



PAYMENT SYSTEMS REVIEW

(FISCAL YEAR 2014-15)

**PAYMENT SYSTEMS DEPARTMENT
STATE BANK OF PAKISTAN**

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Disclaimer

The figures and statistical analysis are based on data received from commercial banks. Although great deal of care has been taken to ensure the publication of correct information and data, however, State Bank of Pakistan disclaims responsibility for errors and omissions. This review is being published for the purpose of information and analysis etc. to the potential users. There may be minor differences due to rounding of numbers. If any errors are identified the same may be communicated to the below mentioned email address. The volume and value mentioned in larger units are approximate figures.

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Note: All values as on June 30, 2015 are Provisional

1. OVERVIEW OF COUNTRY'S PAYMENT SYSTEMS

SBP, being a core contributor to National Payment Systems development, is playing its key roles as a Regulator, Operator and Facilitator - in achieving its public policy objectives of safety and efficiency of National Payment Systems. SBP, being the central bank of Pakistan, has a strong interest in the smooth functioning of the Payment Systems in the country.

Payment and Settlement Systems infrastructure in Pakistan has been facilitating government, businesses and individuals to discharge their financial obligations and play a critical role not only in smooth functioning of the real economy but also in maintaining financial stability and promoting economic growth. Following are the major Payment Systems in Pakistan:

1. The Pakistan Real-time Interbank Settlement Mechanism (PRISM) - which is the RTGS system of Pakistan
2. Central Security Depositories - in SBP for Government Securities
3. Central Depository Company (CDC) - for corporate securities which is regulated by SECP
4. National Clearing Company of Pakistan Limited (NCCPL) - manages the clearing and settlement of all book entry securities
5. Paper instruments Clearing House
6. Two ATM switches

On the retail Infrastructure side, besides ATM networks, POS networks, Internet Banking, Mobile Banking, Call Center & IVR Banking are also serving the needs of general consumers for payments. Branchless Banking offered by Microfinance Institutions and some commercial banks are also adding their significant contribution in country's payments infrastructure. The number of ATMs has been consistently increasing over the last couple of years and reached to 9,597. On the other hand, number of POS terminals, users of Internet Banking and usage of Pay Cards are increasing. Other widely used electronic payment instruments worldwide are Direct Debits and Credit Transfers. Electronic Credit Transfers are offered by different Payment Systems in Pakistan, however, Direct Debit systems are currently not in vogue in Pakistan.

The increasing operational cost creates impediments for banks in investing in their payment infrastructure. Performance issues in the area of ATM services such as frequent cash outages, network and power availability issues, cost of alternate energy sources, problems in cash supply chain management also result in inefficiencies. Obsolescence of Payment Systems & channels and cyber security threats, law and order situation and issues in vendor support while 24/7/365 availability demand from general consumers are challenges for industry.

2. MAJOR DEVELOPMENTS AND FUTURE OUTLOOK

Payment Systems development efforts in Pakistan have traditionally been aimed at establishing Large Value Payment Systems for interbank settlements and bringing efficiency in retail payment processing for the banking customers. However, recent technological innovations have resulted in development of several Alternate Delivery Channels that are capable of not only bringing payment processing efficiency but also support in increasing financial access comparatively at a lower cost than the traditional banking channels. These innovations have started attracting a number of non banking players, processors and innovators generally in financial services and specifically in payment services market.

SBP's focus and efforts resulted in significant infrastructure, standardization and regulatory developments in the Payment Systems arena during the last few years. Major developments, therefore, in this connection include RTGS implementation, Interoperability of ATM Switches, Branchless Banking Regulations and collaborative launching of Pakistan Remittance Initiative (PRI) and Supporting government initiated social safety nets such as Benazir Income Support Programme (BISP) Cards by waiving of Inter-Switch Fee / Charges on ATM Transactions. Recent regulatory initiatives that led to significant market development include IBAN standard adoption, introduction of cheque layout and security standards. Banks are also aggressive in launching Pay Cards, Internet Banking, Mobile Apps based funds transfer services and wallet accounts and their usage is gradually increasing. Despite all the above developments, still a number of challenges and roadblocks are impeding further developments of the retail and large value Payment Systems in Pakistan.

