



STATE BANK OF PAKISTAN



2nd Quarterly Report on The Retail Payment Systems of Pakistan *(Paper Based and E-Banking)* Oct – Dec, FY 2008-09

Payment Systems Department
(Development & Policy Division)

Table of Contents

	EXECUTIVE SUMMARY	1
1	Introduction	3
1.1	The Retail Payments through Paper Based Instruments.....	4
1.2	The Retail Payments through eBanking.....	4
1.3	Share of ATMs, POS and RTOB in eBanking Operations.....	5
1.4	Transition to eBanking.....	5
2	eBanking Infrastructure in Pakistan	6
2.1	Online Branch Network and Automated Teller Machines (ATMs).....	6
2.2	Number of Cards.....	6
2.2.1	Credit Cards.....	7
2.2.2	Debit Cards.....	7
2.2.3	ATM Cards.....	7
2.2.4	Smart Cards.....	7
3	Volume and Value on E-Banking in Pakistan	7
3.1	Real Time Online Banking (RTOB) Transactions.....	7
3.2	Transactions through ATMs.....	7
3.2.1	Fund Transfers.....	8
3.2.2	Cash Deposits.....	8
3.2.3	Utility Bills Payment.....	8
3.3	POS (Point of Sale) Transactions.....	8
3.4	Call Centre Banking.....	9
3.5	Internet Banking.....	9
3.6	Mobile Banking.....	9
3.7	Internet Merchant Banking.....	10
3.8	Cross Border Transactions through eBanking (ATM, POS, Internet).....	10
3.9	Non-financial eBanking Transactions.....	11
4	List of Acronyms	12

List of Figures

Figures	Page No.	Title
Fig. 1(a):	3	Volume of Transactions
Fig. 1(b):	3	Value of Transactions
Fig. 2(a):	4	Share in Paper Based Transaction Volume
Fig. 2(b):	4	Share in Paper Based Transaction Value
Fig. 3(a):	5	Share in e-Banking (Volume of Transactions)
Fig. 3(b):	5	Share in e-Banking (Value of Transactions)
Fig. 4(a):	5	% Composition of Volume of Retail Transactions
Fig. 4(b):	5	% Composition of Value of Retail Transactions
Fig. 5:	6	Number of ATMs and Real Time Online Branches
Fig. 6:	6	Share of ATM, Credit and Debit Card
Fig. 7:	6	RTOB Transactions
Fig. 8:	8	ATM Transactions
Fig. 9:	9	POS Transactions
Fig. 10:	10	Mobile Banking Transactions
Fig. 11:	10	Internet Merchant Account Transactions
Fig. 12:	11	Non Financial Transactions

List of Tables

Tables	Page No.	Title
Table 1:	4	Paper Based Instruments
Table 2:	12	Comparison of Cross Border Payment Transactions

EXECUTIVE SUMMARY:

Total Retail Payments:

During Qtr-2, the volume and value of total retail payment transactions in the country reached at 120.4 million and Rs.38.0 trillion respectively showing decline of 2.0 percent in number and 8.5 percent decline in value as compared to 4.0 percent increase in numbers and 5.7 percent decline in value in the previous quarter.

Paper Based:

During Qtr-2, the volume and value of paper based transactions in the country reached at 82.8 million and Rs.34.7 trillion respectively showing decline of 2.8 percent in numbers and 8.3 percent decline in value as compared to 1.0 percent increase in numbers and 5.1 percent decline in value in the previous quarter.

eBanking:

During Qtr-2, the volume and value of eBanking transactions in the country reached at 37.6 million and Rs.3.2 trillion respectively showing decline 0.2 percent in numbers and 11.3 percent decline in value as compared to 11.5 percent increase in numbers and 11.5 percent decline in value in the previous quarter.

Debit & Credit Cards:

The quantity of cards (debit / credit /ATM) in circulation during Qtr-2 reached at 7.8 million which shows an aggregate growth of 11.7 percent compared to 3.7 percent increase in the previous quarter. Here the quantity of credit cards has increased by 2.5 percent as compare to 1.8 percent decline in the previous quarter reaching at 1.56 million. However debit cards showed a growth of 14.5 percent as compared to 4.5 percent increase in previous quarter and stood at 5.94 million.

