



First Quarterly Report on Retail E-Payments and Paper Based instruments July –September, FY10

Payment Systems Department (Planning & Development Division)

# **Table of Contents**

	EXECUTIVE SUMMARY	1	
1	E- Payment & Paper Based Payments	4	
2	The Retail Payments through E-Payment Systems.	5	
2.1	E-Payments Composition.	5	
3	E-Payments Infrastructure in Pakistan		
3.1	Online Branch Network and Automated Teller Machines (ATMs)	5	
3.2	Number of Cards	6	
3.2.1	Credit Cards	6	
3.2.2	Debit Cards.	6	
3.2.3	ATM Cards.	6	
3.2.4	Smart Cards	6	
4	E-Payments (Cash Based -Online Banking & ATM)	7	
4.1	Real Time Online Banking (RTOB) Transactions	7	
4.2	Transactions through ATMs.	7	
4.2.1	Fund Transfers.	8	
4.2.2	Cash Deposits.	8	
4.2.3	Utility Bills Payment	8	
5	E-Payments (Virtual / Plastic Money)	8	
5.1	POS (Point of Sale) Transactions.	8	
5.2	Payments through Call Centre	8	
5.3	Payments through internet	9	
5.4	Payments through Mobile	9	
5.5	Internet Merchant Payments	9	
6	Cross Border Transactions through E-Payments (ATM, POS, Internet)	10	
7	Non-financial E-Banking Acticities.	10	
8	The Retail Payments through Paper Based Instruments	11	
9	Transition to E-Payments.	12	
10	List of Acronyms.	13	

# **List of Figures**

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

# **List of Tables**

<b>Tables</b>	Page No.	Title
Table 1:	10	Comparison of Cross Border Payment Transactions
Table 2:	11	Paper Based Instruments

### **EXECUTIVE SUMMARY:**

## **Electronic / Mobile Payments - Alternative Payment Channels:**

During Qtr-1, the volume and value of E-Payments transactions in the country reached at 45.7 million and Rs.3.9 trillion respectively showing an increase of 2.7 percent in numbers and 0.3 percent increase in value as compared to 11.1 percent increase in numbers and 7.8 percent increase in value in the previous quarter.

## E- Payments (Cash Based – Online Banking & ATM):

## **Real time Online Banking (RTOB):**

During Qtr-1, the volume and value of online banking transactions in the country reached at 13.0 million and Rs. 3.6 trillion respectively showing a decline of 4.6 percent in numbers and 0.4 percent decline in value as compared to 10.8 percent increase in numbers and 7.4 percent increase in value in the previous quarter. The decline in volume of transactions is adjustment of more than 10 percent growth recorded in the preceding two quarters.

#### **ATM Transactions:**

During Qtr-1, the volume and value of ATM transactions in the country reached at 26.8 million and Rs. 206.4 billion respectively showing a growth of 6.1 percent in numbers and 9.2 percent increase in value as compared to 12.0 percent increase in numbers and 12.2 percent increase in value in the previous quarter.

## **E-Payments (Virtual / Plastic Money):**

#### **POS Transactions:**

During Qtr-1, the volume and value of POS transactions in the country were recorded at 4.9 million and Rs. 26.7 billion respectively showing an increase of 6.1 percent in numbers and 13.87 percent increase in value as compared to 6.3 percent increase in numbers and 8.3 percent increase in value in the previous quarter.

### **Internet Payments Transactions:**

During Qtr-1, the volume and value of internet transactions in the country were recorded at 0.6 million and Rs. 27.9 billion respectively showing a decrease of 2.1 percent in numbers and 25.4 percent increase in value as compared to 15.4 percent increase in numbers and 35.7 percent increase in value in the previous quarter. The significant rise in value of transactions is because of bulk payments to parent companies by franchises of telenor, Nadra etc through internet. It also reflected the increased confidence level on internet channel, due to which it is used for large value of transactions.

## **Mobile Payments Transactions:**

During Qtr-1, the volume and value of mobile transactions in the country were recorded at 54,009 and Rs. 152 million respectively compared to 21,733 volume and Rs. 4.9 million value of transaction reported in previous quarter.