The pace of change in payments globally is accelerating. The proliferation of mobile phones, the rapid growth of e-commerce, technological developments such as smart phones and Near Field Communication (NFC) and Card Not Present Payments are resulting in the emergence of new ways to pay. However, cash still remains the most preferred payment instrument for discharging obligations at the retail level in Pakistan. In this scenario, Rules for Payment Systems Operators (PSOs) and Payment System Providers (PSPs) were issued in October this year. The objective is to enhance competition among institutions in the arena of Payment Systems and to make payment transactions efficient, convenient and secure. Moreover, this initiative will encourage non bank entities to participate in payments industry to provide new products and services in the country. After the issuance of these Rules, not only the existing Payment System Operators would come under a formal regulatory ambit but also new Payment Institutions for Automated Clearing House, Electronic Payment Gateway for e-commerce, ATM Switch and Networks, Domestic POS and Pay card Schemes and others will be established and operated bringing products and service innovations based on competitive pricing.

The industry is also working on the implementation of Digital Image Based cheque processing whereby clearing process is expected to become more efficient reducing the physical transmission of cheques in the clearing process.

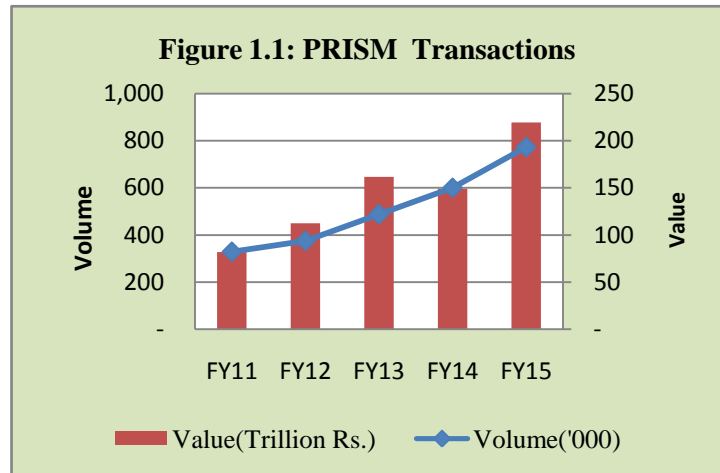
SBP has provided guidance to the industry to promote transformation of manual/ paper based transactions to electronic payments and also to automate back office functions of banks. In this regard, SBP is also considering to develop Rules for Electronic Funds Transfer. Moreover, SBP is also coordinating with the banking industry to implement Straight Through Processing (STP). Some banks are already proceeding to make necessary technological developments for the successful implementation of STP. Further, Rules for Clearing House and Risk Management Framework in Settlement Systems are also in development process. SBP is also working to provide guidelines to the industry on the security of online banking and payment cards. In order to further strength its regulatory oversight over Payment Systems, SBP is also working on developing Designation Framework of Payment Systems and Framework for Oversight.

3. PAYMENT SYSTEMS STATISTICS

3.1 Large Value Payment Systems – PRISM (RTGS)

During FY 2014-15, RTGS processed 772,421 transactions worth Rs. 219.40 Trillion as compared to 600,343 transactions worth Rs.149.30 Trillion in FY 2013-14, showing an increase of 29% in volume and 47% in terms of value. PRISM transactions are approximately 8 times of GDP (at current basic prices) of Pakistan and 59% of total number of transactions in the country for FY 2014-15.

During the FY 2014-15, Interbank Funds Transfer constitutes major portion in overall PRISM transactions in terms of volume while in terms of value the major contribution is of Securities Settlement constituting 54%. As on FY2014-15, Interbank Fund Transfers have increased both in terms of volume and value by 31 % and 42% respectively as compared to FY2013-14. Similarly, as on FY 2014-15, Securities Settlement has increased by 28% in terms of volume and 59% in terms of value as compared to last Fiscal Year 2013-14.

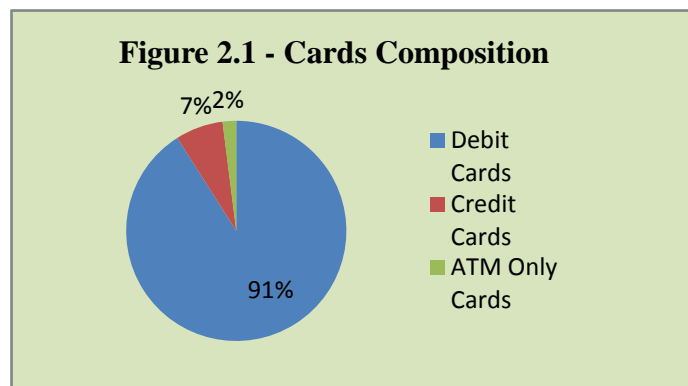


During Q4 of FY 2014-15, 214,202 transactions amounting to Rs. 80.70 Trillion were executed through RTGS showing an increase of 8% in volume and 57% in value as compared to that in Q3 of FY 2014-15.

