



**WORKING PAPER**

# **Applying the RIA Lite Methodology**

**An Example from Pakistan**

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## WHAT IS THE RIA LITE METHODOLOGY?

A regulatory impact assessment (RIA) is a comprehensive and systematic appraisal of positive and negative effects of proposed (*ex ante*) or existing (*ex post*) regulations. RIAs have long been used in OECD countries,<sup>1</sup> and they are increasingly being used in emerging markets and developed economies (Kirkpatrick and Parker 2007). They are widely regarded as an important tool for effective policy making. Indeed, some form of an RIA has become mandatory in an increasing number of countries. However, it is often perceived as a challenge to conduct in practice because of a lack of sufficient data and the difficulty in attributing impact to specific changes in regulation.

The research addressed in this paper used an “RIA lite” methodology, which is less comprehensive than a full-fledged RIA, but still gives stakeholders (*i*) a sense of the effectiveness of regulatory changes and (*ii*) evidence-based recommendations for potential future policy changes.<sup>2</sup> RIA lite in digital financial services (DFS) goes beyond a simple diagnostic. It considers relevant regulations and policies for DFS and related supervisory practices, and it estimates their impact on providers and clients as measured against defined policy objectives (used as benchmarks). RIA lite focuses on the most material impact of regulations that can be measured through analysis of primary and secondary data, relevant policy and research documents, and interviews with central bank officers, financial services providers, and other informed stakeholders.

In 2016, CGAP conducted an *ex-post* RIA lite on Pakistan’s regulatory framework for DFS.<sup>3</sup> The goal was to help regulators improve financial inclusion policy design and show the value of this methodology. In Pakistan, DFS is limited to a bank-based model and is referred to as *branchless banking*.<sup>4</sup>

The benchmark used in the analysis is the degree to which the central bank’s key policy objectives have been achieved. The objectives were taken to be inclusion, stability, integrity, and protection, collectively known as the I-SIP objectives. While this is an important parallel to the I-SIP research exercises CGAP has undertaken in several countries over recent years, the focus of an RIA is not on understanding the policy-making process, but on measuring the impact of policy outcomes. Therefore, RIAs focus on defining impact indicators and analyzing data.<sup>5</sup> The attribute “lite” is used to signify that the assessment is a streamlined version of a full-fledged RIA, which is often perceived as nice to do in theory, but hard to do in practice.

We began the assessment by defining (quantitative and qualitative) impact indicators that can be used as proxies to measure impact. As with any impact assessment, one of the major challenges is how to attribute market observations to a specific regulatory change. This is less of an issue in a case such as the introduction of branchless banking regulations in Pakistan, because these regulations opened the market to new transaction

1 See OECD: <http://www.oecd.org/gov/regulatory-policy/ria.htm>

2 The methodology was first developed in Staschen (2010). For a summary of the methodology, see Staschen, Dermish, and Gidvani (2012).

3 This Working Paper summarizes Rashid and Staschen (2016), which was shared with the State Bank of Pakistan in September 2016.

4 Defined as the delivery of financial services outside conventional bank branches, often using agents and relying on mass market technology such as mobile phones.

5 See CGAP (2017) for the most recent I-SIP research exercise on the Philippines.

types and alternative delivery channels that clearly would not be permitted and thus would not be made available without the change in regulation.

Still the question remained: How do we isolate the impact of other changes to the regulatory framework? One way to address this question is to look at *structural breaks* in the data that can be clearly attributed to a change in regulation, which are sudden changes in trends (e.g., a sudden increase in account opening caused by changes in know-your-customer [KYC] rules).<sup>6</sup>

This analysis was complemented by qualitative information from interviews with key stakeholders about the observed effect of regulations and supervisory practice. The objective of the assessment was to look at past experiences with individual regulatory provisions on DFS and identify the potential effect future changes to the regulations might have. We also considered alternative approaches that the regulator could have chosen, although it is much more difficult to state with some authority how the sector would have developed in a hypothetical case.

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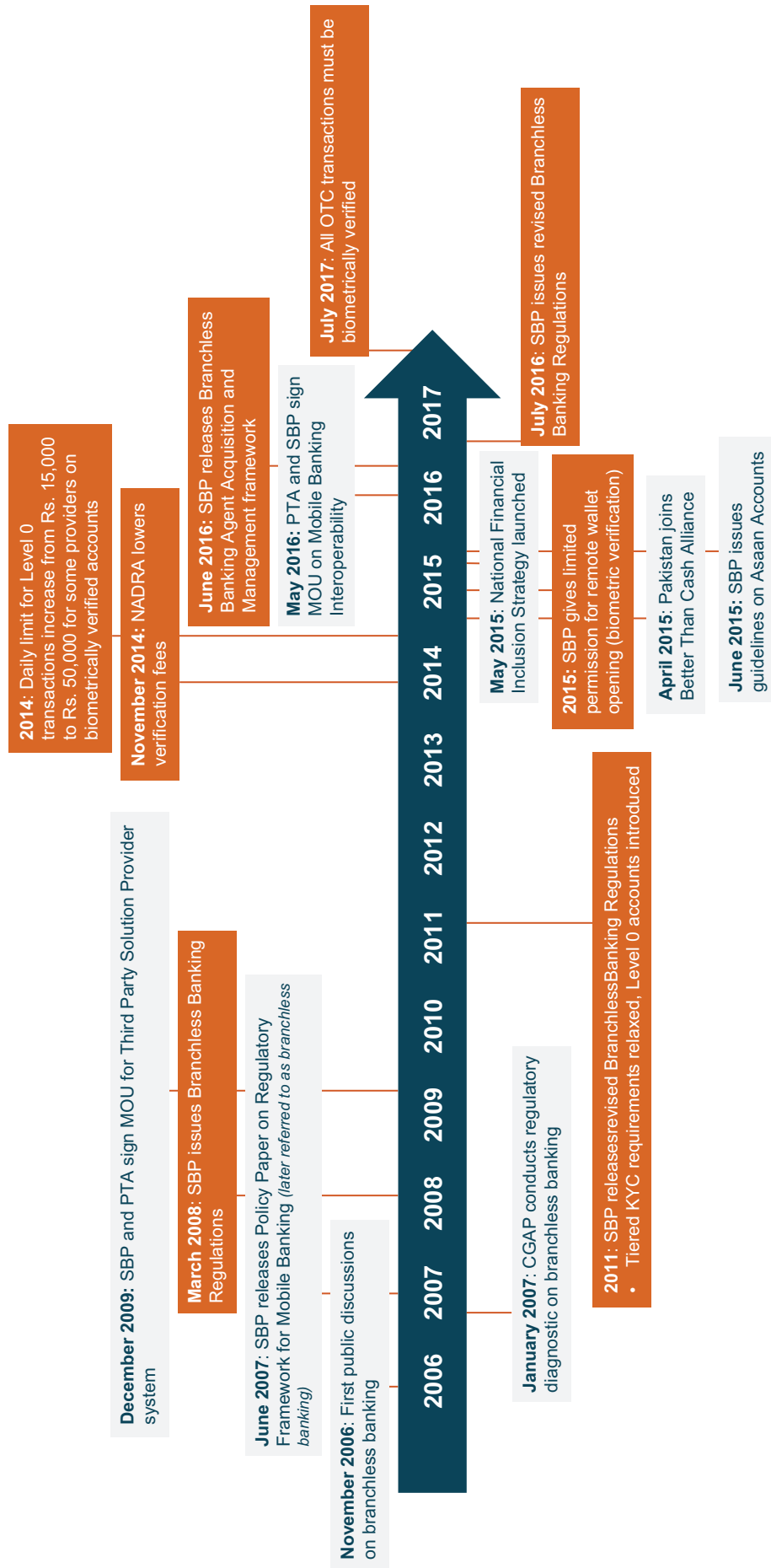
<sup>6</sup> Note that not every change in the sector can be considered a regulatory impact. The focus should be on how *changes in regulation* have led to *changes in trends* (e.g., stronger growth).

