



## **Technology Program - Country Note:**

### **PAKISTAN**



**April 2011**

## Overview<sup>i</sup>:



Population:	177 million	(2010 figure)
% Urban:	36%	(2008 figure)
% aged under 15:	36%	(2010 figure)
GDP/capita (PPP):	\$2,600	(2009 figure)
No. Bank Branches:	9,041	(2010 figure)
No. Bank Accounts:	16 million	(2009 estimate)
No. Mobile phones:	97 million	(2010 figure)

## Introduction and overview:

Although Pakistan's population exceeds 170 million,<sup>ii</sup> there are only an estimated 16 million individual bank accounts,<sup>iii</sup> leaving the vast majority of the population without access to banking services. Access challenges are particularly acute in rural areas, where there are fewer than 2,500 branches for a population of 105 million people—or an average of 42,000 inhabitants per branch.<sup>iv</sup> In contrast, the number of mobile telephone customers exceeds 97 million<sup>v</sup>. A dynamic telecoms sector and permissive regulator have provided the foundations for an emerging branchless banking sector.

CGAP has a long history of working with the State Bank of Pakistan (SBP) which has increased financial inclusion as a major policy goal. In 2008 the SBP issued the Branchless Banking Regulation (BBR) which provided a clear legal framework for the provision of branchless banking services by banks. The SBP has now issued four branchless banking licenses and there are two services which are operational in the market at scale. CGAP has been involved since the beginning and provided a grant to Tameer Microfinance Bank in January 2008. Tameer went on to be the first actor to launch a commercial service, in November 2009, in partnership with a major MNO, Telenor. CGAP has remained heavily involved in helping Tameer to develop their service over the past three years.

In April 2010 a large commercial bank, UBL, launched “Omni” the second branchless banking service in Pakistan. There are signs that other actors are now seeking to enter the market and several license applications have been submitted to the SBP. There are, however, still a number of regulatory and business challenges that are being faced by all actors and therefore CGAP plans to continue to work with Tameer over the next year to help them to prove the business case in the Pakistani market. At the same time we hope to continue to strengthen our relationship with the regulator to provide strategic guidance on the sector as a whole and to work with both government and industry to identify and tackle the key bottlenecks to the sector's development.

The Government of Pakistan (GoP) has recently launched two pilots for financially inclusive payment mechanisms for their flagship social safety net program the Benazir Income Support Programme (BISP). We hope to deepen our engagement with BISP and to broaden our involvement to include other government departments that are interested in exploring payment pilots as an aid to financial inclusion.

## Situation Analysis:

### Policy and Regulatory Environment

After a well-attended workshop on branchless banking in November 2006, the GoP established a forum for relevant stakeholders to discuss Pakistan's approach to branchless banking. Over time, the participation of most of the major industry stakeholders declined, leaving the SBP, the Ministry of Information Technology (MoIT), and Tameer as the main participants.

In June 2007 the Banking Policy & Regulations Department (BPRD) of the SBP released its Policy Paper on the Regulatory Framework for Mobile Banking in Pakistan (Policy Paper). As stated in the Policy Paper, bank-led branchless banking "offers a distinct alternative to conventional branch-based banking in that [the] customer conducts financial transactions at a whole range of retail agents (or through mobile phones) instead of at bank branches or through bank employees."<sup>vi</sup> The resulting 2008 Branchless Banking Regulations (BBR) generally implement the approach articulated in the Policy Paper.