3.2 Retail Payment Systems

3.2.1 Infrastructure

There are 11,937 branches of 35 commercial banks operating across the country, out of which 11,315 branches are online branches. The total number of ATMs installed across the country has reached now to 9,597 which include both On-site (at branch) and Off-site (away



from branch) ATMs. As of FY2014-15, there are 28 banks offering ATM services in Pakistan. ATMs per 100,000 population¹ have increased from 4.5 to 5 in FY 2014-15.

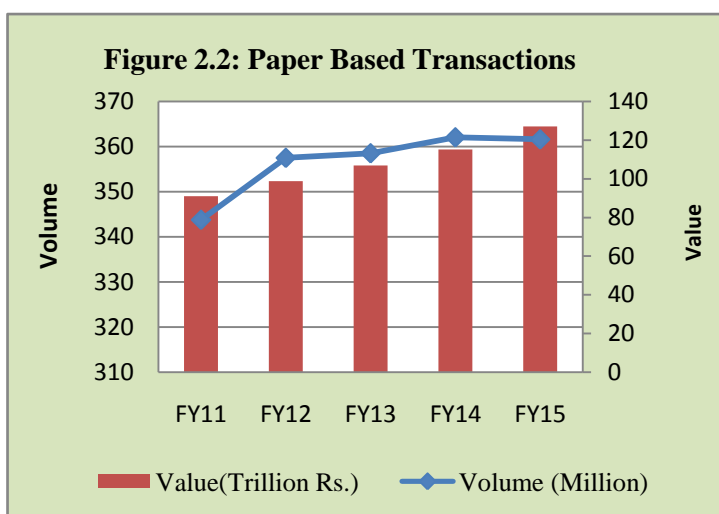
Among Cards, Debit Cards have shown an increasing trend over the years, the number of Debit Cards have crossed 25 Million at year end FY 2014-15 with 91% share in total number of Plastic Cards. Number of Credit Cards has reached to 1.40 Million at year end FY 2014-15 whereas ATM Only cards are just over 0.90 Million.

There are 6 banks managing POS services in Pakistan. In FY 2014-15, the number of POS machines have increased by 20% reaching to 41,183 as compared to FY 2013-14.

3.2.2 Paper Based Transactions

During FY 2014-15, the volume of Paper Based transactions nominally decreased by 0.12% from 362.04 Million in FY 2013-14 to 361.56 Million. In terms of value these transactions have increased by 10% from 115.16 Trillion in FY 2013-14 to 127.16 Trillion this year.

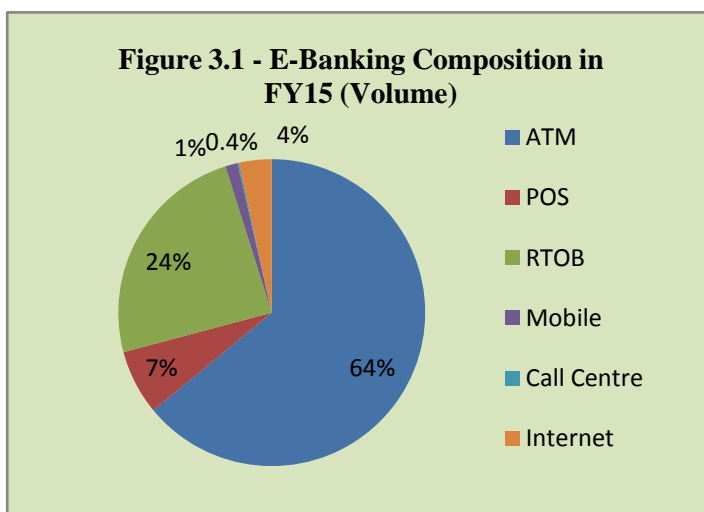
Paper Based transactions are approximately 34% of total retail payments.