## WHY DID WE CHOOSE TO STUDY PAKISTAN?

The State Bank of Pakistan (SBP)—the Central Bank of Pakistan—was one of the first regulators globally to create an enabling regulatory environment for banks to operate outside traditional brick-and-mortar branches. This action made it possible for the branchless banking industry in Pakistan to emerge. Since its start in 2008, the growth of the industry has been shaped by subsequent changes SBP made to regulations. While the initial 2008 Branchless Banking Regulations set the stage for the launch of branchless banking operations, defined the main models, and set the basic rules for the industry, subsequent revisions of the regulations (in 2011 and in 2016) were made in response to changes the sector developed over time. (See Figure 1.)

The Pakistan market is considered to be somewhat of an enigma because, despite its strong regulatory foundations, the growth of financial inclusion has progressed slowly and the level of financial inclusion remains low compared to that of other countries in the region. Measurement of change over time is made easier by the fact that Pakistan has some of the richest demand- and supply-side financial inclusion data in the world. Understanding how regulation has shaped the sector measured against SBP's core I-SIP policy objectives and identifying recommendations for possible further revisions to the regulatory framework could help unlock the full potential of DFS in advancing financial inclusion.

**FIGURE 1. The evolution of Pakistan's branchless banking sector**



## HOW WERE IMPACT INDICATORS SELECTED?

Because the achievement of the four regulatory objectives—inclusion, stability, integrity, and protection—cannot be directly measured, for each objective we defined a range of impact indicators that are characterized by a clear causal link to the regulatory objective and can be directly observed and measured (see Figure 2).

A variety of indicators should be considered. Indicators used to measure market outcomes often are quantitative and draw on available demand- and supply-side data (see Box 1). Those that describe changes in systems and processes are likely to be qualitative and to draw on evidence from interviews, reports, or changes in regulations. They may serve as proxies for future changes (e.g., changes in market outcomes caused by new supervisory practices). The list

of indicators shown in Figure 2 is not exhaustive; it reflects the availability of data in Pakistan at the time the RIA lite was conducted. This list could be tailored to a different context as per a regulator’s objectives, and it could be more extensive especially if such an exercise is planned a few years in advance and relevant data are collected from the beginning.

**Inclusion.** Unless customers have substituted branchless channels for traditional branch-based channels (which is unlikely considering the differences in customer profiles), each single branchless banking transaction can be regarded as an indicator of increased financial inclusion. In demand-side surveys, financial inclusion has been variously defined as “having a registered account with a financial institution that provides a full suite of

**FIGURE 2.** Sample list of indicators for RIA lite

OBJECTIVE	PROXY INDICATOR	DEMAND SIDE DATA	SUPPLY SIDE DATA	MEASUREMENT TYPE
Inclusion	% of financially included adults	<input checked="" type="checkbox"/>		Market outcome
	# of branchless banking (BB) accounts / % of active BB accounts		<input checked="" type="checkbox"/>	Market outcome
	# / % of formal BB transactions broken down by type		<input checked="" type="checkbox"/>	Market outcome
	# of BB agents / % of active BB agents		<input checked="" type="checkbox"/>	Market outcome
Stability	Total BB deposits		<input checked="" type="checkbox"/>	Market outcome
	Share of BB deposits as % age of total		<input checked="" type="checkbox"/>	Market outcome
	Regulatory approach: permitted providers			System or process change
Integrity	# of suspicious transaction reports linked to BB transactions		<input checked="" type="checkbox"/>	Market outcome
	Customer due diligence rules			System or process change
	# of accounts by KYC level		<input checked="" type="checkbox"/>	Market outcome
Consumer Protection	# of customers with a complaint	<input checked="" type="checkbox"/>		Market outcome
	# of resolved complaints	<input checked="" type="checkbox"/>		Market outcome
	Types of complaints	<input checked="" type="checkbox"/>		Market outcome
	Consumer satisfaction and grievances	<input checked="" type="checkbox"/>		System or process change

BB = branchless banking; STR = Suspicious Transaction Report

### **BOX 1. Choosing between demand- and supply-side data**

When choosing indicators, it is important to understand the distinction between demand- and supply-side data (Broens Nielsen and Butkus 2014). While demand-side data originate from consumers (e.g., individuals and households), supply-side data originate from providers. Understanding the inherent differences between these sources can help users decide which sources to use.

Demand-side sources depend heavily on the exact way a survey question is asked. Thus, they produce results that are not easily comparable across different surveys. For example, the topline financial inclusion indicator is both defined and measured differently depending on whether you use the World Bank Findex database or the InterMedia Financial Inclusion Insights (FII) surveys. Treating these different sources as if they were the same could lead to confusing or misleading results.

On the other hand, using only one source could lead to significantly different conclusions about financial inclusion than those of someone using a different source. The strength of demand-side data lays in their reflection of consumer perception. This is particularly useful when trying to understand subjective issues such as consumer protection. They also enable users to estimate how many unique customers are served by DFS—which is notoriously difficult to do with supply-side data because of multiple SIM and account ownership.

Supply-side data are more quantitative. These data are useful when tracking changes over time. However, this does not preclude confounding issues such as double-counting and lack of comparability across regions. Consequently, supply-side data should be analyzed with great care.

financial services” (FII Survey), “having an account either by oneself or together with someone else, at a bank or another type of financial institution, or having personally used mobile money in the last 12 months” (Findex), or being “formally served” (Access to Finance Survey). The FII Survey definition includes mobile wallets,<sup>7</sup> but not over-the-counter (OTC) transactions. The other two definitions do include OTC transactions, which are the most common type of transaction in Pakistan by far. Figure 3 illustrates how these differences in definition make comparability difficult, even of simple topline financial inclusion indicators.

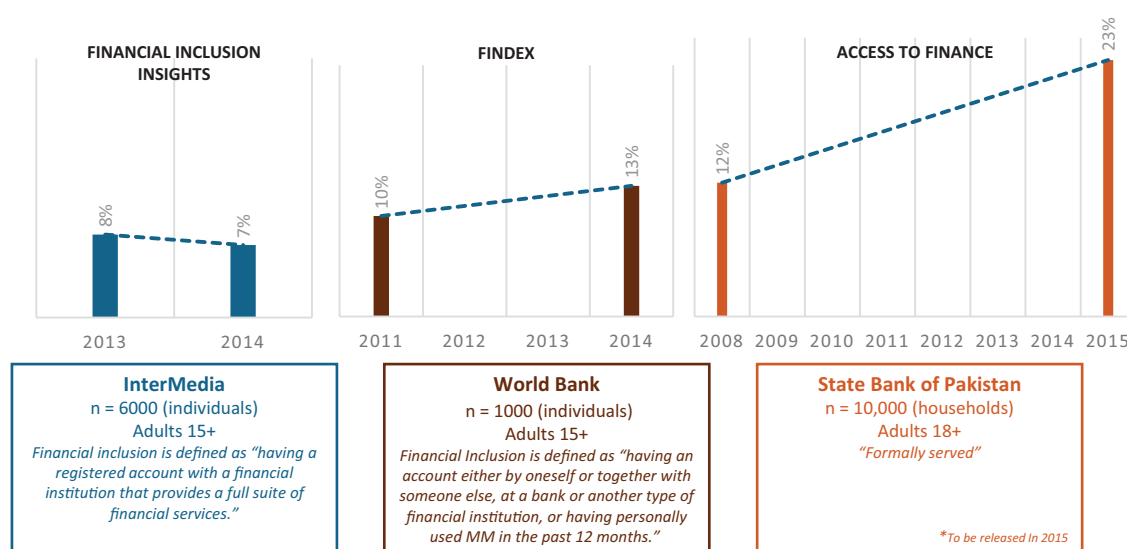
Sorting branchless banking transactions by type of transactions can provide a refined picture of the impact of

branchless banking on inclusion. For example, while OTC transactions (described by SBP as person-to-person [P2P]) fulfill a basic need to send money from A to B or to pay a bill, opening a mobile wallet (which in fact is a full bank account in Pakistan, even though the term “mobile wallet” is widely used) enables the use of a wider range of services, such as storing money in interest-bearing accounts or having access to digital credit products. Therefore, account-based transactions are perceived as having a higher utility from a financial inclusion perspective.

