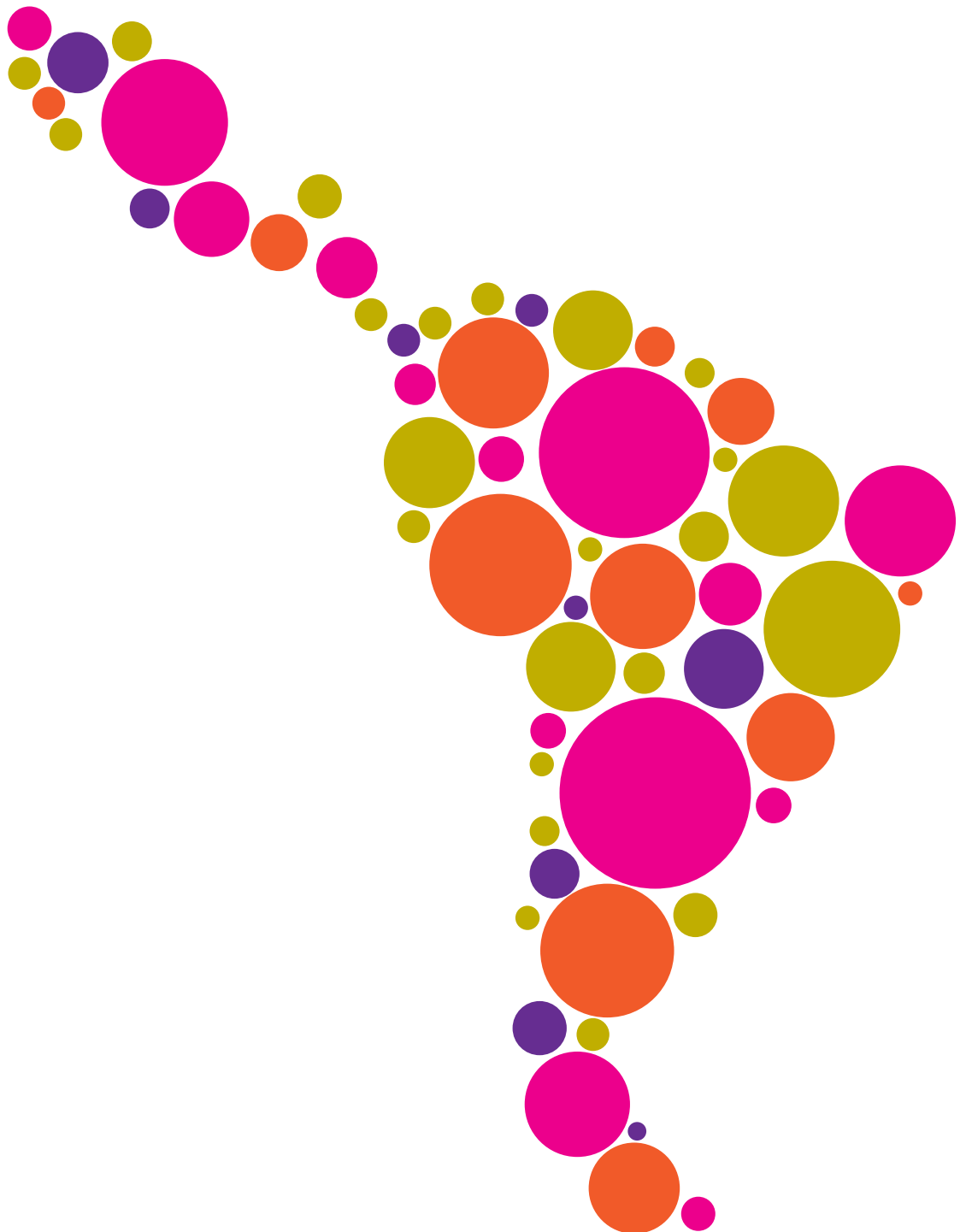


# Regulatory Approaches to Mobile Financial Services in Latin America



# Contents

Introduction	1
1 The Status of Financial Inclusion in Six Latin American Countries	2
2 Why Initiate Reforms to Facilitate MFS?	4
3 Regulatory Approaches and Reforms	5
3.1 General Framework	5
3.2 Reform Elements	8
3.2.1 New Electronic Money Issuers or Payment Services	8
3.2.2 Product Diversity	10
3.2.3 Agent Banks or Correspondents: An Indispensable Complement to MFS	12
3.2.4 Regulations on Risk Management and Mitigation	12
3.2.5 Consumer Protection	16
3.3 Regulation for Mobile Operators	18
4 Primary Outcomes	19
5 Final Considerations	20
Annex	21
Bolivia Annex	22
Guatemala Annex	26
Mexico Annex	28
Peru Annex	33

# Introduction

As part of a growing effort to advance financial inclusion in Latin America and the Caribbean through mobile financial services, the Alliance for Financial Inclusion (AFI), together with the Ministry of Finance and Public Credit of Colombia, organized the seminar, “Smart Policies for Mobile Finance in the Americas: The Next Financial Inclusion Breakthrough,” in Cartagena de Indias, in February 2013.

Nearly 70 participants gathered in “The Heroic City”, including policymakers and regulators from 12 Latin American countries.<sup>1</sup> The core focus of the event was case studies from Colombia, Guatemala, Mexico, Paraguay and Peru, which featured the lessons learned from diverse policy approaches to mobile financial services (MFS).

A range of issues were analyzed at the meeting: the progress that has been made in several countries despite the absence of proper regulation; the importance of maintaining a dialogue between regulators and operators in the market; the need to develop a common vision on issues such as risks and interoperability; and that, at least in Latin America, there is still an obligation to prove the business case for entities that intend to provide mobile financial services to segments of the population that have so far been excluded.

The seminar concluded with a decision by the Superintendents of Guatemala, El Salvador, Paraguay and Peru to create a regional leaders group to promote MFS, which was later embraced by regulators from Colombia, Mexico and Bolivia, which all agreed to take part in the initiative.

The first meeting of the Regional Roundtable, held in April 2013 in Antigua, Guatemala, reviewed and analyzed the issues mentioned above. It was unanimously decided that a study would be conducted to reveal the common features of countries that have experienced the most progress, as well as their experiences implementing MFS.

The purpose of this special report is to draw lessons from these countries’ shared experiences, explore what has been done in each country to develop and advance MFS and examine the diverse approaches required by the unique socioeconomic contexts in which these regulators and policymakers operate. It highlights views on alternative mobile financial services models (bank and non-bank) used in each country and, to the extent possible, explores the results achieved so far, even though they are quite recent reforms or still in the project phase. This study will allow AFI member institutions to learn about a broad range of practices from both within and outside the region aimed at regulating mobile financial services.

This work is based on reports by the regulators of Bolivia, Colombia, Guatemala, Mexico, Paraguay and Peru, who were



tasked with preparing a document in which they narrate their experience with mobile financial services. AFI also participated in a review of two country experiences outside the region that employ different regulatory approaches. We express our special thanks to all of them. Special mention should be made of the Association of Supervisors of Banks of the Americas (ASBA), which contributed suggestions and comments to this initiative, as well as the Superintendency of the Financial System of El Salvador for accompanying us throughout this process.

This special report adopts the definition of mobile financial services (hereinafter “MFS”) proposed by AFI’s Mobile Financial Services Working Group (MFSWG)<sup>2</sup>:

The use of a mobile phone to have access to financial services and carry out financial transactions. This includes both transactional and non-transactional services, such as visualizing financial information in a user’s mobile phone.

1 Colombia, Chile, Ecuador, El Salvador, Guatemala, Haiti, Mexico, Panama, Paraguay, Peru, Dominican Republic and Uruguay.

2 AFI, July 2013, “Mobile Financial Services: Basic Terminology,” Guideline Note No. 1.

# 1 The Status of Financial Inclusion in Six Latin American Countries

The six countries included in this study have major differences in terms of size, geographical area and per capita income. Table 1 shows how the group is segmented in terms of GDP per capita compared to the average in Latin America. Mexico is the only country with a higher GDP per capita than the regional average, while Colombia and Peru have a GDP per capita of 85% and 71% of the average respectively, and Paraguay, Guatemala and Bolivia have a GDP per capita less than 45% of the regional average.

However, these levels are not necessarily reflected in the access and usage of financial services in these countries since, as already mentioned, there are differences in terms of geographical reach and complexity. In fact, if the availability of touch points in the financial system is considered an indicator of access to financial services, major differences are revealed. For example, Colombia and Peru have the most touch points (branches, ATMs and agent banks) per 100,000 adults in the group, while Paraguay has the least. Table 1 reveals that Colombia and Peru have the highest number of bank agents per 100,000 adults, even more than the number of branches and ATMs, as a result of the strategies used to promote this service channel and the fact that the regulation enabling its use was issued in the second half of the last decade.

Guatemala stands out in terms of touch-point coverage, with branches and agent banks in 100% of regions and municipalities reaching 100% of the population. Colombia, Mexico, Bolivia and Peru follow. Coverage in Colombia and Peru is worth highlighting, where the number of agent banks per 100,000 adults has already surpassed the number of branches and ATMs, which provide important support for mobile financial services, as discussed below.

The level of coverage by municipality and population illustrates the challenge of creating access to financial services in all these countries, although it does not mean that Guatemala has necessarily met this challenge (see Table 1). In fact, the ratio of municipalities and towns covered shows that, except in the case of Guatemala, it is the less populated municipalities or districts that are still excluded from the financial system. The efforts of these countries to promote agent banks as a low-cost channel has led them to remote towns, but it is still too costly for municipalities with few inhabitants far from urban areas. In several countries, this situation has prompted discussions about the potential of MFS as a tool to cover their entire population and territory.

Another complex challenge to be solved in terms of financial services use is that the percentage of the population holding a deposit or credit account is still very low.

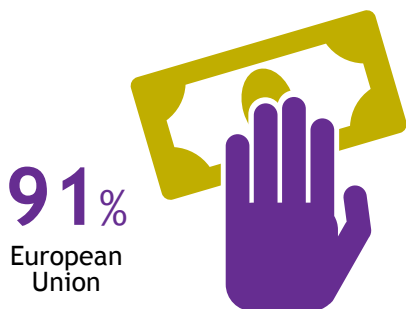
The percentage of adults with a deposit account is comparable to the regional average in three of the six countries, but the percentage of all countries is significantly lower than that of the European Union, where 91% of adults have at least one deposit account. For credit, the numbers are even lower.

These indicators show that, even if 100% physical coverage is guaranteed, regulatory reforms need to be studied in depth to: (a) avoid obstructing the development of financial products that can adapt to the needs of the population, in such a way that ensures they are really useful and sustainable over the long term; and (b) promote the development of accessible and appropriate media channels for customers to use these products when they need them, regardless of geographical location, and reduce, to the greatest extent possible, the transaction costs customers have to pay to use financial services. These are precisely the purposes of the regulatory reforms that have made it possible for MFS to be part of the region's financial inclusion strategy.

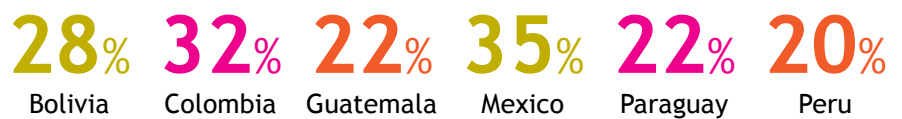
Table 1. Financial Inclusion Indicators, by Country

	BOLIVIA	COLOMBIA	GUATEMALA	MEXICO	PARAGUAY	PERU
GDP per capita in current terms	2,716	7,933	3,313	9,742	3,813	6,573
Total population	10,027,254	46,528,107	15,073,375	120,847,477	6,601,424	30,135,875
Adult population (over 15 years old)	6,916,732	33,658,833	7,895,314	85,791,432	5,387,244	20,773,134
Number of Administrative Units (Municipalities)	339	1,102	334	2,456	N.D.	1,835
<b>ACCESS</b>						
Number of points of access per 100,000 adults	52.4	156.2	110.8	90.55	21.69	159.09
Number of bank branches per 100,000 adults	16.97	23.20	41.40	15.68	8.53	20.21
Number of ATMs per 100,000 adults	27.41	42.01	3.90	47.33	11.92	40.04
Number of agent banks or correspondents per 100,000 adults	8.02	91.0	65.5	27.54	1.24	98.83
Percentage of administrative units with at least one access point	45%	98.7%	100%	60.7%	N.D.	39.0%
Percentage of total population living in an administrative unit with at least one access point	86%	99.8%	100%	95.2%	N.D.	85.0%
<b>USAGE</b>						
Percentage of adults that have a deposit account with a regulated entity	28.0%	31.9%	22.3%	35.5%	22.0%	20.5%
Percentage of adults that have at least one credit with a regulated entity	16.6%	11.9%	14.6%	27.5%	14.9%	29.0%
Depositors in regulated entities per 1,000 adults	N.D.	1,539	437	940	378	1,009
Credits in regulated entities per 1,000 adults	179	468	245	379	149	571

Source: Based on indicators estimated by the countries, Findex and Financial Access Survey



% of adults that have a deposit account with a regulated entity



## 2 Why Initiate Reforms to Facilitate MFS?

The countries in this study began creating reforms in 2007 and earlier this decade.<sup>3</sup> While some countries began implementing reforms to authorize innovative channels, such as agent banks, as early as 2005, and established basic deposit accounts and simplified regimes for bringing more customers into the financial system beginning in 2007, it was not until 2009 that specific standards were established for mobile financial services.

In all six countries, certain conditions fostered the creation of regulatory frameworks for MFS: a concern for promoting competition in the financial system and an interest in facilitating greater financial inclusion. In 2005, countries like Bolivia, Colombia, Mexico and Peru began looking for regulatory mechanisms that would allow them to reduce the cost of expanding the geographical coverage of the financial system and authorizing the use of banking agents to achieve more financial inclusion.

While these efforts have had major outcomes, as shown in Table 1, it was necessary to study the reforms in-depth to create even lighter, user-friendly channels to provide financial services to people living in towns and areas far from urban centers. Authorities decided to facilitate the use of a mobile channel to provide traditional financial services at a lower cost.

Developing the regulatory framework for an MFS channel led authorities in several of these countries to consider regulating financial products other than traditional ones, keeping in mind that the initial needs of low-income customers are making payments and sending money orders.

In the case of Bolivia<sup>4</sup> and Guatemala,<sup>5</sup> MFS regulation emerged as the market evolved and the regulator became aware of the interest of non-regulated companies in developing initiatives that seized the potential of the mobile phone to provide financial services. This process has also been evolving in Paraguay for some time,<sup>6</sup> although regulations in that country are now beginning to be developed due to the fact that a telco in the market is already offering a mobile wallet product that is not regulated.

These processes have been the result of mobile phone companies taking the initiative to provide mobile payment services and moving closer to developing innovative financial instruments beyond traditional financial services.

