

Payment systems continued efficient and reliable settlements of increasing interbank payments and securities transactions during the period under review. PRISM- the large value payment system continued efficient settlements of higher volume of large value transactions while minimizing systemic settlement risk. The retail payments also observed a moderate growth 5 percent and 7 percent in volumes and values respectively. With improvements in the IT infrastructure of banks and customers' interest in mobile and e-banking modes, the use of electronic payment channels witnessed a rapid expansion. The usage of Real Time Online Banking (RTOB) continued to provide momentum to the e-banking retail payment due to rising number of online bank branches.

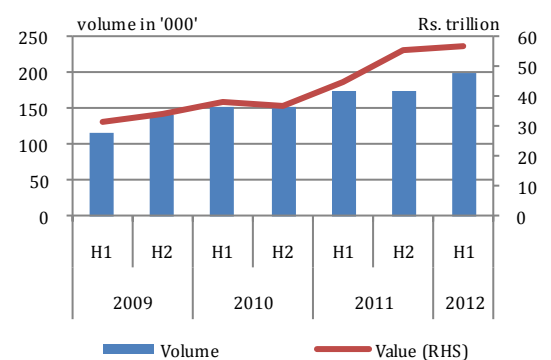
Presence of an effective and efficient payment infrastructure is indispensable for financial stability. Despite some stress in the financial markets and minor operational problems, the payment and settlement infrastructure of Pakistan remained robust during the period under review and provided uninterrupted access to payment system to all stakeholders. The traffic across both the retail and large value payment systems witnessed an increase during H1-CY12.

### Large Value Payments <sup>81</sup>

The value and volume of large payments increased substantially over the last few years mainly due to enhanced coverage of fund transfer and surge in money market activities. The efficient handling of these rising transactions through Pakistan Real time Interbank Settlement Mechanism (PRISM) the large value payment mechanism of the country-ensured smooth functioning of financial markets, while the real-time gross settlement minimized the related risks<sup>82</sup>. During the last three years, the value of transactions settled through PRISM saw an annual average growth of 27 percent. The trend continued during H1-CY12, as PRISM processed about 199,000 transactions, 13 percent higher volumes than the preceding half year, while the value of transactions improved by 2.4 percent to PKR 57 trillion, representing 3 times of the GDP (**Figure 8.1**).

**Figure 8.1**

Growing trend of PRISM transactions



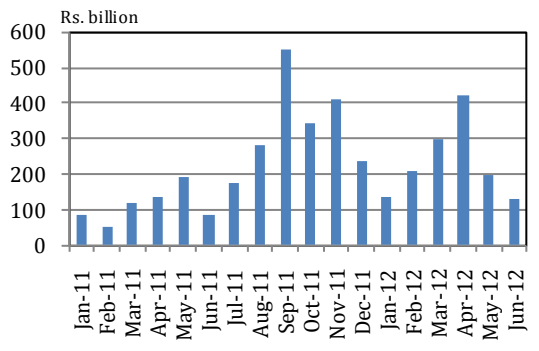
<sup>81</sup> Pakistan Real Time Interbank Settlement Mechanism (PRISM) is the back bone of the large value payment and settlement system in Pakistan and it is also the key component of the national government, securities transactions. At present four types of transactions are settled through PRISM (i) Securities (ii) Interbank Fund Transfers (iii) batches of retail cheque clearing net balances (iv) high value third party funds transfers.

<sup>82</sup> Due to its role in the payment infrastructure of the country, the sheer value of transactions that it settle and being the only large value payments system, PRISM is systemically important payment system in Pakistan. Further, as PRISM is realtime gross settlement system, therefore, the credit and liquidity risks emanating from settlement process are miniscule due to reduction in the duration of credit and liquidity exposures.

Subsequent to introduction of PRISM in 2008, the State Bank facilitated not only in improving the speed and safety of payments but also focused on enhancing scope of payments. The PRISM initially allowed settlement of IFT (Interbank Fund Transfers) and NIFT (National Institutional Facilitation Technologies) transactions and later enhanced to include securities settlements. In 2011, customer (3<sup>rd</sup> party) credit transfers<sup>83</sup> were allowed through PRISM, while this facility was recently enhanced to allow settlement of multiple third party transactions with a minimum value of PKR 100 thousand<sup>84</sup>. As a result of this enhanced coverage of funds transfer activities over the last two years, the volume and values of IFT settled through PRISM saw a substantial growth. During the period under review, the system settled 141 thousand IFT transactions, 19 percent higher over the H2-CY11, while transaction value increased by 14.4 percent to PKR 18.7 trillion. It is expected that the PRISM transactions in value terms will get a substantial jump once net settlement of the ATM transaction are also routed through it<sup>85</sup>.

