

## STATE BANK OF PAKISTAN

1<sup>st</sup> Quarterly Report on The Retail Payment Systems of Pakistan (Paper Based and EBanking) FY 2008-09

> Payment Systems Department (Development & Policy Division)

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## **EXECUTIVE SUMMARY:**

#### **Total Retail Payments:**

During Qtr-1, the volume and value of total retail payments transactions in the country reached at 122.9 million and Rs.41.8 trillion respectively showing an increase of 4.0 percent in number and decline of 5.0 percent in value as compared to 5.9 percent increase in numbers and 20.1 percent increase in value in the previous quarter.

#### **Paper Based:**

During Qtr-1, the volume and value of paper based transactions in the country reached at 85.2 million and Rs.37.9 trillion showing an increase of 1.0 percent in numbers and decline of 5.1 percent in value as compared to 4.0 percent increase in numbers and 19.8 percent increase in value in the previous quarter.

#### eBanking:

During Qtr-1, the volume and value of eBanking transactions in the country reached at 37.7 million and Rs.3.9 trillion showing an increase of 11.5 percent in numbers and decline of 4.4 percent in value as compared to 10.9 percent increase in numbers and 22.9 percent increase in value in the previous quarter.

#### Debit, Credit & ATM Cards:

The quantity of cards (Debit / Credit /ATM) in circulation during Qtr-1 reached at 6.98 million which shows an aggregate growth of 3.7 percent compared to 4.9 percent increase in the previous quarter. Here the quantity of credit cards has infact decreased by 1.8 percent as compare to 0.3 percent decline in the previous quarter reaching at 1.52 million. In contrast, debit cards showed a growth of 4.5 percent as compared to 6.1 percent increase in previous quarter and stood at 5.19 million.

#### Infrastructure:

The <u>total quantity of ATMs</u> during Qtr-1 reached at 3,275 registering a growth of 4.9 percent as compare to 3.3 percent increase in the previous quarter. The volume of <u>Real Time Online Branches</u> (RTOB) during Qtr-1 reached at 5,421 and recorded a growth of 2.6 percent as compared to 3.1 percent increase in the previous quarter. The <u>total quantity of POS terminals</u> reached at 46,666 showing a growth of 6.3 percent in number as compared to 2.4 percent increase in previous quarter.

#### **ATM Transactions:**

During Qtr-1, the volume and value of ATM transactions in the country reached at 21.95 million and Rs.158.28 billion showing an increase of 15.4 percent in numbers and 22.3 percent increase in value as compared to 16.1 percent increase in numbers and 17.8 percent increase in value in the previous quarter.

#### **RTOB Transactions:**

During Qtr-1, the volume and value of RTOB transactions in the country reached at 10.46 million and Rs.3.74 trillion showing an increase of 5.8 percent in numbers and decrease of 5.4 percent in value as compared to 8.4 percent increase in numbers and 23.2 percent increase in value in the previous quarter.

#### **Other e Banking Channels:**

During Qtr-1, the volume and value of eBanking channels (POS, Internet & Call Center/IVR, and Mobile) transactions in the country reached 5.25 million and Rs.39.47 billion showing an increase of 8.2 percent in numbers and 12.9 percent increase in value as compared to 1.8 percent decline in numbers and 8.9 percent increase in value in the previous quarter.

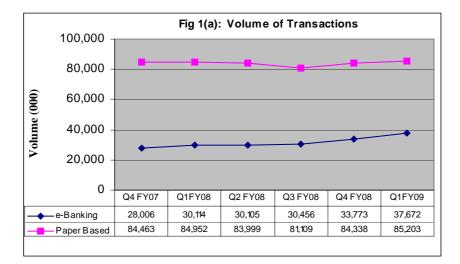
#### **Transformation:**

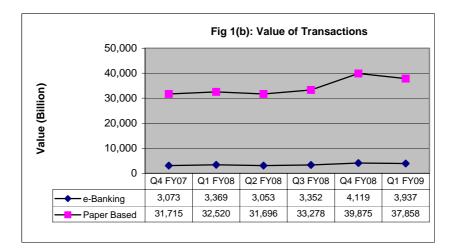
The use of electronic channels has been showing a consistent growth as during Qtr-1, the contribution of electronic transactions increased to 30.66 percent in numbers compared to 28.59 percent share recorded during previous quarter. In terms of value, the electronic channel's composition reached 9.42 percent against 9.36 percent share recorded for the previous quarter.