During Q4 of FY 2014-15, approximately 92.50 Million transactions amounting to Rs. 34.60 Trillion were executed using paper instruments showing an increase of 8% in volume and 18% in value as compared to Q3 of FY 2014-15.

3.3 E-Banking Transactions

Over the past 5 years, e-banking

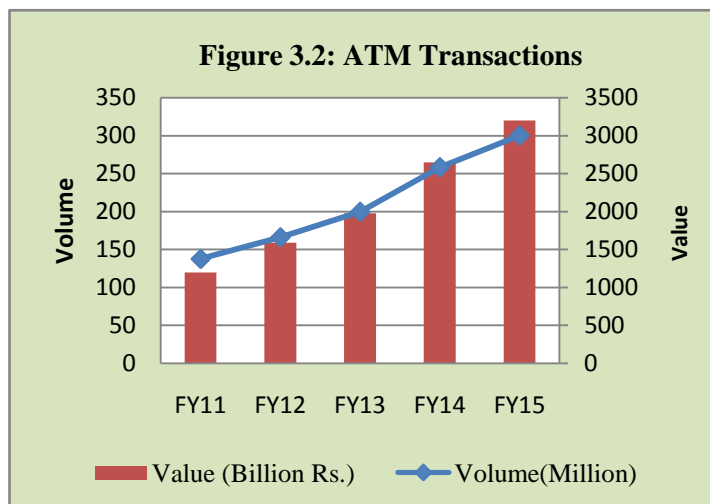


¹ Population equal to 186.19 Million as of FY2014-15 (Reference: Pakistan Bureau of Statistics)

transactions have witnessed a phenomenal growth. Volume of e-banking transactions has increased by 100% i.e. from 235 Million to 470 Million over the last 5 years while value of e-banking transactions have increased 62% from Rs. 22.1 Trillion to Rs.35.8 Trillion from FY 2010-11 to FY 2014-15. Last year alone has witnessed a growth rate of 16% and over 6% in volume and value respectively.

3.3.1 ATM Transactions

During the FY 2014-15, the volume of ATM transactions reached to around 300 Million amounting to Rs.3.20 trillion in value as compared to FY 2013-14 showing a growth rate of 16% in volume and 21% in value. Cash withdrawal is the major contributor in this increase of ATM transactions over the year contributing around 96% in volume and 83% in value. ATM transactions are 11% of the total



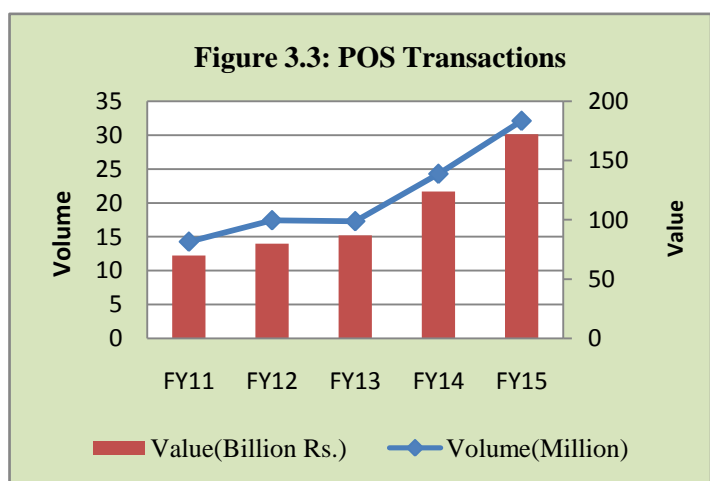
retail electronic payments for the FY 2014-15. During FY2014-15, Cash Withdrawal through ATMs has increased by 16% in terms of volume from 248.40 Million to 288.89 Million while value has increased by 23% from Rs.2.16 Trillion to Rs. 2.66 Trillion.

Utility Bill Payments have shown a significant increase both in volume and value whereby the volume has increased by 39% from 626 to 869 Thousands while value has increased by 79% from Rs.1,641 Million to Rs.2,934 Million as compared to FY 2013-14.

During Q4 of FY 2014-15, 84.20 Million transactions amounting to Rs. 892.60 Billion were executed through ATM network showing an increase of 14% in volume and 11% in value as compared to Q3 of FY 2013-14.

3.3.2 POS Transactions

The volume of POS transactions during FY 2014-15 reached over 32 million amounting to Rs.171 Billion, depicting a growth rate of 32% in volume and 38% in value as compared to the previous year.

