Payment Systems Department

2nd Quarter FY07-08 Report on Retail Payment Systems of Pakistan (Paper Based and E-Banking)
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EXECUTIVE SUMMARY

TOTAL RETAIL PAYMENTS
During Q2 FY07-08, total 115.5 million retail payment transactions were recorded valuing Rs. 35.2 trillion; this shows a growth of 0.3% in numbers and decline by 1.8% in amount.

E-BANKING
The volume and value of e-banking transactions during Q2 FY07-08 reached at 31.5 million and Rs.3.6 trillion respectively, recording a growth of 4.4% in numbers and 5.4% in amount.

CARDS
Total number of active cards grew by 2.5% reaching the level of 6.7 million. Credit cards recorded increase of 2.5% having reached at 1.7 million, debit cards recorded growth of 1.8% and stood at 4.8 million and ATM only cards reached 0.191 million registering 20.9% growth over the previous quarter.

INFRASTRUCTURE
Total number of ATM machines as of Q2 FY07-08 reached at 2,618, depicting an increase of 6.0% over the previous quarter. The Real Time Online Branches (RTOB) reached at 4,979 and now constitutes 61% of total branch network in the country. RTOB recorded 12.0% increase in the number of branches compared with the previous quarter. As of Q2 FY07-08, number of POS terminals available to customers were 52,474; reflecting a growth of 4.9% over the previous quarter.

ATM TRANSACTIONS
Total number of ATM transactions increased by 3.2% in Q2 FY07-08 and stood at 16.5 million, whereas the amount of such transactions was Rs.109.5 billion; showing a growth of 5.2% over the previous quarter.

RTOB TRANSACTIONS
The number of Real Time Online Banking (RTOB) transactions grew to 10.1 million, reflecting an increase of 11.6% as compared to the previous quarter. The value of transactions through RTOB recorded during this quarter was Rs.3.4 trillion showing an increase of 5.4% over the previous quarter.

OTHER E-BANKING CHANNELS
The number of transactions on other E-Banking channels (POS, Internet & Call Center/IVR, and Mobile) recorded during the quarter under review was 4.8 million, reflecting a decline by 4.4% over the previous quarter. The value of such transactions was Rs.28.8 billion; reflecting an increase of 4.7% over the previous quarter.

TRANSFORMATION
The use of electronic channels is consistently growing as contribution of electronic transactions increased to 27.2% in number terms and in value terms constitute 10.1% of total retail transactions, as compared to 26.2% and 9.4% respectively in the previous quarter.
1. **INTRODUCTION**

Retail payments are mainly made by consumers and commercial counterparties to purchase goods and services. At the retail level, most transactions use paper based instruments. However electronic mode is also getting momentum with the passage of time. Retail payments in Pakistan comprise of various paper-based and electronic instruments from conventional cheques to modern smart cards. The Payment Systems Department compiles a quarterly report based upon various paper based and electronic instruments reported by commercial banks and SBP BSC offices. This report focuses on the transactions of retail nature through ATMs, Cards, RTOBs, POS machines, internet, cross border card based transactions, etc. During Q2 FY07-08 volume of retail payment transactions registered a growth of 0.3% and the value of transactions decreased by 1.8%. In the last quarter the volume increased by 2.3% and value increased by 3.2%.

The trend of paper and electronic based transactions and value since Q1 FY07-08 is given in the figure 1(a) and 1(b).
1.1 Retail Payments through Paper Based Instruments

Q2 FY07-08 witnessed a decline by 1.1% in numbers and also a decline by 2.5% in value of paper based retail payment transactions as compared to an increase of 0.6% in numbers and increase of 2.5% in value observed in the preceding quarter (Table 1-(a), 1-(b)).