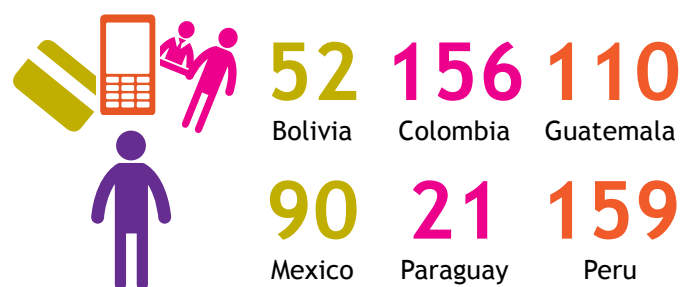
In other cases, such as Colombia, regulation has been the result of market evolution, but responds to the initiatives of the banks. For example, when one of the country's banks launched an electronic wallet product that was operated using a mobile phone, it became necessary to define "electronic

deposit" for bank-authorized transactions. A similar situation arose in Guatemala, but in this case by a credit card-issuing company that wanted to offer mobile phone-enabled services.

As discussed below, this type of initiative, as well as regulators' interest in promoting an environment enabling greater financial inclusion in their respective countries, has led to discussions of the differences between regulating financial services typified by deposit taking or financial intermediation, and those purely related to payments or money orders.

It has also led to discussions of the role of MFS in the financial system, whether as a channel, a management strategy and/or a product leading even to the definition, in some cases, of new transactions with electronic money or the creation of new licenses within the financial system structure. The experiences of the six countries outlined below reveal different approaches within this range of alternatives.

### Number of access points per each 100,000 adults



- The regulations issued by each country are included in this report and will also be available on the AFI website.
- The main mobile operator in Bolivia informed the regulator that it wanted to offer a "mobile wallet" (which, for purpose of this report, is understood as a store of value registered electronically and channeled through the mobile phone, and which serves to make payments, money orders and transfers), but the supervision authority and the Central Bank stated that such transactions had to be under the supervision of financial entities using a specific framework, which was developed in 2013.
- In Guatemala, the banks drove the interest in MFS, approaching the regulator and telcos as allies.
- For the past three years, the two main mobile phone companies in Paraguay have operated mobile wallets and money orders, one of them in association with a bank that uses banking accounts, and another that does not. The latter is not regulated, as it has been decided that it does not act as an intermediary of the funds and, therefore, is not subject to financial regulation under the laws of the country. The regulation to be studied aims at addressing circumstances such as these.

## 3 Regulatory Approaches and Reforms

### 3.1 General Framework

The legal frameworks in most of the countries in the study set forth financial intermediation as an activity under the control and supervision of the state that must first be authorized, essentially defining it as taking deposits from the public to be used as credit. This is the case in Bolivia, Guatemala and Paraguay.

In Bolivia's regulation, the definition of MFS is broader, setting forth the provision of financial services and any other activity related to the handling, use and investment of savings as being in the public interest.

In contrast, in Colombia's and Mexico's regulations, raising public funds is reserved to and subject to the control of the state, and can only be carried out with prior authorization. It is illegal to do otherwise.

While the scope of financial activities seems clear, it may not be for innovative payment activities and even those related to money orders. This is the result of developing new initiatives based on mobile services, and it has raised concerns about the best way to protect public funds. In some cases, this discussion—and its gaps—has left room to implement payment schemes using mobile devices operated by non-bank entities. Paraguay is one example where difficulties with linking the concept of deposit taking with the concept of intermediation facilitated the development of a mobile payment model outside the financial regulation.

In other cases, such as Peru, the financial regulation was prepared to develop mobile financial service initiatives, and although the payment system legislation included the concept of "payment service suppliers", financial authorities deemed it necessary to perfect the legal and regulatory framework to bolster competition and create initiatives related to financial inclusion.

The development process for these regulations and discussions around the meaning and scope of MFS have led to the adoption of several regulatory approaches that may be grouped into two trends. On one hand, there are countries that have focused on the development of MFS as a channel and a means for providing traditional financial services on behalf of a bank. This is the case in Mexico, where regulations clearly state that the provision of financial services, in its broadest sense, is subject to regulation and specialized supervision from the state, particularly when related to taking deposits from the public. Also, financial services may only be developed by entities that are expressly authorized to do so, and where mobile phones are considered a channel for the provision of such services.<sup>7</sup>

Likewise, in Colombia and Guatemala, the regulatory approach adopted so far considers MFS as an additional channel for carrying out financial transactions, along with branches or agent banks, ATMs and POS. However, since each of them has different service and security features, the Mexican regulation, like the one in Colombia and Peru, ensures that mechanisms are established to handle and control the appropriate and specific risks of each channel.

The other approach is to consider MFS as a payment transaction, as in the Bolivian case, which allows payment systems to be regulated under Bolivia's Central Bank Law, thus allowing a regulatory framework to be created that allows new operators to provide such services, subject to specialized supervision of the state.

Finally, other countries consider MFS not only as a channel through which traditional financial services may be delivered, but also as a new operation that includes the issuance of electronic money, which may be stored in cards or mobile devices.

In these cases, a new type of regulated institution is authorized to be created, as in the case of the law already approved in Peru, the draft law in Colombia and the draft circular to be issued by Paraguay's central bank, as explained below.

The differences in the regulatory approaches of different countries are not only due to the types of institutions that may provide MFS, but also their role, which may mean they should be distinguished as payment services that are entirely separate from deposit taking, types of deposits or new financial transactions (Table 2).

<sup>7</sup> The schemes established by América Móvil with Banamex and Inbursa (Transfer) have naturally derived in terms of business, to the share of Ra diomóvil Dipsa (AMX operator in Mexico) as agent bank of such credit institutions.



### 3.1 General Framework *continued*

In some cases, it is understood that MFS implies deposit taking, since money in mobile wallets may be stored for an indefinite period of time. Therefore, mobile wallets may only be offered by companies authorized to accept deposits, such as banks or other licensed financial institutions.

In other cases, MFS is understood as the transformation of physical money into electronic money and, therefore, is allowed to be managed by both banking and non-banking institutions, provided that electronic money is repaid equally. In the case of Bolivia, MFS is more similar to a payment service, so it may be offered by payment-providing entities, while in the case of Peru, MFS may be supplied through bank deposits or electronic money, as appropriate and depending on the type of license the provider holds.

For all countries, regardless of the type of MFS, these services are subject to the control and surveillance of the state. The different approaches taken by the countries to develop suitable standards for MFS were based on their particular legal framework which defined their regulatory path.

In cases where the regulation considered MFS a payment service, the central bank's authority was used as the governing body with duties created under the law. This is the case in Bolivia, where, even though a new operator was created, it was not necessary to issue a law because the authority of the Central Bank was used to regulate the payment system operators, and the powers of the Financial System Supervision Authority were used to create the mobile payment service companies. This seems to be the same path taken by the Central Bank of Paraguay.



The countries that have considered MFS a payment service linked to the issuance and use of electronic money have had to adopt regulations consistent with their respective regulatory frameworks.

The countries that have considered MFS a payment service linked to the issuance and use of electronic money have had to adopt regulations consistent with their respective regulatory frameworks. In cases where it was decided to create a new license for developing new transactions, a law had to be issued that reformed the financial system structure, as in the case of Peru, so as to allow electronic money to be issued.<sup>8</sup> This will be the path Colombia will follow, where a new law must also be created.

Countries such as Mexico and Guatemala, which consider MFS transactions to fall within the traditional transactions of regulated financial institutions, developed a special regulatory framework (described below), as did authorities in Peru and Colombia, where the provision of MFS in the traditional financial system required various changes to be made to allow banks to provide MFS, especially handling and mitigating risks.

<sup>8</sup> Although it must be emphasized that MFS did not require this legal change as such, several initiatives related to the establishment of MFS by the banking sector were already underway.



### 3.1 General Framework *continued*

**Table 2: A Comparison of Regulatory Approaches to MFS**

COUNTRY	REGULATORY APPROACH
BOLIVIA	<p><b>Banking and non-banking</b> Mobile payment service as an electronic payment instrument: It is not a deposit; therefore, is not subject to intermediation and does not generate interest. Regulated payment transaction within the payment system: The Financial System Supervision Authority is responsible, in coordination with the Central Bank of Bolivia.</p> <p>Mobile payment service through mobile devices: A new service that intermediation entities and auxiliary service companies may provide, prior non-objection or authorization, as the case may be. Authorized mobile payment service companies, which are specialized entities within the payment management company's group. Regulation: Regulations on Electronic Payment Instruments Resolution 126/2011, October 2011, Central Bank of Bolivia; Resolution from the Financial System Supervision Authority 772/2011, November 2011.</p>
COLOMBIA	<p><b>Banking</b> Deposit taking from the public: May only be developed by entities subject to specialized supervision from the state. Flexibility of regulations regarding channels and KYC. Regulation: diverse regulations issued by the Ministry of Treasury and Public Credit and the Financial Superintendence from 2009.</p> <p>Electronic deposit: Defined within the authorized transactions for intermediation entities as on call deposits, other than current accounts and savings accounts. May accrue interest. Regulation: Executive Order 4687 of 2011.</p> <p><b>Non-banking</b> Subject to submission and approval of the bill on issuers of electronic deposits.</p>
GUATEMALA	<p><b>Banking</b> Financial intermediation (deposit taking for lending) only with prior authorization; banks are the intermediaries authorized to provide MFS. Credit card management companies may also supply MFS. Regulation: Regulations for the Provision of Mobile Financial Services, prepared by the Superintendence of Banks and authorized by the Monetary Board under Resolution JM-120-2011.</p>
MEXICO	<p><b>Banking (and regulated financial institutions)</b> Deposit taking from the public: Activity reserved to regulated and supervised entities responsible for safeguarding public funds. 2008-2009: Creation of the "niche bank," with capital requirements proportionate to the authorized transactions. Regulatory flexibility: Use of the mobile channel, transactional products depending on the risks, simplified requirements and limits on account openings. Regulation: Several regulations issued by Banxico, SHCP and CNBV as from 2009.</p>
PARAGUAY	<p><b>Banking and non-banking</b> Financial intermediation: Only deposit taking from the public for intermediation is regulated. Lack of clarity on mobile wallets (for payments and remittances) resulted in a 2009 proposal to allow both bank and non-bank issuers. Regulation: Draft reform to mobile wallets that store value and through which remittances and payments are made. Internal consultation process is underway at the Superintendency since the Central Bank has sufficient authority.</p>
PERU	<p><b>Banking and non-banking</b> Financial intermediation: Reserved to institutions from the financial system. Flexible regulation for channels and KYC to allow the use of mobile phones as a channel. Regulation: Several. Banks and Insurance Superintendency.</p> <p>Development of the concept of electronic money (beyond mobile banking) and authorization for electronic money issuers to operate. Regulation proportional to risk and technologically neutral, simplified KYC regime. Regulation: Law 29985 of 2012. Standards of the Superintendence published for review and comments.</p>

Source: Based on documents prepared by the countries.

## 3.2 Reform Elements

The following section reviews the main features of the reforms implemented in each of the six countries to develop a framework for MFS.

### 3.2.1 New Electronic Money Issuers or Payment Services

As explained above, not all of the countries that addressed the MFS regulation opted to create a new license in the financial sector for a specialized operator. In fact, in Colombia (with the current regulation), Guatemala<sup>9</sup> and Mexico, authorities decided to incorporate MFS into the existing banking model, thereby allowing only financial system institutions to develop services, enabling the use of the mobile channel.

Countries that created a new license for specialized operators include Peru, which issued the respective law at the end of 2012, and Bolivia, which created it through regulations related to the payment system issued by the Central Bank and the Financial System Supervision Authority. For Paraguay, creating a new license will depend on the study conducted by the Central Bank and, in the case of Colombia, a new operator will be created if the bill is approved.

These new operators all specialized in supplying electronic instruments (whether mobile devices or cards) that can store value and make payments and money orders. This allows a proportionate and, in general, lighter regulatory regime than the one in place for commercial banks or other entities who act as intermediaries of deposits from the public.

In fact, in Peru and Bolivia, these entities may not act as intermediaries of the funds, and may only carry out conversion and reconversion transactions, payments, transfers and purchases. This suggests that their income is derived from commissions from customer transactions. Given that electronic money is not a deposit, fund protection mechanisms are based on an obligation to create a trust for the entire amount of outstanding electronic money.

Regulations in these countries also lay out the investment regime for the funds. In Bolivia, the funds can only be invested in sovereign risk securities issued by the Central Bank of Bolivia or the National General Treasury of Bolivia, or in negotiable instruments of the public treasury of other countries that have a sovereign risk rating. The regulation published for review in Peru states that they may be invested in deposits of “multiple transaction companies” rated A+, in Treasury Bonds of the Peruvian Government, or securities of the Central Bank and other liquid assets authorized by the Superintendency.

In Bolivia, the electronic wallet is considered a payment service. The new license was created as a sub-group within “auxiliary services companies” (already subject to supervision) as a payment service company, specifically mobile payment service companies. This development was allowed by the payment system law, which has a conceptual scope that extends to electronic payments.

In Peru, the law that creates and defines the features of electronic money issuers states that electronic money issuers may only issue and manage electronic money stored in electronic media, generally including mobile phones, and requests as backup the funds invested in a trust. This transaction is also allowed for other financial institutions operating in the country.

In Colombia, where the bill is in the process of being approved and authorities are contemplating creating new operators, the companies specializing in electronic deposits would be authorized to provide electronic deposits covered by deposit insurance, but may not act as intermediaries of the funds, and must keep the deposited funds backed up by electronic money in investments regulated by the Ministry of Treasury and Public Credit.

In Mexico, regulators are contemplating the possibility of creating specialized operators under the concept of “niche banks” already included in the Banking Law, under which deposit-taking, payments and remittances would be subject to regulation based on the types of risks they pose.

One of the special features of the new licenses is a minimum capital requirement for institutions to start operations, which is lower than that required to establish a commercial bank. This indicates a decision to allow a greater number of players to participate in the system, but with the initial support of investors.

The minimum capital entry and other prudential regulations for specialized operators are determined based on the transactions they are authorized to perform and the risk these transactions pose. They show, in any case, the proportion of minimum capital required for commercial banks in each country (see Table 3).

<sup>9</sup> In Guatemala, these are incorporated into a single regulation: Resolution of the Monetary Board JM-120-2011, Regulations for the Provision of Mobile Financial Services.

## 3.2 Reform Elements

*continued*

**Table 3. Requirements for New Operators or Specialized Operators**

	BOLIVIA	COLOMBIA*	MEXICO	PARAGUAY*	PERU
<b>AUTHORIZED OPERATORS</b>	Mobile payment service companies	Companies specialized in electronic deposits (Project)	Niche banks or specialized banks **		Entities issuing electronic money
<b>MINIMUM CAPITAL STOCK FOR SPECIALIZED ENTITIES (A)</b>	US\$ 752,000	US\$ 3 million	US\$ 14 million	US\$ 2 million	US\$ 806,000
<b>MINIMUM CAPITAL STOCK FOR BANKS (B)</b>	Multiple banks: US\$ 8.0 million. SME Banks: US\$ 5 million	Commercial banks: US\$ 40 million	Multiple banks: Level I: US\$ 34 million	US\$ 8 million	US\$ 8.9 million
<b>A/B RATIO</b>	9.4%	7.5%	40.0%	25.0%	9.0%
<b>CAPITAL ADEQUACY</b>	Not required	Yes. Subject to further regulation.	Yes, the provisions issued for full license multiple banking are applicable, but only in regard to transactions carried out.	Not required	Draft regulation: EIEMs must have an effective net worth not less than 2% of the total money in circulation
<b>AUTHORIZED TRANSACTIONS</b>	Load of mobile wallet, conversion to cash, transfers, balance and transaction inquiries	Electronic deposits, management of prepaid cards, payments, collections, money orders, domestic transfers	Deposit taking, payments, prepaid cards, remittances	Electronic wallet, money orders	Conversion to electronic money, reconversion to cash, transfers, payments, remittances from abroad, disbursement of credits, among others. Mobile phones, prepaid cards and any other electronic devices may be used.
<b>BACKUP MECHANISM</b>	Trust (banks: 100% statutory reserve)	100% of the value of deposits have to remain in banks. Deposit insurance.	Deposit insurance. 100% of funds invested in liquid form.	Trust	Trust (other entities as well)

\* In Colombia and Paraguay, regulatory projects are being studied.