## **1. Introduction**

The retail payments in Pakistan comprise of various paper-based and electronic instruments from conventional cheques to modern smart cards. The system handles high volume and low value transactions through paper based (such as cheque) and non-paper based transactions (such as eBanking). The ease and comfort associated with eBanking has been gradually reducing the volume and value of paper based transactions in Pakistan. This report focuses on the transactions of retail nature through paper as well as electronic mode. During Qtr-1 FY2008-2009 the volume of total retail payment transactions registered an increase of 4.0 percent against 5.9 percent increase in the previous quarter and value of total retail payment transactions registered a decrease of 5.0 percent against 20.1percent increase in the previous quarter.

The trend of paper and electronic based transactions and value since Q4 FY2006-2007 is given in the **Fig. 1a & 1b** mentioned below:



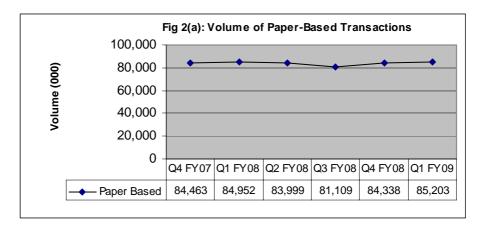


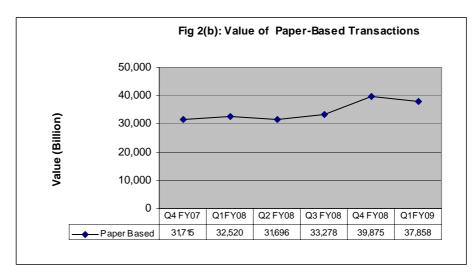
#### 1.1 The Retail Payments through Paper Based Instruments

Qtr-1 FY2008-2009 witnessed an increase of 1.0 percent in numbers compared with 4.0 percent increase in the previous quarter (**Fig. 2a / Table-1**). The value of transactions decreased by 5.1 percent against 19.8 percent increase recorded during previous quarter (**Fig 2b**).

	Qtr 4 l	FY08	Qtr 1 FY09		
Instruments	Number (M)	Value (T)	Number (M)	Value (T)	
Cash – Cheques	37.8	22.0	<b>↑</b> 39.6	<b>↓</b> 19.4	
<b>Transfer - Cheques</b>	26.1	9.3	<b>↓</b> 25.1	<b>个</b> 9.6	
<b>Clearing - Cheques</b>	15.1	5.1	<b>↑</b> 15.2	<b>↑</b> 5.3	
Pay Orders	2.2	1.3	2.2	<b>↑</b> 1.4	
Demand Drafts	1.5	0.5	1.5	<b>↓</b> 0.4	
Tele. Transfers	0.4	0.9	0.4	♦ 0.7	
Others	1.2	0.9	1.2	<b>1</b> .2	
TOTAL	84.3	39.9	<b>↑</b> 85.2	<b>↓</b> 37.9	

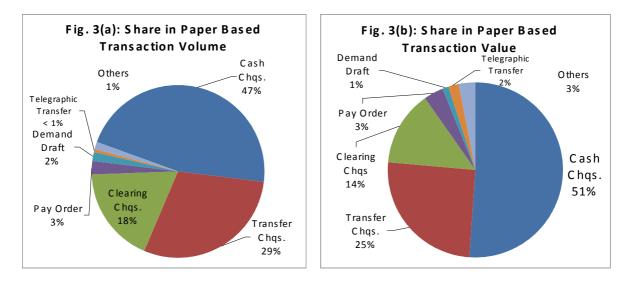
#### Table 1: Paper Based Instruments





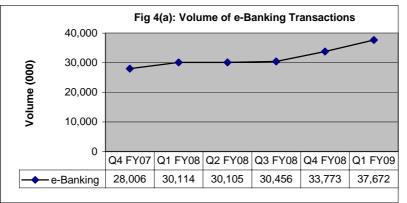
While looking at the composition of the paper based instruments, the cheques (such as cash, clearing, transfer) carry a major share i.e. 94 percent in volume and 90 percent in value. Here the cash cheques

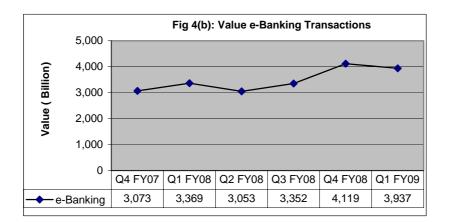
have been the widely used paper based instrument with 47 percent share in volume and 51 percent share in value. The respective percentage share of all instruments is shown in the **Fig. 3a & 3b**.



