

In line with the 2001 Payment System Comprehensive Strategy Project and the utilization of modern information and communication technologies, the CBI adopted various significant measures in 2018/19 for the furtherance of the payment system. This was done with a view to the expansion of retail payment services, which was fulfilled via the PAYVAND system, and making money transfers as well as cross-border payments through cards safer and more secure. Deepening of supervision, advocacy of transparency in the economy, prevention of corruption in the banking system, development of NAHAB (the Electronic Banking Authentication System) as the integrated inquiry center of Iran's banking system, the expansion of MAKNA (the Credit Control and Oversight Center) as a priority on the project list of Resistance Economy Command Headquarters, and the establishment of SAYAD (System of Bank-Wide Standard E-Checkbook Issuance) for raising the security and efficiency of checks as a payment instrument were among the important measures taken by the CBI. The design and implementation of three projects including cross-border communication, establishment of a direct credit-based payment system,

and empowerment of international standards were put on the agenda for 2018/19. The transfer of public accounts to the CBI was another important project, which was done with the aim of implementing the Comprehensive Roadmap of E-Government Plan and the improved management of public accounts by the CBI, as the banker to the government.

Cash Payment

Notes and Coins

Banknotes and coins act as direct instruments for cash payment. With the inclusion of Iran-Checks issued by the CBI, total notes and coins issued amounted to Rls. 657.5 trillion in 2018/19. Notes and coins with the public (including the Iran-Checks of the CBI) rose 23.7 percent compared with the year before, reaching Rls. 547.5 trillion in March 2019, up from Rls. 442.7 trillion in March 2018. The ratio of the notes and coins with the public to GDP (at current prices) decreased by 0.1 percentage point to reach 2.9 percent. The share of the notes and coins in M2 remained at 2.9 percent but in M1, it fell by 3.5 percentage points to reach 19.2 percent.

Table 14.1. Notes and Coins with the Public and their Ratio to Macroeconomic Indicators

	Value (trillion rials)	Percentage change (annual)	Share in M1 (percent)	Share in M2 (percent)	Ratio to GDP (percent)	Value per capita (thousand rials)
2017/18	442.7	12.6	22.7	2.9	3.0	5,461
2018/19	547.5	23.7	19.2	2.9	2.9	6,670

Sight Deposits

Total sight deposits reached Rls. 2,304.8 trillion in March 2019, showing 53.2 percent increase compared with the year before. The share of sight deposits in M1 was 80.8 and in M2, 12.2 percent. The ratio of notes and coins to GDP was 12.4 percent at current prices. Moreover, sight deposits per capita reached Rls. 28,079 thousand, showing 51.4 percent growth compared with the preceding year. Due to the rise in the value of notes and coins with the public as well as sight deposits, total money supply (including notes and coins with the public plus sight deposits) increased by 46.5 percent from Rls. 1,946.7 trillion in March 2018 to Rls. 2,852.3 trillion in March 2019.

Check Settlement System

The implementation of CHAKAVAK (Infrastructure of Systematic and Electronic Processing of Checks) in 2014 and its gradual replacement for the Interbank Clearing House by month June 2015 paved the way for the execution of check clearance solely through this system as of 2016. The number of checks channeled via CHAKAVAK reached 109.7 million in 2018/19, down by 10.2 percent compared with 2017/18. The

value of these checks reached Rls. 39,878.1 trillion, showing an increase of 74.8 percent compared with the year before. Therefore, the average value per transaction increased by 94.7 percent to about Rls. 363.4 million in 2018/19, when compared with Rls. 186.7 million in 2017/18. The number of transactions per capita was 1.3 and the value of transactions per capita was Rls. 485.8 million. The ratio of the value of check transactions to GDP was 2.1 at current prices, indicating an increase compared with the respective figure in the year before (1.5).

Electronic Payment System

Expansion of Electronic Payment Instruments

In 2018/19, the number of cards issued in the banking sector increased by 5.1 percent to 338.6 million. Of these cards, 227 million were debit cards (67.0 percent), 109 million were prepaid cards in the form of purchase and gift cards (32.2 percent), and merely 3 million were credit cards (0.8 percent). The number of issued cards per capita increased from 4 in March 2018 to 4.1 cards in March 2019.