\*\* Credit institutions (multiple banking) that, unlike other institutions, obtain the license by setting limits in their bylaws on the activities to be performed; thus, the minimum capital requirement is lower. This allows entry costs to be reduced to acquire the banking license.

Source: based on documents prepared by the countries

## 3.2 Reform Elements *continued*

The regulations that allow new operators to enter the market are very similar to those issued in other parts of the world when it is accepted that mobile financial services may be provided by non-bank entities.

Such is the case in the Philippines, which is known in the industry for having two of the most important non-bank business models (Box 1 below).

### 3.2.2 Product Diversity

Several of the countries have developed special MFS products as a result of the debate over whether they should be considered deposits and the differences and similarities between MFS products and traditional banking products. The discussion is complex, addressing whether or not electronic money is a deposit in the traditional sense. It also depends on the application of specific prudential regulations, including the development of deposit coverage mechanisms or the development of other mechanisms that reduce the risks and consequences of insolvency (Table 4).

#### Box 1: The Regulatory Approach in the Philippines

##### A staged approach to a non-bank electronic money model

Two of the first and best-known mobile wallets worldwide, **SmartMoney** and **G-Cash**, were developed in the Philippines. SmartMoney was created through an alliance of Smart, a mobile carrier, and Banco Oro, which managed the accounts storing the funds. G-Cash was established under a special concept authorized by the Central Bank of the Philippines under which Globe, another mobile carrier, created G-Xchange to operate the G-Cash wallet in 2004.

Given that the Philippines regulations only allowed banks to act as intermediaries (grant loans) with funds received from the public, and Globe did not intend to grant loans, but rather facilitate transfers among its clients, the Central Bank allowed it to operate the mobile wallet under a “money transfer agent” license (which could be called a remittance entity). To mitigate the risks this initiative entailed, the Central Bank obliged G-Xchange to maintain liquid funds with commercial banks equal to the funds stored in the wallets at the end of the day. Therefore, it established certain minimum anti-money laundering requirements, while also authorizing that cash-ins and cash-outs from the wallets would be made at duly trained agent banks.

The experience gained through these two initiatives allowed the Central Bank to advance its regulatory framework and, in 2009, it issued Circular 649 titled “Electronic Money.” This Circular, capturing the Central Bank’s goal to promote the development of an “efficient and convenient” payment and transfer system, contemplates the authorization of banks, non-banking financial entities and non-banking entities to act as electronic money issuers, requiring them to have a minimum capital stock of US\$ 2.2 million, in contrast with the US\$ 54 million required from a commercial bank. The regulation provides that electronic money may be stored in a card or mobile device, and does not constitute a deposit. It therefore has no deposit guarantee, nor can it accrue interest, and only one person may charge, in one or several wallets from the same issuer, a maximum amount of US\$ 2,250 per month.

As a mechanism for safekeeping funds, all non-banking entities are required to maintain funds invested in liquid form in the amount

equal to the electronic money issued, in government debt papers and banking deposits. Likewise, it sets forth other stipulations that seek to provide a proportionate regulation for operational risks and consumer protection standards.

Finally, in 2010, Circular 704 was issued, which sets forth the regulations that allow electronic money issuers to outsource the operation of the technological platform to a third party to manage the entire operation.

This regulatory framework is complemented by Circular 706, which sets forth the parameters to be used by financial institutions and electronic money issuers to develop their anti-money laundering and combating the financing of terrorism (AML/CFT) models, so as to implement a system for classifying the clients according to their risk, allowing simplified processes for clients matching a particular profile. These processes allow outsourcing of the physical verification of customer ID.

Even though Circular 268 does not authorize the use of agents when dealing with financial products such as deposits, it does authorize them to be used for remittance transactions, which requires the individual record of each agent and attendance at training provided by the Central Bank, related to anti-money laundering. In the case of G-Xchange, the Bank allowed a massive registration process based on the company’s commitment to assume all related risks.

According to the latest figures published by the BSP, in December 2012, there were 24 banks and three non-bank entities authorized to issue electronic money; together, Globe and Smart had 15,365 agents and there were 1 million electronic wallets operating, with G-Cash customers making at least one transaction in the previous month and 7 million wallets operating, and SmartMoney customers conducting at least one transaction in the previous six months.

In sum, the Central Bank has responded cautiously to the progress of the market, but with flexibility, allowing innovation within security standards, understanding the elements of the business and identifying the risks to be mitigated as well as the schemes to do so.

## 3.2 Reform Elements

### continued

Countries such as Guatemala and Mexico consider MFS merely a channel through which to use traditional banking services. In Mexico, changes were made to traditional deposit products, simplifying certain account opening and documentation requirements to better suit the features of electronic channels, such as mobile devices, and imposing some transactional and operational capacity controls to comply with the financial system integrity (AML/CFT) and security requirements for all users.

**Table 4. Special MFS Product Definitions**

COUNTRY	PRODUCTS
BOLIVIA	Electronic money: Monetary value stored electronically Mobile wallet: An electronic payment instrument
COLOMBIA	Electronic deposit: Onsite; transactional For individuals or legal entities. Maximum withdrawals or debits: Two minimum legal monthly salaries (SMLM). (US\$ 725). Linked to two or more handling methods, and may include the concept of prepaid card, as it may be repaid in goods. Maximum term with no funds: 3 months Interest rate: could be borne
GUATEMALA	Not defined
MEXICO	No specific products defined, but there are four levels of accounts to control money laundering, which may be linked to mobile phone transactions (see Section 3.2.4).
PARAGUAY	Electronic wallet: Store money in accounts. Money orders or domestic remittances: They are not deposits; maximum withdrawal within 72 hours; the beneficiary is different from the sender. Transaction limits not greater than US\$ 2,250 per month (6 SMLM).
PERU	Electronic money: Store value through electronic means; accepted as a means of payment, convertible to cash, does not constitute a deposit and does not generate interest. Allows payments and transfers, international remittances and disbursements of credits. Transaction limits: US\$ 1,400. Prepaid cards are a modality of electronic money. The main issuance method is opening electronic money accounts, which, based on their features, may be opened under the simplified or general regime for the purposes of ML/TF prevention and user information.

Source: Based on documents prepared by the countries.

While this is also the case in Colombia, since 2011, the regulation has defined a type of electronic deposit other than savings or current accounts which differentiated it completely from the regulations governing such products, and that, despite being simplified, the banks argued that they did not allow it to be electronically handled in full. For example, signing requirements for their opening, sending of periodical abstracts, etc.

This deposit may be offered by all banks, as well as the new specialized operators once the bill is approved. Although it differs in nature from traditional deposits, it is subject to the existing mechanisms to protect public savings, such as deposit insurance.

Countries such as Bolivia and Peru define electronic money as a new type of financial transaction that implies the use of deposits from the public, but differs in terms of the uptake of savings, term deposits or current accounts.

Electronic money is understood as a store of value and, given that it is not a deposit, may not be used as an intermediary— only to make payments and transfers.

This defines the scope of activities for the new specialized operators, as well as the characteristics of the prudential regulation that apply to them. Paraguay will include the same interpretation in its regulation.

The countries that integrated MFS into electronic money or payments (Bolivia, Paraguay and Peru), in addition to allowing banks to supply traditional products using the mobile channel, understand MFS as a store of value that may be used to carry out transfers, money orders and payments. Even Bolivia, which considers the electronic wallet to be a payment service, allows money to be stored in the mobile phone, as in the case of cash kept in the wallet.

Table 4 shows the amounts that some countries have included as part of their product definitions, which in many cases are related to the limits set for products with simplified KYC and operational risk regimes. In the case of Guatemala, even though there are no defined limits for MFS, the regulation requires the boards of directors to define them.

The product definitions also include simplified account opening documents and requirements for MFS, in order to adapt them to electronic products, primarily mobile phones. These requirements eliminate the obligation to have a signature upon opening the account and to send print abstracts to the clients and print the opening form (Colombia, Mexico and Peru). However, the consolidation of this type of changes requires a law permitting the use of a digital signature. In the absence of such a law, Bolivia, for example, has not been able to move forward in this direction.



## 3.2 Reform Elements

### *continued*

#### 3.2.3 Agent Banks or Correspondents: An Indispensable Complement to MFS

Many Latin American countries began their search for low-cost channels to provide financial services by authorizing the use of agent banks or correspondents, which many know as “branchless banking,” even before considering mobile alternatives. The process of developing the agent banking channel, combined with the need to further reduce the costs of financial services, ultimately allowed the identification of agent banks as a key complement to MFS, able to reach dispersed populations with low-value products through cash-in and cash-out points. Colombia and Peru were the first to follow in Brazil’s footsteps on agent banking implementation authorized in 2005 and 2006 respectively. Then, in 2009,<sup>10</sup> Bolivia and Mexico authorized the use of third parties to provide financial services; Guatemala allowed it in 2010 and Paraguay in 2011.

It is clear that authorizing the use of existing infrastructure is indispensable for the development of any product linked to a mobile phone, particularly when transformational models are used. That is, using the mobile phone as a mechanism to attract clients to the financial system for the first time.

The importance of making MFS feasible led authorities to change several of the transactions authorized to be used through these types of channels, such as opening a savings account. While the responsibility for financial services supplied through agent banks lies with the financial entities in all countries, it was necessary to create mechanisms for opening savings accounts at agent banks and even through the mobile channel (i.e. a remote channel). To do this, many print documents that had previously been required were eliminated and technological tools were enabled to verify the identity of clients in real time. This has allowed Colombia, Mexico and Peru, for example, to provide services that customers can sign up for anywhere in the country using a mobile phone, instead of meeting with a bank representative in person. (This obviously applies to products with simplified KYC requirements.)

In Guatemala, banking agents are only able to accept the documents required to open accounts and to process a customer’s sign-up information. There is no possibility of opening accounts at these touch points.

The Bolivia regulation is the only one that includes an express standard, whereby mobile wallet operators must ensure that sufficient funds are available at the agent banks or at a nearby touch point, in order to fulfill requests to issue a money order or top-up a wallet.

The need to quickly expand agent coverage led to the authorization to use agent network aggregators or managers, allowing financial entities to contract many agents through managing entities. In theory, this should also facilitate agreements among financial institutions and mobile phone companies with broad distribution networks.

In Pakistan, the branchless banking model was used to address MFS regulation within a bank-led model. The main characteristics of this model are detailed below in Box 2.

#### 3.2.4 Regulations on Risk Management and Mitigation

Among the factors identified in several countries as barriers to access to financial services, there are some regulatory requirements for risk management in which progress has been made to introduce proportionality elements to their management.

The risk management mechanisms applied to all financial products, irrespective of the market in which they are used or the risk they represent, could imply high costs and burdensome processes and documentation requirements, especially if intended to serve low-income markets. This would ultimately restrict the access and usage of financial services, both for the supply and the demand sides.

Simplified approaches, especially in the KYC due diligence process, were introduced in several countries even prior to the mobile phone being considered a tool for offering financial services. However, several countries had to make changes when MFS were introduced, including adjusting the operational risk prevention and control mechanisms to incorporate new technologies. These changes were designed using the proportionality principle, based on the level of risk mobile products and services posed to the financial system.

#### Anti-Money Laundering and Combating the Financing of Terrorism (AML/CFT)

In 2006, Colombia, Mexico and Peru began the process of identifying and reducing the regulatory costs of managing the risk of low-value deposit products. Such efforts were focused mainly on simplifying the requirements and KYC processes for low-value deposit products, without prejudice to the permanent monitoring requirements for financial movements (expos control).

Colombia, for example, began reducing the mandatory information to sign up customers in 2006, and in 2007 issued a decree that creates low-value savings accounts, which had some exemptions, and had to be offered with no minimum opening balance and two free transactions and one free balance inquiry per month.

<sup>10</sup> In the case of Mexico, some multiple banking institutions authorized in 2006 and who started operations in 2007, had already contemplated the provision of certain services through third parties, mainly the collection of credit cards at cashiers in retail chains. However, the amendments to the Credit Institutions Law, on February, 2008, gave rise to prudential provisions that regulated such activity, which became effective during 2009.

## 3.2 Reform Elements

### *continued*

#### Box 2: Pakistan's Branchless Banking as a Foundation for MFS

##### Provision of financial services through a "branchless banking" model

Under the Law of Payment Systems and Electronic Transfers and branchless banking standards issued in 2008 (and updated in 2011), Pakistan defined a branchless banking model as a channel for offering cost-effective financial services, which may only be provided by banking or microfinance institutions.

These channels use the mobile phone as one of its devices, as well as agent banks, for which the regulation differentiates three types of agents: super agents, who directly manage sub-agents and may be gas stations, post offices or supermarket chains; direct agents, which are companies that manage and process a network of independent sub-agents; and the sub-agent, which operates the outlet where services are provided.

The regulations authorize the provision of typical services, as well as services similar to those in the majority of the Latin American countries for agent banks, including, among others, the opening and maintaining of accounts, transfers between accounts or person-to-person, payment of bills and goods, as well as disbursement and repayment of credits.

These regulations are complemented by regulations setting forth a KYC process with requirements in proportion to the risk, and applied in all branchless banking models. Four levels of accounts were established, with levels 0 and 1 supplied only to individuals, and levels 2 and 3 supplied to different types of legal entities.

Transactional limits and security requirements were assigned to each level. The 0 level account is best suited to the agent channel, as it entails simplified KYC requirements, does not require physical support materials and allows accounts to be opened directly with the agent bank, provided that the digital platform for opening accounts is used there. It also includes a digital photo of the client, as well as a digital image of his/her ID document, all of which must be sent to the financial entity. These accounts are subject to limits of US\$ 145 per day, US\$ 240 per month and US\$ 1,150 per year.

Special attention was given to consumer protection regulations, with specially determined requirements for expediting the handling and resolution of claims, for example, requiring claims to be processed within 24 hours, assigning a specific number to the claim and specifying the estimated response time and broadly disclosing the mechanisms to customers, including the telephone numbers they can call to submit claims.

Under this regulatory approach, and using a bank-led model, there are already five banks in the country providing mobile banking services, three of which are microfinance banks acquired by the mobile carriers. With five other banks piloting mobile-based products, Pakistan is well underway to becoming one of the most competitive markets in the world for MFS.

The above is illustrated by some data: through December 2012, 2.1 million accounts were opened through these innovative channels, using over 40,000 agents.

Source: Prepared with the support of the AFI team.

However, the market did not embrace the product, and in late 2008, regulations were issued for electronic savings accounts with the same general features, except that the channels and handling methods were electronic, which reduced costs significantly.

The supervisory authority then went even further, establishing a simplified procedure for opening savings accounts. This applied to accounts below the limits described in Table 5 below, without restricting the fees that could be charged.