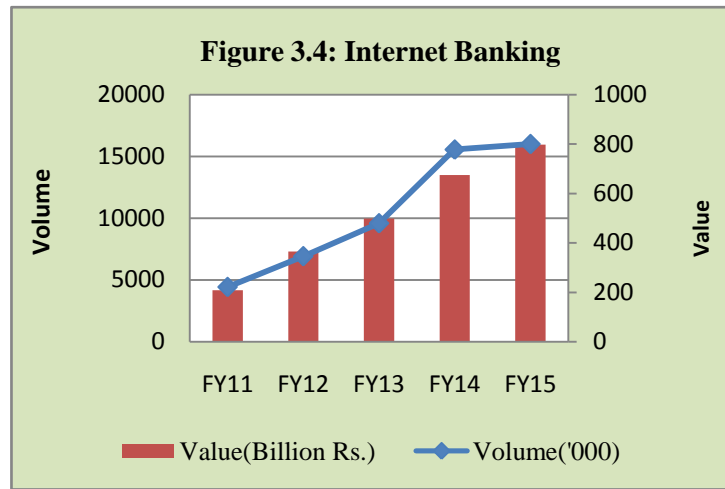


During Q4 of FY 2014-15, approximately

9.1 Million transactions amounting to Rs. 47.1 Billion were executed through POS machines showing an increase of 20% in volume and 17% in value as compared to third quarter of FY 2014-15.

3.3.3 Internet Banking

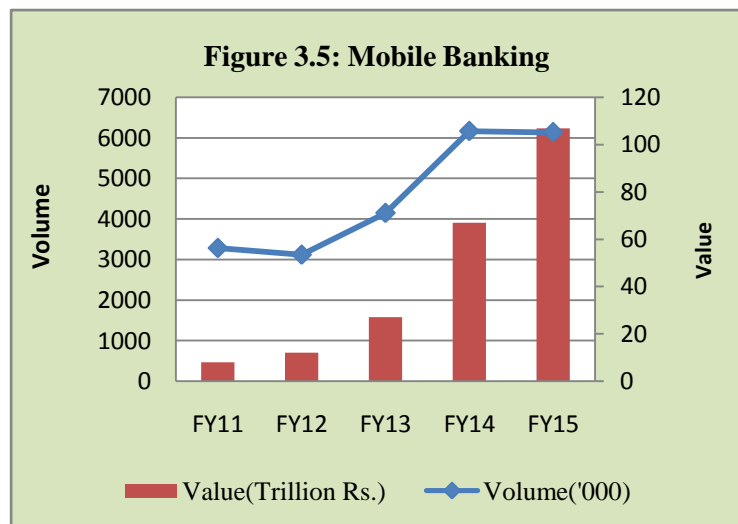
During FY 2014-15, volume of Internet Banking has increased by 3% and transaction value increased by 18% reaching 798 Billion as compared to FY 2013-14. The number of users of Internet Banking increased by 23% reaching over 1.8 Million as compared to the previous year.



During Q4 of FY 2014-15, approximately 4.50 Million transactions amounting to Rs. 219.50 Billion were executed through Internet Banking showing an increase of 11% in volume and 10% in value as compared to Q3 of FY 2013-14.

3.3.4 Mobile Banking

During FY 2014-15, the volume of Mobile Banking² transactions showed a slight decline reaching to 6.14 Million from 6.16 Million. However, the value increased by 59% reaching Rs.107 Billion as compared to FY 2013-14.



During the FY 2014-15, the largest share in Mobile Banking in terms of volume is of Utility Bills Payment which is 52% while in terms of value, the largest share has been contributed by third party Account to Account Funds Transfer having 53% share.

As compared to FY 2013-14, Mobile Banking Registered users have increased by 36% reaching to 2.27 Million by the end of FY 2014-15.

During Q4 of FY 2014-15, 1.47 Million transactions amounting to Rs. 32 Billion were executed through Mobile Banking showing an increase of 14% in volume 16% in value as compared to Q3 of FY 2013-14.