Infrastructure:

The total quantity of ATM machines during Qtr-2 reached at 3,523 registering a growth of 7.6 percent as compared to 4.9 percent increase in the previous quarter. The volume of Real Time Online Branches (RTOB) during Qtr-2 reached at 5,857 and recorded a growth of 8.0 percent as compared to 2.6 percent increase in the previous quarter. The total quantity of POS terminal reached at 48,944 showing a growth of 4.9 percent in number as compared to 6.3 percent increase in previous quarter.

ATM Transactions:

During Qtr-2, the volume and value of ATM transactions in the country reached at 21.4 million and Rs.152.9 billion respectively showing decline of 2.5 percent in numbers and 3.4 percent decline in value as compared to 15.4 percent increase in numbers and 22.3 percent increase in value in the previous quarter.

RTOB Transactions:

During Qtr-2, the volume and value of RTOB transactions in the country reached at 10.8 million and Rs.3.0 trillion respectively showing increase of 3.0 percent in numbers and 11.84 percent decline in value as compared to 5.7 percent increase in numbers and 12.8 percent decline in value in the previous quarter.

Other e Banking Channels:

During Qtr-2, the volume and value of eBanking channels (POS, Internet & Call Center/IVR, and Mobile) transactions in the country reached at 5.40 million and Rs.39.63 billion respectively showing an increase of 2.9 percent in numbers and 0.4 percent increase in value as compared to 8.2 percent increase in numbers and 12.9 percent increase in value in the previous quarter.

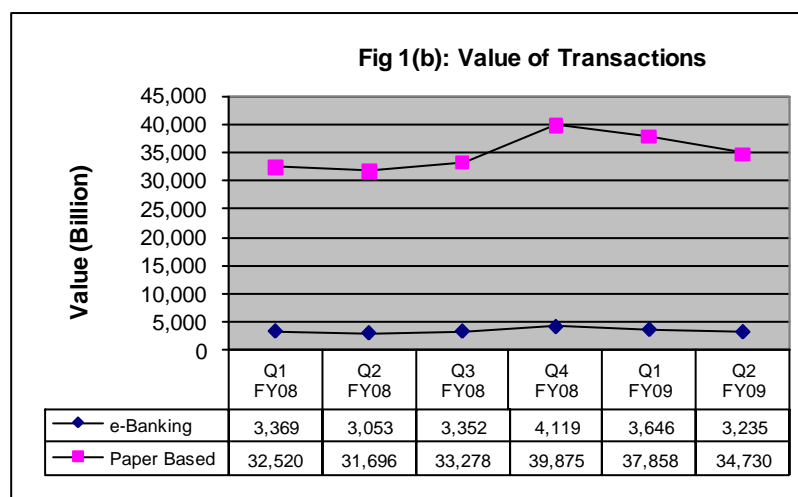
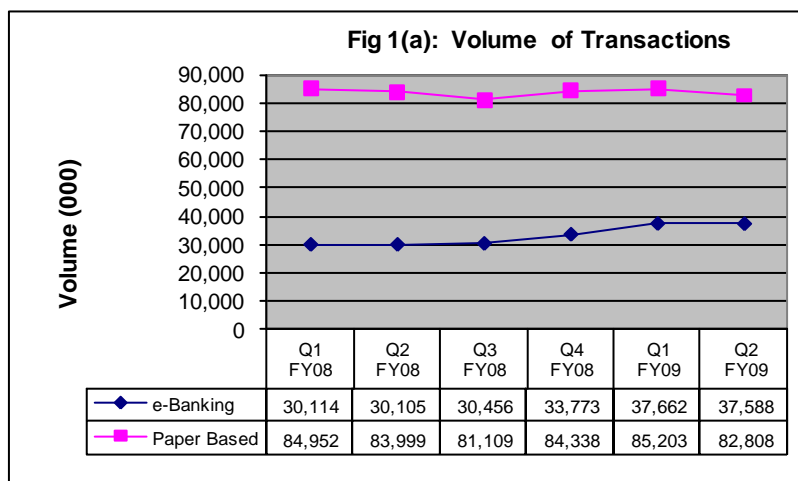
Transformation:

The use of electronic channels has been showing a consistent growth as during Qtr-2, the contribution of electronic transactions increased to 31.22 percent in numbers compared to 30.65 percent share recorded during previous quarter. In terms of value, the electronic channel's composition recorded 8.52 percent against 8.78 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-2 FY2008-2009 the volume of total retail payment transactions registered a decline of 2.0 percent against 4.0 percent increase in the previous quarter and value of total retail payment transactions registered a decline of 8.5 percent against 5.7 percent decline in the previous quarter .