## Payments through Call Centre / IVR

During Qtr-1, the volume and value of call centre / IVR transactions in the country recorded 0.3 million and Rs. 2.0 billion respectively showing a decrease of 1.1 percent in numbers and 14.9 percent increase in value as compared to 18.9 percent increase in numbers and 2.2 percent increase in value in the previous quarter.

#### **Debit Cards Transactions:**

During Qtr-1, the volume and value of debit cards transactions reported 28.1 million and Rs. 210.5 billion respectively showing an increase of 0.2 percent in numbers and 0.3 percent increase in value as compared to 6.5 percent increase in numbers and 12.2 percent increase in value in the previous quarter.

#### **Credit Cards Transactions:**

During Qtr-1, the volume and value of credit cards transactions reported 4.2 million and Rs. 18.6 billion respectively showing a decrease of 7.1 percent in numbers and 2.7 percent decrease in value as compared to 0.2 percent decrease in numbers and 0.9 percent increase in value in the previous quarter.

## **E-Payments Infrastructure:**

The total quantity of ATM machines during Qtr-1 reached at 4,055 registering a growth of 1.4 percent as compared to 5.7 percent increase in the previous quarter. The volume of Real Time Online Branches (RTOB) during Qtr-1 reached at 6,119 and recorded a growth of same 1.3 percent as recorded in the previous quarter. The total quantity of POS terminal reached 51,685 showing an increase of 4.0 percent in number as compared to 2.7 percent increase in previous quarter.

The quantity of cards (debit / credit /ATM only) in circulation during Qtr-1 reached at 9.3 million which shows an increase of 4.3 percent compared to 6.6 percent increase in the previous quarter. Here the quantity of credit cards has decreased by 1.1 percent to 1.7 million as compared to 0.6 percent decrease in the previous quarter. Debit cards have increased by 6.6 percent as compared to 9.6 percent increase in previous quarter and stood at 6.8 million. ATM only cards have decreased by 2.1 percent to 0.86 million as compared to 0.2 percent increase in previous quarter.

## **Paper Based Payments:**

During Qtr-1, the volume and value of paper based transactions in the country reached at 83.2 million and Rs. 34.6 trillion respectively showing a decrease of 2.8 percent in numbers and 4.3 percent increase in value as compared to 4.8 percent increase in numbers and 6.1 percent decrease in value in the previous quarter.

# **Total Retail Payments:**

During Qtr-1, the volume and value of total retail payment transactions in the country reached at 128.9 million and Rs. 38.5 trillion respectively showing decrease of 0.9 percent in number and 3.9 percent increase in value as compared to 6.9 percent increase in numbers and 4.8 percent decrease in value in the previous quarter.

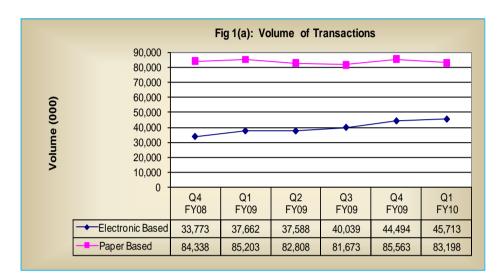
### **Transformation:**

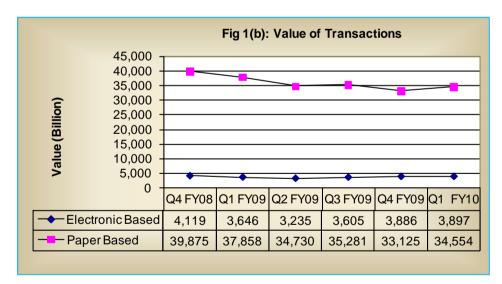
The use of electronic channels has been showing a consistent growth as during Qtr-1, the contribution of electronic transactions increased to 35.5 percent in numbers compared to 34.2 percent share recorded during previous quarter. In terms of value, the electronic channel's composition recorded 10.13 percent against 10.5 percent share recorded for the previous quarter.