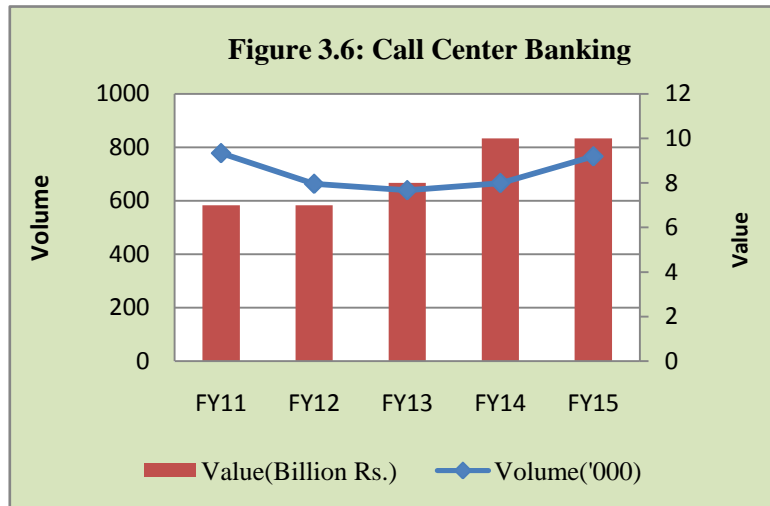
² This does not include Branchless Banking Data.

3.3.5 Call Center & IVR Banking

During FY2014-15, the volume of Call Center & IVR Banking transactions increased by 15% from 666 Thousand to 766 Thousand while value remained constant at 10 Billion as compared to FY2013-14.

During the FY 2014-15, the largest share in Call Center Banking in terms of volume is of Payment through Call

Center having 44%. In terms of value the largest share (48%) is of Account to Account Funds Transfer. Call Center Registered users increased by 20% reaching to 1.67 Million in FY2014-15.

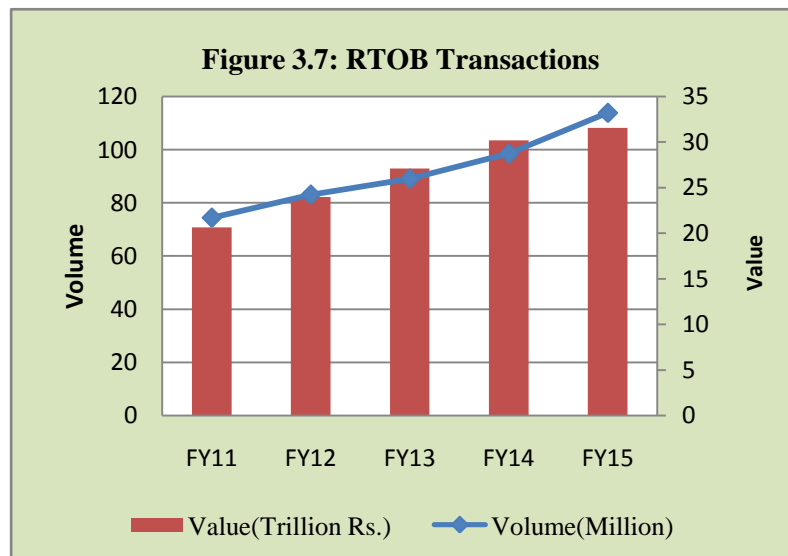


During Q4 of FY 2014-15, 0.19 Million transactions amounting to Rs. 2.39 Billion were executed through Call Center & IVR showing an increase of 1.6% in volume and 7% in value as compared to third quarter of FY 2014-15. Though the growth seems nominal, however the increasing trend during last few years indicates that this is also a convenient and useful Alternate Delivery Channel for banking customers.

3.3.6 RTOB Transactions

RTOB transactions represent all those transactions which are executed through banks' Core Banking Systems on Real-Time basis.

The volume and value of RTOB transactions have reached to around 113.8 Million and Rs. 31.6 Trillion respectively in FY 2014-15 showing an increase of 16% in volume and 5% in value as compared to that of FY 2013-14.



During the FY 2014-15, the largest share in RTOB Transactions in terms of volume has been contributed by Cash Deposits having 34% share followed by Real Time Account to Account Funds Transfer having

29% share. In terms of value, the largest share has been contributed by Real Time Account to Account Funds Transfer having 58% share followed by Real Time Third Party Account to Account Funds Transfer having 26% share.

During Q4 of FY 2014-15, 32 Million transactions amounting to Rs. 8.59 Trillion were executed through Real Time Online Banking (RTOB) showing an increase of 13% in volume and 11% in value as compared to third quarter of FY 2013-14.

