

Payment Systems Review

FISCAL YEAR 2018-19

Payment Systems Department

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Table 1 - Payment Systems Snapshot

Items	As on end June, 2019	As on end June, 2018
Population (Million) ¹	204.65	200.96
Currency in Circulation ² (Rs. Trillion)	5.3	4.6
Number of Banks' Accounts ³	53,923,303	50,565,334
Technology Infrastructure⁴		
Basic Telephony Subscribers (Million)	3	3
Basic Telephony Tele-density %	1.3	1.30
Cellular Subscribers (Million)	161	150
Cellular Tele-density %	76.76	72.81
Broadband Subscribers	71	58
Broadband Penetration Rate %	33.81	28.27
3G/4G Subscribers (Million)	69	56
3G/4G Penetration Rate %	32.72	27.18
Payment Systems Infrastructure		
Number of Banks (and their branches)	45(15,598)	45(14,970)
Commercial/Specialized ⁵	34(14,395)	34(13,908)
Microfinance	11(1,203)	11(1,062)
Number of Banks having:		
ATMs	33	32
Point of Sale	9	9
Internet Banking	27	28
Mobile Phone Banking	26	20
Call Center Banking	22	21
Number of PRISM System Participants	45	43
Number of Registered e-Commerce Merchants	1,362	1,094
Total Number of ATMs	14,722	14,019
Number of ATMs Interoperable Switches	1	1
Number of Cash Deposits Machines (CDMs)	65	52
Total Number of POS Machines	56,911	53,511
Payment Systems Transactions 2018-19	Volume (Million)	Value (in Billion PKR)
PRISM System	2.5	398,168.9
RTOBs	187.4	49,430.7
ATMs	523.3	6,399.6
POS	72.4	366.2
Internet Banking	39.7	1,722.2
Mobile Phone Banking	41.1	866.8
Call Centers/IVR Banking	0.3	9.2
e-Commerce	5.7	26.1
Paper-based Transactions	465.3	145,853.9

¹ Population figures derived from Pakistan Bureau of Statistics – Gross Domestic Product of Pakistan² As on June, 2019 Monthly Statistical Bulletin, SBP³ As on December, 2018 is used⁴ www.PTA.gov.pk As on end June, 2019⁵ Includes overseas branches

1. Overview

In recent years, the payment and settlement systems of the country has been significantly changing on account of State Bank of Pakistan (SBP) efforts to promote digital payments as alternative to cash. New regulations such as Payment Systems Designation Framework, Guidelines for Clearing Operations, new rules for PRISM system, Electronic Fund Transfer Regulation, Electronic Money Institutions and Guidelines for White Labels ATMs have been issued by SBP in recent years to provide a level playing field to all the stakeholders.

During the year FY19, country's core payment systems infrastructure remained operationally resilient. All the channels of payment systems showed significant growth compared to the previous year. The large-value payment system i.e. Pakistan Real Time Interbank Settlement Mechanism (PRISM) processed 2.5 million transactions amounting to Rs.398.2 trillion. These transactions showed significant growth of 47.2% and 10.3% in both volume and value of transactions compared to previous year i.e. FY18. In these transactions, the transactions with regards to the 3rd Party customers' transfers has the highest share of 84.1% (i.e. 2.1 million transactions) whereas Government securities settlement transactions have the highest share of 69.0% (Rs.274.9 trillion in value of transactions).

The e-Banking channels i.e. real time online branches (RTOB), ATMs, e-Commerce, Internet, Mobile Phone and Call Centers/ IVR Banking collectively processed 869.8 million transactions of value Rs.58.8 trillion. These transactions showed significant growth of 15.0% and 24.1% in both volume and value of transactions compared to previous year i.e. FY18.

A comparative summary of payment systems' transactions is as under:

Table 2 - Comparative Summary of Payment Systems' Transactions

Payment Systems	FY18		FY19		Growth	
	Volume	Value	Volume	Value	Volume	Value
PRISM	1.7	361.0	2.5	398.2	47.2%	10.3%
e-Banking	756.4	47.4	869.8	58.8	15.0%	24.1%
Paper-based	466.5	150.4	465.3	145.8	(0.3%)	(3.0)
Total	1,224.4	558.8	1,337.6	602.8	9.2%	7.9%

2. Payment Systems in Pakistan

SBP is the regulator of country's payment systems and has also adopted the roles of overseer, operator and catalyst to achieve its tactical objectives to contribute towards financial stability and enhance public's confidence in payment systems. Presently, different types of payment systems are available through different platforms and these can be categorized into two major categories i.e. Large-Value Payment System and Retail Payment Systems.

2.1 Large-Value Payment System

The large-value payment system of Pakistan i.e. PRISM is owned and operated by SBP. It enables its direct participants to settle their payment obligations in Real Time on Gross basis. PRISM is primarily used by financial institutions to settle inter-bank and customers' transactions. The system allows settlement of Government securities trades as well as Multi-lateral Net Settlement Batches processed through Clearinghouse of paper-based instruments, Capital markets transactions (via NCCPL) and settlement of electronic channels clearing via 1Link.