In 2011, additional progress was made when electronic deposits were regulated using a simplified regime for opening accounts and KYC. This, combined with the use of technological platforms, primarily the mobile phone, allowed financial products to be opened remotely from a mobile phone, and managed completely electronically.

Mexico also used a phased process to define low-value deposit products with implications for KYC requirements. The process began in 2007, with basic accounts having mandatory features

related to costs, product simplicity and minimum opening documentation. Then, in 2009, a different approach was used, whereby the minimum requirements for risk controls were simplified based on the transaction, types of transactions, channels and authorized methods. The regulation currently in effect was issued in 2011, which defines four levels of accounts with light and differential requirements depending on the risk, channel, method, volume and type of authorized transactions, and the minimum management requirements proportional to the risk. They even allow, in account level 1, the possibility of being anonymous, thus mitigating the risks that can arise by imposing limits on amounts and channels.

In Peru, in 2011, the Superintendency created two regimes: the simplified regime and the general regime. Under the simplified regime, general criteria are established related to low-risk products in the financial, insurance and pension system, and the client linkage requirements are reduced. While relevant products fall under the general regime by default, both the regulator and the regulated entities can decide to include diverse products in the simplified regime.



## 3.2 Reform Elements

### *continued*

In 2012, with the issuance of the electronic money law, entities that issue electronic money may open electronic money accounts, which, depending on their characteristics, may fall within the simplified regime or the general regime.

Paraguay recently issued regulation on simplified accounts for clients considered low risk and who conduct less than US\$ 2,500 per month in transactions, which allows outsourcing due diligence.

In Guatemala, in 2011, a simplified regime was established that applies to any type of low-risk client, has low transaction volumes and monthly and annual transaction limits, as detailed in Table 5.

The remaining countries are still in the process of making small changes to address simplified minimum KYC requirements. In Bolivia the general regime is still applied, even for mobile wallets.

#### Operational Risks

Usually, all six countries apply the general operational risk management regime to MFS, except for Colombia and Mexico (Table 7).

In Bolivia, a clear effort has been made to ensure that mobile wallets operate properly as a payment mechanism, whereas in other countries the regulator shows interest in identifying the technological platform to be used, ensures the confidential management of users' information and, in several countries, explicitly contemplates the possibility of outsourcing one or several parts of the operation.

In any case, minimum transparency and security requirements are established in these contracts, while in other regulations this authorization is generally given. This is the case in Guatemala, which offers a broad framework so that entities may submit their risk models and demonstrate how risks have been mitigated in the model, without providing any details on specific requirements. Thus, the supervisor has the flexibility to become familiar with several options for service provision.

Peru has deemed it unnecessary to make additional changes to the regulation related to the operational risk management of providing MFS, maintaining a neutral approach from a technological standpoint.

The simplified regime for managing operational risk in Colombia is applied to simplified accounts and electronic deposits. To manage such risks, entities may establish limits in addition to transactions and operations, and limit the channels as well. In regard to security, exemptions are established for the minimum requirements, such as the obligation to customize the handling methods, the use of a different password for each medium or channel, the creation of a transactional profile, the creation and delivery of supporting materials, and the supply of debit cards with solid authentication mechanisms, among others. However, it incorporates certain data security and encryption

requirements that, in practice, limit the possibility of using SMS technology for monetary transactions and the USSD for transactions with higher values.

Mexico has developed a special regime to manage risk based on the account level, the handling methods and channels. Rules are established for authentication elements in such manner that the higher the transaction limits and scope of the account, the greater the authentication requirements and operational risk controls. In terms of operational risk management and fraud prevention, the values that determine the use of authentication and registration mechanisms are related to the four levels of accounts defined for KYC procedures and money laundering control.

However, the Mexican regulation sets additional limits on security requirements for the channel and electronic banking, some of them specific to the mobile channel. Mobile payment, mobile banking and Internet banking categories are used,<sup>11</sup> and each channel maintains specific encryption requirements, authentication elements and others, with maximum caps on the transactions that can be conducted. The limits on financial products offered through a mobile phone depend on two separate features of the product:

- the account level; and
- the type of technological controls used to operate the mobile phone, for which two types of services are defined: mobile payment, where data is not required to be encrypted nor use two authentication elements (which imposes operational limits), and mobile banking, which requires data encryption and two authentication elements, with no operational limits.

The regulation authorizes an entity to use limits or elements other than the one it sets forth, provided that any claim from a client is addressed in a maximum 48-hour period and the bank is authorized to carry out additional investigations. For the purpose of implementing this principle, when the value of the limits due to operational risk fails to coincide with the values allowed by the account level, the controls corresponding to the most restrictive limit shall be applied.

Regulations in Mexico continue to change as products are developed and the market evolves. For example, in June 2013, flexible new regulations were introduced for electronic channels, allowing agent banks to operate offline when individual balances are stored in the handling method and when there is the express authorization of the CNBV.

11 See Annex 63, "Guideline for the Use of Electronic Banking Service," which is included in the General Provisions for Credit Institutions (the bank's only circular).

## 3.2 Reform Elements

*continued*

**Table 5. Managing the Risk of Money Laundering and Terrorist Financing**

COUNTRY	ML/TF REQUIREMENTS: KNOW YOUR CUSTOMER (KYC)
BOLIVIA	<p>General regulations apply; there is no simplified regime</p> <p>Accounts must be opened in person</p> <p>Maximum amount per transaction in mobile wallet: 1.5 times one minimum wage: US\$ 170</p>
COLOMBIA	<p><b>Simplified process</b></p> <p>Minimum information: Name, number and date of issue of ID document</p> <p>Maximum monthly amounts of electronic deposit:</p> <ul style="list-style-type: none"> <li>• Withdrawals: 3 SMLM (US\$ 1,088)</li> <li>• Balance: 3 SMLM (US\$ 1,088)</li> </ul> <p>One single deposit per person throughout the financial system</p> <p>Account opening: No fingerprints or signatures required. In practice, the OTA opening is allowed.</p>
GUATEMALA	<p><b>Simplified KYC regime:</b></p> <p>Applicable to national residents with low transactional risk or low business volume for opening financial products; also applies to MFS.</p> <p>Maximum transaction limit: US\$ 625 per month</p> <p>Maximum store limit: US\$ 2,500 per year</p>
MEXICO	<p><b>Simplified process to open debit accounts:</b></p> <p>Level 1: Anonymous opening, only with prepaid cards. Monthly cash-ins up to US\$ 288. Balance up to US\$ 383.</p> <p>Level 2: Individuals, remote opening may be through mobile phone, simplified file including information such as name, state, date of birth, gender and address. May be linked directly to mobile phones and opening through a mobile device. Monthly cash-ins up to US\$ 1,150.</p> <p>Level 3: Individuals and business entities (companies). Physical presence is required for opening, but may be opened at branches, through mobile devices and through commission agents or agent banks. Simplified file. Monthly cash-ins of US\$ 3,834.</p> <p>Level 4: Traditional accounts, complete file, opening in person inside a bank branch; no transaction limits, except the limit agreed upon between the client and the financial institution. These accounts may also be linked to a mobile phone.</p>
PARAGUAY	<p><b>Simplified regime:</b></p> <p>Low-risk clients (up to US\$ 2,000 per month in deposits)</p> <p>KYC may be outsourced for MFS, even if the banking entity is responsible.</p> <p>Allows remote opening</p>
PERU	<p><b>Simplified regime:</b></p> <p>The simplified regime applies to ML/TF, as well as to the simplification of information requirements and means of communicating with the user.</p> <p>Similar criteria for banking or electronic money accounts, which consider maximum balance and transaction volume limits. Maximum transaction and transaction volume limits vary under the simplified regime, depending on whether they are banking or electronic money accounts.</p> <p>Minimum information required related to the national ID document.</p> <p>The mobile telephone service number is required in certain cases.</p> <p>Account can be opened using a mobile phone, remotely for national or foreign individuals in domestic currency. Used in the national territory.</p> <p>In domestic currency. Used in the national territory.</p> <p>In case of electronic money, the limits are as follows:</p> <ul style="list-style-type: none"> <li>• Transaction limit: US\$ 350</li> <li>• Balance of one same holder: US\$ 700</li> <li>• Monthly volume: US\$ 1,400</li> </ul>

Source: Based on documents prepared by the countries

## 3.2 Reform Elements

### continued

While this creates other security challenges, it also solves the telecom's infrastructure problems in some areas. The flexibility also allows remote product opening, activation of the mobile phone as a handling method in ATMs—something that was already allowed in Colombia and Peru—and raising the amounts of mobile payments that can be made without a personal ID number (PIN) (to US\$ 98 per transaction).

#### 3.2.5 Consumer Protection

In the area of consumer protection, all of the countries tend to apply the same general regulations to traditional financial services. Bolivia, Colombia and Mexico have set up the same general regime as they developed for the rest of the system. In Peru, a simplified regime is used, which it also applies to areas such as consumer protection for traditional financial services and those developed for electronic money. Guatemala is in the process of developing a consumer protection regime for the bottom of the pyramid, and a general regime is being developed in Paraguay.

Special attention has been given to providing sufficient information to customers about costs, special conversion processes for electronic wallets, and the importance of using channels to submit claims and complaints, all of which demonstrate a concern for the types of clients that MFS will target.

However, some of the documentation requirements that were eliminated in some countries through the simplified processes could represent a challenge for authorities aiming to protect the interests of the financial consumer. For example, challenges could arise from eliminating the printed abstract or account statement, information on security, or fees for transactions prior to carrying out the transactions. In such cases, the important thing is to find a balance between the costs of the printed material or frequent information and the need to protect the consumer, by keeping the information on the transactions available in some media and publishing in general the rates for transactions.

Table 6: Monthly limits for products and ratio with GDP per capita

	BOLIVIA	COLOMBIA	GUATEMALA	MEXICO	PARAGUAY	PERU
GDP per capita, 2012	2,576	7,933	3,313	9,742	3,813	6,573
ML/TF limits	170 Maximum transaction	1,088 Withdrawals and balance	625 Stored	2,061 Cash-ins	2,000 Cash-ins	1,400 Maximum stored transactions
Limit / GDP per capita	7%	14%	19%	21%	52%	21%

Source: Based on documents prepared by each of the countries in the study

## 3.2 Reform Elements

*continued*

**Table 7. Regulations to Control Operational Risk in MFS**

COUNTRY	REQUIREMENTS TO CONTROL OPERATIONAL RISK
<b>BOLIVIA</b>	<p>Risk management: Responsibility of the entity; the general regime is applied. Minimum operational requirements. Those defined by the Central Bank are applied:</p> <ul style="list-style-type: none"> <li>• Linking the account number, ID document and mobile phone number</li> <li>• Keeping a record of transactions for at least 10 years</li> <li>• Mechanisms to authenticate and verify the identity of electronic payment instruments in each transaction</li> <li>• Integrity: protected against alterations and fraud</li> <li>• Confidentiality: encrypted mechanisms to avoid unauthorized disclosure</li> <li>• Non-repudiation: none of the parties involved in the transaction may deny their participation therein</li> <li>• Availability: the processing system must be available for the users, according to the contractual provisions</li> <li>• User authentication password</li> <li>• Session is closed after 20 seconds of inactivity</li> </ul>
<b>COLOMBIA</b>	<p>Simplified regime sets forth exemptions and, for accounts opened under the simplified process, it does not require:</p> <ul style="list-style-type: none"> <li>• Customization of media and passwords per medium</li> <li>• Creation of a transactional profile</li> <li>• Creation and delivery of physical support materials</li> <li>• Training on security measures</li> <li>• Information on costs prior to carrying out transactions</li> <li>• Receipts and clearance documents</li> <li>• Debit cards with strong authentication mechanisms.</li> </ul> <p>Technology: “strong end-to-end encryption” in the case of products with transactions over US\$ 310 per month</p>
<b>GUATEMALA</b>	<p>Real-time registration of transactions that keeps the balance updated Specific MFS risks:</p> <ul style="list-style-type: none"> <li>• Description of technological platform</li> <li>• Mechanisms that guarantee the confidentiality, integrity and availability of information.</li> </ul> <p>Application of general standards for risk management establishing minimum guidelines</p>
<b>MEXICO</b>	<p>Operational risks: Reduced by the limits defined in each type of account, including channel and media limitations. Minimum requirements are established for the use of mobile channels and electronic banking.</p> <ul style="list-style-type: none"> <li>• Minimum sign-up requirements: user ID</li> <li>• Authentication elements</li> <li>• Conditions required for the institution’s authentication by the user</li> <li>• Security elements for transactions carried out by the user through mobile devices</li> <li>• Requirement to register destination accounts</li> <li>• Notification of transactions by the institution to its clients</li> <li>• Limits on transaction amounts and respective controls</li> <li>• Security elements in sending passwords and personal ID numbers (PIN)</li> <li>• Activation and deactivation of services.</li> </ul>
<b>PARAGUAY</b>	<p>Application of general rules</p>
<b>PERU</b>	<p>General regulation is applied, which allows the Superintendency to accept or reject the technological model or support platform to be implemented and, in general, the risk management model of each operator. Balance of one same holder: US\$ 700 Monthly volume: US\$ 1,400</p>

### 3.3 Regulation for Mobile Operators

**In all the countries included in this report, there is a specialized regulator for mobile operators independent from the financial sector regulator.**

This situation poses a challenge for MFS when alliances are created to provide financial services through mobile operators. Another area that needs to be explored is competition restrictions and access to mobile channels, which could arise if financial services are provided directly by these types of entities.

Only Peru's electronic money law addresses this issue, setting forth a proper framework for accessing telecom services for mobile financial services, which include all those provided through the mobile channel, not only those related to electronic money. To do this, the law authorized the telecom regulator (Osiptel) to facilitate access to the channel when dealing with mobile financial services.

The regulator's draft standard sets forth legal and regulatory considerations that seek to ensure access under similar conditions for all stakeholders, and resolution mechanisms when there are barriers to access. This may include defining the conditions of the telecom regulatory body in the absence of an agreement between the parties. When it comes to interoperability, the Peruvian law authorizes the Superintendency of Banks and Insurance and the Central Bank to determine the conditions under which clients can conduct transactions with any counterpart.

In Mexico, work is being done to improve the interoperability of mobile payment systems through the SPEI system (operated by the central bank) by linking an account number to a mobile phone number. In Peru, a project led by the banking industry has been announced which seeks to implement a new technological platform, in addition to the current electronic clearing house (to be regulated by the Central Reserve Bank), that will offer real-time clearance, interoperability between banking and non-banking payment systems, as well as interoperability among telcos. Stakeholders would voluntarily sign up for this system.

## 4 Primary Outcomes

**Given that MFS regulation and implementation are relatively new in several of the countries, some have not yet generated data on the results of MFS.**

Given that MFS regulation and implementation are relatively new in several of the countries, some have not yet generated data on the results of MFS.

In Bolivia, a dedicated company specializing in mobile payments has been created, with 490 points of service in non-financial agent banks spread throughout the country's nine regions, covering a total 135 localities.

