

In 1390, upon completion of the main infrastructures for electronic payment and settlement, CBI focused on product expansion, standardization of payment methods and instruments, and enhancement of oversight over the national payment system. With the high growth in electronic payments through POSs and the necessity for the more efficient organization of this system and for the better observance of payment and clearance standards and criteria as well as enhancement of the compatibility of PIN pad operations with the anti-money laundering regulations, optimal utilization of investments, expansion of POSs, encouragement of sound competitiveness, and strengthening of private sector participation in the payment network of the country, the CBI designed and established the Electronic Card Payment and Settlement System (SHAPARAK) in 1390. Moreover, the Central Depository System (CDS) was created for facilitating access to the Scripless Securities Settlement System (TABA). Upon the finalization of TABA, it would be possible for the CBI to

conduct the issue and exchange of banks' securities electronically through the CDS, hence eliminating the requirement for paper exchanges. Among other achievements of the Iranian banking sector in this year was the qualitative and quantitative growth of payment instruments as well as the extended use of electronic payment systems.

Cash Payment

Notes and Coins

Banknotes and coins act as direct instruments for cash payment. With the inclusion of Central Bank Iran-Checks, total notes and coins issued in 1390 reached Rls. 338.4 trillion. Notes and coins with the public (including CBI Iran-Checks) increased by 16.9 percent from Rls. 225.2 trillion in 1389 year-end to Rls. 263.2 trillion at end-1390. Thus, the ratio of notes and coins with the public to GDP (at current prices) dropped 0.5 percentage point to 4.2 percent, compared with 1389.

Table 15.1. Notes and Coins with the Public and their Ratio to Macroeconomic Indicators

	Value (billion rials)	Percentage change (annual)	Share in money (percent)	Share in liquidity (percent)	Ratio to GDP▲ (percent)	Notes and coins per capita (thousand rials)
1388	192,314	21.9	32.0	8.2	4.9	2,627
1389	225,155	17.1	29.7	7.6	4.7	3,036
1390	263,209	16.9	29.3	7.4	4.2	3,502

Sight Deposits

Total sight deposits rose 18.9 percent to Rls. 634.4 trillion compared with the year before. Share of sight deposits in money, liquidity, and GDP was 70.7, 17.9, and 10.2 percent, respectively (at current prices). Moreover, sight deposits per capita increased by 17.3 percent to Rls. 8,441 thousand compared with the preceding year. Considering 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 18.3 percent from Rls. 758.7 trillion at end-1389 to Rls. 897.6 trillion in 1390 year-end.

Interbank Clearing House

In this year, 117.4 million checks worth Rls. 12,225.2 trillion were channeled through the Interbank Clearing House. Total banks' Iran-Checks channeled through the Interbank Clearing House, in terms of volume and value, amounted to about 3 thousand, worth

Rls. 3 billion, with each transaction at Rls. 1,123 thousand, on average.

In 1390, the number of ordinary checks, comprising coded checks and personal checks delivered to the Interbank Clearing House, rose 5.7 percent. Total transactions settled through ordinary checks, in terms of value, grew by 18.9 percent to Rls. 12,225.2 trillion. Therefore, the average value of each transaction of ordinary checks went up by 12.5 percent to Rls. 104,155 thousand compared with the corresponding figure for the previous year (Rls. 92,622 thousand).

Total volume and value of transactions processed through the Interbank Clearing House advanced 5.7 and 18.9 percent, respectively, in 1390. This was to some extent due to rise in the use of ordinary checks and their substitution for Iran-Checks issued by banks. Thus, the ratio of total value of transactions processed through the Interbank Clearing House to GDP (at current prices) decreased from 2.2 in 1389 to 2.0 in 1390.

