

During the period under review (July-December 2011), the payment systems continued to ensure efficient payments and settlements. Various payment system channels exhibited sufficient resilience as they operated with minimum down time without any material disruption during H2-CY11. Large Value payment system-PRISM successfully managed increased transactions, particularly in securities due to stress in the liquidity conditions in the interbank market. Similarly, volumes and transaction value for retail payments also increased during the period. Though paper based transactions dominate the retail payments in terms of value, due to robust increase in e-banking transactions, its share continues to shrink. Among e-banking channels, Real Time Online Banking emerged as the main catalyst of growth.

Efficient functioning of payment systems complemented the banking sector growth

Table 8.1: Profile of Payment System Mechanisms

Mechanism	H1-CY11		H2-CY11	
	Volume	Value	Volume	Value
Volume in thousands and value in trillion Rupees				
PRISM	175.4	44.8	176.1	55.6
Volume in millions and value in billion Rupees				
Retail Payments	302.8	59825.1	309.8	60367.3
Paper based	176.8	47,789.1	177.6	47,757.7
E-transactions	126.0	12,036.0	132.2	12,609.6

With advances in the IT infrastructure in the country, the financial sector in general and the banking sector in particular greatly benefitted from improving services and expanding coverage. With efficient payment systems infrastructure, not only banks enhanced penetration in the urban areas, the traditional banking practices also significantly changed from conventional paper-based to electronic modes. Similarly, the efficient flow of funds in the interbank market led to reliable and smooth payment systems operations compliant with the both domestic prudential and international standards of Basel Core Principle (BCP) that aimed at improving efficiency and mitigating associated risks and ensuring stability of the financial system⁶⁸.

The payment system of the country came a long way from traditional paper-based mechanism to a more sophisticated technology driven real-time online transaction based systems capable of handling large value payments between the financial institutions. Keeping in view the systemic importance of the large value payments, the Pakistan Real-time Interbank Settlement Mechanism (PRISM) was launched in CY08 to facilitate inter-bank as well as transactions involving the central bank. The PRISM transactions included securities settlements, large value cheque clearing and interbank transfers.

In addition to the PRISM, the payment system also constitutes conventional channel of retail payments and emerging E-transaction systems. During the period under review, overall payments settlements improved both in terms of volumes and

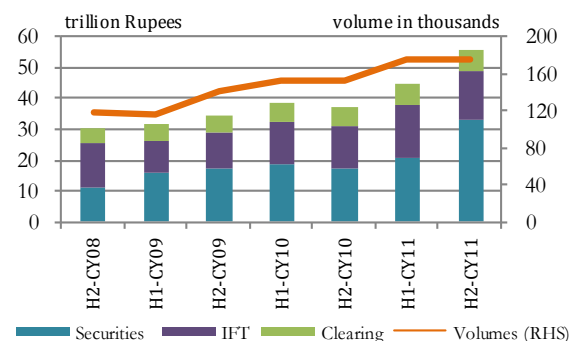
⁶⁸ There are various international standards and measures for ensuring the prudent operations of payment systems including Basel Core Principles (BCP). These include core principle – VII dealing with operational risk, core principle – VIII dealing with efficiency and core principle – IX dealing with access criteria.

value. During H2-CY11, transaction value in PRISM boosted by 24 percent on half-yearly basis while the retail and e-transaction values managed 0.9 and 4.8 percent growth respectively (**Table 8.1**).

PRISM continued to support the growing needs of securities settlements.

Figure 8.1

Profile of PRISM

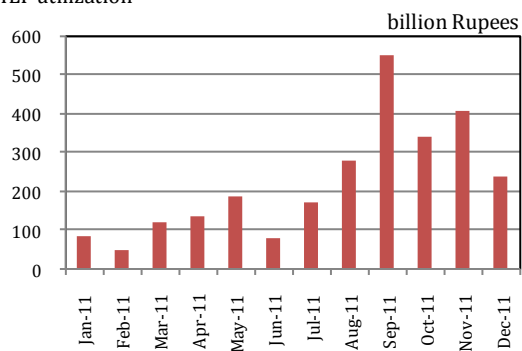


During H2-CY11, the value of PRISM transaction surpassed Rs55.6 trillion which is 2.7 times of the GDP of the country. Similarly, the transaction volumes also improved 2 percent during the period. The most significant factor that contributed towards growth in the settlements values and volume under PRISM was the rising degree of stress in the liquidity conditions in the interbank market during the second half of CY11.