Another indicator for financial inclusion is geographic reach of financial access points and how this has changed with the advent of branchless banking agents.

<sup>7</sup> This seems to be the case even if mobile wallets do not provide a full suite of financial services.



**FIGURE 3.** Topline financial inclusion indicators

Source: Khan and Rashid (2015).

**Stability.** The impact of branchless banking on stability is not easy to assess. Stability is often defined as the absence of instability, which is easy to determine retrospectively. It is much more difficult to measure the likelihood of instability occurring in the future. To do so, one can look at general safety and soundness measures, such as profitability and capital adequacy of financial institutions that offer branchless banking services. In addition, the overall regulatory approach (e.g., what kind of providers are permitted to offer branchless banking services; what are the main regulatory provisions applying to them) and the supervisory practice will be important indicators for the stability objective.

**Integrity.** As with stability risks, integrity risks can be measured by looking at actual market outcomes (e.g., the number of suspicious transaction reports that can be linked to the use of branchless channels) and by assessing policies that relate to integrity. Such policies should deal with issues such as customer due diligence (CDD) and its simplification for lower risk transactions, record keeping and monitoring, and suspicious transaction reporting (Lyman and Noor 2014).

A shift from informal to formal sector transactions allows for better traceability of transactions and thus lower money laundering and financing of terrorism risks, even if subject to simplified CDD.

**Protection.** An effective customer protection regime in branchless banking includes regulatory provisions in protection of client funds, safety and reliability of service, fraud reduction, disclosure, client data protection, and effective redress (Dias and McKee 2010). One set of indicators would look at relevant consumer protection rules and the supervisory approach. In terms of market outcomes, an analysis of complaints and of survey evidence about consumer satisfaction and consumer grievances can provide further evidence.

These objectives are not independent of each other—the I-SIP objectives are subject to synergies and trade-offs. However, unlike the I-SIP research exercises CGAP has undertaken so far, RIA lite does not focus on understanding the linkages among the objectives, rather it looks to measuring the ultimate impact on any one of the objectives.

## FINDINGS

The findings of the RIA lite show that to date the regulation of branchless banking has largely advanced inclusion objectives, had no measurable negative effect on financial stability, upheld and even improved the integrity of the financial sector, and successfully considered consumer protection objectives (see Figure 4).

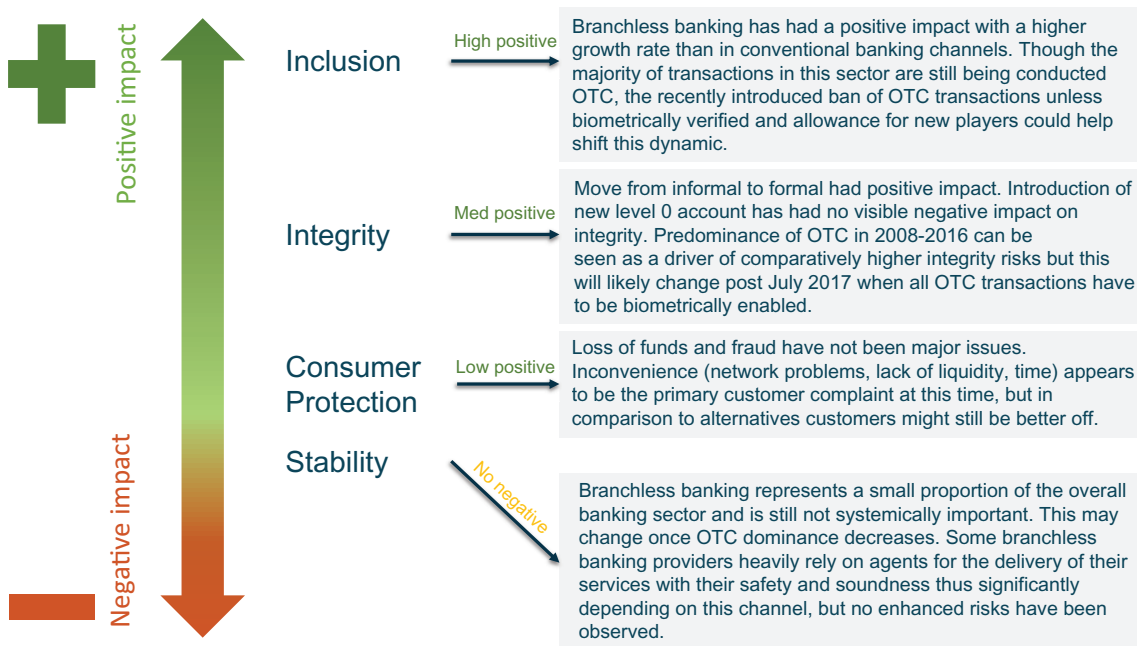
### Inclusion

Initially, advances around financial inclusion were mostly limited to basic OTC transactions (see Box 2). Account-based transactions subsequently were spurred by the 2011 revision of the regulations that introduced a new lowest level consumer account called Level 0,

which had simpler account opening requirements.<sup>8</sup>

After 2011 Pakistan’s topline financial inclusion numbers have been measured by access both to bank accounts (which include traditional bank accounts and mobile wallets) and to OTC services (see Figure 3). The 2014 Global Findex survey shows a 30 percent increase in the level of financial inclusion since 2011. The percentage of adults who have access to a financial account or have used OTC services increased from 10 percent to 13 percent. More recent surveys, such as the second wave of Access to Finance,<sup>9</sup> show an even more positive picture with topline financial inclusion at 23 percent.

**FIGURE 4. Summary of RIA lite results**



8 The Branchless Banking Regulations issued in 2008 defined a tiered approach that requires basic CDD for a simple, limited consumer account (Level 1) and increased CDD requirements for consumer accounts with higher functionality (Level 2). The 2011 revision of the Regulations focused on lowering the identification requirements for account opening and relaxing transaction limits. Among other changes, the revised regulations introduced a Level 0 consumer account that is subject to even simpler CDD requirements and even lower transaction limits than the Level 1 account. During 2008–2016, a Level 3 account existed that was reserved for agents. However, in 2016 this category was eliminated; instead agents now use Level 2 accounts.

9 This was conducted in mid-2015. It takes into account the impact of regulatory changes, such as the lowering of National Database and Registration Authority verification fees and permission to open accounts remotely by using biometrically verified SIMs, that were introduced in 2014 and early 2015.

## BOX 2. SBP permits OTC transactions in Pakistan

The 2008 regulations initially did not allow for OTC transactions. Though SBP allowed branchless banking customers to send money to the mobile number of noncustomers, the original regulation stated that the receiver had to set up a branchless banking account to access the funds. The implicit assumption was that the Pakistani mobile money market would grow just as the Kenyan market had.

However, SBP was aware that customers wanted OTC transactions. Services providers, likewise, wanted to allow for OTC transactions. In this environment, SBP permitted OTC transactions, but only via special waiver. Tameer Bank's Easypaisa secured this waiver and followed an OTC model from the first day of operations. It did not expect that the OTC model would dominate its mobile money business as it later did (Hussain 2013).

One reason Easypaisa pursued this approach was that CDD requirements for account opening were stringent and growth of account-based transactions would be slow. In fact, only a few agents (12 percent of the total at the time) were able to open branchless banking accounts in mid-2012. Another advantage of the OTC business was that branchless banking providers could serve customers who had any SIM card, which was otherwise not possible because competitors did not have access to USSD.