The SBP considered several models of branchless banking before deciding to, initially, allow only bank-led models. The BBR permit three bank-led models: one-to-one, one-to-many and many-to-many. These three models apply to arrangements between banks and MNOs as well as to arrangements between banks and other agents (such as gas stations, chain stores, the Pakistan Post) using either mobile phones or other technologies such as point-of-sale (POS) devices to communicate between the bank and the agent. (The BBR refers to the non-MNO branchless banking arrangements as "alternate channels."<sup>vii</sup>) In all cases, the customer has an account relationship with the bank through the establishment of a "branchless banking account" (BB account). The BBR define "branchless banking" to exclude "information services" provided by banks to their existing customers via channels including the phone, internet and SMS.<sup>viii</sup> An example of the operation of such an arrangement is MCB Bank, which offers its customers the ability to engage in mobile phone-enabled internet banking via WAP<sup>ix</sup> enabled smart phones. However, this model does little (if anything) to promote financial inclusion since there is no outreach to the unbanked, and it requires the use of expensive mobile phones.

The three models can be summarized as follows:

With the "one-to-one model," a bank offers banking services via a BB account through (i) a single MNO, either by means of an agency or a joint venture agreement with the MNO, or (ii) an agent network.<sup>x</sup> The EasyPaisa Mobile Wallet (discussed below) offered by Tameer Bank and its parent, Telenor, to customers who have a Telenor mobile phone represents the one-to-one model. (Tameer Bank also offers a limited service through its EasyPaisa agents to the

customers of other MNOs or customers that do not have a phone at all. These customers are able to transact one-off bill payments and send domestic remittances to other non-customers.)

The “one-to-many model” involves a bank offering banking services via a BB account: (i) to any person with a mobile phone provided that the customer's particular MNO can provide an SMS pipe with adequate speed for processing transactions; or (ii) through many independent agents.<sup>xi</sup> As described in the BBR, in the case of mobile phone banking services, the model has limitations, including the fact that not all MNOs may be ready to offer the bank a priority SMS pipe to enable the bank to provide fast service. Second, the bank must bear all advertising and marketing expenses. Finally, the model may require the bank to rely upon its own branch network for product distribution and cash-in, cash-out services. United Bank Limited (UBL) Omni (also discussed in more depth below) is an example of a one-to-many model, where UBL has developed its own network of agents that will serve customers of any mobile operator.

The “many-to-many model” involves a central transaction processing system (i.e., switch) that provides total inter-operability, allowing multiple banks to offer services to the customers of multiple agent networks or MNOs.<sup>xii</sup> The switch must be controlled by a bank, an agent or subsidiary of a bank, or a subsidiary of a group of banks. The many-to-many model has not been implemented yet although the SBP views it as “the desired situation [in which] all banks and all telcos [are] able to entertain each other’s customers.”<sup>xiii</sup> The many-to-many model presents certain benefits to banks, including: (i) the opportunity to purchase access to a switch (analogous to ATM access), which would reduce the required investment in the technology required to support MNO branchless banking, and (ii) access to a large pool of new customers and the fee income from providing branchless banking services to them.<sup>xiv</sup>

In December 2009, the SBP and Pakistan Telecommunication Authority (PTA) agreed to set up a Joint Regulatory Committee to introduce a “unified regulatory framework for Third Party Solution Provider system.”<sup>xv</sup> It remains to be seen whether this new initiative will provide additional encouragement for the many-to-many model to be pursued and if so, by whom.

There are still several challenges with the current regulation that CGAP believes are holding back the industry including: (i) the requirement to capture biometric information at the time of account opening requires banks to invest in expensive infrastructure and hinders customer acquisition; (ii) low transaction thresholds, that have eroded significantly due to inflation since they were first set, reduce the usefulness of accounts; and (iii) high fees charged by the National Database and Registration Authority (NADRA) for verifying customer information at the time of account opening which again pushes up the cost of account opening.

### **G2P Payments**

There is a lot of interest in using Government to Person (G2P) payments as a means of promoting financial inclusion. The Government has experimented with financially inclusive payment channels for several schemes including payments to IDPs after the military action in the Swat valley, in making payments to the victims of the floods in August 2010 and to beneficiaries of the Benazir Income Support Programme (BISP). In the first two schemes, funds were distributed via Visa branded swipe cards provided by the large commercial banks.