As on June 30, 2019, PRISM system has 45 Direct Participants which includes 32 Banks, 2 Specialized Banks, 2 MFBS, 8 DFIs and one non-bank which is Central Depository Company (CDC). During FY19, PRISM processed 2.5 million transactions amounting to Rs.398.2 trillion. Both the volume and value of total transactions processed by PRISM system has shown a significant growth of 47.2% and 10.3% respectively compared to the previous year. This trend is very encouraging and it shows that SBP's awareness initiatives relating to PRISM are working well. In the total volume of PRISM's transactions, the highest share 84.1% pertains to 3rd Party customers' transfers of which 38.1% pertains to the transactions of home remittances. On the other hand, in the total value of transactions Government securities settlement has the highest share of 68.9% followed by 19.2% share of interbank fund transfers, 3rd Party fund transfer transactions have value share of 7.9% and settlement ancillary payments have value share of 3.9%. The volume and value-wise shares are depicted as under:

PRISM Transactions – FY19

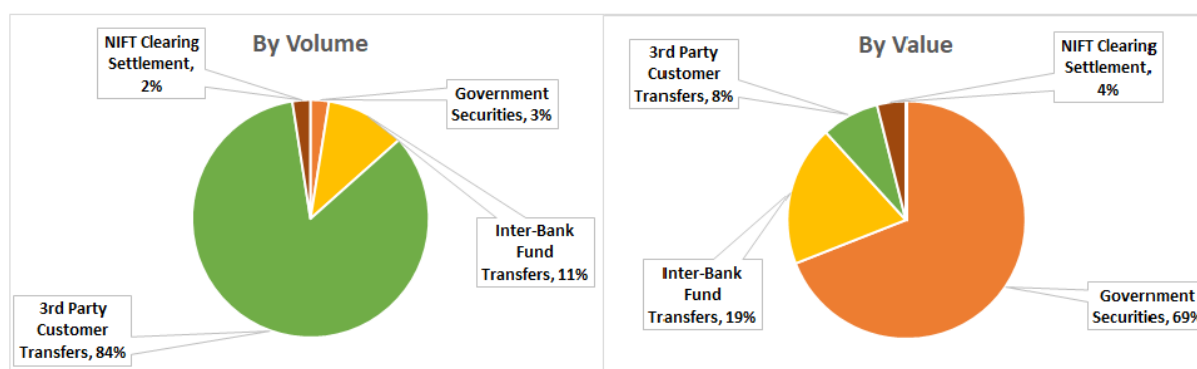


Figure 1 - Pie diagram - PRISM Transactions in FY 2019

2.2 Retail Payment Systems

Retail payment systems (RPS) generally have higher transaction volumes and lower average values compared with large value/wholesale payments systems. RPS facilitates e-Commerce and robust commercial activities within an economy. Recent developments in retail payment systems provide customers a wide array of choices with greater level of efficiency and safety in their transactions. Further, final settlement of many of these retail systems are settled through PRISM, thus enhancing safety and efficiency of the payment systems in the country.

2.2.1 E-Banking Infrastructure

As on June 30, 2019, there were 32 Scheduled Banks, 11 Microfinance Banks and 2 Specialized Banks. Further, 8 Development Finance Institutions (DFIs) were also functional in the country. The total number of Banks Branches with YoY growth of 4.2% reached to 15,598 from 14,970. Among the total Banks' Branches 14,395 were of scheduled Banks and 1,203 were of Microfinance Banks Branches while 89 branches were working in foreign countries. Besides, 248 sub-branches and 415 permanent booths have been providing limited banking facilities to the customers in Pakistan. Except 28 branches, all local branches in the country were Real Time Online Branches (RTOBs).

As on June 30, 2019, the total number of installed ATMs reached to 14,722 from 14,019 of previous year depicting YoY growth of 5.0%. These ATMs have been installed by 33 banks. Out of these ATMs, 11,990 (81.4%) were On-site ATMs whereas 2,727 (18.5 %) were Off-Site ATMs, installed at corporate offices, hospitals, shopping Malls etc. Moreover, 5 Mobile ATMs were also operational. There are 5,298 ATMs, which are also equipped with sensors for biometric authentication. Further, there are 65 Cash Deposits Machines (CDMs) with 49 CDMs with dual functionality of cash withdrawals and deposits. All these ATMs are connected with one ATM interoperable Switch i.e. 1Link.

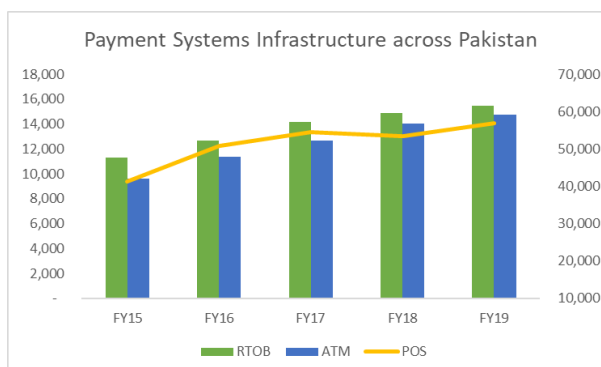


Figure 2 - Snapshot of Payment Systems Infrastructure across Pakistan

The total number of POS machines showed an annual increase of 6.4% and reached to 56,911 from 53,511 last year. Further, Internet Banking, Mobile Phone Banking and Call Centers/ IVR Banking were being offered by 27, 26 and 22 Banks/ Microfinance (MFBs) respectively.