Easypaisa's OTC-based business stands in contrast to UBL's model, which focused on its mobile wallet. It is debatable whether the regulation created an OTC-first business that made it difficult for mobile wallet services to advance. Some hold that the OTC business would have flourished anyway or that restrictions of OTC transactions might have even further suppressed branchless banking.

These gains can be seen across two separate data sets and can be attributed to the accelerated uptake of branchless banking channels between 2014 and 2016.

FII shows a slight increase in overall financial inclusion figures from 2013 to 2015, with inclusion in 2015 standing at 9 percent. This number, however, looks only at "full service accounts"<sup>10</sup> and thus does not include OTC services. The most significant gains since 2013 appear to have been in access through mobile wallets (increased from 0.1 percent in 2013 to 1.0 percent in 2015) and access through nonbank financial institution (NBFI)<sup>11</sup> accounts (increased from negligible to 1 percent).

Women have made immense gains since 2014, with financial inclusion of women doubling within a single year (increasing from 3 percent included to 6 percent). When we account for OTC services, the picture becomes even more positive: 9 percent of Pakistanis have used mobile money services; 86 percent of this subset use OTC services as opposed to registered accounts (see Figure 6).

When the overall financial inclusion gains from branchless banking are examined in greater detail, it is clear that OTC services is far more popular than mobile wallets—adult Pakistanis used OTC services 19 times more than they

<sup>10</sup> Mobile wallets are included in the "full service accounts" category because they are technically bank accounts.

<sup>11</sup> In Pakistan's FII surveys, NBFIs are defined as rotating savings and credit associations, nonbank microfinance institutions, and insurance companies.

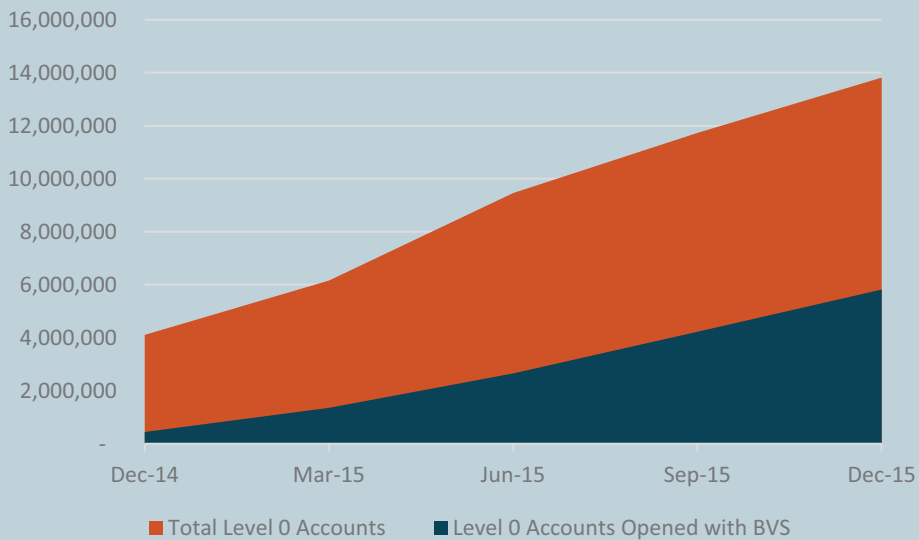
**BOX 3. Biometric verification and remote account opening**

New branchless banking regulatory permissions in 2014 made it increasingly easy to open and operate a Level 0 mobile wallet account. Starting in the fourth quarter of 2014, the Pakistan Telecommunication Authority (PTA) mandated that all newly issued SIMs be biometrically verified to ensure that every phone number is linked to the Computerized National Identity Card (CNIC) number. This requirement was enforced for all existing nonverified SIMs through a national SIM reverification drive that took place between January and April 2015. The CNIC data can be used to fulfill the KYC requirements for opening Level 0 accounts and allow for both account opening via biometrically verified SIMs (BVS) for new mobile network operator (MNO) customers at agents that are equipped with biometric readers and remote account opening from any location with network coverage for existing, verified MNO customers.

With the 2016 revision SBP allowed all providers, including Easypaisa, Jazzcash, and Upaisa, to open Level 0 mobile wallet accounts remotely. This means that customers can open an account from the convenience of their mobile phone by keying in a simple USSD string. This ease of opening is complemented by higher account limits for biometrically opened wallets and reduced verification costs across the board. Notably, while all players are legally permitted to remotely open accounts, in practice only MNO-backed providers that have easy USSD access (e.g., Easypaisa, Jazzcash, and Upaisa) have been able to leverage this permission.

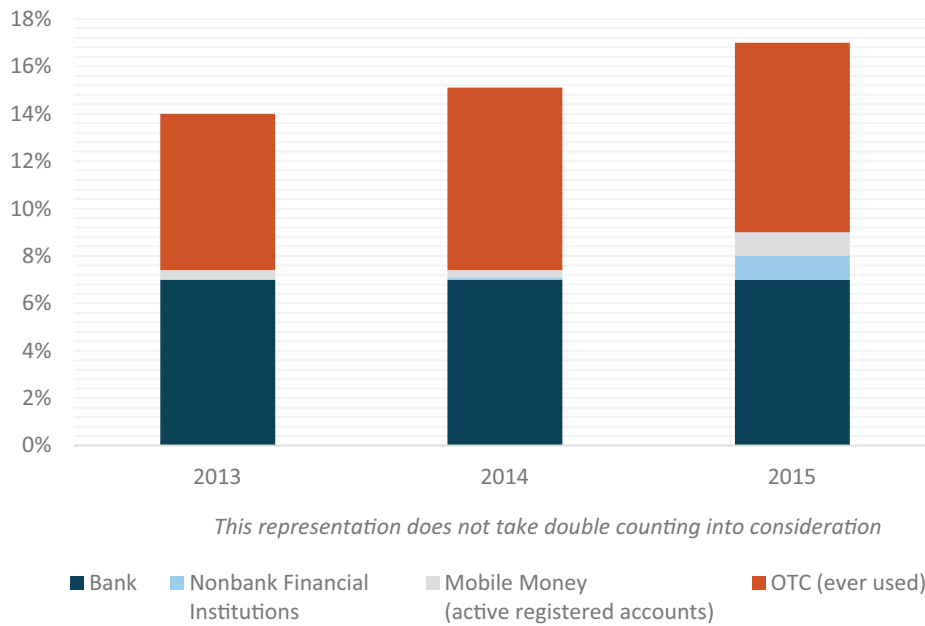
The result of this allowance has been a dramatic increase in the number of total registered Level 0 wallets. See Figure B3-1.

**FIGURE B3-1. New level 0 accounts**



Source: SBP.

**FIGURE 6. Breakdown of FII topline financial inclusion results**



Source: FII.

used mobile wallets in 2014 (5.7 percent versus 0.3 percent).<sup>12</sup> While there are no current demand-side data available, recent supply-side data show a gradual and accelerating shift toward wallet-based transactions in 2011–2017 (see figures 7 and 8). This can be attributed to the introduction of the Level 0 account in the revised Branchless Banking Regulations 2011. Level 0 accounts have grown much faster than other accounts.