**Figure 8.2**

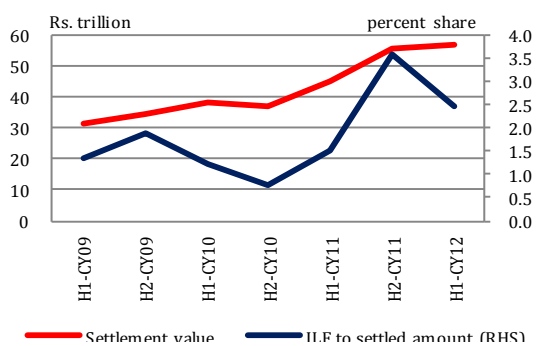
ILF utilization in PRISM



The share of securities settlement, which forms the major part of the PRISM transaction in value terms, saw a visible surge over the last three years due to strained market liquidity. Impact of this market stress reflected into higher utilization of intraday liquidity facility (ILF)- a collateralized facility extended by SBP to PRISM participants in need of liquidity<sup>86</sup> to facilitate smooth settlements. However, the ILF availed by participants of the PRISM over the half year decreased to Rs 1.4 trillion from Rs. 2 trillion during H2-CY11 (**Figure8.2**). The reduction in the use of ILF suggests relatively lesser liquidity strain in the market. Consequently, the share of ILF extended to participants fell to 2.4 percent of the total settlement value during H1-CY12 from 3.6 percent in the previous half year (**Figure 8.3**).

**Figure 8.3**

ILF Utilization by Participants



An efficient and reliable payment system serves as the catalyst for growth in the financial system. In this regard, the PRISM contributed significantly towards improving the efficiency of payments and securities settlements and minimizing the cost and time of interbank transfers and clearing. During H1-CY12, the PRISM availability and performance remained high; it remained available for 99.6 percent of the total operational time.

<sup>83</sup> PSD Circular 2, Feb 2011, State Bank of Pakistan

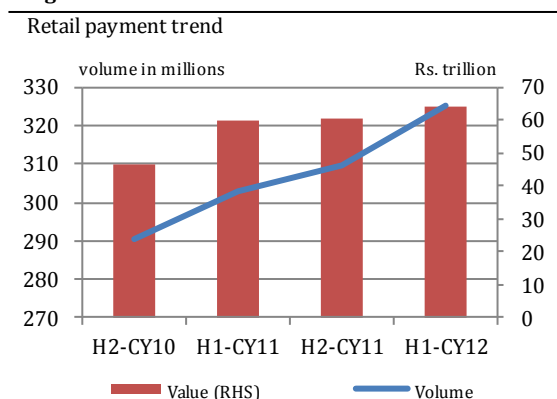
<sup>84</sup> PSD Circular Letter No 1/2012, State Bank of Pakistan

<sup>85</sup> Presently, net settlement of ATM transaction is routed through Globus, which is expected to be shifted to PRISM in near future.

<sup>86</sup> Intraday Liquidity Facility (ILF) was introduced in January 2009.

## Retail Payments

**Figure 8.4**

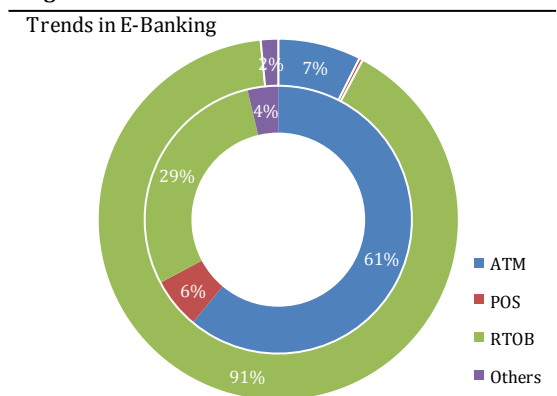


During H1-CY12, the number of retail payments crossed 325 million registering a 5 percent growth over H2-CY11, while its value witnessed a 7 percent increase to reach Rs. 64.4 trillion. The retail payments, though dominated by paper-based transactions, continue to undergo changes in the wake of increased focus of banks on electronic means of payments. The retail payment channels also witnessed rapid innovation amid improvements in IT, conducive regulatory environment, and changing user preferences. Accordingly, e-banking transactions gained considerable share in large volume-low value retail payment (**Figure 8.4**).

In terms of volume, electronic transactions accounted for 43 percent of the total transactions whereas the value transacted electronically stood at about 21 percent of the total retail transactions during first half of 2012. Bulk of the paper-based payments was cleared through the NIFT, which provided clearing services to 6,698 branches in 241 cities, making it an important part of the payment system infrastructure.

### ***RTOB remains a major part of e-transactions while ATMs dominate as volume leader***

**Figure 8.5**



Among the electronic transactions, Real Time Online Banking (RTOB) stayed as the leader in terms of value while the ATMs further consolidated their position as volume leader. During H1-CY12, RTOB accounted for about 91.7 percent of the total value of e-transactions; while the rest was shared amongst ATMs, POS, and others (**Figure 8.5**). Given the efficiency and ease of use, RTOB is likely to maintain lion's share in e-banking transactions. Although, ATMs and POS gained some share in value but their overall share remained trivial, reflecting cost issues, user preferences and (financial) literacy conditions.