The trend of paper and electronic based transactions and value since Q1 FY2007-2008 is given in the **Fig. 1a & 1b** below:



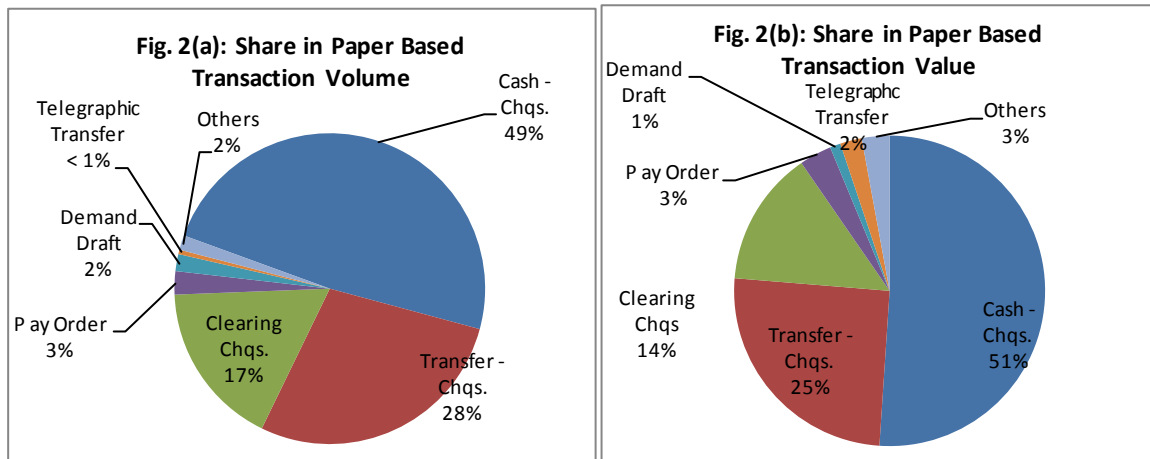
1.1 The Retail Payments through Paper Based Instruments

Qtr-2 FY2008-2009 witnessed a decline of 2.8 percent in numbers compared with 1.0 percent increase in the previous quarter (Fig. 1a / Table-1). The value of transactions decreased by 8.3 percent against 5.1 percent decrease recorded during previous quarter. (Fig b).

Table 1: Paper Based Instruments

Instruments	Qtr 1 FY09		Qtr 2 FY09	
	Number (M)	Value (T)	Number (M)	Value (T)
Cash – Cheques	39.6	19.4	↑40.3	↓17.7
Transfer - Cheques	25.1	9.6	↓23.2	↓ 8.8
Clearing - Cheques	15.2	5.3	↓14.2	↓ 4.9
Pay Orders	2.2	1.4	↓ 2.0	↓ 1.2
Demand Drafts	1.5	0.4	1.5	0.4
Tele. Transfers	0.4	0.7	0.4	↑ 0.8
Others	1.2	1.2	↑ 1.3	↓ 1.0
TOTAL	85.2	37.9	↓82.8	↓34.7

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 most widely used paper based instrument with 49 percent share in volume and 51 percent share in value. The respective percentage share of all instruments is shown in the Fig. 2a & 2b.