The number of payment cards issued in Pakistan reached to 42.3 million in June, 2019 from 40.9 million in end of June, 2018. These cards showed YoY growth of 3.2 % compared to previous year. The increase is not encouraging enough, however SBP has mandated that in order to further secure card based payments, all the payment cards in Pakistan (except Social Welfare Cards) are to be recarded in order to comply with SBP instruction of securing transactions following EMV Chip and Pin standards. Out of these Cards, 58.8 % are Debit Cards, 20.1% are ATMs only proprietary Cards, 16.8% are Social Welfare Cards, 4.3% are Credit Cards and remaining Pre-Paid Cards.

2.2.2 E-Banking Transactions

During FY19, 869.8 million transactions of value Rs.58.8 trillion were processed through retail e-Banking channels. These transactions showed YoY growth of 15.0 % and 24.1% in volume and value of transactions respectively compared to previous year. In total e-Banking transactions, RTOBs transactions' accounted for the largest share of 84.0% in value of transactions with volume share of 21.5% whereas ATMs has the largest share of 60.2% in volume of transactions with a value share of 10.9%. POS transactions contributed 8.3% in volume with value share 0.6% only, Internet Banking accounted for a share 4.6% and 2.9% in volume and value of transactions respectively. The residuals share of e-Banking transactions is contributed by Mobile Phone Banking, Call Centers/ IVR Banking and e-Commerce transactions.

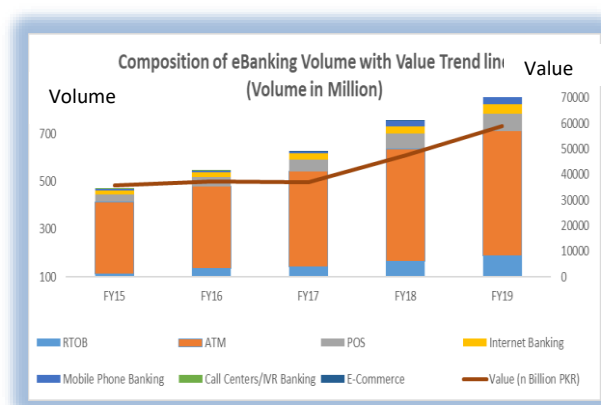


Figure 3 - Composition of eBanking Volume with Value Trend line

2.2.2.1 Real Time Online Branches (RTOB) Transactions

RTOB channel provides online banking facility to all its customers' across all the branch network of the same Bank. During the year under review, this channel processed 187.4 million transactions of Rs.49.4 trillion. These transactions depicted YoY growth of 13.1% and 24.0% in volume and value of transactions respectively compared to previous year.

During FY19, in terms of number of transactions Cash Deposits transactions has the highest share of 47.5% (89.0 million) in total RTOBs' transactions whereas online funds transfer transactions to other branches have the highest share of 73% (Rs.49.4 trillion) in value of total RTOBs transactions. It is being observed that RTOBs has the growing trend of transactions both in term of volume and value of transactions. The yearly trend is depicted in the above graph.

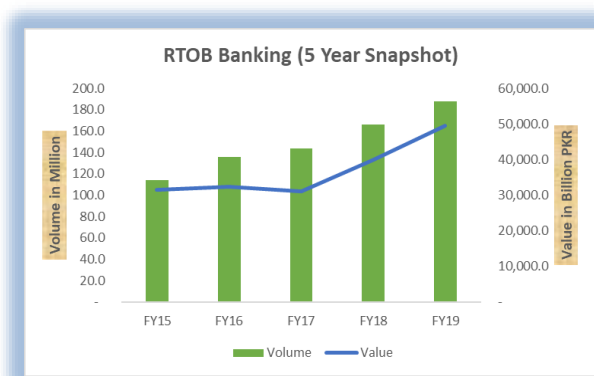


Figure 4 - Five year snapshot for RTOB Banking

2.2.2.2 ATM Transactions

As a core banking touchpoint and major enabler for access to funds, ATMs are still playing a central role in the broad context of modern banking. The wide selection of services like Cash withdrawals, Funds transfers, and Utilities bills payments etc. have been emerged on ATM in the recent years. Despite availability of wide range of services on ATMs, Cash withdrawals still has the highest volume and value of truncations. The channel leads to reduction in the number of branches. As on end June 2019, total number of ATMs were 14,722. During the year FY19. These ATMs processed 523.3 million transactions amounting to Rs.6.4 trillion. These transaction showed a YoY growth of 11.2% by volume and 15.3% by value. As the number of ATMs in the country are growing, the size of ATMs transactions as well as number of transaction per ATM are also showing rising trend. During the year under review, the average size of ATM transaction was approximately Rs.12,229 per transaction and 35,544 transactions were processed per ATM, compared with average size of Rs.11,792 per ATM transaction and 33,569 transactions processed per ATM last year. The trend of ATM transactions in the above graph showed that both volume and value of ATMs transactions are also increasing. Further, ratio of On-Us versus Off-Us Cash withdrawal was approximately 62:38 by volume and 68:32 by value which shows that customers generally prefer to withdraw cash from their own bank's ATMs.