In Colombia, the electronic deposit developed by the Davivienda Bank (Daviplata) already has more than 2 million accounts, including 900,000 beneficiaries of conditional grants from Familias en Acción, which operate exclusively through a mobile phone. The Banco AV Villas developed a basic account product that works only with a mobile phone. It was linked to the Transfer wallet in 2012 (in association with Claro, the Colombian affiliate of América Móvil), and in 2013, Bancolombia launched a simplified account that works exclusively through a mobile phone, with no handling fees. It reached 60,000 clients within the first six months, 70% of which are using the financial system for the first time.

The recent issuance of regulation in Guatemala has not yet shown any statistical results, but there are seven entities supplying MFS.

In Mexico, during 2012, more than six authorizations were granted to niche banks, including the Banco PagaTodo, S.A., whose corporate purpose is to supply payment methods that allow users to carry out simple transactions. The number of contracts using mobile phone banking began to be reported in the second quarter of 2012 and, by the end of May 2013, there were 175.54 mobile banking agreements per 10,000 adults, with a total 1,207,634 accounts. In 2013, four mobile payment products were in operation, supplied not only by banks, but also by a product promoted by WOCCU (World Council of Credit Unions) in two cooperative microfinance institutions.

Paraguay has not yet produced any results given that the regulation is still being developed. In Peru, several banks and some microfinance entities supply mobile banking services to their clients, where the mobile phone is used as an additional service channel. One of the providers is a local bank that has implemented a "mobile wallet" product targeted at small enterprises, mainly warehouses, which can make payments to their distributors using a mobile phone. The payments are made from simplified deposit accounts or "basic accounts" that the warehouses hold with the bank. There are several other MFS projects being developed by banking companies, microfinance institutions and other entities, which in some cases include the use of electronic money or bank deposits.

## 5 Final Considerations

For several years, regulators in several Latin America countries have demonstrated an interest in fostering a regulatory framework that facilitates financial inclusion. The regulatory initiatives that have been developed for mobile financial services represent an important stage in this process.

The development of MFS regulation has generated discussions on how to define the financial activities supervised by the state, and the relations and differences with MFS. In fact, the review of the concepts of intermediation and deposit taking from the public vis-à-vis the provision of money orders and payment services produced discussions on the borderline of financial services versus payment services (payment system).

The difference in approaches comes from determining who is allowed to develop MFS products and services. In Colombia, Guatemala and Mexico, it is clearly established that only financial system entities, especially the banks, can develop these services, but they are understood as a channel for supplying traditional financial services. In these countries, there is no possibility that non-banking entities would be considered to develop MFS.

In other countries, an interest in facilitating entry to other types of entities prompted authorities to propose the creation of a new type of entity, with an understanding that it would be an independent company under the regulation and supervision of the financial authorities, and would adjust the regulatory requirements depending on the risk assumed.

This process has been accompanied by the design of products and processes aimed at conducting low-value transactions and operations, which allows for risk reduction and leads to the development of simplified processes for customer linkage and managing operational risk. These product definitions and simplified processes also lead to decisions being made about which channels and means to use based on their security features and management of operational risk, in several cases.

Several institutions included in this study had support from AFI to analyze the experiences of their peers, which was useful as a benchmark, but they ultimately had to adapt their regulatory frameworks to provide MFS. The changes were made based on the nature of their respective legal frameworks, the reality of their financial markets and the considerations and potential issues that emerged from in-depth discussions on products, channels, risks and legal authorizations.

Equally important was the participation of private entities, both financial and mobile phone service entities, in defining the need for regulation in the financial market. The

experiences of the six countries demonstrated the importance of maintaining ongoing communication with market players and diverse interest groups to develop a regulatory framework suited to market requirements, as well as the principles of financial regulation.

In several countries, it was necessary to develop a definition for a new financial transaction, and even to amend the structure of the financial system to allow specialized electronic money issuers to enter the market. It is worth mentioning that all regulatory initiatives have had equitable market competition as a guiding principle and regulations followed the principle of proportionality, based on the risk of the transactions. Therefore, those who decided to create a new concept through the legal channel, and those who opened a space for specialized entities through the regulatory channel, both aimed to align MFS regulation with the regulatory requirements of the full financial intermediation entities and avoid market distortion.

It is important to point out that all MFS initiatives in the Latin American countries featured here have been delimited within the financial regulation, respecting the protection of public savings and activities that are in the public interest, such as typical deposit taking.

As a result, in five of the six countries that were analyzed, MFS may only be supplied by regulated entities, whether bank or non-bank, subject to the specialized supervision of the state. Likewise, authorized entities must have a sole corporate purpose, since, if a mobile phone company wishes to develop mobile payment services, it would have to create an affiliate to do this, which would be subject to the same supervision of the financial system.

There are still some areas that need to be studied in more detail to determine the “playing field.” These include the interoperability of mobile operators for the provision of financial services, the range of telecommunications to allow transactions to be conducted online and in real time in all regions, and equitable access to the mobile channel to provide financial services, to name only a few.



## Annex

Bolivia Annex	22
Guatemala Annex	26
Mexico Annex	28
Peru Annex	33

# Bolivia Annex

## 1. The Status of Financial Inclusion in Bolivia

Although Bolivia has been a leader in microfinance, access and usage of financial services are relatively low compared to other countries in the region, due primarily to the low number of agent banks. However, more than one-third of banking correspondents are located in rural areas, where banking institutions specializing in microfinance and private financial funds dominate. The number of service points increased by 42% between 2010 and 2013, while the number of savings accounts increased by 143 percent.

**Table 1. Main Financial Inclusion Indicators in Bolivia, June 2013**

GDP per capita	2,716
Population	10,027,254
Adult population	6,916,732
Number of administrative units	339
<b>ACCESS</b>	
Number of access points per 100,000 adults	52.4
Number of bank branches per 100,000 adults	16.97
Number of ATMs per 100,000 adults	27.41
Number of agent banks per 100,000 adults	8.02
Percentage of administrative units with at least one access point	45%
Percentage of total population living in an administrative unit with at least one access point	86%
<b>USAGE</b>	
Percentage of adults having a deposit account with a regulated entity	28%
Percentage of adults having at least one credit with a regulated entity	16.6%
Depositors at regulated entities per 1,000 adults	NA
Credits with regulated entities per 1,000 adults	179

Source: Information provided by ASFI, Global Findex and the FinScope Financial Access Survey, June 2013

## 2. Why Initiate Reforms to Facilitate MFS?

In the mid-2000s, Bolivia's regulatory authority began seeking regulatory mechanisms that would reduce the cost of providing financial services to more areas of the country and authorized the use of agent banks or correspondents to achieve greater financial inclusion. However, regulatory authorities wanted to bring financial services to people living in rural and remote areas through an even lighter channel and decided to facilitate the use of the mobile channel to provide traditional financial services at a lower cost.

In Bolivia, the MFS regulation is the outcome of a particular evolution in the market: non-regulated companies were interested in developing initiatives aimed at harnessing

the potential of mobile phone services to provide financial services. The country's main mobile phone operator, and one financial intermediation entity in particular, expressed their interest to the regulator in providing a mobile wallet<sup>1</sup> that included a mobile money order service. However, this offering was not clearly framed within the MFS regulation. The Financial System Supervision Authority (ASFI) and the Banco Central de Bolivia determined that these transactions had to be subject to the supervision of financial entities under a specific framework developed in 2011 within the Regulations for the Incorporation, Operation, Dissolution and Closing of Mobile Payment Service Providers.

## 3. Regulatory Approaches and Reforms

### 3.1 General Framework

Like other countries, Bolivia's legal framework defines financial intermediation as an activity subject to the control and supervision of the state that requires prior authorization. However, the Bolivian regulation defines it even more broadly, specifying that the provision of financial services, and any other activity related to the handling, use and investment of savings, are in the public interest. Given the nature of this framework and that all mobile draft services are related to public savings, it was the responsibility of ASFI, in coordination with the Banco Central de Bolivia and in compliance with the provisions of Article 331 of the Federal Constitution of the State, to issue regulations governing mobile wallet services.

In Bolivia, MFS are considered payment transactions; therefore, payment systems are regulated under the Banco Central de Bolivia law. By emphasizing the similarity with a payment service, a regulatory framework could be created that allows new operators to provide MFS (subject to the supervision of the state). This eliminated the need for a law that created a new type of operator, and payment system operators could be regulated under the authority of the Banco Central de Bolivia. Mobile payment service companies (ESPM) were created as auxiliary financial service companies under the authority of ASFI.

The mobile payment service offered through mobile phones is considered a new service that financial intermediation entities (EIF) and auxiliary service companies can provide, subject to non-objection or authorization by the supervision authority. A hybrid banking/non-banking MFS model is therefore being applied.

Likewise, given that the mobile payment service is considered an electronic payment instrument, the money stored electronically in a mobile wallet is not considered a deposit. Thus, EIFs and the ESPM cannot act as intermediaries of funds received through a mobile wallet, nor can they acknowledge the payment of interest on accrued balances in the payment accounts of these wallets. Yields from resources held in the trust fund correspond to the ESPM.

<sup>1</sup> For the purposes of this document, store of value shall be understood as value that is registered electronically and channeled through a mobile phone, and can be used to make payments, money orders and transfers.

## Bolivia Annex

### continued

In terms of rules and regulations, the Banco Central de Bolivia includes the mobile wallet as an electronic payment instrument in its Payment Service Regulations<sup>2</sup> and regulates the activities and creates guidelines for the issuance and management of mobile wallets in its Electronic Payment Instruments Regulations.<sup>3</sup> By defining a mobile wallet as an electronic payment instrument (IEP), the issuer and the holder enter into a contractual relationship when the payment account is opened (exclusively in domestic currency) and make electronic payments and/or inquiries using a mobile device. ASFI includes auxiliary financial service companies that provide mobile payment services in its regulation and supervision activities, and authorizes<sup>4</sup> the mobile payment service through mobile devices as a new service that both intermediation entities and auxiliary service companies may provide, subject to non-objection or authorization from ASFI.

### 3.2 Reform Elements

The following is a review of the main characteristics of the reforms that framed the development of MFS in Bolivia.

#### 3.2.1 New Electronic Money Issuers or Payment Services

As previously mentioned, MFS may be supplied by EIF subject to non-objection by ASFI. In an attempt to reach clients underserved by traditional financial entities, a new type of entity was created to provide mobile wallet services through ASFI's Regulations for the Incorporation, Operation, Dissolution and Closing of Mobile Payment Service Providers. By considering electronic wallets a payment service, a new license for a mobile payment service company was created as a subgroup within the auxiliary financial service companies, which were already subject to supervision. This allowed the Payment System Law to be enacted with a conceptual scheme that extends all the way to electronic payments.

Mobile payment service companies must request authorization from ASFI and comply with the requirements set forth in the regulation. These new operators specialize in supplying electronic instruments authorized to make payments and money orders, allowing a proportionate and, in general, lighter regulatory regime than the one for commercial banks or other entities that act as intermediaries of public funds. In Bolivia, these entities cannot act as intermediaries and can only carry out conversion and reconversion transactions, payments, transfers and purchases.

Given that electronic money is not considered a deposit, the fund protection mechanisms are based on the ESPM's obligation to create a trust for the entire outstanding amount of electronic money. Bolivia's regulations specify that these funds must be invested exclusively in sovereign risk securities issued by the Banco Central de Bolivia, the National General Treasury of Bolivia, or in negotiable instruments of the public treasury of other countries with a sovereign risk rating. Financial intermediation entities that provide mobile payment services must create a general ledger account<sup>5</sup> for transactions using mobile wallets subject to the creation of a statutory legal reserve in cash for 100% of the amount.

**Table 2. Requirements for New Operators or Specialized Operators**

Authorized operators	Mobile payment service company
Minimum capital stock for specialized entities (A)	US\$ 752 million
Minimum capital stock for banks (B)	Commercial banks: US\$ 8 million SME banks: US\$ 5 million
A/B ratio	9.4%
Capital adequacy	Not required
Authorized transactions	Loading of mobile wallet, conversion to cash, transfers, and balance and transaction inquiries
Backup mechanism	Trust (Banks: 100% statutory reserve)

#### 3.2.2 Product Diversity

Bolivia defines electronic money as a new type of financial transaction that uses funds from the public, but differs from savings deposits, term deposits or current accounts. Incorporating MFS into electronic payments has allowed banks to offer traditional products through the mobile channel, which is understood as a store of value that may be used to carry out transfers, money orders and payments. Since these are not deposits, they may not be used to act as an intermediary of the funds. Even though electronic wallets are considered a payment service, money can still be stored "inside" a mobile phone just as cash is kept in a wallet.

The provisions of Bolivia's Mobile Payment Service Regulations include the following definitions:

- **Electronic money:** Monetary value that is stored electronically and equivalent to the value of legal tender bills and coins.
- **Mobile wallet:** An electronic payment instrument (IEP) that confirms a contractual relationship between the EIF or ESPM and the client because a payment account is opened (exclusively in domestic currency) to make payments and/or inquiries electronically using a mobile device.
- **Payment account:** A record of transactions carried out using a mobile wallet. Payment accounts must use domestic currency exclusively.
- **Mobile device:** An electronic device that is able to carry out several transactions wirelessly anywhere there is signal. It is enabled with a mobile telephone line by a mobile phone service operator.

Bolivia does not yet have simplified opening products, which will require a law to be enacted that allows the use of digital

2 Resolution of the Board of Directors No. 121/2011

3 Resolution of the Board of Directors No. 126/2011, dated October 4, 2011

4 Resolution of ASFI No. 772/2011, dated November 10, 2011, within the framework of Article 39 (25) of the Banks and Financial Entities Law No. 1488

5 The Banco Central de Bolivia has determined that this account must be classified as 'Other Sight Obligations with the Public.'

## Bolivia Annex

### continued

signatures. Therefore, while change is underway, the regular account-opening regime still applies.

#### 3.2.3 Agent Banks or Correspondents: An Indispensable Complement to MFS

Third parties have been authorized to provide financial services in Bolivia since 2007.<sup>6</sup> These are called ‘non-financial agents.’

Given that the regulations for contracting agent banks were issued prior to the Mobile Payment Service Regulations, the original regulations had to be reformed. Pursuant to the provisions of the regulations, agent banks may carry out transactions and offer financial services in the name and on behalf of the contracting party. Through the agreement, the EIF and ESPM may authorize an agent bank to open savings accounts or payment accounts for mobile wallets, but they must manage the risks they encounter.

Bolivia’s regulation is the only one that expressly requires mobile wallet operators to ensure sufficient funds are available at agent banks or at a nearby access point to fulfill the payment request for a money order or the repayment of a wallet.

#### 3.2.4 Regulations on Risk Management and Mitigation

##### 3.2.4.1 Anti-Money Laundering and Combating of the Financing of Terrorism

Since there is no simplified KYC regime in Bolivia, the general regime is still being applied, even for mobile wallets.

A mobile wallet or payment account must be opened in person, and the supervised entity is responsible for identifying the client and authorizing signatures to verify, register and document the client’s information. As mentioned, the agent bank may open payment accounts on behalf of the contracting party. The maximum amount per transaction in a mobile wallet is US\$ 170, representing 7% of the GDP per capita.

##### 3.2.4.2 Operational Risks

In order to guarantee that mobile wallets operate properly as a payment mechanism, risk management is the responsibility of the entity offering the service and the general regulatory regime must be applied.

In terms of minimum operational security requirements, the Banco Central de Bolivia has created guidelines for the mobile payment service that the EIF and ESPM must follow. These are described below.