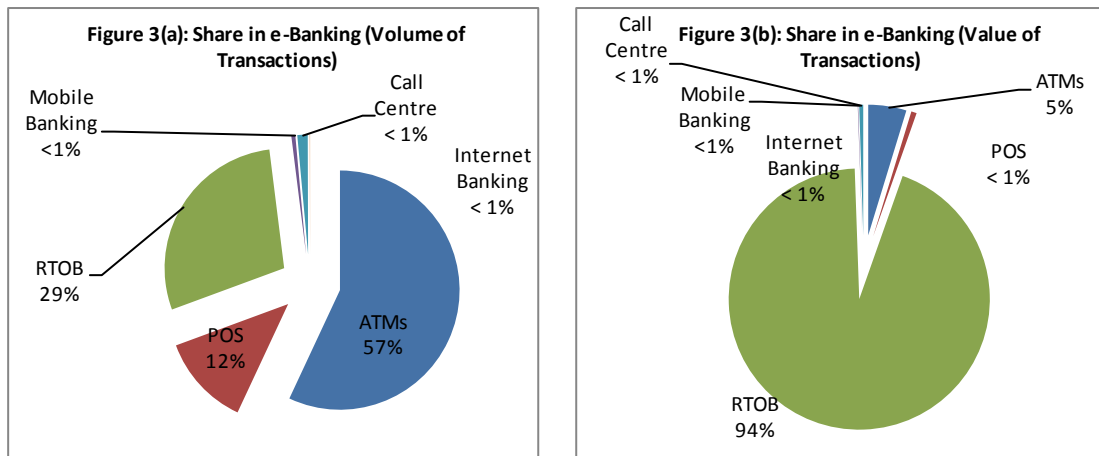


1.2 The Retail Payments through eBanking

In terms of volume, the electronic banking has recorded 37.6 million transactions showing 0.2 percent decline against the increase of 11.5 percent recorded in the previous quarter. In terms of value, it reached Rs.3.2 trillion showing a decrease of 11.3 percent against 11.5 percent decline recorded in the previous quarter (Fig. 1a & 1b).

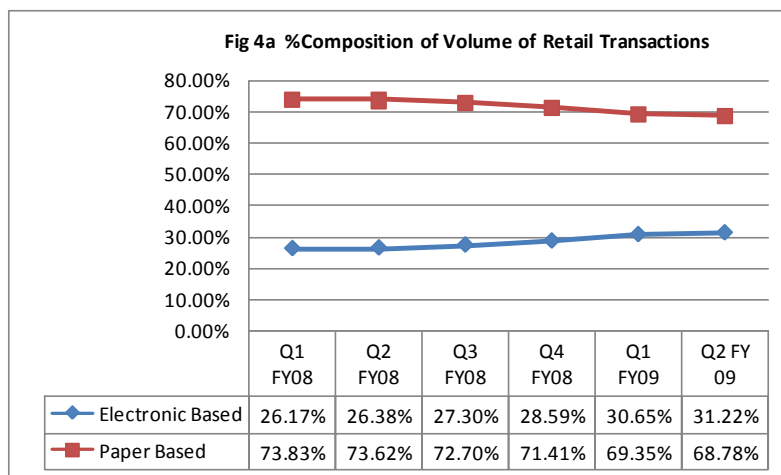
1.3 Share of ATMs, POS and RTOB in eBanking Operations

ATMs are commonly used for frequent but small value cash withdrawals, therefore, its share in total number of electronic transactions was recorded to be the highest i.e. 57 percent. During Qtr-2 the average size of ATM transactions¹ was recorded at Rs.7,140/= compared to Rs.7,212/= recorded during previous quarter. The share of Real Time Online Banking (RTOB) and POS in the total e-Banking was 29 percent and 12 percent respectively. Call Centre, Internet Banking and Mobile Banking, however had comparatively low share in the total eBanking business (**Fig. 3a**). In terms of value, the RTOB contribution was 94 percent, since this channel is mostly used for B2B transactions. ATM transactions contributed 5 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. 3b** below.

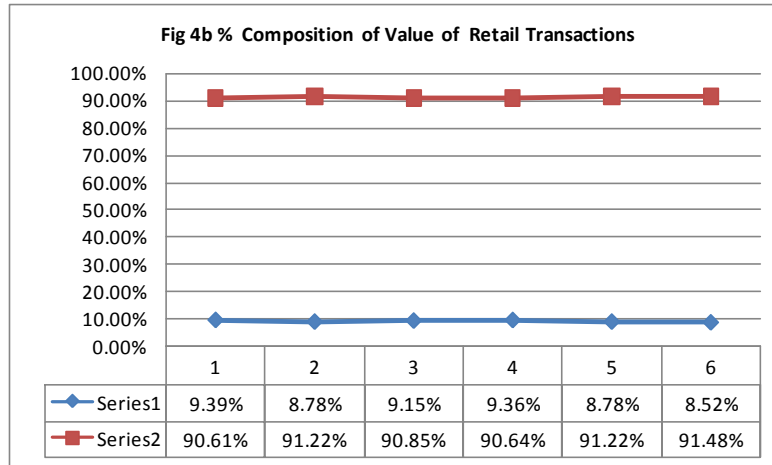


1.4 Transition to eBanking:

During the last six quarters the transition from manual (paper based) banking to e-banking has been gradual, yet consistent, in terms of both volume and value of transactions. The composition (in percentage) of electronic transaction increased to 31.22 percent of the total number of transactions as compare to 30.65 percent recorded last quarter. In terms of value, however, the same recorded to 8.52 percent as compare to 8.78 percent recorded last quarter(**Fig 4a & 4b**).