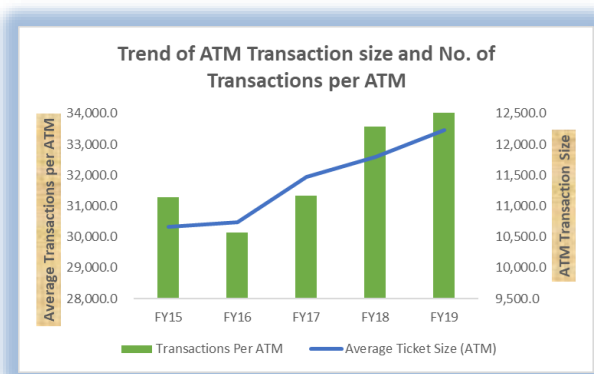


Figure 6 - Comparison of ATM Ticket Size vs ATM Transactions per ATM

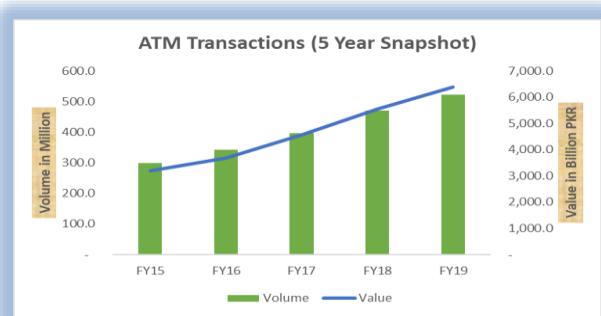


Figure 5- ATM Transactions Five Year Snapshot

2.2.2.3 POS Transactions

In Pakistan 5 banks are in the business of open-loop POS acquiring whereas 4 banks are providing close-loop services on POS. The turnover of 72.4 million POS transactions valuing Rs. 366.2 billion was recorded in FY19 as compared to 63.5 million transactions valuing Rs. 297.0 billion in FY18, showing a YoY growth 14.0% by volume and 23.3% by value of transactions. POS transactions have 8.3% share in total volume of transactions with value share 0.6 % showing low uptake of merchant onboarding and insignificant usage of Debit Cards for retail transactions. However, both the Average size of POS and number of transactions per POS have shown a growing trend.

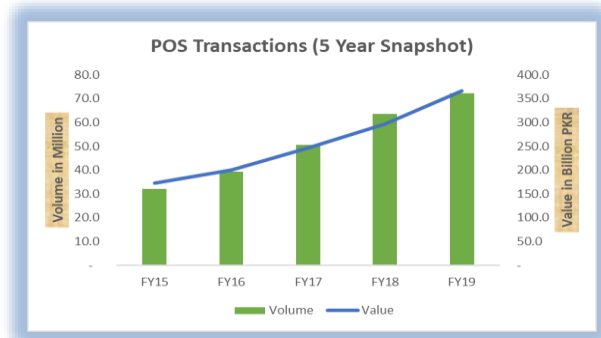


Figure 7 - POS Transactions Five Year Snapshot

2.2.2.4 Internet Banking Transactions

Banks are offering a variety of financial services through Internet Banking (IB) like Intra-bank & Interbank Fund transfer, scheduled fund transfers, Utility Bills Payments, Mobile Air-time top up, Intra-bank credit card payments, School fee payments etc. As on end June, 2019, 27 banks were offering Internet Banking and there were 3.3 million registered Internet Banking Users with these banks. During the year FY19, this channel processed 39.7 million transactions amounting to Rs.1.7 trillion. These transactions showed a YoY growth of 27.3% and 36.4% respectively compared to previous year. In the total Internet Banking transactions the share of Intra-Bank Funds transfers transactions is 23.5% (9.3 million) and 25.4% (Rs. 437.5 billion) in volume and value of transactions respectively whereas the share of Inter-Bank Funds transfers transactions in volume and value of transactions is 37.5% (14.9 million) and 44.6% (Rs. 767.4 billion) respectively. Utility Bills Payments contributed 31.6% (12.6 million) in volume and 3.7% (Rs. 63.7 billion) in value of transactions and the residuals shares is contributed by other miscellaneous payments including school/ university fees submission, mutual funds payments, credit cards payment etc. Internet Banking also facilitated 111.7 million non-financial transactions, which include pay order, cheques books, bank account statements and Debit Cards requests etc. The Internet Banking also depicting a growing trend in both volume and value of transactions, which is quite encouraging. It can easily be inferred that the use of internet banking service has gauged substantial traction during the last fiscal year.