- i. The issuer must link the payment account number, the full name of the holder, ID document and mobile device number, and must keep the record of processed transactions for at least 10 years.
- ii. Payment orders and electronic fund transfer orders using mobile devices must be processed through means that guarantee compliance with the following security features:
  - a) **Authenticity:** Mechanisms must be in place to verify the identity of the electronic payment instrument for each transaction.

- b) **Integrity:** There must be protection against any accidental or fraudulent alterations during processing, transportation and storage.
  - c) **Confidentiality:** Encryption mechanisms must be in place to avoid unauthorized diffusion or disclosure of information contained in the transaction.
  - d) **Non-repudiation:** The issuer must guarantee that none of the parties involved in the transaction can deny they participated.
  - e) **Availability:** The issuer shall guarantee that the processing system is available for users, according to the contractual provisions.
- iii. The user must have a password for authenticating the service.
  - iv. Financial entities and mobile payment service companies must implement authentication mechanisms.
  - v. The issuer must consider closing a session after 20 seconds of inactivity.
  - vi. Financial entities and mobile payment service companies must carry out information campaigns about the security of using the payment instruments.

The technological platform to be used for mobile payment services must, as a minimum requirement, have the ability to keep records of clients and their transactions, as well as all information related to sales agents and service distributors. The platform must also be able to identify and monitor existing electronic money moving through the distribution channel for the mobile payment service.

##### 3.2.4.3 Consumer Protection

The general regulations that are applied to traditional financial services are also applied to consumer protection.

Within the framework of the Banks and Financial Entities Law, the regulation issued by ASFI specifies that all transactions carried out by EIF and ESPM with operators and providers of mobile phone services, sales agents, distributors and other entities involved in the mobile payment service shall be subject to bank secrecy.

However, given that the provision of mobile payment services may be carried out through agent banks or sales agents, it is the obligation of the financial intermediation entities and mobile payment service companies to establish mechanisms to address client claims using the same telecommunications technology that was used to provide mobile payment services.

The regulation specifies that EIFs and ESPMs must send to the client or holder of a mobile wallet, within an agreed period, a report of the transactions carried out using the electronic

<sup>6</sup> Book 1, Title III, Chapter I, Section 4, Compilation of Standards for Financial Services. Within the framework of the provisions of Article 154 (7) of the Banks and Financial Entities Law, ASFI is authorized to prepare and approve the control and supervision regulations related to financial intermediation activities. Also, in accordance with the provisions of Article 1 (IV) of the Law No. 3076, ASFI has exclusive and non-delegable jurisdiction to issue prudential regulations.

## Bolivia Annex

### *continued*

payment instrument. The frequency of the account statement and the means of communication shall be agreed upon by the financial intermediation entity or the mobile payment service company and the client or account holder. The transaction report must include, at minimum, the period of the account statement and the balance through the end of the period.

### 3.3 Regulation for Mobile Operators

Strategic alliances between a financial intermediation entity or a mobile payment service company and a telephone service company are subject to the regulations of diverse supervision authorities. While financial intermediation entities and mobile payment service companies are regulated by ASFI, telephone service companies are regulated by the Telecommunication and Transportation Oversight and Regulation Authority (ATT).

In cases where the ESPM establishes a contractual relationship with a mobile phone service operator of the same corporate group, the ESPM shall have strategies, policies and procedures in place to manage the risks it is exposed to as a member of that same group. The following shall be taken into consideration (at minimum):

- the risk that the financial difficulties of the mobile phone service operator may affect the mobile payment service company, especially solvency and liquidity issues; and
- the mitigation of operational risks in the mobile payment service company.

## 4. Primary Outcomes

The regulation was issued in December 2011, and there is currently one mobile payment service company in operation. This company was incorporated between October 2012 and January 2013, and it obtained the operating license from the ASFI to provide mobile payment services after complying with all legal, technical and security requirements determined by the ASFI and the Banco Central de Bolivia. Ever since, it has been exclusively providing payment services for mobile devices. The service is operated through a mobile wallet linked to a mobile phone, which can also be used to conduct transfers, loads and cash withdrawals. Money can also be remitted and transferred, payments made and phone top-ups purchased in an easier, faster and more comfortable way.

The mobile payment service company started out with 490 points of service (non-financial agents) distributed throughout the nine regions of the country covering 135 localities, 14 of which had no access to formal financial services at all. By the end of December 2013, there were 688 points of service.

Paid-in capital increased 124% over the original capital by the end of fiscal year 2013. The company created a trust in 2013 of more than 8 million Bolivianos, which will cover the liquidity requirements if the ESPM does not convert the client balances to cash.

One of the major characteristics of this service is that all clients may enable the service through their mobile phones, with no need to install any application, since the technological

platform uses SMS technology and is compatible with any mobile phone model.

## Final Considerations

In Bolivia, classifying MFS as payment transactions allowed payment systems to be regulated under the Banco Central de Bolivia law, and created a regulatory framework that allows new operators to provide these services (subject to the supervision of the state). Since the authority of the Central Bank was used to regulate payment system operators, and the authority of ASFI to create ESPM as auxiliary financial service companies, no new law had to be issued to approve new operators.

Given that the regulation would be governing an innovative service, it was necessary to study and analyze domestic and international markets and hold coordination meetings with diverse stakeholders to determine the main guidelines to be included in the regulation. This included entities interested in incorporating mobile payment service companies, financial intermediation entities and the Banco Central de Bolivia. To boost the impact of MFS and achieve greater financial inclusion in Bolivia, simplifying account opening procedures will be crucial.



# Guatemala Annex

## 1. The Status of Financial Inclusion in Guatemala

Financial inclusion indicators in Guatemala have improved in recent years, especially those related to the coverage of the financial system. Access to financial services has expanded with agent banks, known in Guatemala as banking correspondents. Every territorial unit (all regions and municipalities) now has at least one financial entity but, as in other countries, usage of financial products remains low. Coverage is therefore necessary but not sufficient for customers to actually use financial products; suitable financial products must also be designed and implemented.<sup>1</sup>

**Table 1. Financial Inclusion Indicators in Guatemala, June 2013**

GDP per capita	3,313
Population	15,073,375
Adult population	7,895,314
Number of administrative units	334
<b>ACCESS</b>	
Number of access points per 100,000 adults	110.8
Number of bank branches per 100,000 adults	41.40
Number of ATMs per 100,000 adults	3.9
Number of agent banks per 100,000 adults	65.5
Percentage of administrative units with at least one access point	100%
Percentage of total population living in an administrative unit with at least one access point	100%
<b>USAGE</b>	
Percentage of adults having a deposit account with a regulated entity	22.3%
Percentage of adults with at least one credit with a regulated entity	14.6%
Depositors at regulated entities per 1,000 adults	437
Credits with regulated entities per 1,000 adults	245

Source: Superintendencia de Bancos (SIB) of Guatemala, Global Findex and the FinScope Access to Finance Survey

## 2. Why Initiate Reforms to Facilitate MFS?

In Guatemala, mobile financial services (MFS) regulation developed as the market evolved, and banks, credit card issuers and telcos began to show interest in developing initiatives that harnessed the potential of mobile phone services to provide financial services. In fact, one bank, one telco, and companies specializing in issuing and/or managing credit cards, all offered a service allowing cardholders to transfer money.

For financial authorities, the primary motivation to create MFS regulation, other than keeping pace with national and international trends, was to create a regulatory framework

that would foster a prudential ecosystem for mobile financial services and contribute to financial inclusion in Guatemala.

## 3. Regulatory Approaches and Reforms

### 3.1 General Framework

Guatemala's legal framework establishes that financial intermediation, defined as the use of funds raised from the public to be used as credit, is subject to the control and supervision of the state and can only be developed with prior authorization.

The only entities authorized to supply financial services are subject to the supervision framework of the Superintendencia de Bancos de Guatemala (SIB), with a complete prudential regulatory scheme, including multiple regulatory instruments and supervision practices (banks and credit card-issuing companies).

The Monetary Board, Guatemala's monetary authority, issued the Regulations for the Provision of Mobile Financial Services by means of a resolution of the Monetary Board JM-120-2011, which became effective on November 1, 2011. For the purposes of applying the regulations, mobile financial services are defined as those operations and transactions carried out from a monetary deposit account, savings account and/or credit line by means of a mobile device that uses mobile phone services. While the regulation does not expressly specify that it is the case of credit cards, it is implied when understanding the context of the country.

As in Mexico, MFS are considered an additional channel for the provision of traditional banking financial services and conducting financial transactions jointly with bank branches, agent banks, ATMs and POS.

Whereas the scope of financial activities is clear today, it may become less so as innovative payment services are developed by mobile service initiatives, even those related to money orders. This prompts concerns about the best way to protect public funds. For example, a mobile phone service company has been operating mobile wallets and money orders in Guatemala for some time without being regulated, as it does not act as intermediary of the funds. As a telco model, it operates outside the supervisory and regulatory range of financial entities.

### 3.2 Reform Elements

#### 3.2.1 New Electronic Money Issuers or Payment Services

As mentioned above, MFS are considered part of the banking model since the regulation<sup>2</sup> enables the use of the mobile

<sup>1</sup> These indicators show that even with 100% coverage, regulatory reform must still be examined to: a) foster the creation of useful financial products that meet the needs of the population and are sustainable over the long term; and b) promote the development of appropriate and accessible channels to deliver these products, which reduce transaction costs for end users and reach them wherever they live.

<sup>2</sup> Regulations for the Provision of Mobile Financial Services under Resolution JM 120-2011

## Guatemala Annex

### continued

channel for entities belonging to the financial system.<sup>3</sup> Drafting new legislation to include other supervised financial institutions that provide mobile financial services has not been considered but, as mentioned, there is a telco-guided mobile payment model not subject to financial regulation even though it provides financial services.

#### 3.2.2 Product Diversity

Given that MFS are considered a channel for accessing existing financial products, no specific mobile banking products have been defined. According to the provisions of the MFS regulation, every supplier institution must set maximum monthly limits for transaction amounts, accrued amounts and numbers of transactions. The regulation does not specify the amount of the limits; institutions are obligated to define them and the limits must be approved by their boards of directors.

The MFS regulation emphasizes that these limits must be linked to individual monetary deposit accounts or savings deposit accounts of persons who are existing mobile financial services customers (as defined by each institution). In the case of credit card management companies, these services are required to be linked to a credit line. Therefore, regulated services are those provided to existing account or credit card holders.

#### 3.2.3 Agent Banks or Correspondents: an Indispensable Complement to MFS

Agent banks, or banking correspondents, were established prior to MFS regulations being issued. The Regulation for Carrying Out Transactions and Providing Services through Agent Banks was issued in mid-2010 and became effective in October 2010. This regulation governs the transactions and provision of certain services banks may carry out using this channel, although banks were already operating under this scheme.

To supplement the scheme, the SIB issued Order No. 25-2011 in October 2011, which authorized banks to enter into agreements and receive information and documents from the public through agent banks, which were permitted to open monetary deposit accounts and savings accounts and process the client's affiliation with MFS. However, agent banks may not open an account directly; they must remit the documents to a nearby bank branch, which can take at least two hours.

#### 3.2.4 Regulations on Risk Management and Mitigation

##### 3.2.4.1 Anti-Money Laundering and Combating the Financing of Terrorism (AML/CFT)

In 2011, a simplified KYC regime for AML/CFT was adopted for individuals in Guatemala with low transaction levels or business volumes who were opening any financial product, including MFS. A maximum transaction limit of US\$ 625 per month, representing 19% of the GDP per capita, and a maximum accrued limit of US\$ 2,500 per year were established.

##### 3.2.4.2 Operational Risks

The regulation allows a broad framework without specific requirements so that MFS entities can apply their own risk

models. This has also allowed the supervisor to become familiar with several different risk-based approaches to service provision.

The regulation states that transactions must be registered in real time to keep balances current. However, supervised institutions supplying MFS must include a description of the technological platform, hardware and software to be used, and the IT security and controls to be implemented to guarantee the confidentiality, integrity and availability of the information.

Likewise, supervised institutions are required to comply completely with the risk management prudential regulations set forth by the minimum guidelines, including those for managing technological risk, which is understood as an interruption, alteration or failure of the IT infrastructure, information systems, databases or IT processes that could cause financial losses for the institution.

##### 3.2.4.3 Consumer Protection

A consumer protection regime is currently being developed for customers at the bottom of the pyramid.

In terms of specific consumer protection standards, the MFS regulation requires MFS providers to have service infrastructure and systems in place that must include enabling forms of communication so that users may receive proper assistance with inquiries or claims.

### 3.3 Regulation for Mobile Operators

As mentioned, telephone service operators provide mobile financial services schemes as third parties in partnership with banks, which are supervised institutions. Since the banks are responsible for conducting financial activities, the market demands that these operators be regulated directly. The regulation of the activities of telephone service companies is the direct responsibility of the telecom authority.

## 4. Final Considerations

Despite not having statistics on transactions, affiliated users or transactionality amounts, there may still be opportunities for MFS providers. Although the MFS market in Guatemala has passed through an initial stage of development, it is still considered to be in a preliminary stage.

As in other countries in the region, the development of MFS in Guatemala has prompted discussion about which financial activities should be subject to the supervision of the state, and their similarities and differences with MFS. Intermediation and raising funds from the public vis-à-vis money orders and payment services has raised questions about the scope and limits of financial services versus payment services.

<sup>3</sup> The possibility of other suppliers implementing MFS models is not restricted, but the financial authorities (JM and SIB) may only regulate transactions carried out by supervised entities. The best example is Tigo Money, which offers MFS without being subject to the regulation.



# Mexico Annex

## 1. The Status of Financial Inclusion in Mexico

Since the launch of its 2007-2012 National Development Plan, Mexico has recognized financial inclusion as a driver of economic growth, equity and the development of the national economy, and as capable of democratizing the financial system without risking solvency. Several actions have been taken, including establishing the National Council for Financial Inclusion (CONAIF) in 2011, which brings several financial authorities into one advisory and coordination organization to consolidate financial inclusion tasks and strengthen the impact of their individual efforts.

The following are the main financial inclusion indicators measured in Mexico through June 2013. The access indicator measuring points of contact per 100,000 inhabitants is worth noting: agent banks, which are quite important for supporting mobile financial services, already exceed the number of bank branches.

**Table 1. Financial Inclusion Indicators in Mexico, June 2013**

GDP per capita	9,742
Population	120,847,477
Adult population	85,791,432
Number of administrative units	2,456
<b>ACCESS</b>	
Number of access points per 100,000 adults	90.55
Number of bank branches per 100,000 adults	15.68
Number of ATMs per 100,000 adults	47.33
Number of agent banks per 100,000 adults	27.54
Percentage of administrative units with at least one access point	60.7%
Percentage of total population living in an administrative unit with at least one access point	95.2%
<b>USAGE</b>	
Percentage of adults having a deposit account with a regulated entity	35.5%
Percentage of adults having at least one credit with a regulated entity	27.50%
Depositors at regulated entities per 1,000 adults	940
Credits with regulated entities per 1,000 adults	379

Source: Based on indicators estimated by the CNBV, Global Findex and the FinScope Financial Access Survey

## 2. Why Initiate Reforms to Facilitate MFS?

One major component of Mexico's financial inclusion strategy is to create enabling market conditions, which required the regulatory framework to be reviewed and adjusted. The objectives of the regulatory reforms were:

- to promote greater competition in the financial system, allowing new stakeholders to participate and consolidate existing stakeholders;
- to foster new supply channels for financial services that serve the general public and reduce transaction costs (e.g. agent banks, issuers of electronic payment methods); and
- to promote the development of innovative products and services by including options in the regulatory framework for creating payment and savings products that meet the needs of low-income people.