## 1.2 The Retail Payments through eBanking

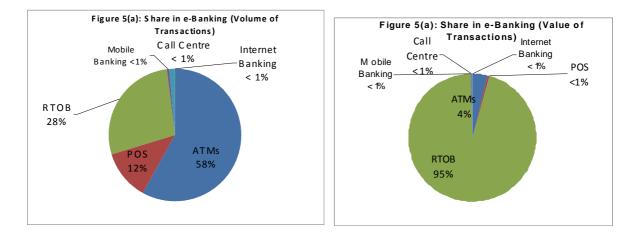
In terms of volume, the electronic banking has recorded 37.7 million transactions showing 11.5 percent increase against the increase of 10.9 percent recorded in the previous quarter. In terms of value, it reached Rs.3.94 trillion showing a decrease of 4.4 percent against 22.9 percent increase recorded in the previous quarter (**Fig. 4a & 4b**).





## 1.3 Share of ATMs, POS and RTOB in eBanking Operations

ATMs are commonly used for more frequent and small value cash withdrawals, therefore, its share in total number of electronic transactions was recorded to be the highest i.e. 58 percent. During Qtr-1 the average size of ATM transactions<sup>1</sup> was recorded at Rs.7,212/= compared to Rs.6,807/= recorded during previous quarter. The share of Real Time Online Banking, ATM and POS in the total eBanking was 28 percent, 58 percent and 12 percent respectively. Call Centre Internet Banking and Mobile Banking; however had comparatively low share in the total eBanking business (**Fig. 5a**). In terms of value, the RTOB contribution was 95 percent, since this channel is mostly used for B2B transactions. ATM transactions contributed 4 percent in the value of transactions. The share in value of POS, Internet, Mobile banking and Call Center banking is very nominal as mentioned in **Fig. 5b** below.



## 1.4 Transition to eBanking:

During the last six quarters the transition from manual (paper based) banking to eBanking has been gradual, yet consistent, in terms of both volume and value of transactions. The composition (in percentage) of electronic transaction increased to 30.66 percent of the total number of transactions as compare to 28.59 percent recorded last quarter. In terms of value, however, the same increased to 9.42 percent as compare to 9.36 percent recorded last quarter (**Table 3.1 & 3.2**).

Number of Transactions (000)							
Number (000) Q4 FY07 Q1 FY08 Q2 FY08 Q3 FY08 Q4 FY08							
Electronic Based	28,006	30,114	30,105	30,456	33,773	37,672	
Paper Based	84,463	84,952	83,999	81,109	84,338	85,203	
TOTAL	112,469	115,066	114,104	111,565	118,111	122,876	
% Composition							
Electronic Based         24.91%         26.17%         26.38%         27.30%         28.59%         3						30.66%	
Paper Based         75.09%         73.83%         73.62%         72.70%         71.41%         69.34						69.34%	

 Table 2.1: Volume-Retail Electronic and Paper Based Payments

<sup>&</sup>lt;sup>1</sup> The average size of ATM Transactions = Total Amount /Total number of transactions. Here the total number of ATM transactions include cash withdrawal, cash deposit, IBFT, utility bills payment, and deposit of Payment instruments

Amount of Transactions (Rs. In Billion)								
Amount (billion) Q4 FY07 Q1 FY08 Q2 FY08 Q3 FY08 Q4 FY08 Q4 FY09								
Electronic Based	4,119	3,937						
Paper Based	31,715	32,520	31,696	33,278	39,875	37,858		
TOTAL	34,789	35,889	34,748	36,630	43,994	41,795		
% Composition								
Electronic Based         8.83%         9.39%         8.78%         9.15%         9.36%         9.42								
Paper Based         91.17%         90.61%         91.22%         90.85%         90.64%         90.58%						90.58%		