¹ 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

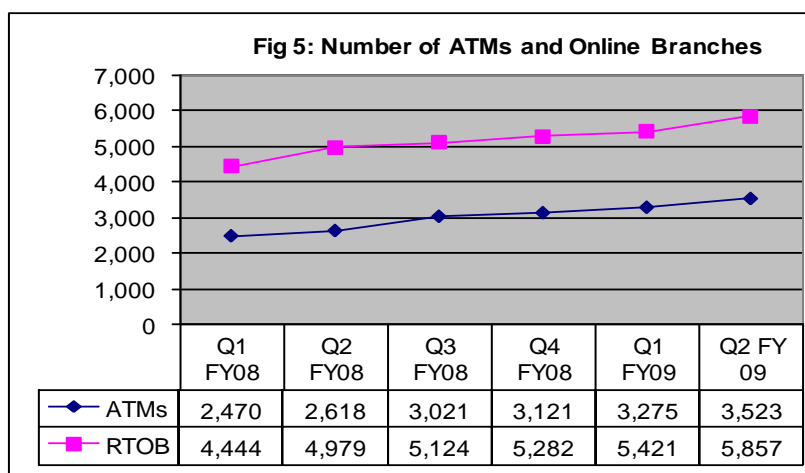


2. eBanking Infrastructure in Pakistan

2.1 Online Branch Network and Automated Teller Machines (ATMs)

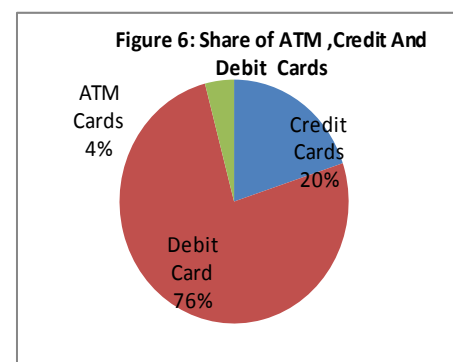
During Qtr-2, banks have upgraded their existing 58 manual or computerized branches to online branches and started 378 new online branches thus increasing online branch network in Pakistan from 5,421 to 5,857 branches.

The share of online branches in the total branch network has increased from 64.4 percent to 67.0 percent. Similarly, during Qtr-2, banks have added 248 new ATMs in their network, bringing the total number of ATMs in the country to 3,523 thus reflecting a growth of 7.6 percent as compare to 4.9 percent growth recorded in the last quarter (Fig. 5).



2.2 Number of Cards (Credit/Debit/ATM)

As of December 31, 2008, the total number of cards in circulation has reached at 7.8 million as compare to 6.98 million cards recorded in the last quarter showing an increase of 11.9 percent (Fig. 6).



2.2.1 Credit Cards

The total number of credit cards increased from 1.519 million to 1.556 million in Qtr-2. Quantity of Islamic credit cards has reached at 3,006.

2.2.2 Debit Cards

Total number of debit cards has increased from 5.19 million to 5.94 million in Qtr-2 showing an increase of 14.5 percent. Here it has been observed that most of the banks are issuing debit cards to their new customers/account holders upon opening of new account.

2.2.3 ATM Cards

During Qtr-2, the total number of ATM cards in circulation recorded at 0.320 million against 0.276 million cards reported during last quarter. This shows an increase of 16.0 percent.