Table 15.2. Sight Deposits and their Ratio to Macroeconomic Indicators

	Value (billion rials)	Percentage change (annual)	Share in money (percent)	Share in liquidity (percent)	Ratio to GDP▲ (percent)	Sight deposits per capita (thousand rials)
1388	409,383	11.3	68.0	17.4	10.5	5,593
1389	533,561	30.3	70.3	18.1	11.3	7,195
1390	634,363	18.9	70.7	17.9	10.2	8,441

Table 15.3. Volume and Value of Transactions Processed through Interbank Clearing House

	Volume (million)		Percentage change	Value (trillion rials)		Percentage change
	1389	1390		1389	1390	
Iran-Checks issued by banks	0.02	0.003	-85.1	0.02	0.003	-84.9
Ordinary checks	111.0	117.4	5.7	10,284.2	12,225.2	18.9
Total	111.1	117.4	5.7	10,284.2	12,225.2	18.9

Electronic Payment System

Expansion of Electronic Payment Instruments

In 1390, electronic payment instruments expanded with an admissible growth. The number of cards issued in the banking sector grew by 35.5 percent to 174.0 million. Among these cards, 122.6 million were debit cards (70.4 percent), 49.9 million were prepaid cards in the form of purchase and gift cards (28.7 percent), and merely 1.6 million were credit cards (0.9 percent). Thus, the number of cards issued in the country for each individual went up from 1.7 in 1389 to 2.3 in 1390 year-end.

The number of ATMs increased by 29.1 percent to 26,626 in 1390. The number of PIN pads, electronic devices used in debit, credit, or smart card-based transactions, rose 22.6 percent to 52,782. The number of POSs surged by 44.3 percent to 2,184 thousand, signifying the positive trend of the banking sector in expanding electronic payments compared with the rise in the number of ATMs. The ratios of cards issued per ATM and PIN pad were 6,536 and 3,297 and per POS, 80 at end-1390.

Table 15.6. Electronic Payment Instruments

	Year-end		Percentage change
	1389	1390	
Bank cards (thousand)	128,413	174,025	35.5
ATM	20,623	26,626	29.1
POS	1,513,318	2,184,237	44.3
PIN pad	43,046	52,782	22.6

Development of Electronic Transactions

In 1390, along with the expansion of electronic payments technologies, banks' electronic transactions increased significantly. Total number and value of electronic transactions settled through the banking sector reached 4,324 million and Rls. 6,554 trillion, respectively. The number of electronic transactions processed through ATMs and POSs during this year grew by 54.6 and 133.8 percent, respectively. Accordingly, the value of electronic transactions processed through ATMs and POSs increased by respectively 132.1 and 392.0 percent. During 1390, the number and value of transactions processed through PIN pads increased by 7.0 and 42.6 percent, respectively.

Table 15.4. Bank Cards

	Number (thousand)		Growth (percent)	Share (percent)		Change in share (percentage points)
	1389	1390		1389	1390	
Debit cards	93,570	122,563	31.0	72.8	70.4	-2.7
Credit cards	1,368	1,570	14.8	1.1	0.9	-0.2
Prepaid cards	33,475	49,893	51.1	26.1	28.7	2.9

Table 15.5. Volume and Value of Electronic Transactions Processed through the Banking Sector

	Volume (million)		Growth (percent)	Value (trillion rials)		Growth (percent)
	1389 ▲	1390		1389 ▲	1390	
Total electronic transactions	2,558	4,324	69.0	2,777	6,554	136.0
ATM	1,846	2,855	54.6	1,052	2,443	132.1
POS	558	1,305	133.8	472	2,324	392.0
PIN pad	154	164	7.0	1,253	1,786	42.6

In this year, despite the surge in the volume and value of transactions processed through POSs, the highest share in electronic transactions still belonged to ATMs. Share of ATMs in total volume of electronic transactions processed through the banking sector was 66.0 percent and in total value, 37.3 percent. On the other hand, the share of POSs in total volume of electronic transactions was 30.2 and in total value, 35.5 percent. This indicates the increased use of POSs compared with the corresponding figures for the year before (21.8 and 17.0 percent, respectively), which shows growing public tendency towards wider use of POSs for daily transactions. It is expected that with the extensive use of credit cards and prepaid cards, as well as more availability of POSs throughout the country, the share of electronic transactions through POSs will increase and the use of cash will decrease in the future. Furthermore, PIN pads enjoyed a share of 27.2 percent in total value of transactions in 1390.