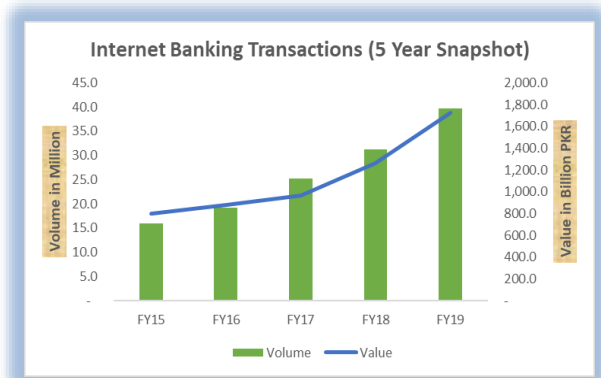


Figure 8 - Internet Banking Transactions Five Year Snapshot

2.2.2.5 Mobile Banking Transactions

Mobile Phone/ App based Banking is being offered by 26 Banks/ MFBs to 5.6 million registered users as of end of June, 2019. This Channel processed 41.1 million transactions worth Rs. 866.8 Billion during FY19 showing a YoY growth of almost double the volume and value. The trend showed a growth of 88.4 % and 111.5% in volume and value of transactions respectively.

Intra-bank and Inter-bank fund transfer were the main contributors in total Mobile Phone Banking transactions. Intra-bank fund transfers contributed 26.6% (10.9 million) transactions by volume and 42.1% (Rs.364.7 billion) transactions by value. Interbank fund transfers contributed 22.1% (9.1 million) transactions by volume and 42.4% (Rs.367.2 billion) transactions by value. Utility Bills Payments had the volume of 45.7% (18.8 million) transactions and 2.64% (Rs.20.6 billion) transactions by value within overall Mobile Banking volume and value transactions respectively and insignificant residual share is contributed by miscellaneous payment using mobile phone app. The channel depicted growing trend of transactions. During the year, FY19 it showed a significant growth compared to the previous years, as evident from the trend shown in figure no. 9.

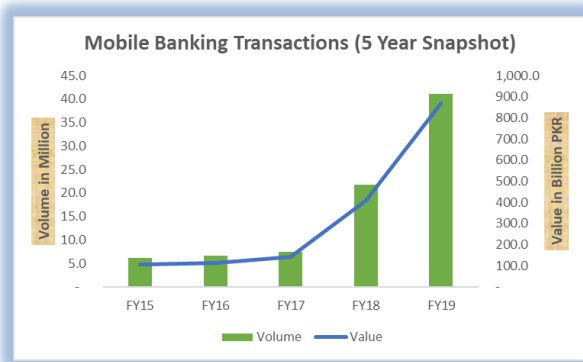


Figure 9 - Mobile Banking Transactions Five Year Snapshot

2.2.2.6 Call Center/ IVR Banking Transactions

During the year FY19, Call Centers/ IVR Banking Channel processed 0.3 million transactions amounting to Rs. 9.2 billion. This channel facilitates Intra and Inter-Bank Funds transfers, Utilities Bill Payments. As on end June 2019, there were 29.7 million Call Centers/IVR Banking Channel registered users with Banks. It also facilitated 17.8 million non-financial transactions during the year.

2.2.2.7 E-Commerce Transactions

There were 1,362 locally registered e-Commerce Merchants having their merchant accounts in 6 banks as of end of June, 2019 compared to 1,094 last year, showing limited boarding of e-Commerce merchants in the country. In Pakistan, International Payment Gateway Services (IPGs) are being provided by 4 banks, whereas 2 microfinance banks were also working as merchant aggregators and are providing e-commerce gateway to their clients while leveraging on 4 IPGs in Pakistan. Consumers carried out 5.7 million online transactions of worth Rs.26.1 billion on these locally registered e-Commerce Merchants during the year FY19. These transactions showed a significant YoY growth of 66.4% and 39.5% by volume and value respectively.

In addition to the above, domestically issued Debit, Credit and Pre-paid cards collectively processed 10.0 million transactions of Rs.51.3 billion on local and International e-Commerce merchants. In these e-Commerce transactions, Credit Cards has the highest share of 54.4% (5.5 million) and 66.6% (Rs.34.1 billion) in volume and value of transactions respectively.

2.2.2.8 Payment Cards Transactions

In Pakistan, payment cards can be categorized as Credit, Debit, Proprietary ATM, Social Welfare and Pre-Paid Cards. As on end-June 2019, there were 42.2 million total cards in circulation. Collectively, these cards processed 607.8 million transactions amounting to Rs. 6.8 trillion and depicted YoY growth of 11.4% and 13.5% by volume and value respectively. Details of Cards is as under:

2.2.2.8.1 Credit Cards

As on end June, 2019, the number of reported Credit Cards in circulation is 1.6 million. These cards processed 39.2 million transactions of value Rs. 217.1 billion during the year FY19 and showed a YoY growth of 11.4 % and 13.5% in volume and in value of transactions compared to the previous year. The

total volume of Credit Card transactions has 85.6% share on POS transactions and 13.9% share in e-Commerce transactions whereas in term of value, these transactions has 83.3% share of usages on POS, 15.7% share of usage for e-Commerce transactions and the residuals share of transactions pertains to ATMs. The average transactions size by Credit Cards is Rs. 5,532 whereas, on average, each credit card conducted 25 transactions.