2.2.4 Smart Cards

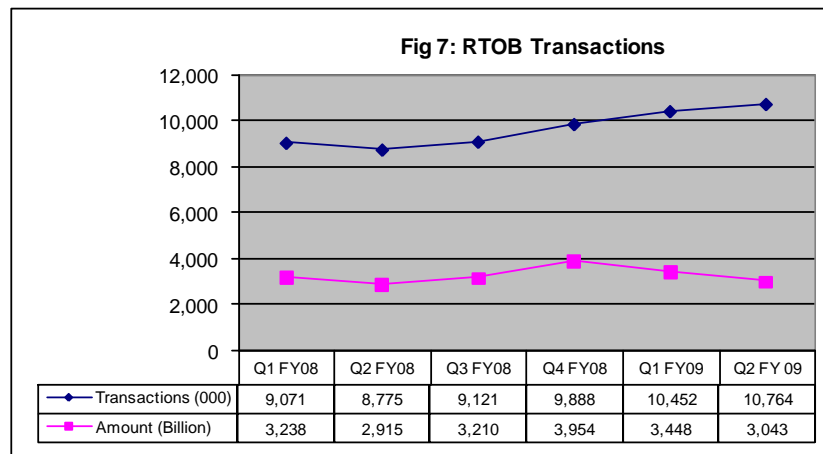
Smart cards are chip based card with enhanced memory and security features. Out of 7.8 million debit/credit/ATM cards, 0.422 million or 5.42 percent are chip based cards. During Qtr-2, however, the total quantity of chip based cards increased by 4.0 percent.

3. Volume and Value on E-Banking in Pakistan:

3.1 Real Time Online Banking (RTOB) Transactions:

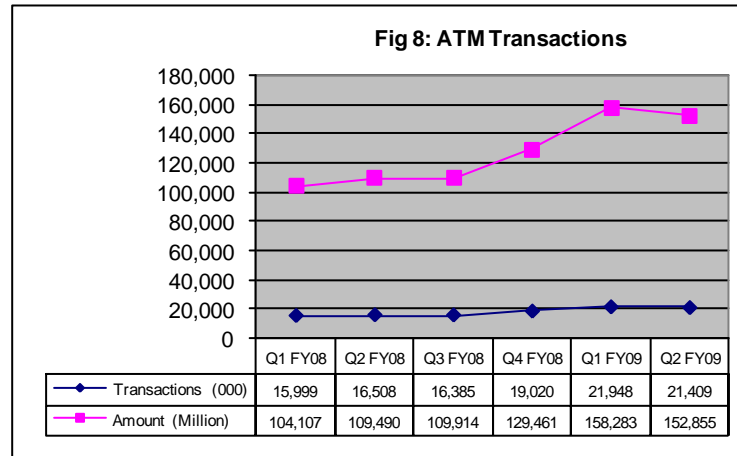
During Qtr-2, the total number of RTOB transactions increased by 3.0 percent as compare to 5.7 percent increase recorded last quarter. In terms of value, the amount decreased by 11.8 percent as compare to 12.8 percent decreased last quarter. Banks use RTOB channel for conducting various transactions which in fact constitute 94 percent of total e-Banking transactions value in the country.

(Fig. 7):



3.2 Transactions through ATMs

ATMs transactions during the Qtr-2 registered decrease of 2.5 percent as compare to 15.4 percent increase in last quarter. The amount of ATM transactions decreased by 3.4 percent as compared to 22.3 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, 68 transactions were executed per day per ATM. The size of average transaction is Rs.7,140/= (Fig. 8).



3.2.1 Fund Transfers

During Qtr-2, account-to-account funds transfer transactions that were made through ATMs, were recorded at 0.326 million showing an increase of 0.7 percent compared to 31.3 percent increase recorded in last quarter. The value of such funds transfer was Rs.17.2 billion, depicting an increase of 0.6 percent compared to 30.3 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