The sudden marked increase in accounts post December 2014 can be primarily attributed to the introduction of biometric verification for Level 0 account opening and limited allowance for remote mobile wallet opening, which occurred around the same time (see Box 3). The July 2016 revision to the Regulations accelerated the shift toward wallets because there was a

strong push to roll out biometric readers at agents, and it was announced that nonbiometrically verified OTC transactions would be banned after 1 July 2017. In the first quarter of 2017, the number of wallet-based transactions had overtaken the number of OTC transactions for the first time. However, while the value of wallet-based transactions has increased, it is still much lower than the value of OTC transactions (see figures 7 and 8).<sup>13</sup>

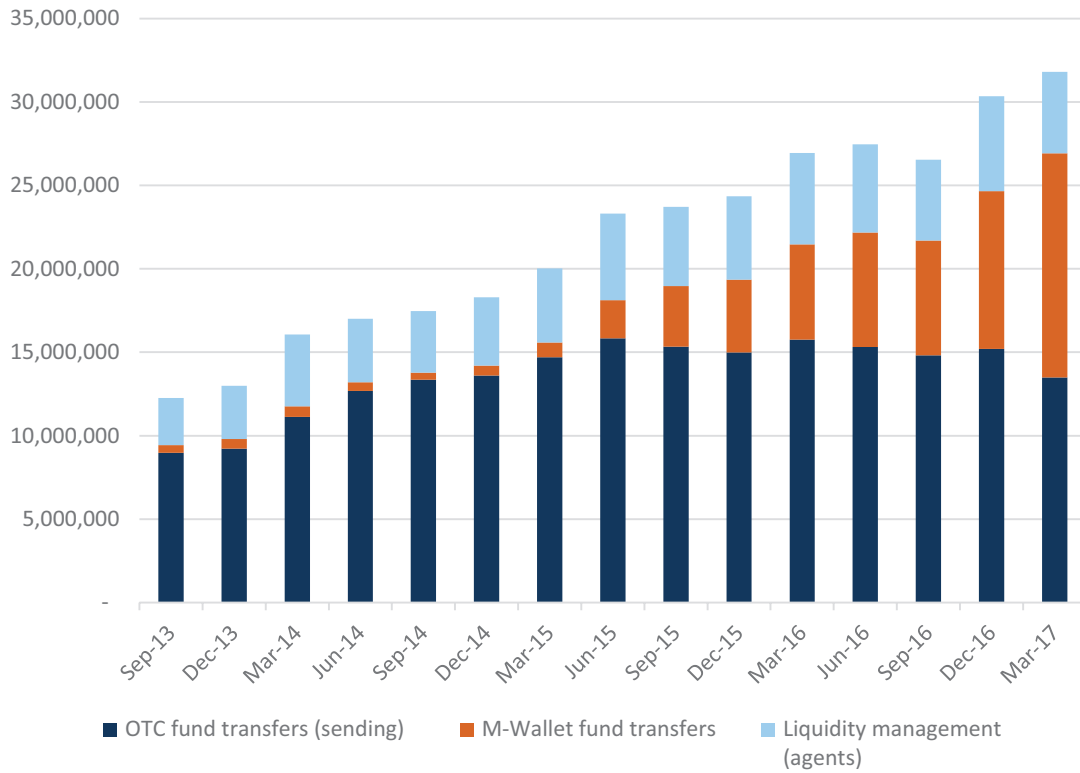
Despite significant growth in the number of mobile wallet registrations, activity rates slumped during the first quarter of 2015. This can be partly attributed to a drop in G2P disbursements during the quarter, from 3.7 million transactions to 1.5 million.<sup>14</sup> Many accounts fell dormant because no benefit payments were channeled through them. Other seasonal

12 FII 2014. FII 2015 does not include data on active OTC use; it asks only whether mobile money users have ever used OTC (86 percent have done so).

13 Figure 7 and Figure 8 depict the volume and value of OTC (P2P receiving and sending through CNIC), mobile wallet (wallet to wallet, wallet to person, wallet to bank account, and bank account to wallet fund transfers), and agent liquidity transactions (agent to agent, agent to bank account, bank account to agent, and cash deposit in Level 3 accounts by agent transactions).

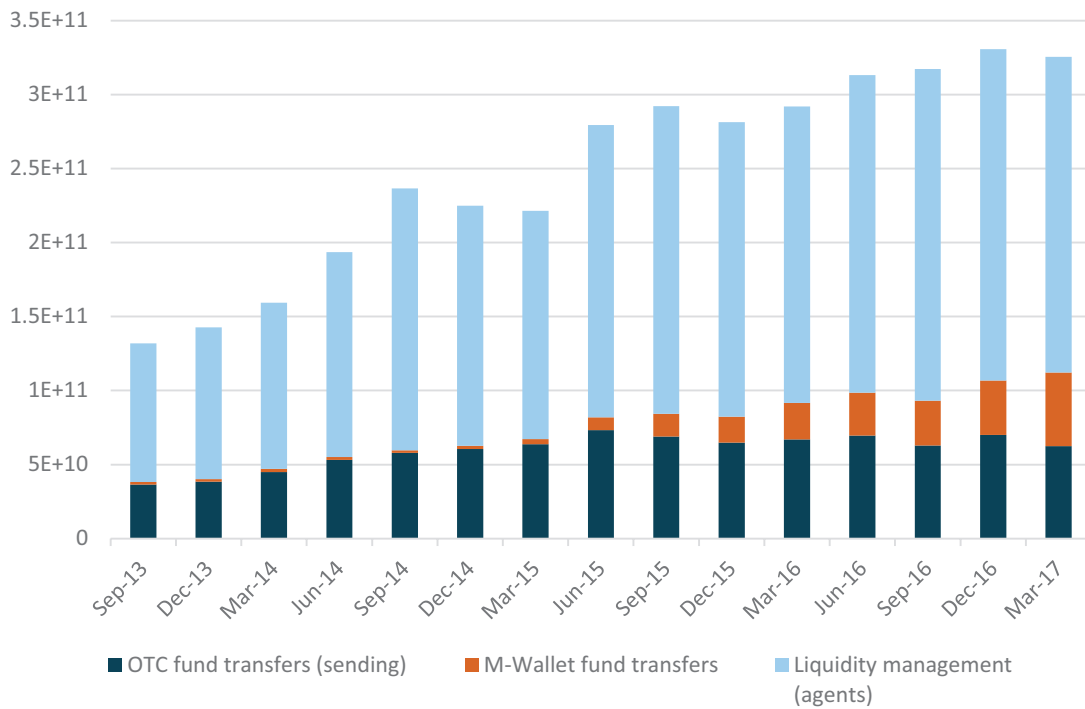
14 According to SBP’s January–March 2015 newsletter, this decline is due to delayed disbursement of Benazir Income Support Programme (BISP) payments through Omni and Easypaisa. BISP payments amount to Rs. 1500/- per beneficiary per month; the disbursements generally take place quarterly.

**FIGURE 7. Volume of transactions in PKR**



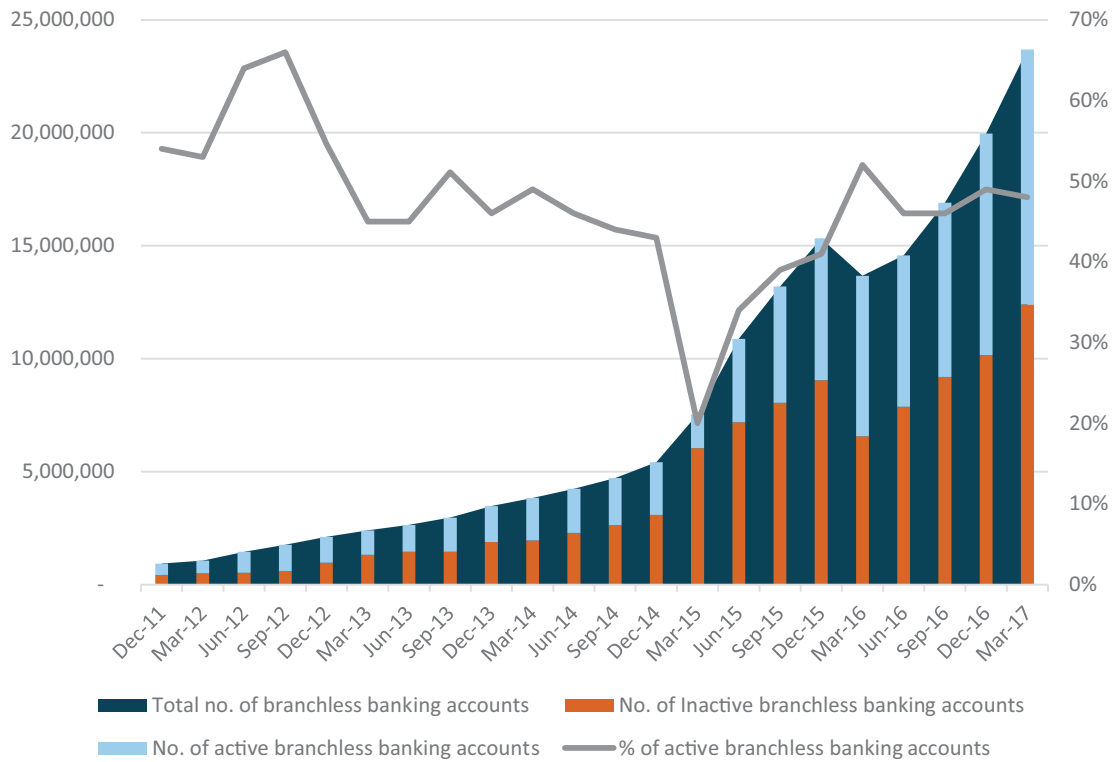
Source: SBP.