2.2.2.8.2 Debit Cards

As of end of June 2019, the number of reported Debit Cards in circulation is 24.8 million. During the year under review, these cards processed 493.4 million transactions worth Rs. 5.8 trillion. These transactions' showed a YoY growth of 12.5% and 13.9% in volume and value of transactions respectively. In the total volume of transactions' processed by Debit Cards, ATMs transactions' have 89.4% share with value share 96.5% whereas POS transactions' has 9.8% share in volume and 3.2% share in value of transactions'. These residuals share of Debit Cards is contributed by e-Commerce transactions proceed by using Debit Cards for online purchases of Card Not Present (CNP) environment. The average transactions size by Debit Cards is Rs. 11,720 whereas 20 transactions were processed by a single card.

2.2.2.8.3 Proprietary ATMs only Cards

Proprietary ATMs only cards are issued by the 14 banks for cash withdrawals on ATM. As on end June 2019, there were 8.5 million ATMs only cards in circulation and these cards processed 66.5 million transaction of value Rs. 724.3 billion. These transactions' showed a YoY growth of 7.5% and 12.8% in volume and value respectively.

2.2.2.8.4 Social Welfare Cards

Social welfare cards are issued by the Government of Pakistan or provisional governments to support needy and disasters affected people. As on end June 2019, there were 7.1 million cards in circulation. During the year FY19, these cards processed 7.6 million transactions worth Rs.38.2 Billion.

2.2.2.8.5 Prepaid Cards

Prepaid cards are being issued by a few banks in Pakistan in order to ensure that customer can enjoy flexibility while paying at merchant locations or at online e-commerce portals. As on end June 2019, there were 0.23 million cards in circulation. These cards processed 1.0 million transactions worth Rs.4.9 billion during the year FY19.

2.2.3 Paper-based Transactions

Paper currency continues to be an important means of payment. In addition to this, paper-based payment instruments such as Cheques, Pay order, demand drafts etc. are also operational to make payments in the country. Among these paper-based instruments, cheques are the preferred mode of transactions for cash withdrawals, funds transfer and Private/Government payments transactions. During the year under review, 465.3 million transactions of worth Rs.145.8 trillion were carried out using paper-based instruments. These transactions showed a decline of 0.3% in volume of transactions and 3.0 % in value of transactions. This is the first time in last 4 years that a decline in transactions recorded in payments through paper based instruments, which is a promising sign that people are getting more inclined towards electronic based transactions.

3. Regulatory Developments in Payment Systems during FY18-19

In line with SBP's Strategic Objective of building robust payment systems, the Payment Systems Department (PSD) has also been undertaking various initiatives aimed at transforming the Payment Systems infrastructure from traditional paper-based mechanisms to electronic channels like ATMs, Point of Sale (POS), Real Time Online Banking (RTOB), Mobile Banking, Call Centers and Internet Banking. SBP's focus and efforts have resulted in significant uplift of payment infrastructure, standardization and regulatory developments in the payment systems arena. Key achievements to strengthen and promote Payment Systems regulatory regime are listed below:

3.1 Regulations for Electronic Money Institutions

SBP while realizing that current banking sector is inadequate for serving digital payment needs of the customers, especially those who are financially excluded, issued regulations for Electronic Money Institutions (EMIs) in April 1, 2019. These regulations are issued with an objective to provide enabling regulatory framework to non-banking entities like FinTechs to foray into payments landscape. EMIs will offer innovative, user-friendly and cost-effective low value digital payment prepaid instruments like wallets, prepaid cards, and contactless payment instruments including wearables to consumers. These EMIs are expected to be instrumental in offering innovative payment instruments that will digitize cashless payments like merchant checkouts, e-commerce, government receipts, bill payments, cross border remittances etc.

3.2 Security of Digital Payments

To safeguard banks/MFBs and their customers from potential losses due to cyber-crimes and online banking frauds, SBP issued a comprehensive set of instructions vide its PSD Cir No. 9 of 2018, advising banks to take pre-emptive measures and ensure security of card data. Some of the directives are outlined as follows:

- a. Banks shall immediately carryout extensive compromise assessment and penetration testing to identify potential weaknesses in their Alternate Delivery Channels (ADCs) and payment systems including Card Systems, RTGS, SWIFT, Internet/mobile banking and Agent-based/Branchless Banking etc.
- b. Banks shall send free of cost transaction alerts to their customers through both SMS and email (*where email IDs are available*) for all international and domestic digital transactions.
- c. Banks shall activate/reactivate online banking services including internet/mobile banking for their customers after biometric verification.
- d. All card-issuing banks shall acquire/upgrade the capability to enable their customers to activate or block their cards for online/cross-border transactions.
- e. All card issuing/acquiring banks shall deploy real-time fraud monitoring tools and alert mechanisms, preferably provided by their Payment Schemes, to detect potential fraudulent activities on their Card Systems.
- f. Banks shall make arrangements to monitor on 24/7 basis usage/activity regarding payments made through their cards or through online transactions on their internet banking platforms.
- g. If a bank realizes that its customers' data has been compromised, the bank shall immediately take steps to protect their customers from further losses and inform them within 48 hours about the steps being taken by the bank. In case of a financial loss to customers, the bank shall compensate them within two (02) business days.