BISP payments have been traditionally delivered primarily through the Pakistan Post Office, but there are two live pilots that use alternative technologies. The first uses “smart cards” although in actuality it is a barcode on the back of the card that is read. The second is a “mobile payment” pilot which is very new and has been rushed out so functionally is limited. There are questions about the sustainability of this model in the longer term (the banks provided a small number of free mobile phones to beneficiaries for this first pilot, but are unlikely to be willing to do this on a larger scale).

Despite these problems, the GoP is clearly interested in experimenting with new payment channels and CGAP has a number of potential partners within government to work with on the design and evaluation of different pilots including BISP, SBP and other departments that are paying salaries, pensions or other entitlements.

### Industry Overview

#### *Banks:*

The State Bank of Pakistan listed 45 scheduled banks that had licenses to offer banking services in Pakistan as of June 2008 (see Figure 1 below). Of these banks four have over 1,000 branches: the publically owned National Bank of Pakistan (NBP), and three private sector banks Habib Bank Limited (HBL), United Bank Limited (UBL) and Muslim Commercial Bank (MCB)<sup>xvi</sup>.

Figure 1: Reporting Scheduled Banks (June 30, 2008)

Sr. No	Bank	No. of Branches	Sr. No	Bank	No. of Branches
<b>A)</b>	<b>Public Sector Commercial Banks</b>	<b>1,592</b>	24	Standard Chartered Bank(Pakistan)	178
1	First Women Bank Ltd.	39	25	United Bank Ltd.	1,082
2	National Bank of Pakistan	1,245	<b>D)</b>	<b>Foreign Banks</b>	<b>60</b>
3	The Bank of Khyber	35	1	Al-Baraka Islamic Bank BSC	18
4	The Bank of Punjab	273	2	Citi Bank NA	26
<b>B)</b>	<b>Specialized Banks</b>	<b>539</b>	3	Deutsche Bank AE	3
1	Industrial Development Bank of Pakistan (IDBP)	20	4	Oman International Bank SAOG	3
2	SME Bank Ltd.	15	5	The Bank of Tokyo-Mitsubishi Ltd.	1
3	The Punjab Provincial Co-operative Bank Ltd. (PPCB)	159	6	The Hong Kong Shanghai Banking Corporation Ltd.	9
4	Zarai Taraqati Bank Ltd. (ZTBL)	345		<b>Indian Banks*</b>	<b>9</b>
<b>C)</b>	<b>Domestic Private Banks</b>	<b>6,143</b>	7	State Bank of India	2
1	ABN Amro Bank NV	80	8	The Bank of India Ltd.	1
2	Allied Bank Ltd.	760	9	The Central Bank of India	3
3	Arif Habib Bank Ltd.	12	10	The Oriental Bank of Commerce Ltd.	1
4	Askari Bank Ltd.	154	11	The Punjab National Bank	1
5	Atlas Bank Ltd	32	12	The United Commercial Bank	1
6	Bank Al-Falah Ltd.	223			
7	Bank Al-Habib Ltd.	202			
8	BankIslami Pakistan Ltd.	36			
9	Crescent Commercial Bank Ltd.	28			
10	Dawood Islamic Bank Ltd	11			
11	Dubai Islamic Bank Pakistan Ltd	18			
12	Emirates Global Islamic Bank Ltd	25			
13	Faysal Bank Ltd.	111			
14	Habib Bank Ltd.	1,450			
15	Habib Metropolitan Bank Ltd.	100			
16	JS Bank Ltd.	9			
17	KASB Bank Ltd.	40			
18	MCB Bank Ltd.	1,025			
19	Meezan Bank Ltd.	110			
20	my Bank Ltd.	69			
21	NIB Bank Ltd.	241			
22	Saudi Pak Commercial Bank Ltd.	55			
23	Soneri Bank Ltd.	92			

Indian Banks-Vested in the custodian of enemy property since September 1965 and are non-operative

There are also a number of Microfinance Banks and Institutions in Pakistan which are listed in Figure 2. The decision by SBP to allow only banks to offer branchless banking services has increased interest in the microfinance sector from those that are interested in offering branchless banking services. The acquisition by Telenor, a mobile network operator, of Tameer Microfinance Bank has led to speculation that other non-bank actors may seek to follow this path to enter the sector<sup>xvii</sup>. NRSP has also recently been awarded a microfinance bank license.