3.4 Payment Systems at a Glance

As on June 30, 2015

Sr. No.	Description	Number
Financial Institutions		
1	Commercial Banks	35
2	Microfinance Banks	10
3	Development Financial Institutions	8
Categorization of Banks		
4	Public Sector Banks	5
5	Local Private Banks	21
6	Foreign Banks	5
7	Specialized Banks	4
8	PRISM's Direct Participants	45
Payment Systems Infrastructure		
9	Online Branches	11,315
10	Manual Branches	622
11	Automated Teller Machines (ATMs)	9597
12	Interoperable Switches	2
13	Banks Managing POS	6
14	Point of Sale (POS) Machines	41,183
Payment System Services by Banks		
15	Banks Providing Internet Banking	21
16	Banks Providing Mobile Banking	16
17	Banks Providing Call Center & IVR Banking	16
18	Banks issuing Credit Cards	12
19	Banks issuing Debit Cards	27
20	Banks issuing Prepaid Cards	9
21	Banks having ATMs	28
Per 100,000 Statistics*		
22	Online Branches per 100,000 Population	6
23	ATMs per 100,000 Population	5
24	POS per 100,000 Population	22

* Population value equal to 186.19 million. Reference: State Bank of Pakistan

3.5 Payment Systems Infrastructure

S.No	Infrastructure	FY2010-11	FY2011-12	FY2012-13	FY2013-14	FY2014-15 ^P
1	ATMs	5,200	5,745	6,757	8,240	9,597
2	POS Machines	37,232	34,879	33,748	34,428	41,183
3	Credit Cards	1,384,814	1,231,000	1,223,271	1,333,827	1,369,958
4	Debit Cards	12,631,959	15,984,000	20,202,558	23,061,171	25,024,235
5	ATM Only Cards	1,484,005	1,673,132	932,971	957,807	900,270
6	Total Bank Branches	9,362	10,020	10,395	11,199	11,937
7	Online Branches Network	7,117	9,291	9,827	10,640	11,315
8	Internet Registered Users	839,948	1,005,428	1,246,373	1,478,301	1,811,707
9	Mobile Registered Users	916,780	1,383,588	1,807,306	1,671,693	2,267,688
10	Call Center Registered Users	7,920,193	9,635,522	11,565,713	13,910,779	16,624,377

3.6 Payment Systems Transactions – Year Wise

(No. in Thousand & Amount in Billion Rupees)

S.No	Type of Transactions	FY2010-11		FY2011-12		FY2012-13		FY2013-14		FY2014-15 ^P	
		No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount
1	PRISM Transactions	329	81,882	375	112,533	488	161,748	600	149,303	772	219,362
2	ATM Transactions	137,659	1,196	166,158	1,589	199,779	1,979	258,483	2,648	300,231	3,202
3	POS Transactions	14,287	70	17,447	80	17,311	87	24,293	124	32,035	171
4	RTOB Transactions	74,407	20,652	83,070	23,969	89,058	27,091	98,491	30,173	113,800	31,560
5	Internet Banking	4,436	209	6,925	365	9,589	499	15,552	676	15,999	798
6	Mobile Banking	3,286	8	3,121	12	4,150	27	6,167	67	6,139	107
7	Call Center Banking	778	7	663	7	639	8	666	10	766	10
8	Paper Based Transactions	343,755	91,054	357,490	98,741	358,504	106,831	362,039	115,157	361,589	127,164

3.7 Payment Systems Transactions – Quarter Wise

(Number in Thousands & Amount in Million Rupees)