In Mexico, payment systems require payment methods (such as cards, near-field communication circuits or mobile phones) to be issued by credit institutions duly authorized to receive funds from the public.<sup>2</sup> Thus, when telecommunications companies expressed interest in offering payment methods through mobile phones, financial authorities advised them that these services had to be backed by a financial entity. Nevertheless, a certain amount of flexibility has been sought to allow new financial services suppliers to participate in the market. One example is allowing issuers of electronic payment methods to operate as niche banks.

Unlike other countries where the private sector has been the main driver of regulatory reforms (approaching financial authorities to create feasible and innovative business models or schemes), in Mexico, they were developed jointly with financial system participants, potential participants from other sectors (such as the telecom sector) and relevant financial authorities.

The regulator was willing to make reforms by consulting and coordinating with the relevant authorities, and advocated a gradual approach that allowed time for review. The regulation was developed in modules, with the first phase focusing on the development of niche banks, key activities and the concept of agent banks. In certain aspects, work has been conducted gradually, as different authorities adjusted the regulatory framework to create a comprehensive, coherent and articulate regulatory environment that fostered new business models. The policy goals were greater competition, stable and secure transactions, the integrity of financial systems, and the development of new business models and financial channels that attract new users of financial products in an orderly and predictable fashion.

Currently, the rules for creating and operating new business models using innovative strategies to expand access to financial services are fully integrated into the regulatory framework of Mexico's financial system.

## 3. Regulatory Approaches and Reforms

### 3.1 General Framework

In Mexico, raising funds from the public is an activity reserved for authorized financial entities. Article 2 of the Financial

<sup>2</sup> A different regulation is applied to loans and the collection of remittances or social benefits, as these are not linked to a deposit account.

## Mexico Annex

### continued

Institutions Law specifies very clearly that the provision of financial services, in its broadest sense, is subject to the regulation and supervision of the state, particularly raising savings from the public.

From the beginning, Mexico's mobile financial services (MFS) model has been based on a banking model, with a fully regulated and supervised financial institution responsible for the safekeeping of public funds, particularly managing mass payment methods for niche entities.

With clear progress and a coherent regulatory framework in place, financial authorities have been flexible enough to make changes to the regulatory approach. For example, adjustments have been made to the regulatory framework for new financial channels, mainly mobile devices. At first, the regulation treated these similarly to other transactional products. However, after discussion and consultation with diverse market participants, the authorities decided to adjust the regulation to treat them as a financial channel, assuming other similar channels would emerge or become widespread in the future.

Since then, the discussion has focused on developing MFS as a channel for providing traditional financial services, as well as a new channel for banks to carry out financial transactions (in addition to branches, agent banks, ATMs and POS). However, given that each channel has different service characteristics and security risks, Mexico's regulation sets forth mechanisms for managing and controlling risks specific and appropriate to each channel. Therefore, even though MFS were considered part of the traditional transactions of regulated financial institutions, a special regulatory framework was developed to accommodate transactional products with varying levels of risk.

### 3.2 Reform Elements

#### 3.2.1 New Electronic Money Issuers or Payment Services

Since MFS may only be provided by entities belonging to Mexico's financial system, no special standards were issued for electronic money. However, reforms were made to the existing regulation that governs and supervises passive and active transactions by financial institutions. These reforms allowed MFS to be used as a channel to provide financial services from a distance that are efficient, reliable and fully subject to supervision and regulation.

New operators are only allowed to enter the market and granted the right to accept public funds if they are supervised and regulated by relevant financial authorities. Since both telecom operators and service suppliers function outside the regulation and supervision of financial authorities, they cannot directly supply any services that involve receiving or safekeeping of public funds.

In an attempt to promote competition in the sector, Mexico's financial authorities amended the legislation<sup>3</sup> between 2008 and 2009 to allow financial institutions known as 'specialty

banks' or 'niche banks' to be created. The legislation permits a non-financial institution to obtain a limited financial institution license and provide specific, limited transactional financial services without the regulatory or financial burden associated with other types of transactions.

The advantage of licensing these types of institutions is that it entices new players to enter the market that do not necessarily come from the financial sector. By obtaining a license, specialty banks can offer transactional services linked to simplified deposit products and provide financial services through these new channels. Financial supervision and regulation then guarantee the security and reliability of these services. Specialty banks, therefore, are credit institutions that obtain their license by limiting the types of activities to be performed in their bylaws, which reduces both the minimum capital stock required and the entry costs for obtaining the banking license. Whereas niche banks were not created specifically to facilitate MFS, the new structure and standards provide the option to develop specialized operators which, in the case of deposits, payments and remittances, would be subject to regulation based on the types of risks they pose.

In 2012, more than six niche banks were authorized to operate. One institution stands out: Banco PagaTodo, S.A., Institución de Banca Múltiple. Its corporate mission is to offer users simpler transaction methods.

**Table 2. Summary of MFS Regulatory Approaches in Mexico through June 2013**

<b>Authorized operators</b>	Specialty banks or niche banks
<b>Minimum capital stock for specialized entities</b>	US\$ 14 million
<b>Minimum capital stock for banks</b>	Level 1 commercial banks: US\$ 34 million
<b>Ratio of specialized entities to banks</b>	40%
<b>Capital adequacy</b>	Regulatory provisions for full license commercial banking apply, but only for transactions carried out
<b>Authorized transactions</b>	Deposit taking, payments, prepaid cards and remittances
<b>Backup mechanism</b>	Deposit insurance: 100% of funds invested in liquid form

#### 3.2.2 Product Diversity

In Mexico, MFS are considered a channel through which traditional banking services can be offered. Adjustments were made to traditional deposit products to simplify certain

<sup>3</sup> By means of a Presidential Executive Order and further amendments to the regulations applicable to

## Mexico Annex

### continued

opening and documentation requirements and to better adapt them to electronic channels, such as mobile devices. Some transactional and operational capacity controls were also imposed to comply with financial system integrity (AML/CFT) and security requirements.

The financial authorities sought to create an enabling regulatory environment for deposit products that addressed both the access challenges faced by those living in rural areas, as well as the documentation barriers demanded by the regulation itself. They also aimed to create linkages with a mass mobile channel, such as basic mobile phones with SMS-type message capability. To do this, they focused on adjusting the corresponding regulation (such as Electronic Banking in the Banks Sole Circular (CUB) - Chapter X) to include transactional products that were well suited to electronic channels, depending on their risk levels.

As in other countries, creating simplified accounts has been a multi-stage process. Basic and simplified accounts have been offered since 2009 and divided into two types of accounts based on ML/TF risk. In 2011, four types of simplified accounts were defined by risk level, with a simplified regime for money laundering control and approved for use with a mobile device. The regulation for simplified account processing was approved in August 2011. Table 3 below summarizes the main characteristics of these four simplified accounts.

#### 3.2.3 Agent Banks or Correspondents: An Indispensable Complement to MFS

The authorization of agent banks in December 2008 and the first agent bank schemes, including the introduction of the Wal-Mart chain as an agent bank in October 2009, marked the beginning of a major expansion of access points for certain financial services in Mexico. Agent banks have made it easy for customers to make utility payments or electronic transfers, reduced the need to maintain physical locations for utility payments, and leveraged systems such as the Interbanking Electronic Payment System (SPEI-BANXICO). The network of agent banks has expanded to almost twice the number of bank branches.

In 2007, some commercial banking institutions considered providing services through third parties, such as credit card payments at cashiers of commercial chains, but amendments to the credit institutions law in February 2008 gave rise to prudential provisions that regulate such activity.

As new products are developed and the market evolves, regulations in Mexico are continuing to change. For example, in June 2013, flexibility was introduced to regulations governing electronic channels, making it possible for agent banks to operate offline provided individual balances are stored using the handling method authorized by the CNBV. While this introduces other security challenges, it solves the infrastructure problems of telecoms in some areas. It effectively allows a mobile agent banks model in which balances 'travel' and are reconciled at points where communication is available. This scheme is used to distribute subsidies, and some product distribution chains (e.g. bread, soda and beer) are in the process of setting up a mobile agent bank in every distribution truck.

Account opening through agent banks has been authorized since 2010,<sup>5</sup> but only for Level 1, 2 and 3 accounts, which have simplified requirements and, therefore, limited types of transactions.

Although the regulation does not allow exclusivity, in practice, the bank may demand (via a clause) that the agent bank does not enter into agreements with other banks. There is also the concept of correspondent manager.

#### 3.2.4 Regulations on Risk Management and Mitigation

##### 3.2.4.1 Anti-Money Laundering and Combating the Financing of Terrorism (AML/CFT)

Mexico's regulator has gone through a successive process of defining low-value deposit products affected by the

4 Simplified file with basic data: name, federal state, date of birth, gender and address

5 Chapter XI of the Bank's Sole Circular, Article 319 (X)

Table 3. Characteristics of Simplified Accounts in Mexico

Type of account	Clients	Opening	File (form)	Limits (cash-ins per month)
Level 1	Anonymous opening	Prepaid cards. May not be linked to a mobile phone.	Not required	US\$ 290 and balance of US\$ 390
Level 2	Individuals	Remote opening, even from a mobile phone	Simplified electronic file with basic data <sup>4</sup>	US\$ 1,117
Level 3	Individuals or legal entities	In-person opening required (at branch or agent bank)	Simplified electronic file, but includes more data	US\$ 3,900
Level 4 Traditional	Individuals or legal entities	In-person opening at branch	Full printed file with copies of all documents	Unlimited

## Mexico Annex

continued

KYC requirements mentioned above. The process began in 2007, with basic accounts having mandatory requirements for cost, product simplicity and minimum account opening documentation. In 2009, a different approach was taken, simplifying the minimum risk requirements for operational functions, including transactions, transaction types, channels and authorized methods. The regulation currently in effect was issued in 2011, which defines four levels of accounts with light, proportionate and differential minimum requirements for risk, channel, method, volume and type of authorized transactions. Even Level 1 accounts have the option to be anonymous, which mitigates the risks posed by limits on amounts and channels. The following section explains the relationship between account levels and channels in more detail.

### 3.2.4.2 Operational Risks

Mexico has developed a special regime to manage risk by account level, handling method and channel. Rules for authentication are based on account level; the greater the amount and scope of the account, the more authentication and operational risk controls are required. In terms of operational risk management and fraud prevention, the values that determine the use of authentication and registration mechanisms are tied to the four levels of accounts.

However, the payment system regulation also sets additional limits on the security requirements for the payment methods and features of the mobile channel and electronic banking methods. Mobile payment, mobile banking and Internet banking categories are used for electronic banking. Each

Table 4. Characteristics of Various Channels

Channel	Characteristics	Limits
<b>Mobile Payment</b>	Simple product, low requirement levels and transactionality for Level 2 and 3 accounts Accessed through a mobile device	Data encryption not required Only single factor authentication required PIN required for transactions >US\$ 70 No operation limits Remote opening, no signature required
<b>Mobile Banking</b>	Additional service for traditional accounts Accessed through a mobile device	Data encryption and dual authentication methods required (dynamic codes, tokens or biometrics) with no operation limits
<b>Internet Banking</b>	Additional service for traditional accounts available online	Unlimited

Table 5. Interaction between Products and Channels

Type of account	Level 1	Level 2	Level 3	Level 4 - Traditional
<b>Characteristics</b>	Prepaid card	Remote opening, even from a mobile phone	Open in person (at a branch or agent bank)	Open in person at a branch
<b>Deposit limits</b>	US\$ 290 and balance of US\$ 390	US\$ 1,117	US\$ 3,900	Unlimited

Channels	Prepaid card	Mobile payment	Mobile banking	Internet banking
<b>Characteristics</b>	May not be linked to a mobile phone	Data encryption not required Only single factor authentication required	Requires data encryption and dual factor authentication methods	Online
<b>Limits</b>		<ul style="list-style-type: none"> <li>US\$ 96 without a PIN</li> <li>Maximum accrued daily payment of US\$ 575</li> <li>Accrued monthly deposit of US\$ 2,301</li> </ul>	Unlimited	Unlimited

## Mexico Annex

### *continued*

channel maintains specific encryption requirements, authentication elements and others, with maximum caps on the transactions that can be carried out by each of them.

Traditional deposit products have been modified to simplify certain opening and documentation requirements and to adapt them to electronic channels, such as mobile devices. This has, in turn, imposed some transactional and operational controls to comply with financial system integrity (AML/CFT) and security requirements. Limits on the types of financial products offered through mobile phones depend on two distinct product features: the account level and the types of technological controls used to operate the mobile phone. The regulation therefore creates an 'interaction matrix' between the products and channels, as summarized in Table 5 on page 31.

The regulation also allows an entity to apply certain additional limits or product features provided that any client claim is settled within a maximum of 48 hours and the bank is authorized to conduct additional investigations. To implement this principle, when the value of the limits due to operational risk differs from the values allowed by the account level, the controls for the most restrictive limit shall be applied.

#### 3.2.4.3 Consumer Protection

The same general regulatory regime that was developed for the rest of the system also applies to consumer protection for MFS customers.

### 3.3 Regulation of Mobile Operators

Work is currently underway to improve the interoperability of mobile payment systems through the SPEI system (operated by the Central Bank) by linking account numbers with mobile phone numbers.

## 4. Primary Outcomes

During 2012, more than six authorizations were granted to niche banks, including Banco PagaTodo, S.A., whose corporate mission is to offer simplified transaction methods. The number of mobile banking accounts began to be reported in the second quarter of 2012 and by the end of September 2013, the demographic indicator was 256 mobile banking accounts per 10,000 adults, with a total of 2,170,533 accounts. In 2013, four mobile payment products were in operation, supplied not only by banks, but also through a product promoted by the WOCCU in two cooperative microfinance institutions.



# Peru Annex<sup>1</sup>

## 1. The Status of Financial Inclusion in Peru

One of the main commitments of Peru's current government to the Peruvian people is to improve social inclusion in the country. Financial inclusion is a key instrument for achieving this goal. The financial inclusion strategy adopted by the Superintendencia de Banca, Seguros y AFP (SBS) del Perú is comprehensive and focuses on four strategic topics: development of an appropriate regulatory framework, improving the transparency of information, consumer protection and financial education.

In terms of the regulatory framework, the SBS seeks to promote soundness and competition in the financial system, as well as create incentives to improve the scope and depth of financial services. In this sense, the regulation not only promotes the development of products and services suitable for all segments of the population, but also encourages the use of safe and low-cost channels. The main development initiatives have focused on alternative channels such as agent banks, transformational mobile financial services and, within a broader reform framework, the introduction of the concept of electronic money and entities issuing electronic money regulated and supervised by the SBS.

Between the end of 2005 and December 2012, Peru's financial system service network (branches, ATMs and agent banks) expanded significantly. During this period, the number of service points increased to 31,847,<sup>2</sup> from 22 to 188 points per 100,000 adults—one of the highest in the region.

This increase was due mainly to agent banks, which were authorized by a regulation issued in the mid-2000s and already exceeded the number of bank branches and ATMs. However, in December 2012, 61% of Peru's districts,<sup>3</sup> where 13% of the adult population resides, still had no financial access points.

