

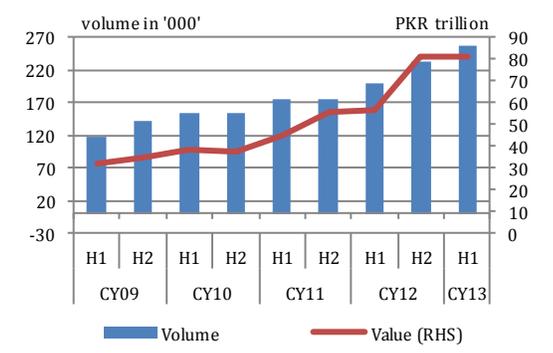
The payment system managed to handle both large valued and retail transactions efficiently during H1-CY13 with reduced downtime and without any material disruption. The Pakistan Real Time Interbank Settlement Mechanism (PRISM) settled increased value and quantum of transactions along with the provision of required liquidity facility through Intra-day Liquidity Facility (ILF) despite stressed marked liquidity conditions. The retail banking also grew, largely due to flourishing e-banking on the back of rising awareness and improved infrastructure. With significant number of new entrants, Branchless Banking (BB) also witnessed robust growth and diversity over the half year.

Table 8.1: Profile of Payment System Mechanisms				
Mechanism	H2-CY12		H1-CY13	
	Volume	Value	Volume	Value
Volume in thousands and value in trillion Rupees				
PRISM	231.9	80.9	256.1	81.1
Retail Payments	331,600	66.5	347,859	69.6
Paper based	180,800	52.5	177,599	53.9
E-transactions	150,800	14.0	170,260	15.7

One of the key objectives of SBP as a regulator of payment system is to ensure continued availability of safe and efficient payment system. SBP has come a long way with a number of initiatives to bring about further efficiency and reliability in the existing payment system of the country. Complementing SBP's endeavors, the large scale investment in IT infrastructure over years from financial institutions particularly banks, has resulted in innovative, resilient, and efficient Alternative Delivery Channels (ADCs) in payment system. Specifically, the development of core banking solutions has helped in achieving higher degree of operational efficiency, better and more diversified provision of services, and higher reliability of systems.

**Figure 8.1**

Growing trend of PRISM transactions



As a core Large Value Payment (LVP) mechanism, Pakistan Real Time Interbank Settlement Mechanism (PRISM)<sup>72</sup> continued to manage increased value and volume of large transactions during the half year under review. It handled PKR 81.1 trillion worth of 256 thousand transactions exhibiting growth of 0.3 percent and 10.4 percent in value and volume respectively over the previous half (**Table 8.1 & Figure 8.1**). Due to continued tight liquidity conditions during the half, SBP provided another PKR 4.1 trillion of ILF (5.1 percent of overall value) during H1-CY13, about 8.8 percent higher than the previous half year. The retail payment mechanism also played a significant part and handled PKR 69.6 trillion of 347.9 million transactions; growing by 4.6 percent and 4.9 percent in value and volume respectively. Though paper based transactions still lead the retail payments, e-banking share is continuously on the rise. With the entry of 3 new market players (all banks) during the half, BB grew with the rapid pace.

<sup>72</sup> PRISM transactions are classified as large value transactions due to high average size of transaction; however, there is no downside limit of the transaction.

### Box 8.1

**PRISM** started operations with the settlement of interbank money market transactions and the domestic leg of FX market operations in July 2008. Since then, the scope of PRISM has been enhanced over time to provide a range of services such as; a) settlement of government securities, b) Intraday Liquidity Facility (ILF), c) SBP's internal transactions such as OMO/auction settlement, d) settlement of interbank fund transfer received in batches through NIFT, e) bank's own account transfer and f) excess to stock exchange member through their settlement banks.

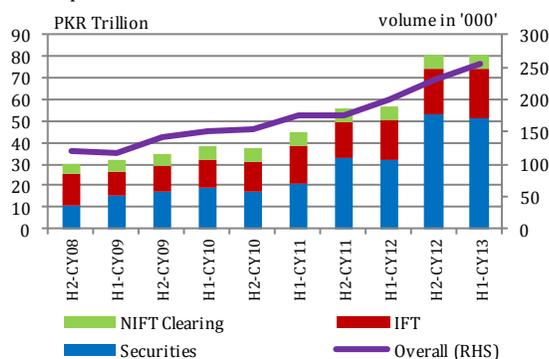
PRISM comprises two major applications i.e. RTS/X and Depo/X. The former is a fund transfer application operated through software installed by SBP at participant's premises. Depo/X is securities settlement web based application which is connected in real time with RTS/X to ensure transaction in Delivery vs. Payment (DvP) basis.