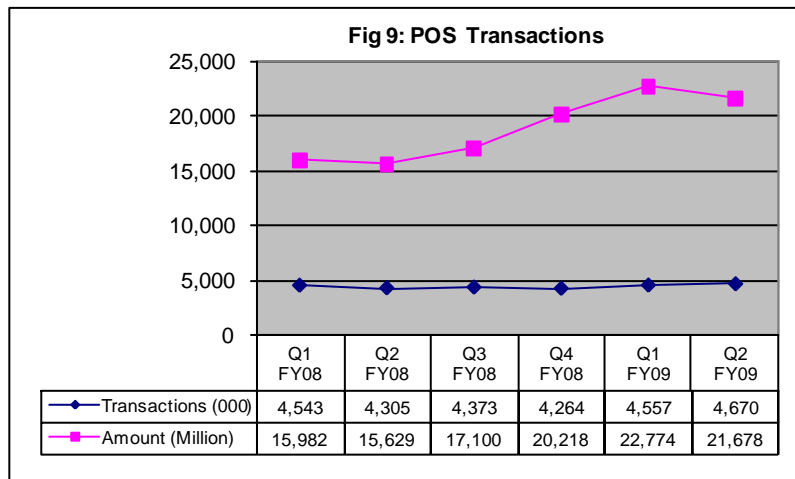
Quite a few banks are providing the facility of cash deposit through ATMs. The mechanism for cash deposit is either through single/bunch note acceptor or envelope based. During Qtr-2 only 4,463 transactions of cash deposit through ATMs were reported showing decline of 8.2 percent compared to 39.6 percent increase recorded in last quarter. In terms of value, the amount decreased from 61.32 million to 53.51 million for the current quarter.

3.2.3 Utility Bills Payment

During Qtr-2, the utility bills payment transactions through ATMs reported 7,031 transactions showing increase of 14.4 percent compared to 2.6 percent decrease recorded in last quarter. In value terms, the banks reported Rs.16.2 million as compare to 9.4 million recorded last quarter showing 71.4 percent increase compared to 24.8 percent increase in the last quarter.

3.3 POS (Point of Sale) Transactions

The total number of POS machines/terminals has reached at 48,944 placed across the country on different merchant locations as compare to 46,666 machines recorded last quarter which shows an increase of 4.9 percent. The number of POS transactions reached 4.7 million showing an increase of 2.5 percent as compare to 6.9 percent increase recorded in last quarter. The amount of such transactions reached Rs.21.68 billion registering decrease of 4.8 percent as compare to 12.6 percent increase in last quarter (**Fig. 9**):



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-2 FY2008-2009 were 0.202 million involving an amount of Rs.1.927 billion. This shows a decrease by 7.2 percent in volume and 34.6 percent decrease in value compared to 0.9 percent decrease in volume and 15.6 percent increase in value recorded in last quarter.

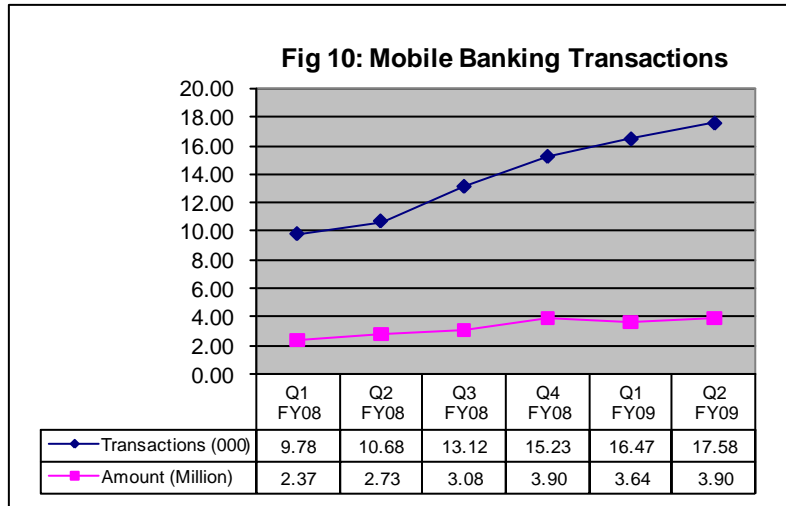
3.5 Internet Banking

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-2 FY2008-2009, banks reported 0.525 million transactions involving an amount of Rs.16.028 billion; this shows a growth of 11.6 percent in numbers and 16.6 percent in amount over the last quarter.