Banks' need for funds have largely been met by securities settlement (collateralization) in exchange for short-term liquidity from the interbank market and from the discount window of the central bank. Other PRISM components including interbank funds transfers and retail cheque clearing witnessed a reduction in transaction values during the period. Much of the reduction in clearing resulted from increasing online funds transfer facilities offered by banks (**Figure 8.1**).

Figure 8.2

ILF utilization



Due to liquidity stress in the interbank market, banks/DFIs participating in the PRISM considerably increased use of the Intraday Liquidity Facility (ILF)⁶⁹. Consequently, the ILF enhanced substantially by 198 percent during the second half of CY11 as banks were not able to readily settle their liabilities and therefore were provided intraday limits to settle transactions and to avoid queues and gridlocks⁷⁰ in the PRISM (**Figure 8.2**). Similarly, the ratio of ILF utilization to PRISM transactions also increased from 1.5 percent in the first half CY11 to 3.7 percent in the second half.

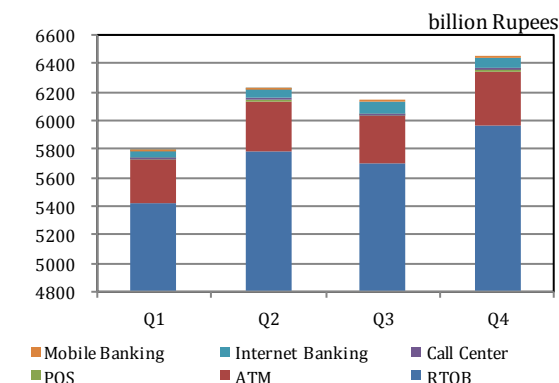
An efficient and reliable payment system serves as the catalyst for growth in the financial system. The PRISM contributed significantly towards improving the efficiency of payments and securities settlements and minimizing the cost and time of interbank transfers and clearing. During H2-CY11, the PRISM availability and performance remained very high; its availability, on average improved to 99.6 percent of the total operational time.

⁶⁹ The ILF provides very short-term liquidity facility to the banks to ensure smooth functioning of the PRISM. In absence of the ILF, the PRISM transactions do not complete and pose settlement risk.

⁷⁰ PRISM transactions are based on FIFO (First in First out). If any transaction is not complete, the PRISM will keep the pending transaction in form of queues. Gridlock occurs when there are large unsettled transactions in the queue.

Figure 8.3

Trends in E-Banking transactions during CY11

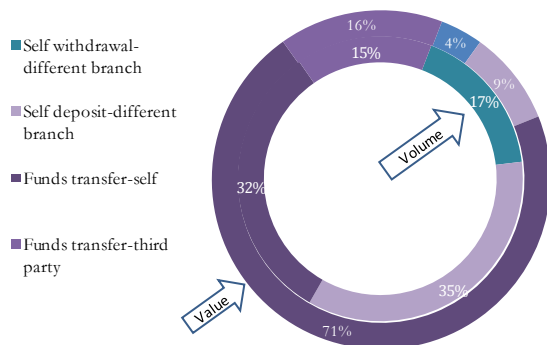


Retail payments system witness a gradual shift towards electronic modes

The retail payment system that link banks with its customers (households and businesses) solely rely on paper-based and electronic modes of payments. Though paper-based transactions still dominate the retail payments with a share of 79.1 percent in value and 57.3 percent in volumes, the share of e-banking transactions continues to grow steadily. with the rapid penetration of internet and mobile phones services. During H2-CY11, the share of electronic modes including RTOB, Automatic Teller Machine (ATM), Point of Sale (POS), Mobile banking and other services improved marginally by 80 bps to 20.9 percent in terms of transaction value. With more banks offering internet / e-banking and mobile banking based products, the share of electronic banking is expected to further improve in the future.