### Large Value transactions observed significant growth...

PRISM was established to address settlement risk by ensuring large value government securities transactions in real-time (thereby to reduce the settlement risk); however, the scope of its usage encompassed several other modes over time (**Box 8.1**). The consolidated data of multiple transactions handled through PRISM indicated that 256 thousand transactions valuing PKR 81.1 trillion were settled through this LVP mechanism<sup>73</sup>. The overall growth in the volume (10.4 percent) was entirely contributed by continued growth in transactions of Interbank Fund Transfer (IFT) and Retail Checque Clearing (RCC)<sup>74</sup>. However, the value of transactions revealed a negligible growth (0.3 percent) mainly due to dip in the value of securities settlements during the half. The higher volume lower value settlements through PRISM reduced the average transaction size by 8.9 percent to PKR 317 million <sup>75</sup> during the half (**Figure 8.2**).

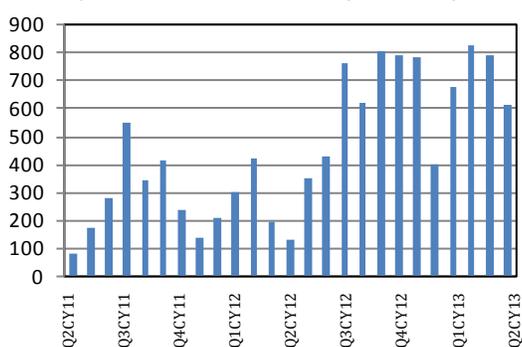
**Figure 8.2**

Component of PRISM Transactions



**Figure 8.3**

Monthly utilization of ILF in PRISM (PKR billion)



### ILF remained on high side...

In case a bank faces shortage of funds, SBP provides Intra-day Liquidity Facility (ILF); a fully collateralized liquidity facility extended against approved government securities, to ensure smooth functioning of payment system. Banks utilization of ILF from SBP grew by 8.8 percent to PKR 4.1 trillion in H1-CY13 (**Figure 8.3**). This allowed banks smooth settlement of transactions and avoid large queues and gridlock situations<sup>76</sup>. The ratio of ILF magnitude to PRISM value of transactions rose by 40 bps to 5.1 percent. The ILF value is growing since the launch of PRISM in 2008 and more so during last few years when market liquidity remained tight.

### Cash dominates the retail payment mechanism ...

Retail payment mechanism comprises both paper and non-paper based modes of transactions. Cash dominated retail transactions mostly person to person (P2P) payments. Despite several issue associated with cash transactions (high economic cost due to manual counting, verification and storage of notes, risk of

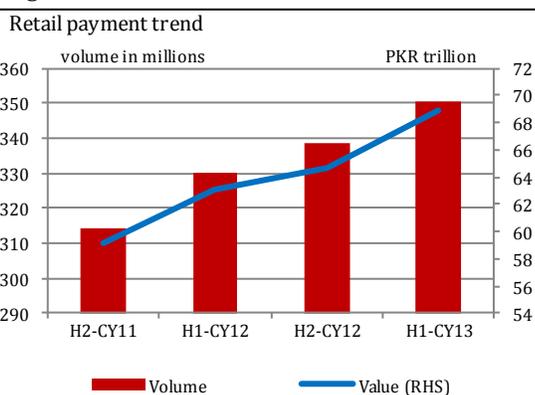
<sup>73</sup> The volume does not include Intra-day Liquidity Facility (ILF) which is also performed through PRISM.

<sup>74</sup> The growth in volume of IFT and CRR actually superseded the declining growth in transactions of securities settlement.

<sup>75</sup> IFT are relatively higher frequency lower value transactions. If IFT transactions are excluded, the average transaction size carried out through PRISM will increase to PKR 1,045 million in H1-CY13 (PKR 666 million in H1-CY12).