**Table 1-(a): Comparison of Number of Transactions in Retail Electronic and paper based Payments**

<table>
<thead>
<tr>
<th>Number of Transactions (000)</th>
<th>Q1 FY07</th>
<th>Q2 FY07</th>
<th>Q3 FY07</th>
<th>Q4 FY07</th>
<th>Q1 FY08</th>
<th>Q2 FY08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic Based</td>
<td>21,699</td>
<td>24,134</td>
<td>25,529</td>
<td>28,006</td>
<td>30,114</td>
<td>31,450</td>
</tr>
<tr>
<td>Paper Based</td>
<td>79,677</td>
<td>79,949</td>
<td>80,130</td>
<td>84,463</td>
<td>84,952</td>
<td>83,999</td>
</tr>
<tr>
<td>TOTAL</td>
<td>101,376</td>
<td>104,083</td>
<td>105,659</td>
<td>112,469</td>
<td>115,066</td>
<td>115,450</td>
</tr>
</tbody>
</table>

| % Composition               |         |         |         |         |         |         |
| Electronic Based            | 21.4%   | 23.2%   | 24.2%   | 24.9%   | 26.2%   | 27.2%   |
| Paper Based                 | 78.6%   | 76.8%   | 75.8%   | 75.1%   | 73.8%   | 72.8%   |

**Table 1-(b): Comparison of Amount of Transactions in Retail Electronic and paper based Payments**

<table>
<thead>
<tr>
<th>Amount of Transactions (Rs. In Billion)</th>
<th>Q1 FY07</th>
<th>Q2 FY07</th>
<th>Q3 FY07</th>
<th>Q4 FY07</th>
<th>Q1 FY08</th>
<th>Q2 FY08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic Based</td>
<td>2,256</td>
<td>2,476</td>
<td>2,692</td>
<td>3,073</td>
<td>3,369</td>
<td>3,550</td>
</tr>
<tr>
<td>Paper Based</td>
<td>27,333</td>
<td>27,803</td>
<td>26,804</td>
<td>31,715</td>
<td>32,520</td>
<td>31,696</td>
</tr>
<tr>
<td>TOTAL</td>
<td>29,590</td>
<td>30,278</td>
<td>29,503</td>
<td>34,789</td>
<td>35,889</td>
<td>35,246</td>
</tr>
</tbody>
</table>

| % Composition                          |         |         |         |         |         |         |
| Electronic Based                       | 7.6%    | 8.2%    | 9.2%    | 8.8%    | 9.4%    | 10.1%   |
| Paper Based                            | 92.4%   | 91.8%   | 90.8%   | 91.2%   | 90.6%   | 89.9%   |
1.2 Retail Payments through E-Banking

Electronic banking transactions have posted a growth of 4.4% in terms of numbers and 5.4% in terms of value during the current quarter. In the previous quarter, growth in volume was 7.5% while value increased by 9.6 % (Table 1-(a), 1-(b)).

1.3 Transition to E-Banking

During the last six quarters the transition from paper based banking to e-banking has been gradual, yet consistent in terms of volume as well as value of transactions. The composition of electronic transaction number is increasing and makes 27.1% of total number of transactions compared with the previous quarter which was 26.2%. The value of electronic transaction composition was 10.1% compared with 9.4% in the previous quarter (Table 1-(a), 1-(b)).

2. ELECTRONIC BANKING IN PAKISTAN

2.1 Online Branch Network & Automated Teller Machines (ATMs)

During this quarter, banks converted 230 manual/computerized branches into online branches and added 499 new online branches, raising the total number of online branches from 4,444 to 4,979. The share of online branches in the total branch network increased from 57% in the previous quarter to 61% in the current quarter. Similarly, during the Q2 FY07-08, banks have added 148 new ATMs in their network, bringing the total number of ATMs to 2,618 (previous quarter recorded total 2,470 number of ATMs) reflecting a growth of 6.0% as compared to 7.7% growth in the previous quarter. The trend in number of ATMs and On-line Branches since Q1 FY07 is given in figure 2.
2.2 Number of Cards (Credit/Debit/ATM)

At the end of Q2 FY07-08, total 6.7 million valid credit, debit and ATM only cards were in circulation showing an increase of 2.5% over the previous quarter (figure 3). In the previous quarter, 6.5 million cards were registered.

2.2.1 Credit Cards

Total number of credit cards increased from 1.62 million to 1.66 million in Q2 FY07-08, registering an increase of 2.5% over the previous quarter. Islamic credit cards have also been introduced numbering 3,753 out of total 1.66 million credit cards (0.23% of total credit cards).