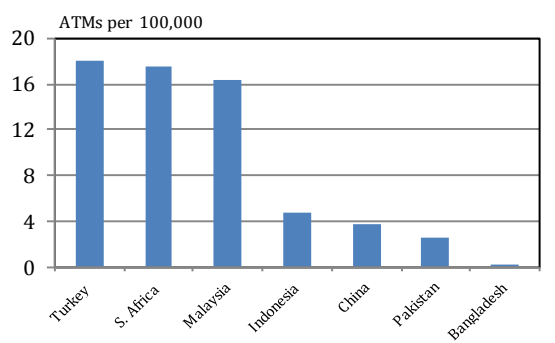
### ***POS terminals on decline amid expanding e-banking infrastructure***

With banks being more selective in extending credit cards and merchants related issues in accepting payments through POS terminals, the number of POS terminals continued to decline while rest of the e-banking infrastructure kept on expanding. Banks' account holders also benefited from growing number of ATMs installed across the country, which lead to increase in

E-Banking Infrastructure				
	H2-CY10	H1-CY11	H2-CY11	H1-CY12
Point of Sale	44,382	37,232	35,703	34,879
Online branches	7,036	7,416	8,905	9,291
No. of ATMs	4,734	5,200	5,409	5,745

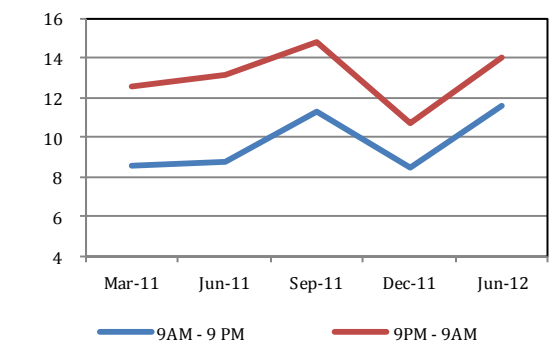
**Figure 8.6**

ATM penetration in 2010



**Figure 8.7**

Downtime of ATM (percent share)



volume and value of ATM transaction over the H1-CY12 (**Table 8.1**). However, the ATM penetration in Pakistan is still low as compared to the developed countries, though Pakistan compares well with other low-income countries in the region (**Figure 8.6**).

**Notwithstanding the growth, ATM downtime is a serious concern**

The efficiency in operations of ATMs, as measured in terms of percentage of down time, somewhat deteriorated during the period under review. During H1-CY12, on average the ATMs were available for 87 percent of the time (**Figure 8.7**), which equates to over 3 million in lost service hours during the period. For half of the downtime the ATMs remained out of service due to power issues and for the other half due to operational reasons. Given the massive loss of ATM productivity, banks need to work out solutions to contain rising ATM downtime and to be able to provide uninterrupted services to the ATM users.

**Mobile payment systems gaining momentum**

In order to foster financial inclusion, especially in the rural and remote areas of the country, the SBP has been encouraging alternative delivery channels for financial services including branchless or mobile banking. Within a short span of time, branchless banking has proved to be a success with substantial increase in the number of customers that it addresses. By the end of the review period, the branchless banking accounts grew by 56 percent to 1.4 million<sup>87</sup> while the number and value of transactions increased to 53.7 million and Rs. 200 billion, registering an increase of 47 percent and 45 percent respectively (**Table 8.2**).

**Listed Securities Settlement and Clearing**

Another key element of the payments system includes securities depository and the securities settlement system. Central Depository Company (CDC) which act as securities repository, provide securities accounts, central safe keeping services and asset services, play an important role towards ensuring smooth securities transactions. The asset services cover the administration of corporate actions and redemptions and play an important role towards ensuring smooth securities transactions.

Branchless Banking Indicators			
	H2-CY11	H1-CY12	Growth rate
No. of Agents	22,512	29,525	31.2
No. of Accounts	929,184	1,447,381	55.8
No. of Transaction (millions)	37	54	47.3
Transaction Value (Rs. billions)	138	200	45.1

<sup>87</sup> For comparison, as of 31-Dec-2011, there were 12.8 million transaction (current) accounts and 15.7 million saving accounts at brick-and-mortar bank branches.

The National Clearing Company of Pakistan Ltd (NCCPL) is responsible for the management and operations of National Clearing & Settlement System (NCSS) a fully automated electronic settlement system. The NCSS handles clearing and settlement of all book-entry securities traded in all three stock exchanges across Pakistan. NCCPL also manages the settlement of non-exchange transactions. During H1-CY12, NCSS settled 39.3 billion securities worth over Rs. 1.1 trillion. Despite the huge volumes of securities trading, the system provided uninterrupted and seamless service to its users.