Figure 2: Microfinance Networks (Banks and Institutions) in Pakistan<sup>xviii</sup>

MFB	Rural Support Programs
1 The First Micro Finance Bank Limited	1 Lachi Poverty Reduction Project (LPRP)
2 Khushali Bank Limited	2 National Rural Support Programme (NRSP)
3 Network Micro Finance Bank	3 Punjab Rural Support Programme (PRSP)
4 Pak Oman Micro Finance Bank	4 Sarhad Rural Support Programme (SRSP)
5 Rozgar Micro Finance Bank, Karachi	5 Thardeep Rural Development Programme (TRDP)
6 Tameer Microfinance Bank Limited	6 Sindh Rural Support Organization (SRSP)
7 Kashf Micro Finance Bank	<b>Others</b>
<b>MFI</b>	1 ORIX Leasing Pakistan Ltd. (OLP)
1 Akhuwat	2 Jinnah Welfare Society (JWS)
2 Asasah	3 Narowal Rural Development Programme (NRDP)
3 Kashf Foundation	4 Organization for Participatory Development (OPD)
4 Orangi Pilot Project (OPP)	5 Rural Community Development Society (RCDS)
5 Sindh Agricultural and Forestry Workers Cooperative Organization (SAFWCO)	6 Save the Poor (STP)
6 Community Support Concern (CSC)	7 Sungi Development Foundation (SDF)
7 Development Action for Mobilization and Emancipation (DAMEN)	8 Swabi Women's Welfare Society (SWWS)
8 Centre for Women Cooperative Development (CWCD)	9 Taraqee Foundation (TF)

### Branchless Banking Operations:

At the time of writing, four Banks have been awarded branchless banking licenses, but only two have launched commercial services. **Dubai Islamic Bank** was the first to be awarded a license, but so far has only opened one agent location as a pilot. They plan to use the license to operate low-cost service points (for example in shopping malls) where their existing customers can avail themselves of a range of services. We do not anticipate that they will develop a branchless banking service that is aimed at acquiring large numbers of customers in the mass market segment. **First MicroFinance Bank (FMB)** has signed an agreement with the Pakistan Post to serve poor customers through rural post offices although this is very limited in its reach.<sup>xix</sup>

The two services that have reached some scale in the market are Tameer Bank's **EasyPaisa** and UBL's **Omni Service**.

**EasyPaisa:** In October 2009, Tameer Microfinance Bank, and its parent company, Telenor, a major MNO, launched EasyPaisa. EasyPaisa allows both Telenor and non-Telenor customers to make over-the-counter bill payments and money transfers through EasyPaisa agents, who themselves hold accounts with Tameer.<sup>xx</sup> In February 2010 they launched the EasyPaisa mobile wallet, which will allow customers to make payments from an account on their Telenor phone and allow Tameer to offer savings, insurance, and loan services to EasyPaisa customers.

At the beginning of 2011, Tameer had over 10,000 EasyPaisa agents operational with ambitious plans to have 30,000 by 2012. EasyPaisa had now processed over 10 million transactions (75% of which are for bill payment). The mobile wallet has not seen such rapid take-up and Telenor has held back from marketing the service until they have improved the customer sign-up registration process.

