State Bank of Pakistan
PAYMENT SYSTEMS DEPARTMENT

1st 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 Q1 FY07-08, total 115.5 million retail payment transactions were recorded valuing Rs. 39.4 trillion; this shows a growth of 2.7% in numbers and 13.3% in amount.

E-BANKING
The volume and value of e-banking transactions during Q1 FY07-08 reached at 30.1 million and Rs.3.4 trillion respectively, recording a growth of 7.5% in numbers and 9.6% in amount.

CARDS
Total number of active cards grew by 11.9% reaching the level of 6.5 million. Credit cards recorded decline of 4.4% having reached at 1.6 million, debit cards recorded growth of 18.7% and stood at 4.7 million and ATM only cards reached 0.158 million registering 17.7% growth over the previous quarter.

INFRASTRUCTURE
Total number of ATM machines as of Q1 FY07-08 reached at 2470, depicting an increase of 7.7% over the previous quarter. The Real Time Online Branches (RTOB) reached at 4,444 and now constitutes 57% of total branch network in the country. RTOB recorded 6.3% increase in the number of branches compared with the previous quarter. As of Q1 FY07-08, number of POS terminals available to customers were 50,004; reflecting a growth of 7.9% over the previous quarter.

ATM TRANSACTIONS
Total number of ATM transactions increased by 11.2% in Q1 FY07-08 and stood at 16.0 million, whereas the amount of such transactions was Rs.104.1 billion; showing a growth of 18.1% over the previous quarter.

RTOB TRANSACTIONS
The number of Real Time Online Banking (RTOB) transactions grew to 9.1 million, reflecting an increase of 1.4% as compared to the previous quarter. The value of transactions through RTOB recorded during this quarter was Rs.3.2 trillion showing an increase of 9.4% 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 5.0 million, reflecting a growth of 7.7% over the previous quarter. The value of such transactions was Rs.27.6 billion; reflecting an increase of 9.5% over the previous quarter.

TRANSFORMATION
The use of electronic channels is consistently growing as contribution of electronic transactions increased to 26.1% in number terms and in value terms constitute 8.5% of total retail transactions, as compared to 24.9% and 8.8% 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 Q1 FY07-08 volume of retail payment transactions registered a growth of 2.7% and the value of transactions increased by 13.3%. In the last quarter the volume increased by 6.4% and value increased by 17.9%.

Trend of paper and electronic based transactions and value since Q4 FY06-07 is given in the figure 1(a) and 1(b).

![Fig. 1 (a) Number of Transactions](image-url)
1.1 Retail Payments through Paper Based Instruments

Q1 FY07-08 witnessed a growth of 1.1% in numbers of paper based transactions and an increase of 13.7% in terms of value of paper based retail payment transactions as compared to an increase of 5.4% in numbers and increase of 18.3% in value observed in the preceding quarter (Table (1a), (1b)).

1.2 Retail Payments through E- Banking

Electronic banking transactions have posted a growth of 7.5% in terms of numbers and 9.6% in terms of value during the current quarter. In the previous quarter, growth in volume was 9.7% while value increased by 14.2 % (Table (1a), (1b)).

1.3 Transition to E-Banking

During the last six quarters the transition from paper based banking to e-banking has been gradual in terms of number of transactions. However, there was no consistent trend in the value of e-banking transactions. The composition of electronic transaction number is increasing and makes 26.1% of total number of transactions compared with the previous quarter which was 24.9%. The value of electronic transaction composition was 8.5% compared with 8.8% in the previous quarter. (Table 1(a) and 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>Q4 FY06</th>
<th>Q1 FY07</th>
<th>Q2 FY07</th>
<th>Q3 FY07</th>
<th>Q4 FY07</th>
<th>Q1 FY08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic Based</td>
<td>20,160</td>
<td>21,699</td>
<td>24,134</td>
<td>25,529</td>
<td>28,006</td>
<td>30,114</td>
</tr>
<tr>
<td>Paper Based</td>
<td>82,131</td>
<td>79,677</td>
<td>79,949</td>
<td>80,130</td>
<td>84,463</td>
<td>85,403</td>
</tr>
<tr>
<td>TOTAL</td>
<td>102,291</td>
<td>101,376</td>
<td>104,083</td>
<td>105,659</td>
<td>112,469</td>
<td>115,517</td>
</tr>
</tbody>
</table>

% Composition

<table>
<thead>
<tr>
<th></th>
<th>Q4 FY06</th>
<th>Q1 FY07</th>
<th>Q2 FY07</th>
<th>Q3 FY07</th>
<th>Q4 FY07</th>
<th>Q1 FY08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic Based</td>
<td>19.7%</td>
<td>21.4%</td>
<td>23.2%</td>
<td>24.2%</td>
<td>24.9%</td>
<td>26.1%</td>
</tr>
<tr>
<td>Paper Based</td>
<td>80.3%</td>
<td>78.6%</td>
<td>76.8%</td>
<td>75.8%</td>
<td>75.1%</td>
<td>73.9%</td>
</tr>
</tbody>
</table>