S.No	Transactions Type	1st Qtr FY2014-15		2nd Qtr 2014-15		3rd Qtr FY2014-15		4th Qtr FY2014-15 ^P	
		No	Amount	No	Amount	No	Amount	No	Amount
1.0	Paper Based	89,243	30,275,473	94,286	32,868,802	85,579	29,418,779	92,480	34,601,055
1.1	Cheques								
a	Cash	41,784	4,087,163	43,001	4,417,168	40,200	3,864,008	42,541	4,930,164
b	Transfer	26,808	14,862,237	30,553	16,581,949	24,500	15,247,056	29,233	17,466,622
c	Clearing	15,565	6,719,747	15,672	7,035,422	14,631	6,086,052	15,123	6,220,851
d	Refund	34	70,436	25	66,559	24	69,841	24	44,455
1.2	Pay Orders	2,110	1,620,502	2,130	1,728,380	2,141	1,533,752	2,438	2,651,543
1.3	Demand Drafts	1,442	615,496	1,396	694,204	1,380	588,711	1,593	685,205
1.4	Telegraphic Transfers	496	731,718	471	708,438	445	593,515	491	780,126
1.5	Mail Transfers	223	589,773	195	571,196	183	555,488	182	500,712
1.6	Dividend Warrants	168	43,255	234	39,038	848	29,418	267	44,777
1.7	Direct Debit	569	932,854	549	1,021,488	513	847,563	539	1,274,059
1.8	Coupons & refund vouchers	44	2,291	59	4,961	715	3,376	49	2,541
2.0	PRISM Transactions¹	171,545	44,785,087	188,424	42,420,415	198,250	51,495,918	214,202	80,660,817
2.1	Interbank Fund Transfer	143,917	16,962,338	159,427	15,051,314	168,321	13,813,939	184,596	41,301,127
2.2	Retail Cheque Clearing	12,048	3,645,596	10,926	3,232,958	11,038	2,626,423	11,431	3,404,279
2.3	Securities Settlement	15,580	24,177,153	18,071	24,136,142	18,891	35,055,557	18,175	35,955,410
3.0	ATM Transactions	69,869	747,947	72,201	757,760	73,932	804,015	84,229	892,604
3.1	Cash Withdrawal	66,977	606,572	69,612	637,843	71,156	672,561	81,136	745,044
3.2	Cash Deposit	1	13	1	8	1	10	1	9
3.3	Utility Bills Payment	208	757	201	624	210	523	250	1,030
3.4	A/c to A/c Funds Transfer	1,175	60,058	1,021	48,325	1,101	52,034	1,226	57,936
3.5	Third Party A/c to A/c Funds Transfer	1,508	80,547	1,367	70,960	1,465	78,887	1,617	88,585
4.0	Points of Sale(POS) Transactions	7,656	42,297	7,676	41,478	7,570	40,262	9,133	47,105
5.0	Internet	3,678	191,606	3,698	187,463	4,085	199,095	4,538	219,488
5.1	Payment Through Internet (Excl. Util. Bill Payments)	578	82,985	546	78,511	559	76,482	608	80,791
5.2	Utility Bills Payment	970	3,404	1,040	2,483	1,080	2,085	1,180	2,788
5.3	A/c to A/c Funds Transfer	985	54,235	1,037	52,717	1,180	62,012	1,386	73,293
5.4	3rd Party A/c to A/c Funds Transfer	1,143	50,982	1,076	53,751	1,266	58,516	1,364	62,615
6.0	Mobile	1,887	24,361	1,503	23,819	1,285	27,203	1,465	31,506
6.1	Payment Through Mobile (Excl. Util. Bill Payments)	80	412	91	464	89	537	92	617
6.2	Utility Bills Payment	1,267	2,496	845	1,202	501	331	584	461
6.3	A/c to A/c Funds Transfer	220	7,965	248	9,388	308	12,151	344	13,978
6.4	3rd Party A/c to A/c Funds Transfer	320	13,488	318	12,766	387	14,185	445	16,450
7.0	Call Center	203	2,581	185	2,324	187	2,231	190	2,388
7.1	Payment Through Call Center (Excl. Util. Bill Payments)	87	743	84	691	83	706	83	747
7.2	Utility Bills Payment	88	623	73	380	75	283	79	398
7.3	A/c to A/c Funds Transfer	26	1,122	27	1,164	26	1,153	26	1,133
7.4	3rd Party A/c to A/c Funds Transfer	2	93	2	89	2	89	2	110
8.0	Real Time Online Banking (RTOB)	25,951	7,404,257	27,062	7,814,391	28,581	7,750,897	32,206	8,590,163
8.1	Real Time Cash Withdrawals	5,486	495,991	5,880	518,170	6,338	519,766	6,803	560,973
8.2	Real Time Cash Deposits	8,689	734,792	9,195	751,336	10,183	775,323	10,110	815,200
8.3	Real Time A/c to A/c Funds Transfers	7,058	4,170,208	7,612	4,570,186	7,807	4,506,477	10,140	4,989,106
8.4	Real Time 3rd Party A/c to A/c Funds Transfers	4,717	2,003,266	4,374	1,974,700	4,252	1,949,332	5,152	2,224,884

1. The numbers are in actual

P Stands For Provisional