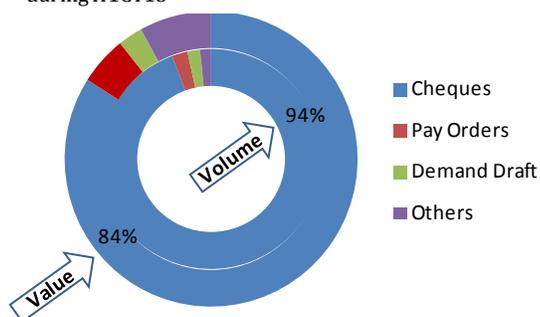
<sup>76</sup> If one bank face funding shortfall, it may create the shortage of funds for the recipient bank. A system wide similar situation where several banks' transactions are stuck is called Gridlock situation. PRISM system is also equipped with the Gridlock resolutions mechanism which when activated by SBP can offset large number of transactions on individual basis by reprioritizing payments in queue using different algorithms.

**Figure 8.4**



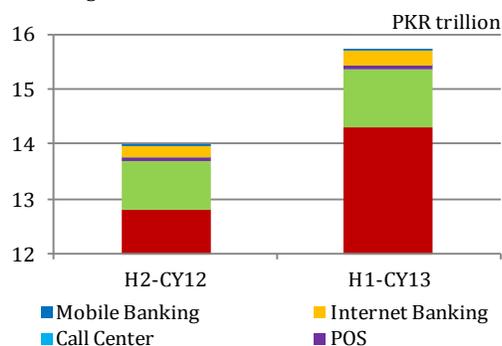
**Figure 8.5**

Composition of paper-based retail transactions during H1CY13



**Figure 8.6**

E-Banking Transactions



theft/loss etc), cash dominance may be attributed to host of factors including lack of awareness to alternative modes, liquidity preference, perceived public confidence on currency, cultural issues, low financial inclusion, and intended avoidance of record keeping for tax evasion. Apart from cash-based transactions, the rest of retail payments were subjugated by traditional cheque-based transactions followed by emerging e-banking transaction which accelerated in growth in recent years with the support of technological improvement (Figure 8.4).

### Cheques handled most of paper-based retail payments...

In order to bring efficiency in clearing and settlement processes, SBP is working on standardization of financial instruments with initial emphasis on standardization of cheques (also referred as cheque truncation) while at the same time improving its security features. This step intends to speed up the overall cheque clearing process and minimize the fraudulent activities.

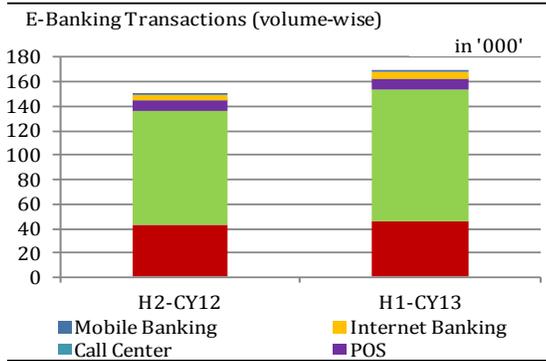
Overall, paper based retail payment mechanism handled PKR 53.9 trillion worth of 177.6 million transactions showing 2.7 percent growth in value while 1.8 percent decline in volume in H1-CY13 over the previous half. Resultantly, the average transaction size rose with a significant jump to PKR 303.2 thousand in the half under review against PKR 290.1 thousand in previous half. Segment-wise classification reveals a clear ruling of cheque-based transactions contributing 84.5 percent (PKR 45.5 trillion) share in value and 94.1 percent share in volume of retail payments followed by pay orders as the second best (Figure 8.5). Interestingly, 49.5 percent of cheques transactions were carried out for cash withdrawals contained only 16.8 percent share in volume. In contrast, cheque payments for transfer carries only 31.5 percent share in volume while 55.1 percent share in value (Table 8.2).

### e-banking continued to rise ...

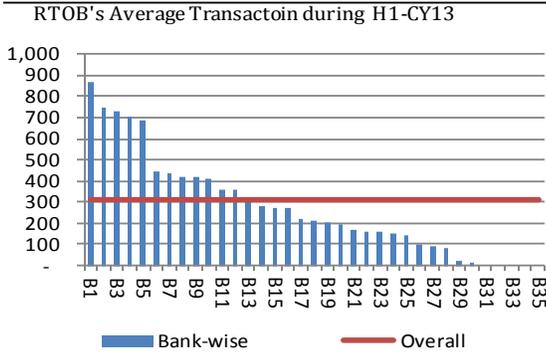
In Pakistan, e-banking evolved over time, and with growing trend, has started to gain importance in retail banking. This technology based transaction mechanism has benefited the large customer base through efficient, reliable, and diversified banking services using non-traditional ADCs. Consequently, the value share of e-banking in overall retail payment transactions rose to 22.2 percent on end June - 2013 (20.6 percent as of end December 2012). During the half, 170.2 million e-banking transactions were conducted, showing an increase of 12.9