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>Q4 FY06</th>
<th>Q1 FY07</th>
<th>Q2 FY07</th>
<th>Q3 FY07</th>
<th>Q4 FY07</th>
<th>Q1 FY08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic Based</td>
<td>2,479</td>
<td>2,256</td>
<td>2,476</td>
<td>2,692</td>
<td>3,073</td>
<td>3,369</td>
</tr>
<tr>
<td>Paper Based</td>
<td>25,036</td>
<td>27,333</td>
<td>27,803</td>
<td>26,804</td>
<td>31,715</td>
<td>36,055</td>
</tr>
<tr>
<td>TOTAL</td>
<td>27,515</td>
<td>29,590</td>
<td>30,278</td>
<td>29,503</td>
<td>34,789</td>
<td>39,425</td>
</tr>
</tbody>
</table>

% Composition

<table>
<thead>
<tr>
<th></th>
<th>Q4 FY06</th>
<th>Q1 FY07</th>
<th>Q2 FY07</th>
<th>Q3 FY07</th>
<th>Q4 FY07</th>
<th>Q1 FY08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic Based</td>
<td>9.0%</td>
<td>7.6%</td>
<td>8.2%</td>
<td>9.2%</td>
<td>8.8%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Paper Based</td>
<td>91.0%</td>
<td>92.4%</td>
<td>91.8%</td>
<td>90.8%</td>
<td>91.2%</td>
<td>91.5%</td>
</tr>
</tbody>
</table>

2. ELECTRONIC BANKING IN PAKISTAN

2.1 Online Branch Network & Automated Teller Machines (ATMs)

During this quarter, banks converted 179 manual/computerized branches into online branches and added 86 new online branches, raising the total number of online branches from 4,179 to 4,444. The share of online branches in the total branch network increased from 54% in the previous quarter to 57% in the current quarter. Similarly, during the Q1 FY07-08, banks have added 176 new ATMs in their network, bringing the total number of ATMs to 2,470 (previous quarter recorded total 2,294 number of ATMs) and reflecting a growth of 7.7% as compared to 5.5% growth in the previous quarter. The trend in number of ATMs and On-line Branches since Q4 FY06 is given in figure 2.
2.2 Number of Cards (Credit/Debit/ATM)

At the end of Q1 FY07-08, total 6.5 million valid credit, debit and ATM only cards were in circulation showing an increase of 11.9% over the previous quarter (figure 3). In the previous quarter, 5.8 million cards were registered. The debit cards showed significant increase in number among all cards.

2.2.1 Credit Cards
Total number of credit cards decreased from 1.698 million to 1.623 million in Q1 FY07-08, registering a decline of 4.4% over the previous quarter. The decrease in number is mainly due to cancellation of 0.98 million credit cards.

2.2.2 Debit Cards
Total number of debit cards (Excluding ATM only cards) increased from 3.983 million to 4.729 million in Q1 FY07-08, showing an increase of 18.7% 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 which have caused increase in the number of debit cards.
2.2.3 ATM Only Cards
Total number of ATM cards was 0.158 million reported by banks for Q1 FY07-08 as compared to 0.134 million in the previous quarter showing an increase of 17.7% over the previous quarter. Most of the ATM only cards have been converted into debit cards but there are still some banks which offer ATM only cards to their account holders.

2.3 Smart Cards
Smart card is a chip based card which contains either micro chip or a magnetic strip with enhanced memory capability. It offers better security features compared with an ordinary card. Out of the total 6.5 million cards, 0.342 million cards are chip based which is 5.3% of the total cards. During this quarter the number of chip based cards increased by 8.5%.

3. VOLUME ON E-BANKING CHANNELS

3.1 Real Time Online Banking Transactions
During Q1 FY07-08, the number of RTOB transactions increased by 1.4% and their value increased by 9.4% as against previous quarter’s growth of 12.7% and 14.3% respectively. The trend in RTOB growth since Q4 FY06 is given in Fig. 4:

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

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Transactions (000)</th>
<th>Amount (Rs. Billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q4 FY06</td>
<td>6,626</td>
<td>2,399</td>
</tr>
<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>
</tbody>
</table>

3.2 Transactions through ATMs
ATMs transactions during the Q1 FY07-08 registered an increase of 11.2% while their amount increased by 18.1% as against an increase of 9.3% and 10.1% respectively in the previous quarter. ATMs are mostly used for cash withdrawal but are also a good mode of transaction for inter-bank/intra-bank funds transfer. Besides cash withdrawal and funds
transfer, this mode is also used for other purposes like Cash Deposits, Payment of Utility Bills etc. On average, 72 transactions were executed per day per ATM and average transaction size was Rs. 6,507. Growth in the use of ATMs since Q4 FY06 is given in Fig. 5

3.2.1 Fund Transfers
During Q1 FY07-08, account-to-account funds transfer transactions made through ATMs were 0.133 million, showing an increase of 29.5%. The value of such funds transfer was Rs.6.9 billion, depicting an increase of 50.3%. 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-bank/intra-bank funds can also be transferred 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 Q1 FY07-08 only 1,930 transactions of cash deposit through ATMs were reported as compared to 1,590 transactions during the previous quarter showing an increase of 21.5% in number and 18.8% increase in the amount of transactions from the previous quarter.