**UBL Omni.** Just under six months after EasyPaisa launched, UBL launched a similar offering (timed to coincide with the SBP Branchless Banking conference on April 17, 2010) under the "UBL Omni" brand. They now have 3,000 Omni Dukaans (agents) active in more than 300 large and small towns across Pakistan. Without the muscle of an MNO with an established distribution channel behind them they may take longer to build their agent network, but their roll

out so far shows that they are serious about this business. They have a large team working on Omni including a sales and distribution team of “foot-soldiers” who directly manage the agent network. The Bill and Melinda Gates Foundation has made two large grants to UBL, totaling \$8.4m, to support the roll out of Omni.

The UBL Omni product offering is very similar to EasyPaisa, but is available to customers of any mobile operator as well as over-the-counter. The mobile wallet is free to open and cash in is also free, but there is a bundled service fee on the account and a minimum account balance of Rs500 with an automatic penalty if the account balance falls below this. UBL has been successful in winning contracts from the Government and NGOs to disburse payments to large numbers of beneficiaries, including after the massive floods in 2010 and as a pilot for the delivery of government payments under the Benazir Income Support Programme. There is already a small overlap between EasyPaisa and Omni agents.

Several other banks are considering the business case for branchless banking:

- **HBL** is a large bank owned in part by the Aga Khan Foundation and is facing considerable pressure from their board to launch a service. As a first step, they are working with government owned mobile operator U-fone on a BISP Mobile Banking pilot
- **Aksari Bank**, partly owned by the Army Welfare Trust, is developing a strategy that will center around providing salary payments to the armed forces. They may tie-up with one of the mobile operators – Zong probably being the most likely (see below)
- **Bank Alfalah**, mobile operator Warid and technology company Raseen are all owned by the Abu Dhabi Group and are trying to work out a business model that will work for all three of them. They are involved in the distribution of flood relief payments and, like HBL, in the BISP mobile payment pilot.

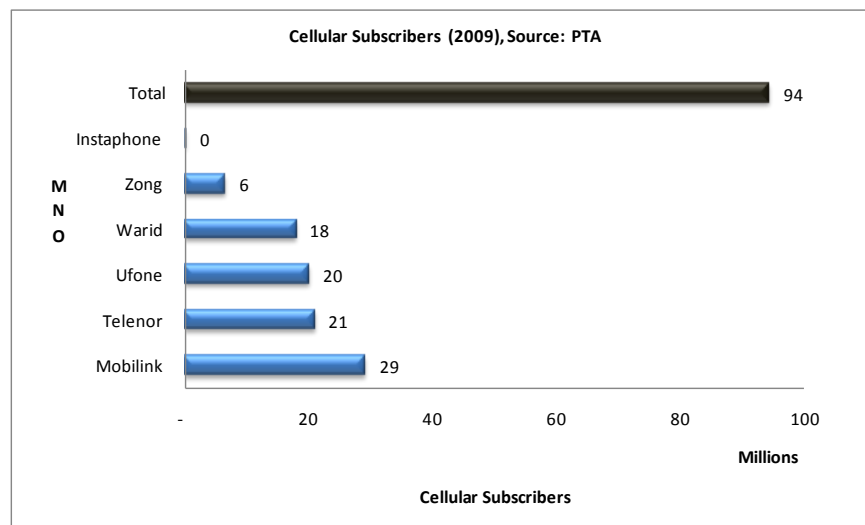
**MCB** is the other large private bank and have been clear for some time that they will not launch a branchless banking service concentrating instead on their mobile banking platform, powered by Fundamo, for existing customers.

Several other banks have signed up to use the “Genie” platform (run by the largest MNO Mobilink) for retail commercial payments such as utility bills, insurance premiums and mobile air-time top-up. Citibank, KASB and Atlas banks opted for the platform and customer of these banks can avail services and use their linked bank account or credit cards through the phone application to effect payments.

#### *Mobile Network Operators:*

There are five major MNOs in Pakistan (Mobilink, Telenor, U-fone, Warid and Zong) although consolidation in the market is expected, with speculation that Warid may be a target.

Figure 3: Pakistani Cellular subscribers by network operator



At present Telenor is the only operator that has entered the market, through their acquisition of Tameer. Their EasyPaisa service, which has been discussed above, provides Telenor customers with access to an expanding range of financial services through over 10,000 agents.