Table 3 - Payment Systems Infrastructure

(Actual Numbers)

Number of	FY15	FY16	FY17	FY18	FY19 ^P
Bank Branches	11,937	13,179	14,293	14,970	15,598
Real time Online Branches (RTOB)	11,315	12,674	14,150	14,850	15,481
ATMs	9,597	11,381	12,689	14,019	14,722
POS Machines	41,183	50,769	54,490	53,511	56,911
Registered Internet Banking Users	1,811,707	1,958,034	2,347,026	3,113,728	3,278,611
Registered Mobile Phone Banking Users	2,267,688	2,451,420	2,484,044	3,385,889	5,626,137
Registered Call Centers/IVR Banking Users	16,624,377	19,200,005	22,389,113	26,484,765	29,748,743

Table 4 - Payment Cards Composition

(Actual Numbers)

Number of	FY15	FY16	FY17	FY18	FY19 ^P
Proprietary ATM only Cards	900,270	4,798,524	8,043,044	8,586,819	8,485,391
Credit Cards	1,369,958	1,450,095	1,292,136	1,453,867	1,589,120
Debit Cards	25,024,235	27,411,117	17,857,561	21,712,069	24,831,777
Pre-Paid Cards⁶	N/A		315,865	234,098	228,417
Social Welfare Cards			9,124,363	8,932,140	7,103,294
Total	27,294,463	33,659,736	36,632,969	40,918,993	42,237,999

⁶ Data of previous period not available

Table 5 - Payment System Transactions (Summary)

(Number in million & Amount in Billion-PKR)

Transaction Type	FY15		FY16		FY17		FY18		FY19 ^p	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
PRISM System	0.8	179,613.5	0.9	231,710.5	1.1	279,464.4	1.7	361,048.2	2.5	398,168.9
e-Banking	468.2	35,848.2	543.1	37,225.0	625.6	37,061.9	756.2	47,403.7	869.8	58,820.7
RTOB	113.8	31,559.7	135.4	32,339.8	143.6	31,126.4	165.7	39,857.7	187.4	49,430.7
ATM	300.2	3,202.3	342.9	3,682.3	397.7	4,562.2	470.6	5,549.4	523.3	6,399.6
POS	32.1	172.1	39.2	199.8	50.5	246.0	63.5	297.0	72.4	366.2
Internet Banking	16.0	797.7	19.0	880.5	25.2	968.7	31.2	1,262.4	39.7	1,722.2
Mobile Phone Banking	6.1	106.9	6.6	112.5	7.4	141.4	21.8	409.8	41.1	866.8
Call Centers/IVR Banking	0.8	9.5	0.7	10.1	0.3	7.8	0.3	8.7	0.3	9.2
E-Commerce	-	-	-	-	1.2	9.4	3.4	18.7	5.7	26.1
Paper Based⁷	361.5	127,160.0	339.8	134,410.1	451.8	139,590.6	466.5	150,362.1	465.3	145,853.9
Total	830.5	342,621.7	883.8	403,345.6	1,078.5	456,116.9	1,224.4	558,814.0	1,337.6	602,843.4

⁷ In the figures of FY17 the numbers of cash deposit transactions over the counter(OTC) are also added

Table 6 - PRISM System Transactions

(Number in Thousand & Amount in Trillion-PKR)

Transactions Type	FY15		FY16		FY17		FY18		FY19 ^p	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Government Securities	68.9	109.7	65.1	152.8	63.9	189.7	63.5	256.4	62.3	274.9
Inter-Bank Fund Transfers	297.3	43.8	312.2	51.2	271.7	56.5	230.4	65.6	272.0	76.3
3 rd Party Customers' Transfers	355.7	13.9	501.6	15.8	714.8	19.7	1,334.1	24.6	2,091.2	31.4
Ancillary ⁸ Payments Settlement	44.3	12.2	51.6	11.9	60.4	13.7	61.6	14.5	61.1	15.6
Total	766.1	179.6	930.5	231.7	1,110.8	279.5	1,689.6	361.0	2,486.7	398.2

Table 7 - Real-Time Online Branches (RTOBs) Transactions⁹

(Volume in Million & Value in Billion-PKR)

Transactions Type (Other online branches)	FY15		FY16		FY17		FY18		FY19 ^p	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Cash Deposits	38.2	3,076.6	47.8	4,617.1	65.9	6,652.9	75.9	7,815.8	89.0	9,790.7
Cash withdrawals	24.5	2,094.9	31.4	3,012.7	31.9	2,502.0	34.5	2,927.1	37.1	3,559.5
Fund transferred	51.1	26,388.2	56.1	24,710.0	45.8	21,971.5	55.3	29,114.8	61.3	36,080.4
Total	113.8	31,559.7	135.3	32,339.8	143.6	31,126.4	165.7	39,857.7	187.4	49,430.7

⁸ It includes Settlement of NIFT, NCCPL and IINK⁹ Transaction within RTOB branches

Table 8 - ATMs Transactions

(Volume in Million & Value in Billion-PKR)

Transactions Type	FY15		FY16		FY17		FY18		FY19 ^p	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Cash Withdrawal	288.9	2,662.0	330.1	3,242.5	375.2	3,880.3	446.7	4,838.3	498.7	5669.0
Intra Bank Fund Transfers ¹⁰	4.5	218.4	5.2	170.8	7.6	232.6	9.3	304.6	8.7	340.0
Inter Bank Fund Transfers (IBFT) ¹¹	6.0	319.0	6.1	263.7	9.5	433.1	8.0	380.7	7.4	349.1
Utility Bills Payment	0.9	2.9	1.2	4.5	5.3	10.7	6.2	13.6	7.9	20.5
Cash /Deposits of Payment Instruments	0.0	0.0	0.0	0.1	0.2	5.4	0.3	12.1	0.5	20.2
Total	300.2	3,202.3	342.7	3,681.6	397.8	4,562.2	470.6	5,549.4	523.3	6398.9