2.2.2 Debit Cards

Total number of debit cards (excluding ATM only cards) increased from 4.7 million to 4.8 million in Q2 FY07-08, showing an increase of 1.8% over the previous quarter. Most of the banks are issuing debit cards to their new customers/account holders and are also converting the existing ATM only cards to debit cards.

2.2.3 ATM Only Cards

Total number of ATM cards was 0.191 million reported by banks for Q2 FY07-08 as compared to 0.158 million in the previous quarter showing an increase of 20.9% over the previous quarter. There are few banks which still offer ATM only cards to their account holders.
2.3 Smart Cards
Smart card is a chip based card with enhanced memory and encryption capability. It offers better security features compared to an ordinary card. Out of the total 6.7 million cards, 0.412 million cards are chip based which is 6.2% of the total cards. During this quarter the number of chip based cards increased by 20.6%. Currently there are only few banks which are issuing smart credit cards.

3. VOLUME ON E-BANKING CHANNELS

3.1 Real Time Online Banking Transactions
During Q2 FY07-08, the number of RTOB transactions increased by 11.6% and their value increased by 5.4% as against previous quarter’s growth of 1.4% and 9.4% respectively. The trend in RTOB growth since Q1 FY07 is given in Fig. 4:

![Fig. 4: Real Time On-line Banking]

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Transactions (000)</th>
<th>Amount (Rs. Billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 FY07</td>
<td>6,284</td>
<td>2,165</td>
</tr>
<tr>
<td>Q2 FY07</td>
<td>7,560</td>
<td>2,375</td>
</tr>
<tr>
<td>Q3 FY07</td>
<td>7,941</td>
<td>2,590</td>
</tr>
<tr>
<td>Q4 FY07</td>
<td>8,948</td>
<td>2,961</td>
</tr>
<tr>
<td>Q1 FY08</td>
<td>9,071</td>
<td>3,238</td>
</tr>
<tr>
<td>Q2 FY08</td>
<td>10,121</td>
<td>3,413</td>
</tr>
</tbody>
</table>

3.2 Transactions through ATMs
ATMs transactions during the Q2 FY07-08 registered an increase of 3.2% while their amount increased by 5.2% as against an increase of 11.2% and 18.1% respectively 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. On average, 70 transactions were executed per day per ATM and average transaction size was Rs. 6,632. Growth in the use of ATMs since Q1 FY07 is given in Fig. 5.
3.2.1 Fund Transfers
During Q2 FY07-08, account-to-account funds transfer transactions made through ATMs were 0.163 million, showing an increase of 22.2%. The value of such funds transfer was Rs.8.8 billion, depicting an increase of 27.5%. 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. Besides ATMs, inter/intra bank fund transfers can also be executed through internet.

3.2.2 Cash Deposits
Quite a few banks are providing the facility of cash deposit through ATMs. The mechanism for cash deposit is envelope based; i.e. Cash is not directly fed into the machine. During Q2 FY07-08 only 2,190 transactions of cash deposit through ATMs were reported as compared to 1,930 transactions during the previous quarter, showing an increase of 13.3% in number and 24.7% increase in the amount of transactions from the previous quarter.

3.2.3 Utility Bills Payment
During Q2 FY07-08, banks reported 6,430 transactions of Utility Bills payment through ATMs involving an amount of Rs.8.3 million as compared to 6,210 transactions valuing Rs.8.3 million in the previous quarter. This registered an increase of 3.6% in numbers but a decrease by 0.1% in amount of transactions. Banks were advised through Payment Systems Department’s guidelines issued on December 18, 2006 to offer utility bills facility across ATM network in phases.