Figure 8.4

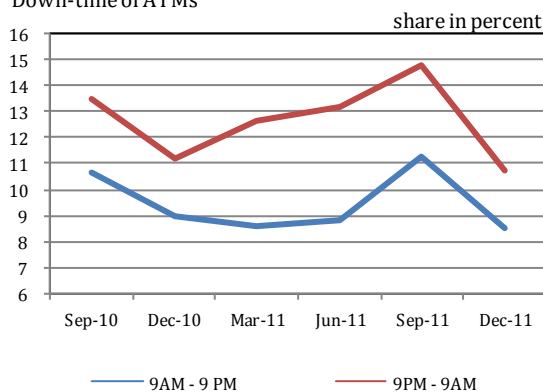
Composition of RTOBs during H2-CY11



Within the electronic banking segment, the RTOB dominated with a share of 92.5 percent in terms of transaction value during H2CY11 (**Figure 8.3**). The RTOB largely constituted large online bank deposits and withdrawals that are drawn in the same bank substituting the conventional clearing and telegraphic and mail transfers (**Figure 8.4**). With an increase in the number of online bank branches to 8905 representing a share of 89.5 percent in total branches network, the RTOB literally created a surge in the efficient and quick online customer clearing and transfer payments.

Figure 8.5

Down-time of ATMs

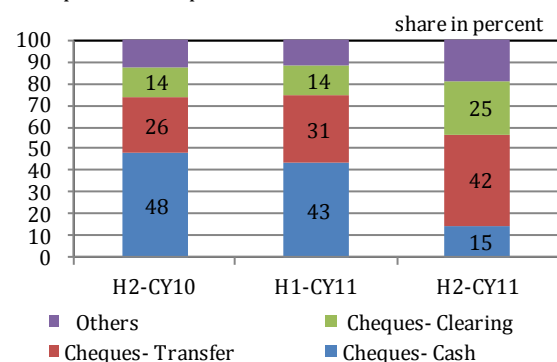


The ATM services are perhaps the most visible and prominent developments of e-banking witnessed in the country. In fact, the ATM services have also become the one leading factor considered by the prospective bank account holder while selecting the bank. Since the introduction of ATM services since early 90s, banks have substantially enhanced their network, to 5409 ATMs by end December, 2011, which provide cash and other services to bank customers, in addition to limited number of machines offering cash deposits services. In terms of value, the ATM transactions account for 5.9 percent of E-banking transactions while in terms of volume, ATM transactions 59.8 percent share. During H2-CY11, ATM transactions value improved by 10.8 percent while the ATM usage augmented by 4.2 percent.

Like PRISM, efficiency of the ATM network also improved during Q4-CY11 (**Figure 8.5**). Historically, the ATM down-time has been lower during the business hours because of proper system maintenance and replenishment of cash in the ATM by the banks. Over the period under review the down time saw a sudden jump in the first half, however, with the resolution of technology related

Figure 8.6

Composition of Paper Based Transactions



issues, the down time substantially improved over the last quarter of the year.

In addition to the developments in the RTOB and ATM, the fast-growing E-banking was boosted by increasing use of branches banking, particularly the internet banking and mobile phone banking. During H2-CY11, the internet banking witnessed an increasing trend in its usage and transaction value as its users became confident of the online security measures taken by banks. In terms of value, the internet banking grew by 5.0 percent while its usage also improved by 1.8 percent.

Pakistan ranks highly in promotion of branchless banking.

Similarly, the mobile phone banking transactions also witnessed a 36.2 percent growth in transaction values. However, the volume of mobile phone banking transactions dropped marginally by 1.9 percent on account of rising security concerns on mobile phones and relatively cheaper internet banking services offered by the banks. Further, World Economic Forum study rated, Pakistan highly on providing mobile financial services in its banking sector⁷¹ and is regarded as one of the fastest developing countries for branchless banking in the world⁷².

Despite technological advancements paper based system dominates

The conventional paper based transactions still lead on account of low level of financial literacy and non-availability of adequate I.T infrastructure in less developed parts of the country. For paper based transactions, settlement of transaction through cheques (clearing, transfers and withdrawal) dominate the customer – bank payment channel. During H2-CY11, a significant change has been observed in paper based transaction as the share of cheques (clearing, transfers and withdrawal) dropped to 81 percent during H2-CY11 (**Figure 8.6**).

⁷¹ The Mobile Financial Services Development Report 2011- World Economic Forum.

⁷² <http://www.cgap.org/p/site/c/template.rc/1.9.55438/>