Table 14.2. Sight Deposits and their Ratio to Macroeconomic Indicators

	Value (trillion rials)	Percentage change (annual)	Share in M1 (percent)	Share in M2 (percent)	Ratio to GDP (percent)	Value per capita (thousand rials)
2017/18	1,504.0	21.6	77.3	9.8	10.2	18,552
2018/19	2,304.8	53.2	80.8	12.2	12.4	28,079

Table 14.3. Transactions Processed through Checks

	Number (million)		Percentage change	Value (trillion rials)		Percentage change
	2017/18	2018/19		2017/18	2018/19	
CHAKAVAK	122.2	109.7	-10.2	22,813.8	39,878.1	74.8

The number of ATMs increased by 2.7 percent to 56,255 in 2018/19. The number of PIN pads (electronic devices used in debit, credit, or smart card-based transactions within bank branches) rose by 2.6 percent to 71,105 and that of POSs surged by 5.1 percent to 6,287 thousand. The ratios of issued cards to ATMs, PIN pads, and POSs were respectively 6,018, 4,761 and 54 which, considering the more rapid rise in the number of issued cards than that in the number of PIN pads, POSs, and ATMs, were all higher than 2017/18.

Development of Electronic Transactions

In 2018/19, the total number and value of electronic transactions settled through the banking sector reached 28,560 million and Rls. 59,960 trillion, respectively. The number of electronic transactions processed through ATMs decreased by 8.3 percent while that

of POSs grew by 29.5 percent. Accordingly, the value of transactions processed through ATMs decreased by 26.1 percent while that of POSs increased by 45.9 percent. The number and value of PIN pad transactions increased by respectively 7.2 and 95.9 percent. Moreover, the number and value of transactions processed through cell phones, landlines, kiosks, and internet rose 37.0 and 80.2 percent, respectively. The total number of transactions per card was 84.4 in 2018/19, indicating a rise when compared with 73.3 transactions in 2017/18. The ratio of the number of ATM transactions to each ATM was 92,241 in 2018/19. This ratio was 3,077 for POS and 4,444 for PIN pad transactions. In 2018/19, the ratio of the value of transactions to their number totaled respectively Rls. 2,483 thousand, Rls. 1,214 thousand, and Rls. 50,962 thousand per ATM, POS, and PIN pad.

Table 14.4. Number of Electronic Payment Instruments

	Year-end		Percentage change
	2017/18 ▲	2018/19	
Bank cards (thousand)	322,002	338,550	5.1
ATM	54,765	56,255	2.7
POS	5,984,036	6,287,201	5.1
PIN pad	69,290	71,105	2.6

Table 14.5. Bank Cards

	Number (million)		Growth (percent)	Share (percent)		Change in share (percentage points)
	2017/18 ▲	2018/19		2017/18	2018/19	
Debit cards	218	227	4.0	67.8	67.0	-0.7
Credit cards	2	3	38.0	0.6	0.8	0.2
Prepaid cards	102	109	7.0	31.6	32.2	0.6

Table 14.6. Electronic Transactions Processed through the Banking Sector

	Number (million)		Growth (percent)	Value (trillion rials)		Growth (percent)
	2017/18 ▲	2018/19		2017/18	2018/19	
ATM	5,659	5,189	-8.3	17,434	12,885	-26.1
POS	14,943	19,348	29.5	16,106	23,495	45.9
PIN pad	295	316	7.2	8,222	16,104	95.9
Cell phone, landline, kiosk, and internet	2,706	3,707	37.0	4,149	7,476	80.2
Total	23,603	28,560	21.0	45,910	59,960	30.6