	Number (000,000)	Amount Billion PKR	Volume Share	Value share
Cash	83.1	7,980.8	48.9%	17.2%
Transfer	55.6	25,928.9	32.8%	56.0%
Clearing	31.1	12,358.6	18.3%	26.7%
Refund	0.0	28.4	0.0%	0.1%

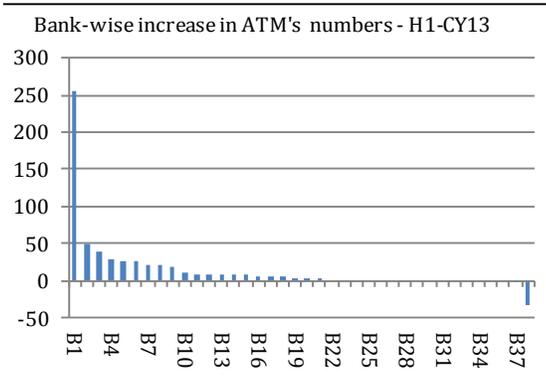
**Figure 8.7**



**Figure 8.8**



**Figure 8.9**



	CY12	H1CY13	Growth H1-CY13
ATMs	5,987	6,757	12.9%
Online Branches Network	9,412	10,013	6.4%
POS	34,229	33,748	-1.4%
Credit Cards (000)	1,274	1,088	-14.6%
Debit Cards (000)	17,588	20,267	15.2%
ATM Only Cards (000)	806	962	19.3%

percent; so was the case with value that grew by 10.6 percent to reach PKR 15.5 trillion (Figure 8.6 & 8.7). The basic infrastructure of payment system showed a considerable improvement with a significant addition of new Real Time Online Banking (RTOB), ATMs, and plastic cards during the half under review (Table 8.3).

**RTOBs dominated e-banking...**

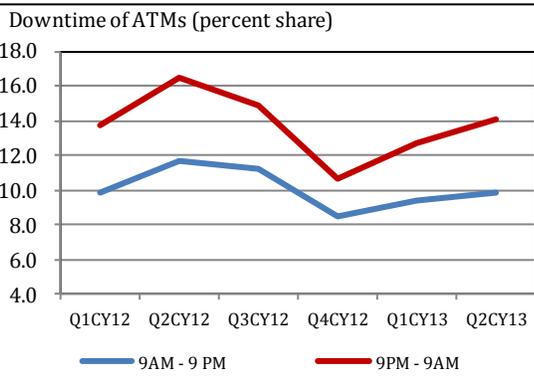
With the addition of 117 branches to the network, the number of online bank branches reached 10,013 which is 94.6 percent of total bank branches across the country. The overall value and volume of payments through RTOB grew by 11.7 percent and 5.9 percent respectively that increased the average transaction size to PKR 0.312 million in H1-CY13 compared to PKR 0.295million in the previous half. There were few banks with average transaction size significantly larger than overall industry average; however, the overall share of such banks in total value of transactions was quite small. Bank-wise value share of RTOB payments during H1-CY13 was confined to few banks only; much more than their relative asset share of the industry (Figure 8.8).

**ATM's growth was impressive...**

With a growth of 8.4 percent, a total of 525 more ATMs were added by various banks (more so in the second quarter of CY13), thus bringing the total number of ATMs installed to 6,757<sup>77</sup>. The bank-wise data revealed that the growth in ATM's number was largely contributed by top five banks (in terms of assets) and partially by few other middle tier and small banks (Figure 8.9). The banking sector handled 107.3 million transactions worth PKR 1.07 trillion through ATM channel showing 18.6 percent and 16.1 percent growth in value and volume respectively. Furthermore, due to rise in per ATMs card withdrawal limit offered by various banks, the average ATMs transaction size increased from PKR 9,794 to PKR 10,007 during the half. However, the detailed bank-wise data reveals significant dispersion in average ATM transaction size amongst banks.

<sup>77</sup> The rise in ATM's number was partially resulted from SBP's instruction to add one ATM against each newly opened branch from CY13 onward and to fill the gap between numbers of existing branches with matching ATMs in next five years (BPRD Circular No.3 of 2012).