**FIGURE 8. Value of transactions in PKR**



Source: SBP.

**FIGURE 9. Pakistan’s registered branchless banking accounts**



Source: SBP

variations, such as the outflows associated with bi-yearly Eid celebrations, also played a role (see Figure 9).<sup>15</sup> Activity rates, though still low (48 percent measured on a 180-day basis in the first quarter of 2017), have been increasing.

In terms of geographic reach of financial access points, Pakistan’s total agent footprint has grown dramatically since 2011, from fewer than 20,000 agents to 368,000 agents, of which 213,000 (58 percent) are active. However, the number of unique agents is still significantly smaller; estimates range from 20 percent to more than 50 percent of all agents work with more than one provider and only about 80 percent of agents are active (Staschen 2014).<sup>16</sup>

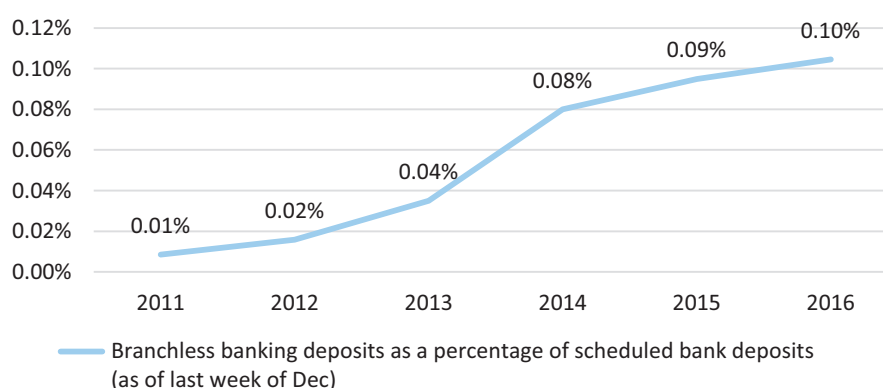
### Stability

The stability of the financial sector is a key objective for SBP. One unforeseen sector development was that OTC transactions dominated overall branchless banking transactions. This is one of the reasons why total branchless banking deposits are low compared to commercial bank deposits (see Figure 10). (Another reason is that branchless banking deposits have a lower average size.) The predominance of OTC transactions has implications for stability because the amount of funds at risk is relatively low (total deposits held are lower than the average value of transactions per day) and typical risks in payment transactions, such as settlement, liquidity, and operational risks, are of greater concern

<sup>15</sup> For example, mobile top-ups decreased in the same period from 4.2 million to 1.3 million transactions.

<sup>16</sup> With the information currently collected by SBP it is not possible to calculate the number of unique agent locations. This will, however, change in the future because each of the providers will have to report on the number of exclusive and non-exclusive agents.



**FIGURE 10.** Branchless banking deposits relative to scheduled bank deposits

Source: SBP

than prudential risks. This may change as mobile wallet activity increases, and deposits rise. However, all funds will continue to be held in full bank accounts, and thus their safety will depend on the quality of banking supervision more generally rather than on the specifics of the branchless banking regime.

The safety and soundness of individual financial institutions that use branchless banking depend on the relative importance of this channel for the individual financial institution, assuming that its stability can be undermined by, for example, operational or consumer protection risks linked to the use of branchless channels. Unfortunately, no data are publicly available showing, for example, the share of deposits in branchless banking accounts as a percentage of overall deposits or a breakdown of their operations in branchless versus branch-based operations. Some of the largest branchless banking providers in Pakistan have been majority-owned by mobile network providers that have an explicit goal of making use of mobile phones and agents as their main delivery channel. Thus, it can be assumed that their soundness depends to a good degree on the risks linked to this channel. Depending on the size of the financial institution, a crisis of an individual institution can potentially have serious

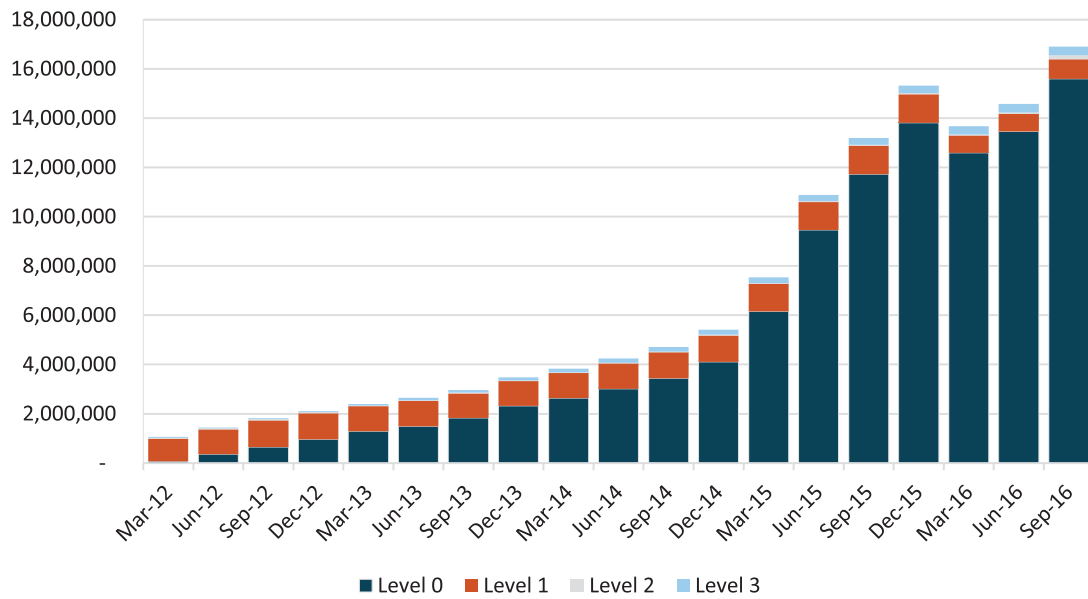
repercussions for the overall stability of the sector.

More strategically, SBP has followed a relatively conservative approach of allowing only banks to offer branchless banking services. It has emphasized that any financial institution should go through a thorough review process before it can launch its branchless banking services. Though some stakeholders believe that the role of MNOs can have a potentially negative effect on stability because traditional banks are stronger on regulatory compliance than banks dominated by MNOs, there is no empirical evidence to support this. It is also difficult to assess how stability would have been impacted if SBP had permitted nonbanks to be directly licensed.