ATMs had respectively 18.2 and 21.5 percent shares in the total number and value of electronic transactions processed through the banking sector in 2018/19. POSs enjoyed shares of respectively 67.7 and 39.2 percent in the total number and value of electronic transactions. The shares of transactions processed through ATMs and PIN pads decreased by about 5.8 and 0.1 percentage points in terms of number while the share of the number of POSs in total transactions rose 4.4 percentage points and that of landlines, cell phones, kiosks, and internet increased by 1.5 percentage points. This showed the growing public tendency towards the wider use of new electronic payment instruments in daily transactions. Furthermore, PIN pads enjoyed respectively 1.1 and 26.9 percent shares in the total number and value of electronic transactions in 2018/19. PIN pads are widely used for the electronic transfer of

funds via bank cards among various accounts of one bank or the interbank transfer of funds. The share of landlines, cell phones, kiosks, and internet in the total number of electronic transactions was 13 and in total value, 12.5 percent. Meanwhile, the share of SHETAB center in the total number of electronic transactions processed through the banking sector was 95.6 percent and in the total value, 76.1 percent. This indicated a rise when compared with the corresponding figures in the year before (91.5 and 69.3 percent). The number of ATM and POS transactions processed via the SHETAB center increased by 6.9 and 29.5 percent to 4,156 million and 19,348 million, respectively. The value of SHETAB transactions via ATMs and POSs reached Rls. 10,307 trillion and Rls. 23,495 trillion in 2018/19, showing respectively 18.1 and 45.9 percent increase compared with 2017/18.

Figure 14.1. Share of electronic payment instruments in total number of electronic transactions in the banking sector in 2018/19

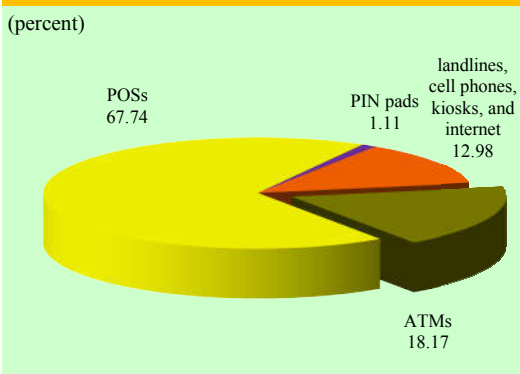


Figure 14.2. Share of electronic payment instruments in total value of electronic transactions in the banking sector in 2018/19

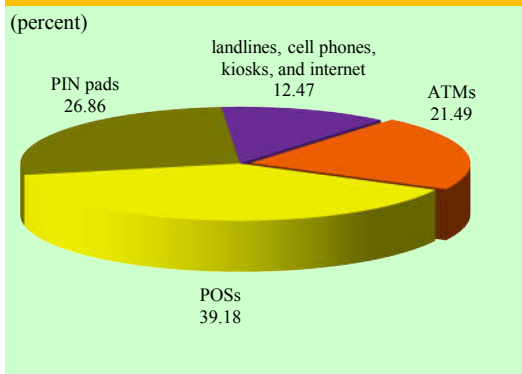


Table 14.7. Interbank Transactions Processed through SHETAB

	Number (million)		Growth (percent)	Value (trillion rials)		Growth (percent)
	2017/18 ▲	2018/19		2017/18	2018/19	
ATM	3,887	4,156	6.9	8,724	10,307	18.1
POS	14,943	19,348	29.5	16,106	23,495	45.9
Other (landline, cell phone, kiosk, internet, and branches)	2,778	3,802	36.9	6,985	11,845	69.6
Total¹	21,608	27,307	26.4	31,815	45,647	43.5

¹ Includes interbank electronic transactions processed through SAHAB (Retail Funds Transfer System).