**Mobilink.** As the largest mobile network operator by customers and by agent channel (by some estimates they have 250,000 agents) Mobilink could be a serious contender if they can find the right partnership to allow them to enter the market. They have already had two unsuccessful attempts to get into the branchless banking business. Their first foray with the post office was supposed to make it possible to make mobile money transfers utilizing post office network. Uptake of this service has been very poor with transactions numbering in the hundreds. Their second attempt in partnership with Citi ended abruptly when Citi pulled out of the deal two weeks before the planned launch in April 2009

After looking seriously at acquiring a microfinance bank they have now decided to start their own. Orascom, their parent company, has been in the market for a banking license for several years and narrowly lost out on their bid to acquire the Pakistani business of Royal Bank of Scotland. Their plan is cautious as they don't want to get this wrong again and fall further behind Telenor. They have developed a business plan for a microfinance bank which has been approved by SBP. They have recruited a CEO who worked at Tameer on EasyPaisa and will use Utiba as the platform.

The intended business model appears to be a carbon copy of Telenor's and will, in the short term, be driven by over-the-counter domestic remittances and bill payments. The mobile wallet will follow and they will look to win contracts for salary disbursements from businesses. In the short term they see little need to differentiate themselves from the other players in the market, likening it to the early days of voice before the market became saturated and the price wars began.

**Zong** is the newest entrant to the market and is the fastest growing. They have competed aggressively on price to win market share. Zong's parent company China mobile recently took a

stake in a bank in China and they are thinking seriously about following this approach in Pakistan or getting their own license. They have support from the highest levels in this regard including from the group Chairman who encouraged them to explore all options for entering the branchless banking market on a recent visit. There is speculation that they may also strike a deal with Askari Bank as part of their strategy.

**Warid** has suffered from constant rumors in the market of a take-over. If they do get into the market it is highly likely that they will do this with their sister company Bank Alfalah (see above)

**Ufone** is the Government owned operator and has developed a couple of solutions to help their own customers to access their bank accounts. The threat of an interoperable solution has prevented them from investing heavily in their own solution and they are probably the least likely of all the five mobile operators to be significantly involved in a service by the end of 2011 although they are involved in several of the government payment pilots in partnership with different banks.

#### *Other distribution channels:*

The **Pakistan Post Office** manages over 4 million savings accounts, mainly small accounts below Rs 10,000 (about USD 118), through more than 12,000 branches.<sup>xxi</sup> Currently, post offices are used as payment agents for the government and utility companies, and they could also potentially become agents for banks. The Pakistan Post has entered into an unsuccessful partnership with Mobilink to provide a “mobile money order” for domestic remittances (see above).

**TCS** is a diversified courier and logistics company with a strong brand in Pakistan. Owned as a family business, it has nearly 400 branded express service centers across Pakistan and claims to reach an additional 12,000 locations. Built around an efficient distribution system, TCS has been looking for ways to leverage its network for inward remittances and other payments and to convert their couriers into “barefoot bankers” who would visit customers on their doorstep. Discussions with various banks have been started and TCS inquired about getting an exchange company license. A lack of success from partnership discussions and SBP’s negative views on exchange houses has pushed TCS to submit an application for a microfinance bank license of its own which it would then seek to convert to a branchless banking license in due course. TCS is in advanced negotiations to attract investment into the new bank. SBP has been hesitant to grant them a license for a liability driven business and seems intent on forcing them to run a full service microfinance bank.

#### *Other stakeholders*

In 2008, the UK Department for International Development (DFID) committed £50 million (US \$81 million) to a Financial Inclusion Programme (FIP) with funding channeled through the State Bank of Pakistan.<sup>xxii</sup> The FIP is a four-year program with a broad remit that includes lending to micro and small enterprises, low-income housing finance and rural finance as well as remittances, Islamic finance, innovation and branchless banking. The FIP has a limited amount of grant funding under a number of different windows.