### Integrity

SBP maintained integrity without unduly restricting access by introducing a tiered account structure. Pakistan is one of the first countries to adopt this approach. The recent move toward full biometric identification of branchless banking customers through biometrically verified SIM cards can also be seen as precedent setting in terms of how integrity and inclusion objectives can be achieved at the same time. In fact, the



**FIGURE 11.** Change in account composition over time

Source: SBP

introduction of the Level 0 account had a revolutionary and immediately discernable impact on the market. Since the introduction of this account type, the composition of branchless banking accounts has heavily skewed toward Level 0 accounts (see Figure 11). This can be largely attributed to the lower KYC requirements of Level 0 accounts, which have become significantly easier to meet since the introduction of biometric verification technology for account opening in 2014 (see Box 3).<sup>17</sup>

On the negative side, despite the high growth in wallets between 2014 and 2016, the majority of transactions continued to be OTC, which were for a long time subject to lower KYC requirements than wallet-based transactions. Up until the 2016 revision, the regulations required only random verification of customers' CNIC with the National Database and Registration Authority (NADRA). Reportedly only a small sample was in

fact verified because of the relatively high cost of verification.<sup>18</sup> The historical OTC dominance is slowly changing, more wallets are being opened, and the share of wallet-based transactions is increasing. The predominance of OTC transactions in 2011–2016 can still be regarded as a driver for potentially higher integrity risks as compared to a branchless banking sector where most transactions are conducted from account to account. According to the 2016 Branchless Banking Regulations, after 1 July 2017 OTC without biometrically verified SIM on both ends is prohibited.<sup>19</sup> Consequently, there has been a strong push for financial institutions to deploy biometric fingerprint readers at all agent locations. Any concerns regarding risk introduced by insufficient OTC customer verification is therefore an issue of the past.

In addition, it should not be forgotten that most of the transactions that are now conducted through branchless

17 As used in this paper, KYC refers to the CDD elements of identification and verification.

18 The 2016 regulations require the verification of the CNIC of at least 20 percent of customers.

19 The regulations are not clear on whether OTC transactions with BVS on one end only would still be permitted.

banking channels were previously conducted in the informal sector, without any KYC rules and traceability. The fact that the advent of branchless banking has brought so many new transactions into the formal sector has therefore had an overall strong positive effect on the integrity objective.

### Protection

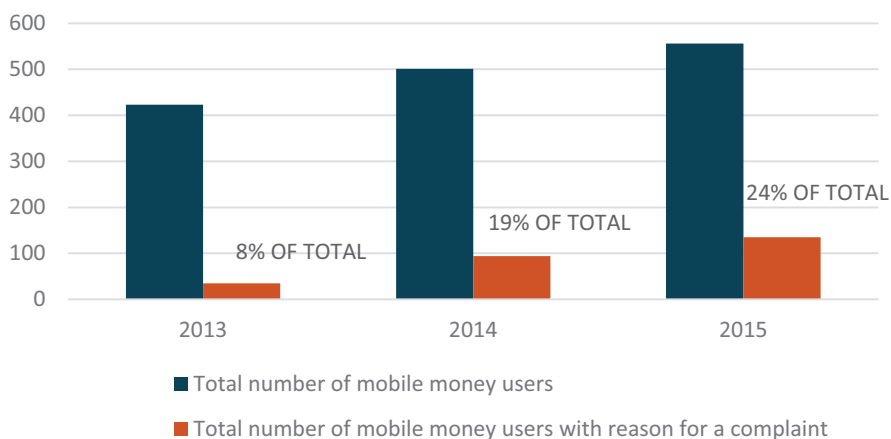
Consumer protection has been addressed through regulations that require financial institutions to guard against risks specific to branchless banking. While SBP receives monthly reports on customer complaints regarding branchless banking, there are not enough complaints to do a rigorous analysis. The general perception across both SBP and providers is that the number of branchless-banking-related complaints are not significantly higher than complaints from using traditional bank channels, though this is not possible to quantify using available data (Staschen 2014).

Although SBP conducts mystery shopping at agents, it depends on providers

to manage agent fraud and other agent-related problems. Branchless banking providers indicate that the top issues for customers are system delays (e.g., in receiving SMS), forgotten personal identity number (PIN), money sent to the wrong person, and inappropriate agent behavior (Staschen 2014).

This is borne out by the limited data that are available for 2013–2015 from FII surveys.<sup>20</sup> The percentage of branchless banking users who have something to complain about tripled between 2013 and 2015 (8 percent vs. 24 percent, respectively). It appears that those who formally reported a complaint constitute a small subset of those who had reasons for a complaint (see Figure 12). Those who did report their complaint chose to either talk directly to their agent or lodge a complaint with the provider, and were largely satisfied with the resolution process. While a little less than 50 percent of complaint lodgers were satisfied with the resolution in 2014, almost 88 percent were satisfied with the final resolution in 2015 (see Figure 13).

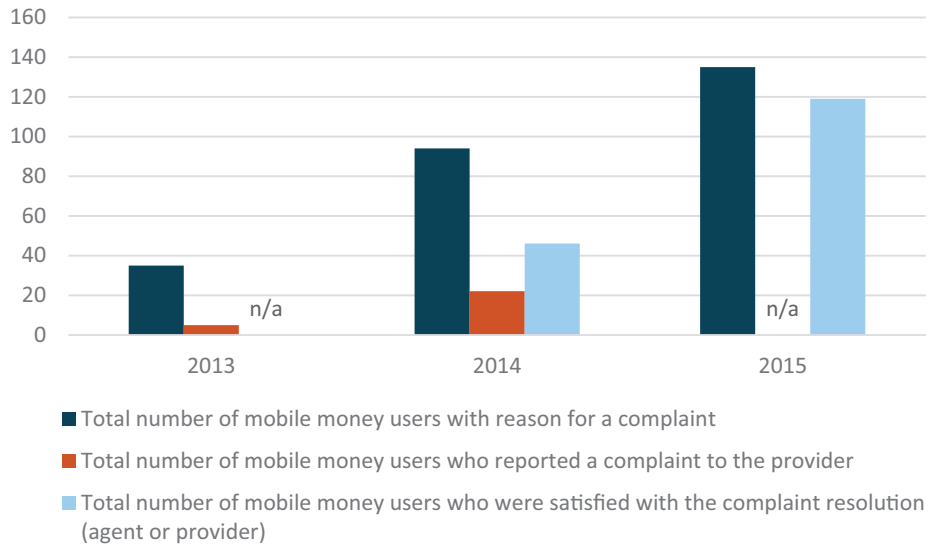
**FIGURE 12.** Mobile money users who self-reported having reasons for a complaint