Electronic Settlement System

SAHAB

The total number of the interbank transactions processed via the Retail Funds Transfer System (SAHAB), as a major service rendered by the SHETAB center, amounted to 2,424 million, worth Rls. 18,113 trillion, in 2018/19. A number of 1,278 million fund transfers, valued at Rls. 8,773 trillion, were processed via the ATMs, showing 7.7 percent growth in terms of number and 19.8 percent growth in terms of value, respectively. Furthermore, 81 million transactions, worth Rls. 4,365 trillion, were processed through PIN pads, up by 33.9 percent in terms of number and 54.1 percent in terms of value, respectively, compared with 2017/18. The number of SAHAB transactions via the "kiosks and internet" was 1,065 million with a value of Rls. 4,975 trillion, up by 95.5 percent in terms of number and 90.6 percent in terms of value compared with the year before. The shares of ATMs, PIN pads, and "kiosks and internet" were respectively 52.7, 3.4 and 43.9 percent in the total number and 48.4, 24.1 and 27.5 percent in the total value of SAHAB transactions. Thus, the expansion of the use of electronic money orders in the future is well expected.

SATNA

The transactions processed through the RTGS (Real Time Gross Settlement) System or the Iranian SATNA, as the main infrastructure for large-value payments, rose by 74.0 percent in terms of number, to 19.5 million in 2018/19. The value of transactions processed via SATNA reached Rls. 151,767 trillion, indicating 66.4 percent growth compared with 2017/18. The total number of customer-to-customer transactions processed through SATNA increased by 77.4 percent to 19.2 million in 2018/19, with their value increasing by 51.4 percent to Rls. 36,097 trillion. Meanwhile, the number of clearing settlement systems fell by 30.9 percent to 201 thousand while their value increased by 57.5 percent to reach Rls. 76,874 trillion. The total number and value of bank-to-bank transactions increased by respectively 19.8 and 109.2 percent compared with the year before, reaching 147 thousand transactions, with a value of Rls. 38,796 trillion. In 2018/19, the customer-to-customer transactions accounted for the highest share in the total number of transactions processed through SATNA by 98.2 percent. The highest share in the total value of transactions processed via SATNA was related to the clearing settlement systems by 50.7 percent.

Table 14.8. Transactions Processed through SAHAB

	Number (million)		Growth (percent)	Value (trillion rials)		Growth (percent)
	2017/18	2018/19		2017/18	2018/19	
ATM	1,187	1,278	7.7	7,320	8,773	19.8
PIN pad	61	81	33.9	2,834	4,365	54.1
Kiosk and internet	545	1,065	95.5	2,610	4,975	90.6
Total	1,792	2,424	35.3	12,764	18,113	41.9

Table 14.9. Transactions Processed through SATNA

	Number (thousand)		Growth (percent)	Value (trillion rials)		Growth (percent)
	2017/18	2018/19		2017/18	2018/19	
Bank-to-bank	123	147	19.8	18,544	38,796	109.2
Customer-to-customer	10,816	19,188	77.4	23,837	36,097	51.4
Clearing settlement systems	291	201	-30.9	48,816	76,874	57.5
Total¹	11,230	19,536	74.0	91,197	151,767	66.4

¹ Excludes CBI's intraday liquidity facility and settlements.

PAYA

The Automated Clearing House System (PAYA), as one of the infrastructures of interbank transactions, receives payment orders from the originating bank and, after processing, sends orders to the destination bank. Upon the full launching of SHAPARAK (Electronic Card Payment and Settlement System), completion of transactions and the transfer of funds to the accounts of goods' and services' suppliers were directed through the PAYA system. With the possibility of processing direct transfer orders through PAYA, this system, together with SATNA and SAHAB, covered all electronic orders for fund transfers. SATNA and PAYA are utilized for the account-to-account transfer of funds while SAHAB is used for card-to-card retail fund transfers. In 2018/19, about 148 million banking transactions worth Rls. 6,853 trillion were processed through PAYA in the form of direct credit transfers, indicating 40.8 percent growth in the number and 17.0 percent increase in the value. Meanwhile, a number of 1,273 million transactions, with a value of Rls. 25,635 trillion, were processed via SHAPARAK. Thus, the total number of PAYA transactions was 1,420 million with a value of Rls. 32,489 trillion, down by 41.7 percent and up by 39.4 percent, respectively.