Table 9 - Internet Banking Transactions

(Volume in Million & Value in Billion-PKR)

Transactions Type	FY15		FY16		FY17		FY18		FY19 ^p	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Intra-Bank Fund Transfers	4.6	242.3	6.0	310.4	6.6	258.2	7.7	323.8	9.3	437.5
Inter-Bank Fund Transfers	4.8	225.9	5.4	222.1	7.5	310.1	10.0	462.1	14.9	767.4
Utility Bills Payment	4.3	10.8	5.3	12.3	9.0	18.6	11.0	29.7	12.6	63.7
Other Payments through Internet	2.3	318.8	2.5	336.4	2.1	381.8	2.5	446.8	2.9	453.6
Total	16.0	797.7	19.2	881.1	25.2	968.7	31.2	1,262.4	39.7	1,722.2

¹⁰ Up till June,2016 It was A/c to A/c transfer

¹¹ Up till June,2016 it was 3rd Party A/c to A/c Transfer

Table 10 - Mobile Phone Banking Transactions

(Volume in Million & Value in Billion-PKR)

Transactions Type	FY15		FY16		FY17		FY18		FY19 ^p	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Intra-Bank Fund Transfers	1.1	43.5	1.4	48.0	2.1	60.0	5.8	186.2	10.9	364.7
Inter-Bank Fund Transfers	1.5	56.9	2.0	58.8	2.0	69.3	5.0	196.4	9.1	367.2
Utility Bills Payment	3.2	4.5	2.9	2.4	3.1	6.0	10.1	10.5	18.8	20.6
Other Payments through Mobile App	0.4	2.0	0.4	3.2	0.3	6.1	0.9	16.7	2.3	114.4
Total	6.1	106.9	6.6	112.5	7.4	141.4	21.8	409.8	41.1	866.8

Table 11 - Call Center/ IVR Banking Transactions

(Volume in Million & Value in Billion-PKR)

Transactions Type	FY15		FY16		FY17		FY18		FY19 ^p	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Intra-Bank Fund Transfers	0.1	4.6	0.1	5.3	0.0	0.4	0.0	0.7	0.0	0.8
Inter-Bank Fund Transfers	0.0	0.4	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0
Utility Bills Payment	0.3	1.7	0.3	1.8	0.1	0.6	0.1	0.9	0.1	1.1
Other Payments through Call Centers/ IVR Banking	0.3	2.9	0.3	2.9	0.2	6.6	0.2	7.1	0.2	7.3
Total	0.8	9.5	0.7	10.1	0.3	7.8	0.3	8.7	0.3	9.2

Table 12 - Payment Cards Vs. Channel Transactions¹²

(Volume in Million & Value in Billion-PKR)

Transactions Type	ATM				POS				e-Commerce			
	FY18		FY19 ^p		FY18		FY19 ^p		FY18		FY19 ^p	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
ATMs only Cards	61.1	630.2	66.0	715.3	0.7	12.0	0.4	0.9	-	-	-	-
Debit Cards	397.6	4,914.0	441.1	5,582.0	37.9	147.9	48.1	184.3	2.9	14.0	4.2	16.2
Credit Cards	0.9	5.1	0.2	2.1	30.9	171.7	33.6	180.9	3.6	24.7	5.5	34.1
Pre-Paid Cards	0.8	4.7	0.6	3.8	0.1	0.2	0.1	0.1	0.3	1.1	0.4	1.0
Social Welfare Cards	7.6	32.8	6.8	34.9	1.1	4.2	0.9	3.3	-	-	-	-
Total	468.0	5,586.8	514.6	6,338.1	70.7	336.0	83.1	377.7	6.8	39.7	10.0	51.3

¹² Reported by the Issuers – which is not reconcilable with the acquirers' reporting.

Acronyms

ATM	Auto Teller Machine
CDM	Cash Deposits Machine
CNP	Card Not Present
IVR	Interactive Voice Response
MFB	Microfinance Bank
NIFT	National Institutional Facilitation Technologies (Pvt.) Ltd
OTC	Over the Counter
PRISM	Pakistan Real-time Inter-bank Settlement Mechanism
PSD	Payment Systems Department
RTGS	Real-Time Gross Settlement System
RTOB	Real-time online Branches

The Payment Systems Review - FY19 (July 2018 to June 2019) is based on the data reported by Banks/ Microfinance Banks (MFBs). The figures related to the number of Banks, Branches, ATMs, POS machines, registered overall users and payment cards mentioned in this Review are as of June 30, 2019. Whereas, figures of volume and value depicting during the year position. Difference may exist due to the reason that the data of ATMs and POS based on reporting of the acquiring banks, whereas Card-wise data of same channels is based on the reporting of the card issuing banks. ‘P’ is used for Provisional.

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