3.3 POS (Point of Sale) Transactions
The total number of POS machines recorded for this quarter was 52,474 compared with the previous quarter which recorded 50,004 machines, showing 4.9% increase from the previous
quarter. The numbers of POS transactions decreased by 5.2% while the amount of such transactions also decreased by 2.2% during this quarter. The previous quarter showed an increase of 7.6% in numbers and an increase of 9.6% in value of transactions. Transactions through POS since Q1 FY07 are given in Fig. 6:

![Fig. 6: POS Transactions](image)

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Transactions (000)</th>
<th>Amount (Rs. Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 FY07</td>
<td>3,671</td>
<td>12,596</td>
</tr>
<tr>
<td>Q2 FY07</td>
<td>3,667</td>
<td>13,156</td>
</tr>
<tr>
<td>Q3 FY07</td>
<td>4,028</td>
<td>13,401</td>
</tr>
<tr>
<td>Q4 FY07</td>
<td>4,223</td>
<td>14,584</td>
</tr>
<tr>
<td>Q1 FY08</td>
<td>4,543</td>
<td>15,982</td>
</tr>
<tr>
<td>Q2 FY08</td>
<td>4,305</td>
<td>15,629</td>
</tr>
</tbody>
</table>

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 Q2 FY07-08 were 0.189 million involving an amount of Rs.2.3 billion, showing a decrease by 8.9% in numbers and also a decrease by 15.2% in amount over the 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 Q2 FY07-08, banks reported 0.317 million transactions involving an amount of Rs.10.2 billion; this shows a growth of 11.9% in numbers and an increase of 16.3% in amount over the last quarter.
3.6 Internet Merchant Banking
Transactions done through internet merchant account are part of Internet Merchant Banking. There were a total of 29 internet merchant accounts in Q1 FY07-08, however, only 15 of them were active. 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 an increase by 17.6% in number of transactions while the value of transactions increased by 46.2% in contrast with the previous quarter which recorded decline in number of transactions by 1.5% but the value of transactions increased by 18.5%.

![Internet Merchant Account Transactions](image)

3.7 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 through Internet. 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 Boarder Payment Transactions Through E-Banking**

<table>
<thead>
<tr>
<th>Means of Transaction</th>
<th>Inflow of Money (Inward remittance)</th>
<th>Outflow of Money (Outward remittance)</th>
<th>Net</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q1FY07-08</td>
<td>Q2FY07-08</td>
<td>Q1FY07-08</td>
</tr>
<tr>
<td>ATM</td>
<td>2,107</td>
<td>2,173</td>
<td>(309)</td>
</tr>
<tr>
<td>POS</td>
<td>2,824</td>
<td>2,234</td>
<td>(1,942)</td>
</tr>
<tr>
<td>INTERNET</td>
<td>48</td>
<td>49</td>
<td>(243)</td>
</tr>
<tr>
<td>Total</td>
<td><strong>4,979</strong></td>
<td><strong>4,455</strong></td>
<td><strong>(2,494)</strong></td>
</tr>
</tbody>
</table>

(Rs. In Millions)
The above table indicates that the volume of cross border e-banking transactions (net inflow) decreased by 10.26% as compared to a decline of 2.78% reported in the previous quarter.

3.8 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 8.1 million as compared to 9.2 million in the previous quarter as shown in fig. 7.

![Fig. 7: Non-Financial Transactions](image)

3.9 Contribution of ATMs, POS & RTOB in E-Banking Operations

ATMs are commonly used for small value cash withdrawal, therefore, the share of ATM transactions in the total number of electronic transactions was highest i.e. 53%. ATMs usage for funds transfer has increased compared to the previous quarter. Average size of ATM transaction recorded for this quarter was Rs.6,632 as compared to the previous quarter which recorded transaction size of Rs.6,507. The share of Online Banking, POS, Call Centre and Internet Banking in the total E-Banking business was 32%, 13%, 1% and 1% respectively. However, in terms of amount, the contribution of RTOB banking is 96%, since this channel is mostly used for B2B transactions. The ATM transactions amount stands at number 2 with 3% contribution in amount of transactions.

The share of POS, Internet and Call Center banking is very nominal (less than 1%) as reflected in figure 8(a) and 8(b).
4. **ACRONYMS**

I B – Internet Banking  
C C – Call Center  
POS – Point of Sales  
RTOB – Real Time Online Branches  
E-Banking – Electronic Banking  
ATM – Automated Teller Machine  
IMA – Internet Merchant Account  
IVR – Interactive Voice Response  

![Fig. 8(a): Share of E-Banking Number of Transactions](image1)  
![Fig. 8(b): Share of E-Banking Amount of Transactions](image2)

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