SIMA

Upon the launching of Scripless Securities Settlement System (TABSA) in 2010/11, which

was introduced as an infrastructure for the electronic issue and settlement of securities, various feasibility studies were conducted on the operation of the Integrated Management System of Securities (SIMA), with the aim of the fully electronic issuance of securities. This subsystem was made operational in 2012/13. Accordingly, Rls. 49.5 trillion worth of participation papers was issued via the SIMA system by Tehran, Tabriz, Karaj, Mashhad, Shiraz, Isfahan, and Ahvaz municipalities, to be sold by Saderat, Parsian, Shahr, Industry and Mine, Tose'e Ta'avon, and Ayandeh agent banks. Furthermore, Rls. 123.5 trillion of securities were in the form of electronic general CDs, issued by Refah Kargaran, Tejarat, EN, Middle East, Melli, Keshavarzi, and Pasargad banks.

Total Value of Transactions

In 2018/19, the nominal value of total transactions in the banking system processed through both electronic payment instruments and checks increased by 45.1 percent compared with 2017/18 to reach Rls. 142,788 trillion. The real value of total transactions, considering the increase in the CPI of goods and services, grew by 10.6 percent compared with the year before. Due to their unrestricted circulation frequency, the notes and coins with the public as well as the Iran-Checks of the CBI were not included in calculations.

Table 14.10. Transactions Processed through PAYA

	Number (million)		Growth (percent)	Value (trillion rials)		Growth (percent)
	2017/18	2018/19		2017/18	2018/19	
Direct credit transfers	105	148	40.8	5,856	6,853	17.0
SHAPARAK	2,330	1,273	-45.4	17,450	25,635	46.9
Total	2,435	1,420	-41.7	23,307	32,489	39.4

The share of the value of check transactions in total electronic transactions increased by 4.7 percentage points to 27.9 percent. Contrarily, the share of the value of electronic payment instruments and systems in total fell by 4.7 percentage points to reach 72.1 percent. The value of the ATM transactions fell by 26.1 percent compared with the year before and the share of the value of ATM transactions in total decreased by 8.7 percentage points. Conversely, the value as well as the share of the value of transactions processed through POSs, PIN pads, and "landlines, cell phones, kiosks, and internet" increased. The value of transactions processed via POSs increased by 45.9 percent and the share of POS transactions in the total value rose by 0.1 percentage point to 16.5 percent.

Data on transactions processed through electronic payment systems indicate that the share of the value of customer-to-customer transactions processed via SATNA increased from 24.2 percent to 25.3 percent. The value of PAYA transactions (direct credit transfers),

with 17.0 percent rise compared with 2017/18, accounted for 4.8 percent of the total value of transactions in 2018/19.

Share of Non-cash Payment Instruments

Of the total number of non-cash transactions processed in the banking system, 99.0 percent were related to bank cards in 2018/19. PAYA, SATNA, and checks constituted respectively 0.5, 0.1 and 0.4 percent of the total number of non-cash transactions, all less than 1.0 percent. Of the total value of non-cash transactions, bank cards constituted a share of 41.4 percent and PAYA held a share of 4.9 percent (the lowest). The average value of each transaction settled via bank cards reached Rls. 2,203 thousand and through PAYA, Rls. 46,417 thousand. The share of checks in the total value of non-cash transactions was 28.2 percent. The average value of each transaction processed through checks was Rls. 363.4 million in 2018/19, which was higher than the value of transactions processed via PAYA and bank cards.