The Bill and Melinda Gates Foundation have recognized the potential of the Pakistani market and have made two large grants to UBL. The first for \$6.9m is to support the general roll out of Omni and has been channeled through Shore Bank International Pakistan (SBIP). A further grant of \$1.5m has been provided specifically to support their flood relief efforts. There is speculation that they may also make a grant of comparable size to Telenor to support the roll out of EasyPaisa.

USAID have been developing plans for a large and wide ranging financial sector development program for some time, but have suffered from frequent changes of policy and personnel. They are interested in the idea of mobile banking and have significant resources that they are looking to spend in this area, probably through a large bilateral program.

The market for consults in Pakistan with the technical capability to work on branchless banking is relatively limited. SBIP is possibly the strongest operation in the country and is seeking to build its expertise through a partnership with UBL. They have also produced a report for the World Bank team that is working on BISP on the feasibility of making Government Payments through financially inclusive electronic channels.

### **Key Challenges and Opportunities:**

The overall environment for branchless banking in Pakistan is relatively permissive. The BBR, although not perfect, does make the position of the Central Bank very clear and actors have responded with the launch of commercial services. New regulations or signals that the SBP was thinking of radically altering its approach would not be advisable at the moment, but there are amendments and clarifications that could be made to the BBR, which would not necessitate the need for new legislation. Among the changes that we are actively seeking are:

- **Removing the requirement to capture biometric information.** The requirement for biometric fingerprint capture as part of the account opening procedure is costly for providers. At present, biometric images cannot be verified against the national database and consequently, they do not add any additional security. Although temporary exemptions have been granted to both Tameer and UBL, providers fear that they will ultimately have to comply with the biometric requirement – which does not give them confidence to invest in new technology at the agent level. This places a limit on the ability of providers to open accounts at agent locations, which was a key goal of the branchless banking regulations and a necessity to translating the use of agents into widespread financial inclusion.
- **Raising the very low transaction limits.** Currently the transaction limits for “Level one” accounts are very low by international standards and customers and agents have complained that they are so low that they are making the service of little use to them for everyday transactions. In addition, daily thresholds mean that greater volumes can be transacted “over-the-counter” with lower customer identification requirements than are required on level 1 accounts. The BBR set the transaction limits in 2008, but with

inflation running in double digits these have already been eroded significantly. The SBP has indicated a willingness to look at revising these upwards or to linking them to inflation.

- **Reducing or removing the high NADRA verification fees.** High verification fees charged by the National Database and Registration Authority pushes up the cost of account opening. Verification should be seen as a public good and not a means to maximize government revenues. NADRA fees (Rs 35-45) for web-based verification are high by international standards and there is no justification for the fact that banks currently pay more than telcos (Rs 13) to access the same data. NADRA is a public entity and should not be seeking to maximize profits, but to provide services at the cheapest possible price to all players to create a level playing field.

There is a lot of interest from the Government of Pakistan in the potential to use government payments as a mechanism to support financial inclusion. CGAP is already engaged with the Benazir Income Support Programme which is running several pilots with different actors. They are interested in support from CGAP to develop their strategy, assess the effectiveness of the ongoing pilots and to possibly design additional pilots. Other government departments may also be interested in piloting financially inclusive payment mechanisms and we plan to explore options for working with other government departments through a workshop with SBP.

An emerging “second wave” of players that are hoping to launch services in 2011 provides an opportunity for CGAP to help them to come up the learning curve more quickly than the first movers. Several of them have expressed a desire to work with CGAP.