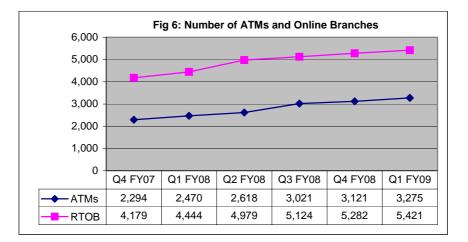
Table 2.2: Value-Retail Electronic and Paper Based Paymen	ts
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## 2. eBanking Infrastructure in Pakistan

## 2.1 Online Branch Network and Automated Teller Machines (ATMs)

During Qtr-1, banks have upgraded their existing 40 manual or computerized branches to online branches and started 99 new online branches thus increasing the total quantity of online branch network in Pakistan from 5,282 to 5,421 branches.

The total share of online branches in the total branch network has increased from 64.0 percent to 64.4 percent. Similarly, during Qtr-1, banks have added 154 new ATMs in their network, bringing the total number of ATMs in the country to 3,275 thus reflecting a growth of 4.9 percent as compare to 3.3 percent growth recorded in the last quarter (**Fig. 6**).

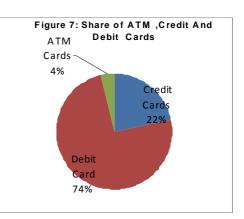


## 2.2 Total Number of Cards (Credit/Debit/ATM)

As of September 30, 2008, the total number of cards in circulation has reached at 6.98 million as compare to 6.73 million cards recorded in the last quarter showing an increase of 3.7 percent (**Fig. 7**).

## 2.2.1 Credit Cards

The total number of credit cards decreased from 1.547 million to 1.519 million in Qtr-1. The subject decrease was recorded because the issuing banks canceled many cards that remained inactive for a certain time period. Quantity of Islamic credit cards has reached at 4,531.



## 2.2.2 Debit Cards

Total number of debit cards has increased from 4.97 million to 5.19 million in Qtr-1 showing an increase of 4.5 percent. Here it has been observed that most of the banks are issuing debit cards to their new customers/account holders because the same can be used both at POS and ATM locations.

#### 2.2.3 ATM Cards

During Qtr-1, the total number of ATM cards in circulation recorded at 0.276 million against 0.221 million cards reported during last quarter. This shows an increase of 25.0 percent.

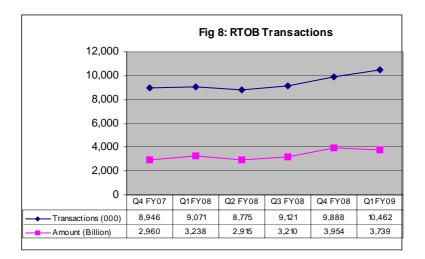
#### 2.2.4 Smart Cards

Smart cards are chip based card with enhanced memory and security features. Out of 6.98 million debit/credit/ATM cards, 0.406 million or 5.82 percent are chip based cards. During Qtr-1, however, the total quantity of chip based cards increased by 3.8 percent.

#### 3. Volume and Value on EBanking in Pakistan:

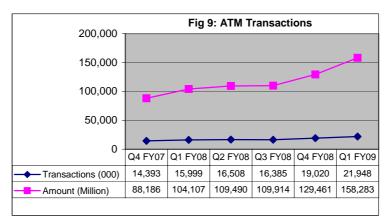
#### 3.1 Real Time Online Banking (RTOB) Transactions:

During Qtr-1, the total number of RTOB transactions increased by 5.8 percent as compare to 8.4 percent increase recorded last quarter. In terms of value, the amount decreased by 5.4 percent as compare to 23.2 percent increased last quarter. The major banks use RTOB channel for conducting various transactions which infact constitute 95 percent of total eBanking transactions value in the country. **(Fig. 8)**:



#### 3.2 Transactions through ATMs

ATMs transactions during the Qtr-1 registered an increase of 15.4 percent as compare to 16.1 percent increase in last quarter. The amount of ATM transactions however, increased by 22.3 percent as compared to 17.8 percent increase in last quarter. Apart from cash withdrawal, ATMs are also used for inter/intra bank funds transfer, cash deposits, payment of utility bills etc. In Pakistan, on average, 74 transactions were executed per day per ATM. The size of average transaction is Rs.7,212/= (**Fig. 9**).