## 1. E-Payments & Paper Based Payments:

E-payment systems are money transmission / delivery mechanism. These systems are cash based and virtual payments. During Qtr-1 FY10 the volume of total E & Paper Based Payments registered a decrease of 0.9 percent against 6.9 percent increase in the previous quarter and value of total retail payment transactions registered an increase of 3.9 percent against 4.8 percent decline in the previous quarter.

The trend of paper and electronic based transactions and value since Qtr-4 FY08 is given in the **Fig. 1a** & **1b** below:



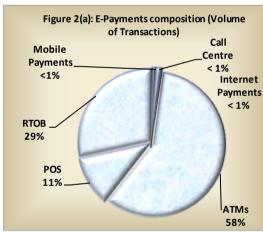


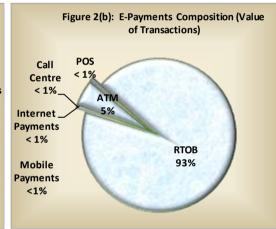
### 2. The Retail Payments through E-Payment Systems:

In terms of volume, the E-Payments has recorded 45.7 million transactions showing 2.7 percent increase against the increase of 11.1 percent recorded in the previous quarter. In terms of value, it reached Rs.3.9 trillion showing decrease of 0.3 percent against 7.8 percent increases recorded in the previous quarter (**Fig. 1a & 1b**).

### 2.1 E-Payments Composition:

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. 59 percent. During Qtr-1 the average size of ATM transactions<sup>1</sup> was recorded at Rs. 7, 706 compared to Rs.7, 489 recorded during previous quarter. The share of Real Time Online Banking (RTOB) and POS in the total E-Payments was 28 percent and 11 percent respectively. Call Centre, Internet Payments and Mobile Payments however had comparatively low share in the total E-Payments (**Fig.**). In terms of value, the RTOB contribution was 93 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 Call Center Payments is very nominal (**Fig. 2b**).





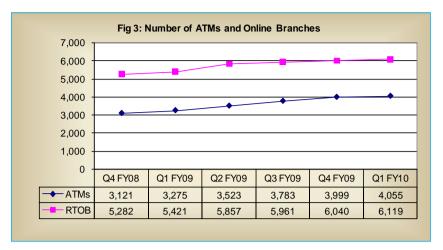
## 3. E-Payments Infrastructure in Pakistan:

## 3.1 Online Branch Network and Automated Teller Machines (ATMs):

During Qtr-1, banks have increased their online Branch network from 6,040 to 6,119 showing a same growth of 1.3 percent as also recorded in previous quarter.

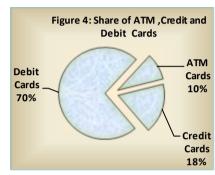
The share of online branches in the total branch network has increased from 68.2 percent to 68.8 percent. Similarly, during Qtr-1, banks have added 56 new ATMs in their network, bringing the total number of ATMs in the country to 4,055 thus reflecting a growth of 1.4 percent as compare to 5.7 percent growth recorded in the last quarter (**Fig. 3**).

<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



## 3.2 Number of Cards (Credit/Debit/ATM):

As of September, 2009, the total number of cards in circulation has recorded 9.3 million as compared to 8.9 million cards recorded in the previous quarter showing growth of 4.3 percent (**Fig. 4**).



#### 3.2.1 Credit Cards:

The total number of credit cards decreased from 1.66 million to 1.65 million in Qtr-1 showing decrease of 1.1 percent compared to 0.6 percent decrease recorded in the previous quarter. Quantity of Islamic credit cards has recorded 2,219.

#### 3.2.2 Debit Cards:

Total number of debit cards has increased from 6.4 million to 6.8 million in Qtr-1 showing growth of 6.6 percent compared to 9.6 percent increase recorded in the previous quarter.

#### 3.2.3 ATM Cards:

During Qtr-1, the total number of ATM cards in circulation recorded at 0.862 million against 0.881 million cards reported during last quarter showing decrease of 2.1 percent compared to 0.2 percent increase recorded in the previous quarter.