**Figure 8.10**



The scope of ATM channel in the e-banking world has significantly widened in recent past. ATMs are now covering round the clock cash withdrawal and deposits, utility bill payments, domestic and cross-border fund transfer, credit card payments etc. The consistent availability of services in minimum time is imperative for the efficiency of ATMs. The downtime of ATMs during working hrs (9am to 9 pm) marginally reduced to 9.6 percent during H1-CY13<sup>78</sup> from 9.9 percent in previous half. However, the downtime for non-working hrs (9pm-9am) increased to 13.4 percent from 12.7 percent in the last half (**Figure 8.10**). A number of factors that may have added to downtime include migration to new software, frequent interruption in power supply, introduction to multi-vendor ATMs software, breakdown in system-wide link, security concerns, etc.

### The downfall in credit card business reduced POSs...

The number of credit cards during H1-CY13 reduced by 13.8 percent to 1.08 million as on June 30, 2013. Following the same trend, POS terminals also declined by 2.8 percent (976) during the half to 33,748 POSs nationwide on end June 2013. However, despite the decline in physical infrastructure, the value and volume of POS based payments showed a positive growth by 7.4 percent and 1.3 percent respectively. High valued transactions with lesser POSs resulted in improved average transaction size to PKR 5,112/- during H1-CY13 compared to PKR 4,824 in the previous half. It may be worth mentioning that banks remained shy from consumer finance especially during last few years due to heightened credit risk in this particular segment and availability of risk free government security as an alternative financing channel.

### Internet banking continued to gain importance ...

The use of internet banking, third largest mode in e-banking after RTOB and ATMs, is evolving with an impressive pace and creating its space in retail payment system. With the prime feature of convenience and improved security, internet banking has got its size doubled in last two years. During the half under consideration, internet banking observed a double-digit growth in value and volume, i.e., 18.6 percent and 26.7 percent respectively. This mode handled PKR 271 billion worth of 5.35 million transactions with an average transaction size of PKR 50,493 during H1-CY13.

<sup>78</sup> Average downtime of two quarters is calculated for full half

## Branchless banking growing...

With the fast growing technological innovations, the financial institutions (particularly banks) have joined hands with telecommunication sector to offer a wide ranged efficient, reliable and user friendly financial services through BB. This form of payment has resulted not only in enhanced reach of financial services to unbanked customers (financial inclusion) but also benefited banks in term of cost effectiveness. The BB can also provide tremendous opportunity for Government to Persons (G2P) and Person to Government (P2G) payments in Pakistan.

	H1CY12	H2CY12	H1CY13	Growth H1CY13
No. of Agents	29,525	41,567	93,862	125.8%
No. of Accounts (in 000)	1,447	2,112	2,643	25.1%
Deposits as of Date (million PKR)	753	1,055	2,391	126.6%
Transactions (No. in million)	54	67	86	27.8%
Value of Transactions (PKR billion)	200	292	344	17.9%
Average Size of Transaction (PKR)	3,732	4,343	4,005	-7.8%
Average No. of Transaction Per Day (in 000)	298	373	477	27.8%

BB was pioneered by Tameer Microfinance Bank through its Easy Paisa model in year 2009 and United Bank Limited's (UBL) Omni in 2010. After witnessing their success, six more players including banks and telecoms have now entered the arena of BB, which boosted the overall growth of BB services. During H1-CY13, the transactions observed substantial growth due to increasing number of BB's agents. In H1-CY13, BB managed PKR 344 billion worth of 86 million transactions with the growth of 27.8 percent and 17.9 percent in value and volume respectively **(Table 8.4)**. BB's payment is dominated by Over the counter (OTC) transactions - transactions from one CNIC to another CNIC that do not involve mobile wallet - which contributes around 83 percent share in BB. On the other side, M-wallets transactions was the second best with 12 percent share. On average, 477 thousand transactions were performed per day by agents with an average transaction size of Rs. 4,005. Alongside, BB accounts witnessed a growth of 25.1 percent during the half and reached 2.64 million in numbers. Similarly, the number of agents offering branchless banking services has crossed 93,800.

Branchless banking industry is expected to become more competitive and cost effective with the entry of new players. During the last two quarters, three new players, i.e., Mobicash, Time Pay, and HBL Express have initiated BB operations, whereas in addition U-Microfinance Bank commenced its branchless banking operations under the brand name U-Paisa in August 2013 as well.