3.6 Mobile Banking

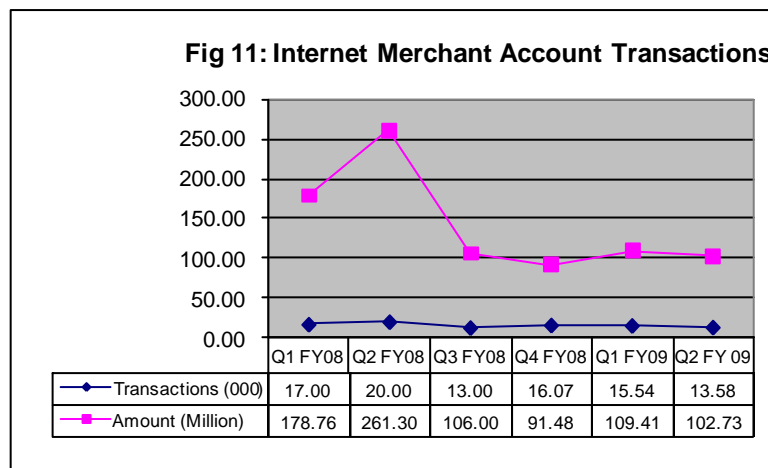
There are few banks which offer transactions through mobile. These transactions include payment through mobile (excluding utility bills payment), utility bills payment, A/C to A/c funds transfer and 3rd party A/c to A/C funds transfer.

The number of transactions reached to 17.58 thousand for the current quarter from 16.47 thousand in the previous quarter. This shows an increase by 6.8 percent in number of mobile transactions compared to 8.1 percent increase in volume recorded in previous quarter. In terms of value, it reached to Rs.3.90 million showing increase of 7.2 percent compared to 6.6 percent decrease recorded in the previous quarter (**Fig. 10**)



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-2 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 12.6 percent in number against 3.3 percent decrease in the previous quarter. In terms of value, there was decrease of 6.1 percent against 19.6 percent increase recorded for the previous quarter (**Fig 11**).



3.8 Cross Border Transactions through E-Banking (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 increased by 9 percent compared to 2 percent decrease in the previous quarter whereas out flow increased by 4 percent compared to 10 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 9 percent compared to 11 percent increased in the previous quarter while the outflow increased by 15 percent compared to 8 percent 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 9 percent increase in the previous quarter where as the out flow decreased by 4 percent compared to 24 percent decreases 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 e-banking, is given in Table 2:

Table 2: Comparison of Cross Border Payment Transactions

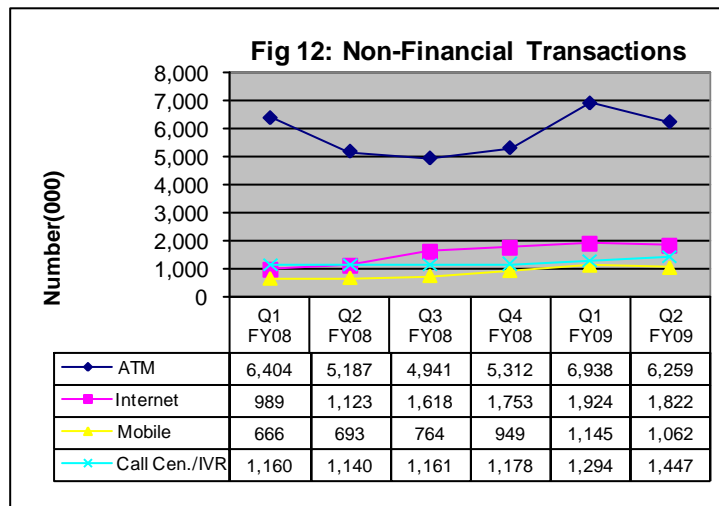
(Rs. In Millions)

Means of Transaction	Inflow of Money (Inward remittance)		Outflow of Money (Outward remittance)		Net	
	Q1 FY 09	Q2 FY 09	Q1 FY 09	Q2 FY 09	Q1 FY 09	Q2 FY 09
ATM	1,913	2,086	(402)	(419)	1,511	1,667
POS	3,035	3,306	(2,029)	(2,329)	1,006	976
INTERNET	58	64	(261)	(252)	(203)	(188)
Total	5,006	5,455	(2,692)	(3,001)	2,315	2,455

The above table indicates that the volume of cross border e-banking transactions (net inflow) increased by 6.1 percent as compared to a increase of 7.4 percent reported in the previous quarter.

3.9 Non-financial E-Banking Transactions

Channels of e-banking 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 10.59 million against 11.30 million recorded in the previous quarter as shown in **Fig. 12**.



4. List of Acronyms

ATM	Auto Teller Machine
I B	Internet Banking
CC	Call Center
POS	Point of Sales
RTOB	Real Time Online Branches
e-Banking	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.