3.2.3 Utility Bills Payment
During Q1 FY07-08, banks reported 6,210 transactions of Utility Bills payment through ATMs involving an amount of Rs.8.3 million as compared to 7,440 transactions of Rs.8.3 million in the previous quarter, registering a decline of 16.5% in numbers but an increase by 13% in amount. One of the reasons for use of ATM for payments of utility bills is that banks have started implementing Payment Systems Department’s guidelines issued on December 18, 2006 in which banks were advised to offer facility of utility bills payment across ATM network in phases.
3.3 POS (Point of Sale) Transactions

The total number of POS machines recorded for this quarter was 50,004 compared with the previous quarter which recorded 46,329 machines, showing 7.9% increase from the previous quarter. The numbers of POS transactions increased by 7.6% while the amount of such transactions increased by 10.6% during this quarter. The previous quarter showed an increase of 4.8% in numbers and an increase of 8.8% in value of transactions. Transactions through POS since Q4 FY06 are given in Fig. 6:

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

3.4 Call Centre Banking

Banking through Call Centre/Integrated Voice Response (IVR) is also included in the electronic banking channels. The number of transactions through such channels reported by the banks for Q1 FY07-08 were 0.207 million involving an amount of Rs.2.7 billion, showing an increase of 21.9% in numbers and 17.8% 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 Q1 FY07-08, banks reported 0.283 million transactions involving an amount of Rs.8.8 billion, this shows a growth of 4.8% in numbers and an increase of 6.2% in amount over the last quarter.
3.6 Internet Merchant Banking

Transactions done through internet merchant account form part of Internet Merchant Banking. There were total 29 internet merchant accounts in Q1 FY07-08, however, only 17 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 a decline by 1.5% in number of transactions while the value of transactions increased by 18.5% in contrast with the previous quarter which recorded decline in number of transactions by 0.8% but the value of transactions increased by 87.5%.

3.7 Cross Border Transactions through E-Banking

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>
<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>Q4FY06-07</td>
<td>Q1FY07-08</td>
<td>Q4FY06-07</td>
</tr>
<tr>
<td>ATM</td>
<td>2,132</td>
<td>2,107</td>
<td>(259)</td>
</tr>
<tr>
<td>POS</td>
<td>2,554</td>
<td>2,824</td>
<td>(1,674)</td>
</tr>
<tr>
<td>INTERNET</td>
<td>44</td>
<td>48</td>
<td>(241)</td>
</tr>
<tr>
<td>Total</td>
<td>4,730</td>
<td>4,979</td>
<td>(2,174)</td>
</tr>
</tbody>
</table>

The above table indicates that the volume of cross border e-banking transactions (net inflow) decreased by 2.8% as compared to a decline of 2.3% 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 9.2 million as compared to 6.7 million in the previous quarter as shown in fig. 7.

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

<table>
<thead>
<tr>
<th></th>
<th>Q4 FY06</th>
<th>Q1 FY07</th>
<th>Q2 FY07</th>
<th>Q3 FY07</th>
<th>Q4 FY07</th>
<th>Q1 FY08</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATM</td>
<td>3,028</td>
<td>3,574</td>
<td>3,545</td>
<td>3,723</td>
<td>4,353</td>
<td>6,404</td>
</tr>
<tr>
<td>Internet</td>
<td>571</td>
<td>445</td>
<td>653</td>
<td>827</td>
<td>810</td>
<td>989</td>
</tr>
<tr>
<td>Mobile</td>
<td>343</td>
<td>276</td>
<td>368</td>
<td>386</td>
<td>478</td>
<td>666</td>
</tr>
<tr>
<td>Call Center / IVR</td>
<td>1,508</td>
<td>1,329</td>
<td>1,249</td>
<td>1,090</td>
<td>1,074</td>
<td>1,160</td>
</tr>
</tbody>
</table>

3.9 Contribution of ATMs, POS & Real Time Online Banking 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 transaction recorded for this quarter was Rs.6,507 as compared to the previous quarter which recorded transaction size of Rs.6,127. The share of Online Banking, POS, Call Centre and Internet Banking in the total E-Banking business was 30%, 15%, 1% and 1% respectively. However, in terms of amount, the contribution of RTOB banking is 96.1%, since this channel is mostly used for B2B transactions. The ATM transactions amount stands at number 2 with 3.1% 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).

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