#### 3.2.4 Smart Cards:

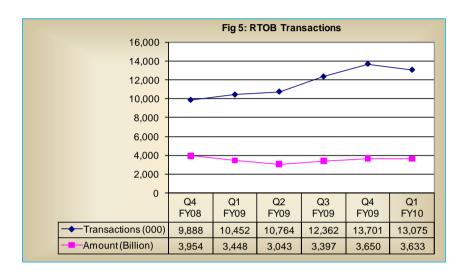
Smart cards are chip based card with enhanced memory and security features. Out of 9.3 million cards, 0.437 million or 4.8 percent are chip based cards. During Qtr-1, however, the total quantity of chip based cards increased by 0.7 percent.

## 4. E-Payments (Cash Based -Online Banking & ATM Transactions):

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

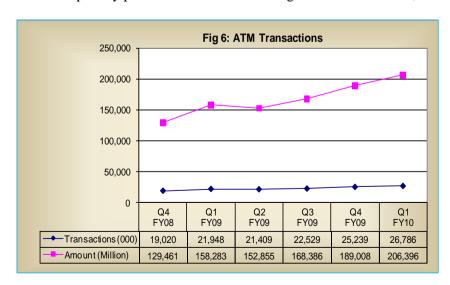
During Qtr-1, the total number of RTOB transactions decreased by 4.6 percent as compared to 10.8 percent increase recorded previous quarter. In terms of value, the amount decreased by 0.4 percent as compared to 7.4 percent increase in the previous quarter. Banks use RTOB channel for conducting various transactions which in fact constitute 93 percent of total E-payments transactions value in the country.

(Fig. 5):



## 4.2 Transactions through ATMs:

ATM transactions during the Qtr-1 registered an increase of 6.1 percent as compared to 12.0 percent increase in the previous quarter. The amount of ATM transactions increased by 9.2 percent as compared to 12.2 percent increase in the previous 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, 72 transactions were executed per day per ATM. The size of average transaction is Rs.7, 706/- (**Fig. 6**).



### 4.2.1 Fund Transfers:

During Qtr-1, fund transfers transactions that were made through ATMs, were recorded at 0.595 million showing a decrease of 2.3 percent as compared to 23.2 percent increase recorded in the previous quarter. The value of such fund transfers was Rs. 24.3 billion depicting a decrease of 12.4 percent compared to 11.4 percent increase recorded in the previous quarter. Fund transfers through ATMs mostly include intra-bank transfers and a small portion of inter-bank fund transfers.

#### 4.2.2 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 6,180 transactions of cash deposit through ATMs were reported showing an increase of 6.7 percent compared to 4.2 percent increase recorded in the previous quarter. In terms of value, the amount increased from 62.7 to 69.53 million for the current quarter showing an increase of 10.9 percent compared to 10.1 percent increase recorded in previous quarter.

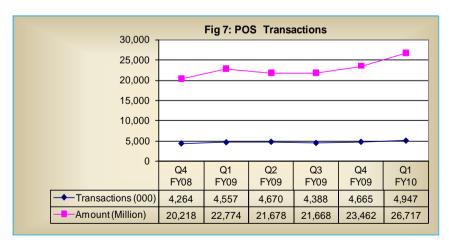
### 4.2.3 Utility Bills Payment:

During Qtr-1, the utility bills payment transactions through ATMs reported 29,174 transactions showing an increase of 51 percent compared to 57 percent increase recorded in the previous quarter. In value terms, the banks reported Rs. 54.2 million as compared to 35.0 million recorded previous quarter showing 54.9 percent increase compared to 84.4 percent increase in the previous quarter.

## 5. E-Payments (Virtual / Plastic Money):

## 5.1 POS (Point of Sale) Transactions:

The total number of POS machines/terminals has reached at 51,685 placed across the country on different merchant locations as compared to 49,715 machines recorded last quarter which shows an increase of 4.0 percent. The number of POS transactions reached 4.9 million showing an increase of 6.1 percent as compared to 6.3 percent increase recorded in the previous quarter. The amount of such transactions reached Rs. 26.7 billion registering an increase of 13.9 percent as compared to 8.3 percent increase in the previous quarter (**Fig. 7**).