## 3.2.1 Fund Transfers

During Qtr-1, account-to-account funds transfer transactions that were made through ATMs, were recorded at 0.323 million showing an increase of 31.3 percent compared to 28.3 percent increase recorded in last quarter. The value of such funds transfer was Rs.17.10 billion, depicting an increase of 30.3 percent compared to 25.6 percent increase recorded in last quarter. Funds transfer through ATMs mostly includes intra-bank transfer and small portion of inter-bank funds transfers. The inter-bank fund transfer is only offered by 11 banks on 1Link switch.

## 3.2.2 Cash Deposits

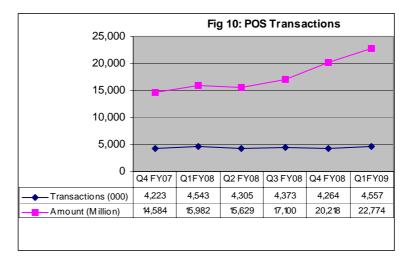
Quite a few banks are providing the facility of cash deposit through ATMs. The mechanism for cash deposit is either through single/bunch note acceptor or envelope based. During Qtr-1 only 4,860 transactions of cash deposit through ATMs were reported showing an increase of 39.6 percent compared to 25.6 percent increase recorded in last quarter. In terms of value, the amount increased from 40.4 million to 61.3 million for the current quarter.

## 3.2.3 Utility Bills Payment

During Qtr-1, the utility bills payment transactions through ATMs reported 6,144 transactions showing decrease of 2.6 percent compared to 17.1 percent decrease recorded in last quarter. In value terms, the banks reported Rs.9.4 million as compare to 7.6 million recorded last quarter showing 24.8 percent increase compared to 10.7 percent decrease in the last quarter.

## 3.3 POS (Point of Sale) Transactions

The total number of POS machines/terminals has reached at 46,666 placed across the country on different merchant locations as compare to 43,903 machines recorded last quarter which shows an increase of 6.3 percent. The number of POS transactions reached 4.6 million showing an increase of 6.9 percent as compare to 2.5 percent decrease recorded in last quarter. The amount of such transactions reached Rs.22.77 billion registering an increase of 12.6 percent as compare to 18.2 percent increase in last quarter (**Fig. 10**):



## 3.4 Call Centre Banking

Banking through Call Centre/Interactive Voice Response (IVR) is also included in the electronic banking channels. The number of transactions through such channels reported by the banks for Qtr-1 FY2008-2009 were 0.218 million involving an amount of Rs.2.944 billion. This shows a decrease by 0.9 percent in volume and 15.6 percent increase in value compared to of 4.7 percent increase in volume and 5.9 percent increase in value recorded in last quarter.

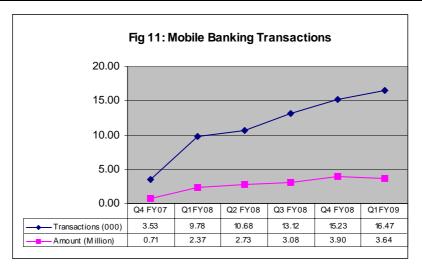
#### 3.5 Internet Banking

Internet banking includes payments and electronic funds transfer (EFT). The funds transfer, however, is presently limited to intra bank account to account funds transfer except for a bank which offers interbank funds transfer facility through internet. Internet banking in Pakistan is growing slowly but at a steady pace. During Qtr-1 FY2008-2009, banks reported 0.470 million transactions involving an amount of Rs.13.747 billion; this shows a growth of 28.7 percent in numbers and of 12.7 percent in amount over the last quarter.

## 3.6 Mobile Banking

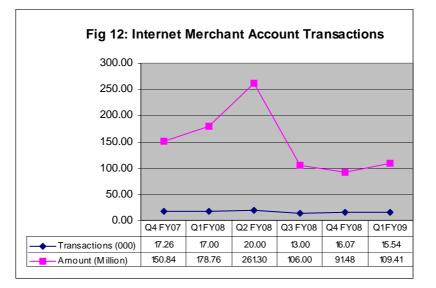
There are few banks which offer transactions through mobile. These transactions include payment through mobile (excluding utility bills payment), utility bills payment, A/C to A/C funds transfer and  $3^{rd}$  party A/c to A/C funds transfer.