The percentage of the adult population who had received a loan from a formal financial entity rose from 17% to 29% in 2012, introducing 2.61 million new debtors to the financial system. During the same period, the number of savings accounts increased to almost 16 million.<sup>4</sup> Table 1 details the main financial inclusion indicators in Peru from June 2013.

## 2. Why Initiate Reforms to Facilitate MFS?

Like other countries in the region, a regulatory framework facilitating mobile financial services (MFS) was created to promote competition in the financial system and enable greater financial inclusion. In the mid-2000s, financial authorities in Peru began to seek regulatory mechanisms that would reduce the cost of providing financial services in more areas of the country, and authorized the use of agent banks to achieve greater financial inclusion. However, the reforms had to be studied in depth to determine how to use even lighter channels to bring financial services to rural and remote areas, where people were underserved by the financial system.

According to the SBS, it was clear that the development of IT in the financial system was growing rapidly and that

Table 1. Financial Inclusion Indicators in Peru, June 2013

GDP per capita	6,796
Population	30,135,875
Adult population	20,773,134
Number of administrative units	1,835
<b>ACCESS</b>	
Number of access points per 100,000 adults	188
Number of bank branches per 100,000 adults	20.21
Number of ATMs per 100,000 adults	40.04
Number of agent banks per 100,000 adults	128
Percentage of administrative units with at least one access point	39.0%
Percentage of total population living in an administrative unit with at least one access point	86.9%
<b>USAGE</b>	
Percentage of adults having a deposit account with a regulated entity	20.5%
Percentage of adults having at least one credit with a regulated entity	29.0%
Depositors at regulated entities per 1,000 adults	1,009
Credits with regulated entities per 1,000 adults	571

Source: Information provided by the SBS, Global Findex and the FinScope Access to Finance Survey

the Internet was being used more often as a transactional platform. Also, conventional networks and mobile phones were beginning to be used to conduct several different transactions. The Multilateral Investment Fund (FOMIN), managed by the Inter-American Development Bank (IDB), provided funding for a consultancy to diagnose the main gaps in the legal, technological and institutional framework and identify the ideal scenario for the development of mobile banking. This process revealed the successful experiences of other countries, not only in developing mobile banking, but other payment services that used electronic money. A series of policy issues were identified in which telecom and financial services regulations converged.

However, several gaps were found in Peru's legislation for payment systems. Despite allowing for electronic money services, such as mobile wallets, it lacked clear definitions on the nature of these services, minimum requirements for what entities could provide and supervisory rules for these transactions. This gap generated uncertainty and limited investments.

1 This annex is based on information furnished by the SBS for the preparation of the general document in 2013.

2 During this period, the number of agent banks (POS) increased to 24,156.

3 Districts are the smallest administrative units in Peru.

4 Due to bank secrecy standards, there are restrictions on counting the number of depositors; therefore, we do not report them.

5 Mobile financial services or MFS are defined as any financial service that requires telecommunication services, whether through mobile phones, tablets or other devices.



## Peru Annex

### *continued*

Given the high degree of mobile penetration in the country and the potential of electronic devices to increase financial inclusion in the country, the SBS sought to clarify the legal framework to allow new participants to enter the market under a prudential and supervised framework. New market players would foster competition since implementing this ambitious transaction-based model required a cost and operation structure distinct from banks.

After studying the experiences and regulatory frameworks of other countries, such as Kenya, the United Kingdom, the Philippines and Spain, the SBS, in coordination with other government organizations, prepared a regulatory proposal that detailed the particular conditions in Peru and sought to develop a series of financial inclusion policy objectives related to competition and proportionate risk-based regulation. These features are described in more detail below.

## 3. Regulatory Approaches and Reform Elements

### 3.1 General Framework

Peru's legal framework specifies that financial intermediation is an activity in which publicly raised funds are used to grant loans or carry out investments. Therefore, financial intermediation requires prior authorization and is subject to state control and supervision. Even though financial regulation has been elaborated for the development of MFS initiatives, and payment system legislation has introduced the concept of payment service supplier, Peru's financial authorities deemed it necessary to reform the legal and regulatory framework to improve competition and encourage the development of initiatives that might boost financial inclusion. The reform had to limit initiatives by non-supervised entities, clarify the scope of transactions that had to be regulated and identify the applicable regulation and type of licenses for such activities. Given the legal framework for financial intermediation activities, the law had to be reformed.

After examining various models, it was concluded that a banking model that offered mobile financial services would have less potential to advance financial inclusion than other models. Therefore, a hybrid banking and non-banking model was adopted that authorized both traditional financial institutions and new operators to provide MFS (subject to the supervision of the state).

It was determined that the focus of the new regulation should not be mobile banking since a new regulatory instrument was not required. A new concept of electronic money was created instead; MFS were defined in the regulation as a channel that not only delivers traditional financial services, but a wide range of other financial services provided through mobile phones and other electronic devices. One of these service categories was mobile banking, which links a deposit account through a mobile device to facilitate payments and other transactions and/or services. The other category does not require a deposit account and is based on the use of electronic money. The new legislation focuses on the latter.

In December 2012, Law No. 29985 was enacted to regulate the basic characteristics of electronic money. The main purpose of the law was to set forth clear rules for the development of electronic money schemes that facilitate payments and transfers in a faster, more secure and economical manner, without the need for a customer to depend on a bank account. It also authorizes the creation of a new type of regulated institution for the development of new transactions and the issuance of electronic money by specialized entities called Entities Issuing Electronic Money (EEDe). Financial inclusion and competition are encouraged, promoting greater efficiency with payment methods, which are expected to be a gateway for a broader range of products. The law also complements the existing regulation for the provision of MFS, which covers deposit accounts. For these services, it was only necessary to clarify the authority of the telecom regulator for MFS.

### 3.2 Reform Elements

#### 3.2.1 New Electronic Money Issuers or Payment Services

The electronic money law authorized the creation of new electronic money or payment service suppliers to create a favorable environment for the development of financial inclusion and fair competition. The law clearly specifies that electronic money may only be issued by authorized entities, either those currently supervised within the financial system or new specialized entities (EEDe), which are also regulated and supervised by the SBS. The new operators specialize in issuing electronic money stored as value in mobile phones or cards and make payments and money orders in an expedited fashion. The applicable regulatory regime is proportionate to the transactions being carried out and, in general, lighter than for entities that act as intermediaries of public funds. This is because a light structure supports the development of services for segments of the population that other entities find difficult to reach given the transaction costs. Such schemes would also require other types of business models based on making transactions profitable, among other possibilities.

Given that electronic money constitutes a monetary value stored in an electronic format that may not be subject to financial intermediation, entities authorized to issue money, including EEDe, are not allowed to act as intermediaries of the funds and may only carry out conversion and reconversion transactions, payments, transfers and purchases. Their income, therefore, comes from the commissions charged for transactions carried out by their clients.

Since electronic money is not a deposit, it is not covered by the Deposit Insurance Fund, but there are other mechanisms in place to reduce the risks associated with the insolvency of the issuer, such as fund isolation and the obligation to create a trust for the entire amount of money in circulation, among other measures. The fund investment regime specifies that funds may be invested in deposits of entities managing multiple transactions classified as A+, in Treasury Bonds of the Peruvian Government or in securities of the central bank, as well as in other liquid assets authorized by the Superintendency.

## Peru Annex

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**Table 2. Requirements for New Operators**

Authorized operators	Entities Issuing Electronic Money
Minimum capital stock for specialized entities	US\$ 806 million
Minimum capital stock for banks	US\$ 8.9 million
Ratio of specialized entities to banks	9%
Capital adequacy	EEDE must have an effective net worth not less than 2% of the total money in circulation
Authorized transactions	Conversion to electronic money, reconversion to cash, transfers, payments, remittances from abroad and disbursement of credits, among others. Mobile phones, prepaid cards and any other electronic device may be used.
Backup mechanism	Trusts

### 3.2.2 Product Diversity

The issuance of electronic money is defined as a new type of financial transaction that involves the use of public funds, but differs from savings deposits, term deposits or current account deposits. Electronic money is understood as value stored in an electronic format, convertible to cash, that allows customers to make payments and transfers, and receive remittances from abroad and credit disbursements. However, since it is not a deposit, the funds may not be used to intermediate and do not generate interest.

The main issuance method is the opening of electronic money accounts, which may be opened under a simplified or general regime to prevent money laundering and financing of terrorism and protect user information. Accounts have transaction limits of US\$ 1,400. Open prepaid cards are a form of electronic money and must comply with the criteria for electronic money set forth in the law.

The definition of products also includes the simplification of opening documents and requirements to adapt them to mobile phones, for example, eliminating requirements to obtain a signature upon opening a product, submit printed abstracts and use a printed form.

### 3.2.3 Agent Banks or Correspondents: An Indispensable Complement to MFS

In 2005, Peru authorized third parties—agent banks or correspondents—to provide financial services and use the infrastructure, which is indispensable for any product linked to a mobile phone, particularly transformational models that are attracting mobile phone users to the financial system for the first time.

After the electronic money law was approved, new reforms were introduced to the existing agent banking regulation. The capabilities of the agent network were extended; agents were permitted to offer services to both traditional financial institutions and the EEDE regardless of whether they were

related to bank deposits or electronic money. The types of transactions that could be conducted were also broadened, with an emphasis on payment services and transactions for individuals, including the sale of microinsurance. In addition to simplified deposit accounts or ‘basic accounts,’ agent banks were also authorized to open electronic money accounts whether on behalf of a bank, an entity acting as an intermediary of funds or an EEDE.

The printed documentation requirement was reduced to a minimum and electronic devices were authorized to verify the identity of clients in real time. This allows clients to be connected through a mobile phone anywhere in the country with no need to be in the physical presence of a bank representative. This applies only to products with a simplified KYC process.

### 3.2.4 Regulations on Risk Management and Mitigation

#### 3.2.4.1 Anti-Money Laundering and Combating the Financing of Terrorism

To facilitate access and maintain the integrity of the financial system, the ML/TF prevention scheme and the applicable data transparency requirements were reviewed to establish a regulation that applied to the new services and was proportionate to the risk.

A simplified regulation process for ML/TF prevention has been in effect since 2011, when simplified bank accounts and basic accounts were also created. Since then, due diligence and KYC principles have been included in general and special (strengthened and simplified) regimes. Under the simplified regime, general criteria were established for low-risk products in the financial system (such as insurance and pensions) and customer linkage requirements were reduced (fewer documents). The regime sets forth general criteria that allow the regulator to create products with fewer requirements and the entity to demand that a product be included under the regime, as long as it is supported by an analysis demonstrating low exposure to ML/TF risks.

Basic accounts, and the simplified regime in general, are products being considered by entities with MFS or electronic money projects. However, in practice, basic accounts and the simplified regime have not been well received, mainly because of high implementation costs and difficulty controlling the related limits, which remains a challenge.

Since the electronic money law was issued in 2013, the EEDE has been authorized to open electronic money accounts, which, depending on their characteristics, fall within the simplified or general regime.

#### Characteristics of the Simplified Regime:

- Applies to requirements for AML/CFT and the simplification of user information.
- Similar criteria is applied for bank accounts and electronic money accounts, including maximum limits for balances and transaction volumes. These limits vary under the

## Peru Annex

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simplified regime, depending on whether they are bank accounts or electronic money accounts.

- Minimum information related to the national ID document is required. A mobile phone number may also be required, depending on the situation.
- Remote opening allowed using a mobile phone.
- Available to national or foreign individuals.
- Operates in domestic currency for use within the country.
- Limits for electronic money are as follows:
  - Transaction limit: US\$ 350
  - Balance of a holder: US\$ 700
  - Monthly volume US\$ 1,400 (21% of GDP per capita)

#### 3.2.4.2 Operational Risks

No significant changes have been required of the current regulation in terms of managing the operational risk to provide MFS, nor for information security issues. There has been a neutral approach to technology, with no particular technology developed or rejected. However, the control framework must be appropriate and comply with the regulation in effect, with any deviation reported and approved under the existing procedures. The general regulation is therefore applied, which allows the SBS to accept or reject the technological model or support platform to be implemented and, in general, the risk management model of each operator.

#### 3.2.4.3 Consumer Protection

Consumer protection is part of the SBS's strategic focus on financial inclusion. Peru's financial system is considered to have a solid regulatory framework based on clear respect policies for the financial consumer, mechanisms for complaint resolution, transparency during the sign-up process and agreements written in a plain and clear language with fair clauses.

The existing regulations for electronic money, related mainly to the simplified regime, have sought to reduce requirements before creating new ones. Some provisions have been introduced in connection with claims handling and related liability, which effectively constitute a simplification of the regime. In general, a simplified regime is considered and is applied to those related to consumer protection for both traditional financial services and electronic money transactions. While the deposits are protected by the bank secrecy law, the electronic money law specifies that the information related to users and their transactions are subject to the Law on Protection of Personal Data.

### 3.3 Regulation for Mobile Operators

Throughout discussions on mobile regulations, it became increasingly evident that it was necessary to regulate access to the mobile channel.

The electronic money law addresses the regulation of mobile operators, establishing a proper framework for access to telecom services for mobile financial services, which include all financial services provided through the mobile channel, not just those related to electronic money.

The law therefore authorized the telecom regulator (OSIPTEL) to facilitate access to the channel for mobile financial services. The regulator has issued a regulation with provisions that seek to guarantee similar access for all stakeholders, as well as resolution mechanisms if access is blocked. These may include conditions determined by the telecom regulatory body, in the absence of agreement between the parties. The telecom regulator has published regulations for public comment that will allow intervention if access to channels is limited, including SMS, USSD and others linked to mobile financial services. This framework not only covers services related to mobile phones, but all telecom services related to financial services.

For interoperability, Peru's law authorized the SBS and the Central Reserve Bank of Peru to determine the conditions under which clients can carry out transactions with any counterpart, regardless of the financial service provider. It also specifies that the use of telecommunications networks for the provision of financial services must be provided under the same conditions for all companies providing the service, thus avoiding differential treatment by the network operators.

## 4. Primary Outcomes

Several banks and some microfinance entities offer mobile banking services to their clients, with the mobile phone used as an additional service channel. Some have initiatives aimed at small companies, mainly warehouses, that allow payments to be made to distributors with a mobile phone. These payments are made with a debit to simplified deposit accounts or basic accounts maintained with the bank.

Among the projects under development, one stands out: the 'Peru Model' led by the Peruvian Bank Association (Asbanc) through its Electronic Money Committee. It will implement a standard platform for the development of electronic money products, allowing them to be interoperable from the date they are launched. All banks in the country are participating in this project, which has been in development since 2013 and is expected to be operational in 2015.

Under the current regulatory framework, there are entities that have expressed an interest in becoming EEDE and providing mobile wallet or prepaid card services. This is in the process of being authorized by the SBS.

## 5. Final Considerations

It is expected that Peru's electronic money law will promote mass use of electronic devices for payment services and transfers, especially among those segments of the population currently underserved by the financial system or living in remote areas. By using electronic money, people will be able to make payments and transfers securely and at a lower cost and lower risk than cash. It is expected that the government will also benefit from using electronic money products, which will reduce the cost of transfers to beneficiaries, who in turn can use the money through their mobile phones.





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