## 5.2 Payments through Call Centre:

Payments through Call Centre/Interactive Voice Response (IVR) is also included in the E-Payment channels. The number of transactions through such channels reported by the banks for Qtr-1 FY 10 were

0.275 million involving an amount of Rs. 2.0 billion. This shows a decrease by 1.1 percent in volume and 14.9 percent increase in value compared to 18.9 percent increase in volume and 2.2 percent increase in value recorded in the previous quarter.

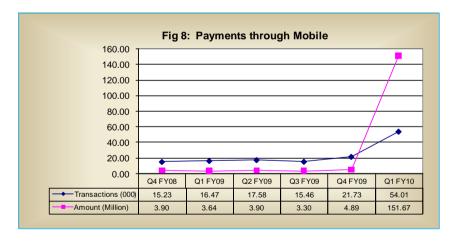
### 5.3Payments through Internet:

Internet Payments includes payments and electronic fund transfers (EFT). The fund transfers, however, are presently limited to intra bank account to account funds transfer except for a bank which offers interbank funds transfer facility through internet. During Qtr-1 FY 10, banks reported 0.577 million transactions involving an amount of Rs.27.87 billion, this shows decrease by 2.1 percent in numbers and 25.4 percent increase in amount compared to an increase of 15.4 percent in numbers and an increase of 35.7 percent in amount recorded in the previous quarter.

### 5.4 Payments through Mobile:

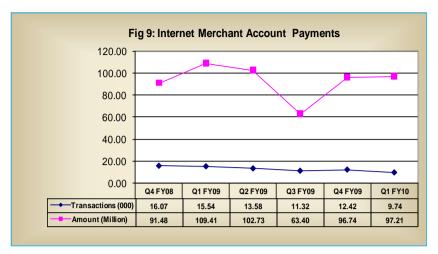
There are a few banks which offer transactions through mobile. These transactions include payment through mobile (excluding utility bills payment), utility bills payment, intra customer account fund transfers and inter customer account fund transfers.

The number of transactions reported were 54,009 for the current quarter compared to 21,733 transactions reported for the previous quarter. In terms of value of transactions it reported Rs.152 million compared to Rs. 4.9 Million recorded in the previous quarter. The extraordinary rise is due to fact that as of September 2009 five Commercial Banks were offering mobile Banking facility and out of Rs 152 million value of transaction Rs. 139 million belonged to intra customer account fund transfer transactions through mobile. (**Fig. 8**).



## 5.5 Internet Merchant Payments:

Transactions done through internet merchant account are part of Internet Merchant (IM) Payments. There were a total of 20 internet merchant accounts in Qtr-1 FY10. 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 of 21.6 percent in number against 9.8 percent increase in the previous quarter. In terms of value, there was increase of 0.5 percent against 52.6 percent increase recorded for the previous quarter (**Fig. 9**).



## 6. Cross Border Transactions through E-Payments:

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 16 percent compared to 12 percent increase in the previous quarter whereas out flow increased by 5 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 decreased by 9 percent compared to 12 percent increase in the previous quarter while the outflow increased by 2 percent compared to 14 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 5 percent compared to 6 percent increase in the previous quarter where as the out flow decreased by 1 percent compared to 24 percent increase 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-Payments, is given in Table 1:

**Table 1: Comparison of Cross Border Payment Transactions** 

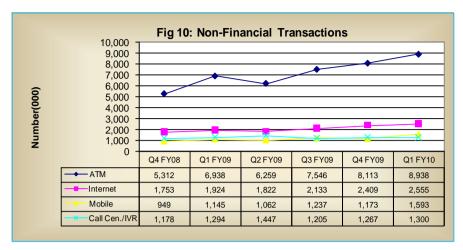
(Rs. In Millions)

1					(	
Means of Transaction	Inflow of Money (Inward remittance)		Outflow of Money (Outward remittance)		Net	
	Q4 FY 09	Q1 FY 10	Q4 FY 09	Q1 FY 10	Q4 FY 09	Q1 FY 10
ATM	2,543	2,949	(450)	(474)	2,093	2,475
POS	4,706	4,300	(3,133)	(3,210)	1,573	1,090
INTERNET	67	70	(334)	(329)	(267)	(259)
Total	7,316	7,320	(3,916)	(4,013)	3,400	3,307

The above table indicates that the volume of cross border e-banking transactions (net inflow) decreased by 2.7 percent as compared to an increase of 8.6 percent reported in the previous quarter.