Source: FII Surveys

20 The sample size of the FII surveys is 6,000 individuals, which includes users and nonusers of mobile money.

**FIGURE 13. Complaints and resolution**

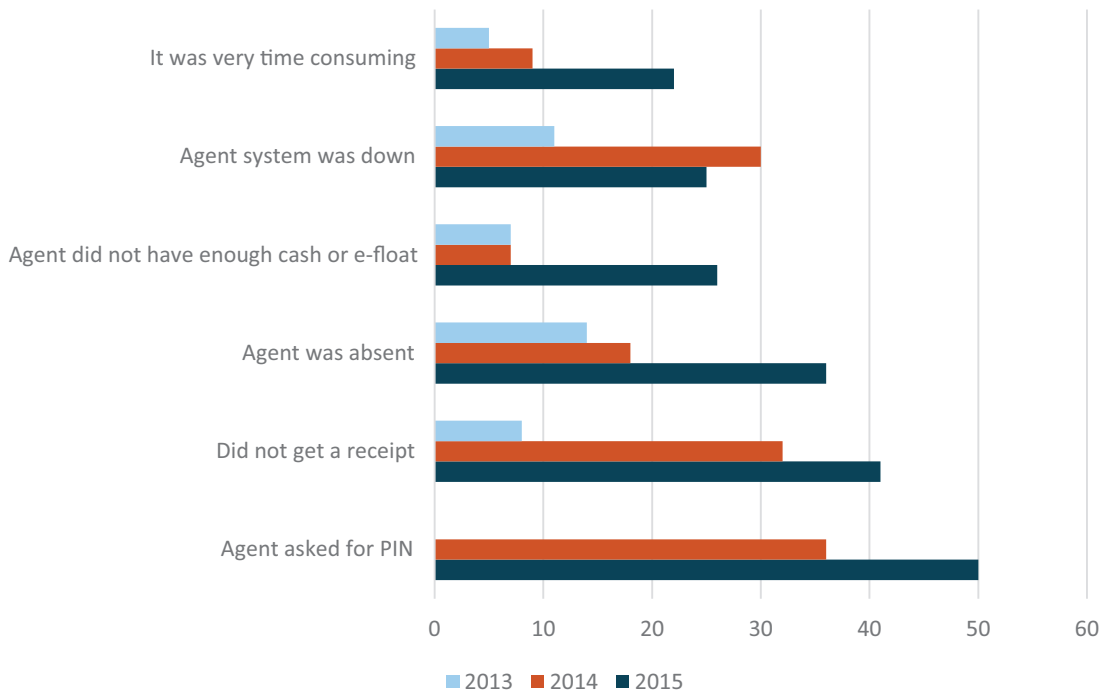


Source: FII Surveys

The top self-reported problems in 2015 were agent asked for a PIN, I did not get a receipt, agent was absent, agent did not have enough cash or e-float, agent system was down, and the process was

very time consuming (see Figure 14). These results should be interpreted with some caution because respondent numbers are very low (maximum 50 out of 6,000 mentioned any of these issues).

**FIGURE 14. Consumers' top complaints**



Source: FII Surveys

## LESSONS FROM CONDUCTING AN RIA LITE

### Lessons for Pakistan

Though limited in scope, CGAP's RIA lite exercise yielded several insights that are backed by expert opinion and data analysis into Pakistan's branchless banking sector and into SBP's approach to regulation over the past decade. Over time SBP has shown a lot of flexibility in areas that present clear benefits to businesses and market uptake and where no serious regulatory concerns have materialized. For example, KYC rules have been revised in line with market development and new technical solutions (e.g., biometric verification). Branchless banking in Pakistan has come a long way, and a lot of the credit goes to SBP, which provided sufficient space for market development. SBP actions resulted in a clearly positive impact on financial inclusion without creating undue risks. The most important changes or inflection points between 2008 and 2016 that led to significant market impact include the following:

- Removing the requirement for a biometric fingerprint scan at agents for opening Level 1 accounts, initially through waivers given to individual providers and later codified in the 2011 regulations.<sup>21</sup>
- Introducing a Level 0 account that can be opened electronically without any physical paperwork.
- Permitting OTC transactions as a new type of transaction.
- Allowing accounts to be opened at agents that use biometrically verified SIMs without further KYC requirements.
- Permitting remote account opening on a USSD string.

SBP moved ahead quickly to address important constraints in the 2016 revisions to the regulations even before the first version of the RIA report was completed. While there was interest in the data analysis, various SBP departments were most interested in how the branchless banking regulations were viewed by industry leaders. They genuinely wanted unbiased feedback about the on-the-ground realities of regulatory implementation, and a sense of what would be most helpful going forward in relation to the country's broader financial inclusion goals. Furthermore, the RIA exercise laid the analytical groundwork—by identifying relevant impact indicators and documenting past experience—for future revisions of the regulatory framework for branchless banking. Given SBP's track record of learning and adjusting, further adjustments can be expected.

CGAP's final internal recommendations addressed three areas:

- Reconsideration of the overall approach to branchless banking by opening the pathway for nonbanks to be primary players and thus providing space for further innovation, along the lines of what has been done in some other countries that allow for nonbank e-money issuance.
- Changes in the approach to supervision.
- Changes in data collection for supervision purposes.

### Methodology lessons

More broadly, this research demonstrated the value of the RIA lite methodology for evidence-based policy making. This Pakistan exercise revealed several good

<sup>21</sup> With the wide adoption of biometric readers over the past two years, this requirement has now been reintroduced for OTC transactions.

practices that other countries may want to adopt.

**Timing.** Sufficient time should be allowed to elapse before countries can accurately assess the impact of a regulatory change. This is especially important because there can be a time lag between when the regulation was issued or revised before it can be related to any visible market change. In Pakistan's case, while 2008–2016 could be thoroughly examined, we can only guess as to the market impact of the more recent 2016 revisions.

**Data collection.** Data collection is best driven by the needs of monitoring the risks that regulators are concerned about and collecting evidence about the achievement of regulatory objectives. Ideally, relevant indicators should be identified well in advance of an RIA lite exercise, and be consistently collected over time without any gaps. This also applies to situations where potential regulatory inflection points have been identified even before issuance. It is also useful to align definitions with international standards or conventions to allow for easy comparability.

For example, in the case of Pakistan, some areas where additional data points would be valuable should the RIA be repeated include the following:<sup>22</sup>

- A breakdown for each provider of branchless versus branch-based transactions and of deposits in branchless banking accounts versus that of other bank accounts would allow for a risk-assessment at the individual institutions level rather than only at the level of the market as a whole.
- A breakdown of the number of wallets opened remotely (through a USSD string) versus at agents or branches would help to determine the impact of remote account opening.

**Execution.** An RIA lite exercise potentially can be built into a regulator's internal work program, but this requires both capacity and time. If a regulator chooses to outsource this work, it should choose a trusted partner to conduct the analysis to avoid concerns around privacy and ensure that the recommendations are candid. Notably, even an external partner will require some form of continuous support from the regulator, ideally in the form of a designated data-point person who supports data gathering and data analysis.

**Implementation of recommendations.** Several departments work together to ensure the successful regulation of the financial sector. All relevant departments need to be included in the RIA lite process, and the final recommendations should be shared both with the wider team and the department directly affected by the assessment. Only then can identified issues be successfully addressed.

## Outlook

An RIA lite can be used to learn from past regulatory experience and to implement future regulatory changes with a stronger emphasis on (qualitative and quantitative) data analytics. A lite version of an

<sup>22</sup> Note that SBP might be able to compute some of these variables based on internal data, to which we did not have access.



RIA does not require extensive resources and can generate useful insights for policy making.<sup>23</sup> In addition, the process of conducting an RIA *ex ante* allows for a clearly structured and consultative (if the results are shared with the industry) process that takes the providers' views into account and considers likely market responses even before a policy change is implemented.

This assessment was one of the first RIAs to be conducted on a financial-inclusion-related policy change. It is too early to draw general conclusions about the usefulness of the methodology for similar exercises in other countries besides the few early lessons mentioned in this report.<sup>24</sup> Future RIA case studies could help to answer the following questions:

- Is the methodology flexible enough to be used for different types of financial inclusion policies with both narrow (e.g., changes of one or only a few regulatory provisions) and broad (e.g., introduction of a new institutional type) scope? Can the I-SIP objectives be used for each of those cases? Or is there a need to define more specific regulatory objectives depending on the type of policy change?
- How do we use the methodology for *ex ante* RIAs, including addressing issues such as choosing relevant options to compare and estimating the regulatory impact of each?
- Can regulators use the RIA methodology as a self-diagnostic tool in policy making to guide the collection of relevant data over time and revise regulations on an ongoing basis?

To answer these and similar questions, a range of RIAs needs to be conducted in several countries, and regulators need to be willing to implement the methodology not only as a diagnostic tool, but as an integral part of their policy-making process.

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23 A rough estimate from the experience in Pakistan is that it took about 60 days of primary and secondary research and data analysis to develop an initial report. We conducted around 20 interviews, but also spent considerable time with colleagues at SBP to get clarification on data, request further details, and discuss our initial findings.

24 At least two RIAs that focus on policies directly relevant to financial inclusion have been conducted, but neither has been published. One was in Uganda (mobile money regulation and mobile money taxation *ex post* and agent banking regulations *ex ante*) and one was in Fiji (financial inclusion policies).

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