The number of transactions reached to 16.47 thousand for the current quarter from 15.23 thousand in the previous quarter. This shows an increase by 8.1 percent in number of mobile transactions compared to 16.1 percent increase in volume recorded in previous quarter. In terms of value, it reached to Rs.3.64 million showing decrease of 6.6 percent compared to 27 percent increase recorded in the previous quarter (**Fig. 11**)



## 3.7 Internet Merchant Banking

Transactions done through internet merchant account are part of Internet Merchant (IM) Banking. There were a total of 19 internet merchant accounts in Qtr-1 FY2008-2009. Mostly service sector/NGOs are IM account holders. The number as well as amount of transactions done through internet merchant accounts is not consistent as transactions done are of seasonal nature and covers activities like air fares, college fee payments etc. This quarter registered a decrease by 3.3 percent in number against 23.6 percent increase in the previous quarter. In terms of value, there was increase of 19.6 percent against 13.7 percent decrease recorded for the previous quarter (**Fig 12**).



## 3.8 Cross Border Transactions through EBanking (ATM, POS, Internet)

Cross border transactions include only those transactions which were executed using either an ATM / POS machine or Internet. ATM transactions include cash withdrawal through ATMs; the inflow of such transactions has decreased by 2 percent compared to 4 percent decrease in the previous quarter whereas out flow increased by 10 percent compared to 15 percent increase in the previous quarter. The POS transactions include purchases of goods and services by the customers. The inflow of POS transactions increased by 11 percent compared to 9 percent increased in the previous quarter while the outflow increased by 8 percent compared to 4 % increase in the previous quarter. The internet transactions include the purchase of goods and services using foreign/local internet merchants. The inflow of internet transactions increased by 9 percent compared to 7 percent increase in the previous quarter where as the

out flow decreased by 24 percent compared to 29 increases in the previous quarter. The foreign merchants include names like eBay, Amazon, Google etc. Internet transactions also include payment of fee for foreign universities and online courses like ACCA, CIMA etc.

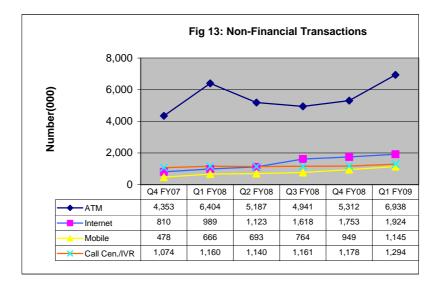
The Comparison of cross border transactions, showing in-flow and out-flow of money through eBanking, is given in Table 3:

		1		5	(R	s. In Millions)
Means of Transaction	Inflow of Money (Inward remittance)				Net	
	Qtr4 FY08	Qtr1 FY 09	Qtr4 FY08	Qtr1 FY 09	Qtr4 FY08	Qtr1 FY 09
ATM	1,958	1,913	(366)	(402)	1,593	1,511
POS	2,727	3,035	(1,875)	(2,029)	852	1,006
INTERNET	53	58	(342)	(261)	(289)	(203)
Total	4,738	5,006	(2,582)	(2,692)	2,156	2,315

The above table indicates that the volume of cross border eBanking transactions (net inflow) increased by 7.4 percent as compared to a decline of 2.0 percent reported in the previous quarter.

#### 3.9 Non-financial EBanking Transactions

Channels of eBanking are also used for non-financial transactions like the balance inquiry, account statements, etc. The total number of non-financial transactions reported during the quarter was 11.3 million against 9.2 million recorded in the previous quarter as shown in **Fig. 13**.



## 4. List of Acronyms

ATM	Auto Teller Machine
ΙB	Internet Banking
CC	Call Center
POS	Point of Sales
RTOB	Real Time Online Branches
eBanking	Electronic Banking
m-Banking	Mobile Banking
IMA	Internet Merchant Account
IVR	Interactive Voice Response
M B	Mobile Banking

Note: The discrepancy in figures may occur because of rounding off data.