## 7. Non-financial E-Banking Activities:

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 14.39 million against 12.96 million recorded in the previous quarter as shown in **Fig. 10**.



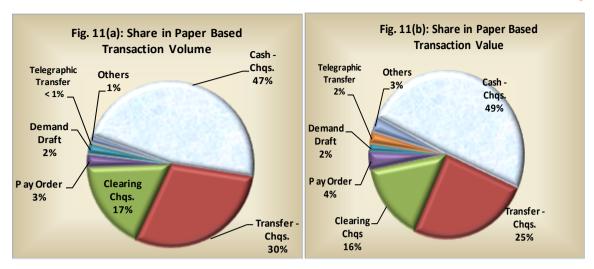
## 8. The Retail Payments through Paper Based Instruments:

Paper based instrument during Qtr-1 FY09 witnessed a decline of 2.8 percent in numbers compared with 4.8 percent increase in the previous quarter (**Fig. 1a**). The value of transactions increased by 4.3 percent against 6.1 percent decrease recorded during previous quarter (**Fig. 1b**).

**Table 2: Paper Based Instruments** 

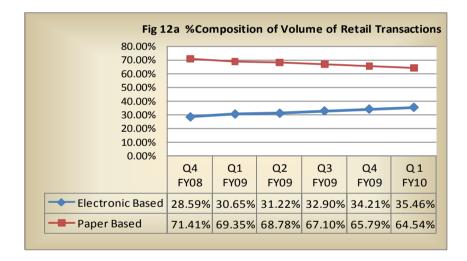
	Qtr 4 FY09		Qtr 1 FY10	
Instruments	Number	Amount	Number	Amount
	(million)	Rs.	(million)	Rs.
		(trillion)		(trillion)
Cash – Cheques	39.1	15.7	39.0	17.0
Transfer - Cheques	26.5	8.8	24.5	8.8
Clearing - Cheques	14.8	5.3	14.6	5.3
Pay Orders	2.0	1.2	2.0	1.2
Demand Drafts	1.7	0.5	1.6	0.5
Tele. Transfers	0.2	0.7	0.2	8.0
Others	1.3	1.0	1.2	1.0
TOTAL	85.6	33.1	83.2	34.6

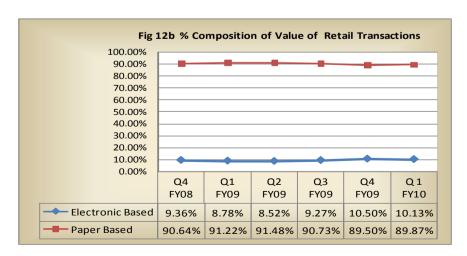
While looking at the composition of the paper based instruments, the cheques (such as cash, clearing, transfer) carry a major share i.e. 94 percent in volume and 90 percent in value. Here the cash cheques have been the most widely used paper based instrument with 47 percent share in volume and 49 percent share in value. The respective percentage share of all instruments is shown in the **Fig. 11a & 11b**.



## 9. Transition to E-Payments

During the last six quarters the transition from manual (paper based) banking to E-Payments has been gradual, yet consistent, in terms of both volume and value of transactions. The composition (in percentage) of electronic transaction increased to 35.5 percent of the total number of transactions as compared to 34.2 percent recorded in the previous quarter. In terms of value, the same recorded to 10.13 percent as compared to 10.5 percent recorded in the previous quarter (**Fig 12a & 12b**).





# 10. 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.