## References:

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- <sup>i</sup> Sources for data are Central Intelligence Agency, The World Fact Book, retrieved August 10, 2010, <https://www.cia.gov/library/publications/the-world-factbook/geos/pk.html> ; and CGAP Financial Indicators Report 2009, <http://www.cgap.org/p/site/c/template.rc/1.9.38735/> and 2010 (forthcoming)
- <sup>ii</sup> Central Intelligence Agency, The World Fact Book, retrieved February 19, 2010, <https://www.cia.gov/library/publications/the-world-factbook/geos/pk.html>
- <sup>iii</sup> “Overview, Financial Market Structure, Regulations, and Policies,” p. 8, retrieved February 25, 2010, <http://siteresources.worldbank.org/PAKISTANEXTN/Resources/293051-1241610364594/6097548-1242706658430/Ch1BringingFinancePakistanPoorMay192009.pdf>;  
siteresources.worldbank.org/PAKISTANEXTN/Resource - 2009-05-19
- <sup>iv</sup> Pakistan 10 Year Strategy Paper for the Banking Sector (2010) (Banking Sector Strategy Paper), Section 55 at <http://www.sbp.org.pk/bsd/10YearStrategyPaper.pdf>.
- <sup>v</sup> Pakistan Telecommunication Authority Website, [http://www.pta.gov.pk/index.php?option=com\\_content&task=view&id=650&Itemid=603](http://www.pta.gov.pk/index.php?option=com_content&task=view&id=650&Itemid=603), retrieved February 19, 2010.
- <sup>vi</sup> Policy Paper, p. 2 at [http://www.sbp.org.pk/bprd/2007/Policy\\_Paper\\_RF\\_Mobile\\_Banking\\_07-Jun-07.pdf](http://www.sbp.org.pk/bprd/2007/Policy_Paper_RF_Mobile_Banking_07-Jun-07.pdf).
- <sup>vii</sup> BBR, Section 3.1
- <sup>viii</sup> BBR, Section 2. The meaning of “information services” is not elaborated upon. However, given the statement in the Policy Paper (which pre-dates the BBR) that banks could offer existing customers the ability to do account-to-account fund transfers and payments via SMS, it is reasonable to interpret “information services” to include instructions by a customer to make a payment from the customer’s account. Policy Paper, p. 7.
- <sup>ix</sup> Wireless Application Protocol.
- <sup>x</sup> BBR, Section 3.1.
- <sup>xi</sup> BBR, Section 3.1.
- <sup>xii</sup> The BBR analogizes the switch to the existing ATM network, which permits a customer of any bank to use the ATMs of any other bank. BBR, Section 3.1.
- <sup>xiii</sup> *Id.*
- <sup>xiv</sup> Of course, a switch would not take care of the need to establish and maintain the agent network that is an essential component of any of the bank-led models.
- <sup>xv</sup> Nov. 18, 2009 Press Release, <http://www.sbp.org.pk/press/2009/PTA-Meeting-19-Nov-09.pdf>.
- <sup>xvi</sup> (State Bank of Pakistan, 2008)
- <sup>xvii</sup> The acquisition of microfinance banks is particularly attractive to non-bank actors due to their lower capital requirements (and hence cheaper price tag) and the lack of limit on the stake that can be taken by any one party.
- <sup>xviii</sup> (Pakistan Micro Finance Network, 2009)
- <sup>xix</sup> <http://ismailimail.wordpress.com/2010/01/29/first-micro-finance-bank-ltd-and-pakistan-post-office-ink-sign-for-poverty-alleviation/>
- <sup>xx</sup> During the first phase of the EasyPaisa roll-out, the ultimate customers will not have a direct banking relationship with Tameer; rather, they will conduct their transactions through accounts in the names of Tameer agents, who will be based primarily in Telenor service outlets.
- <sup>xxi</sup> Banking Sector Strategy Paper, Section 58(v) at <http://www.sbp.org.pk/bsd/10YearStrategyPaper.pdf>
- <sup>xxii</sup> [DFID Annual Report 2009. http://www.dfid.gov.uk/Documents/publications/PSA/E\\_Pakistan.pdf](http://www.dfid.gov.uk/Documents/publications/PSA/E_Pakistan.pdf).