Table 14.11. Transactions Processed through the Banking Sector

	Value (trillion rials)		Growth (percent)	Share in growth (percentage points)	Share in total value of transactions (%)		Change in share (percentage points)
	2017/18	2018/19			2017/18	2018/19	
Checks¹	22,814	39,878	74.8	17.3	23.2	27.9	4.7
Electronic payment instruments and systems	75,604	102,910	36.1	27.7	76.8	72.1	-4.7
Electronic payment instruments	45,910	59,960	30.6	14.3	46.6	42.0	-4.6
ATM	17,434	12,885	-26.1	-4.6	17.7	9.0	-8.7
POS	16,106	23,495	45.9	7.5	16.4	16.5	0.1
PIN pad	8,222	16,104	95.9	8.0	8.4	11.3	2.9
Landline, cell phone, kiosk, and internet	4,149	7,476	80.2	3.4	4.2	5.2	1.0
Electronic payment systems	29,694	42,950	44.6	13.5	30.2	30.1	-0.1
SATNA (customer-to-customer)	23,837	36,097	51.4	12.5	24.2	25.3	1.1
PAYA (direct credit transfers)	5,856	6,853	17.0	1.0	6.0	4.8	-1.2
Total (nominal)	98,417	142,788	45.1	-	100.0	100.0	-
Total (real)²	89,797	99,296	10.6	-	-	-	-

¹ Includes only bank-to-bank transactions processed through the Interbank Clearing House and CHAKAVAK system, excluding intra-bank transactions.

² The CPI is used for the calculation of total transactions in real terms (2016/17=100).

Customer-to-customer transactions via SATNA accounted for 0.1 percent of the total number of non-cash transactions in 2018/19. As SATNA transactions, covering large-value payments, averaged high at Rls. 1,881.2 million in 2018/19, customer-to-customer transactions processed through this system accounted for 25.6 percent of

the total value of non-cash transactions. The overall share of bank cards and PAYA in the total value of non-cash transactions indicated about 5.2 percentage points fall in 2018/19 while the share of the total value of transactions via checks and SATNA (customer-to-customer) showed 5.2 percentage points increase compared with 2017/18.

Figure 14.3. Share of non-cash payment instruments in total number of non-cash transactions in 2018/19

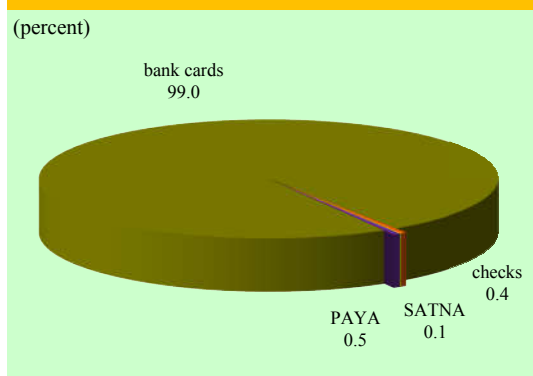


Figure 14.4. Share of non-cash payment instruments in total value of non-cash transactions in 2018/19

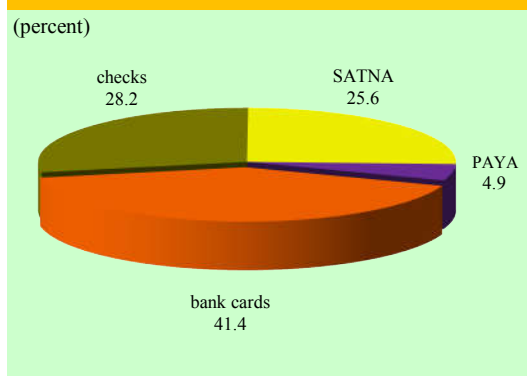


Table 14.12. Share of Non-cash Payment Instruments in Total Number and Value of Non-cash Transactions

	Share in total number (percent)		Share in total value (percent)		Average value per transaction (thousand rials)	
	2017/18	2018/19	2017/18	2018/19	2017/18 ▲	2018/19
Bank cards ¹	98.9	99.0	45.3	41.4	2,048	2,203
Checks ²	0.5	0.4	23.8	28.2	186,668	363,441
SATNA (customer-to-customer)	0.1	0.1	24.8	25.6	2,203,838	1,881,211
PAYA (direct credit transfers)	0.5	0.5	6.1	4.9	55,852	46,417
Total	100.0	100.0	100.0	100.0	4,467	5,273

¹ Includes transactions processed through POS, PIN pad, landline, cell phone, kiosk, internet, and ATM (excluding cash withdrawals).

² Includes only bank-to-bank transactions processed through the Interbank Clearing House and CHAKAVAK system, excluding intra-bank transactions.