The interbank information transfer network (SHETAB) plays a key role in processing electronic transactions in the banking sector. Tourism Bank, Bank Hekmat Iranian, Iran Zamin Bank, and the Central Bank joined SHETAB, raising the number of interbank information transfer network members to 29 in 1390. The share of SHETAB center in the total volume and value of electronic transactions processed through the banking sector was 60.7 and 51.1 percent, respectively, indicating a noticeable rise when compared with the corresponding figures of the year before (52.8 and 41.6 percent, respectively). Expansion

of electronic payment instruments and the development of electronic banking services such as online (internet) banking and telephone banking are among factors contributing to the increase in the share of SHETAB system in interbank electronic transactions.

Figure 15.1. Share of electronic payment instruments in total number of electronic transactions in the banking sector in 1390

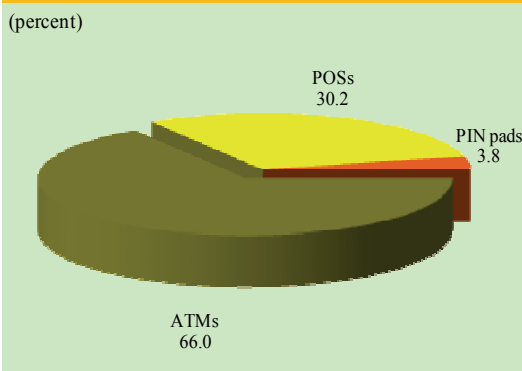


Figure 15.2. Share of electronic payment instruments in total value of electronic transactions in the banking sector in 1390

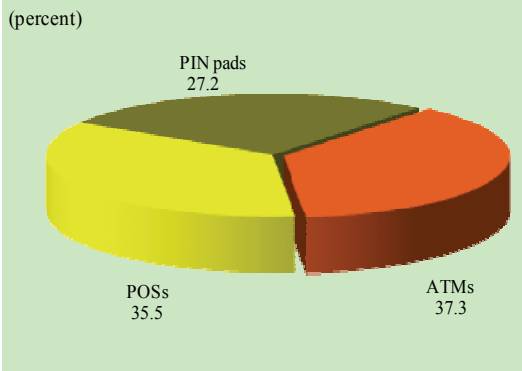


Table 15.7. Volume and Value of Transactions Processed through SHETAB

	Volume (million)		Growth (percent)	Value (trillion rials)		Growth (percent)
	1389	1390		1389	1390	
Total transactions through SHETAB¹	1,351	2,626	94.4	1,156	3,346	189.3
ATM	953	1,583	66.1	716	1,342	87.4
POS	369	943	155.8	366	1,801	391.6
Others (landlines, cell phones, internet, branches)	29	100	244.6	74	203	175.1

¹Includes interbank electronic transactions processed through SAHAB.

Electronic Settlement System

SAHAB

The retail funds transfer system (SAHAB) helped the transfer of more than 166 million transactions through ATMs in 1390, up by 115.9 percent compared with the year before. Furthermore, approximately 4,179 thousand transactions processed through PIN pads were related to SAHAB. The number of transactions processed through SAHAB via the internet rose 3 times compared with the year before. Shares of ATMs, PIN pads, and internet in total transactions processed through SAHAB, in terms of volume, reached respectively 92.8, 2.3, and 4.8 percent and, in terms of value, 82.9, 12.9, and 4.1 percent, respectively.

SATNA

Upon full operation of the Automated Clearing House System (PAYA) in 1389, all small-value transactions were processed through PAYA in 1390 and only transactions

involving values more than Rls. 150 million¹ were processed through RTGS (Real Time Gross Settlement) System or SATNA. Therefore, the growth rates of the volume and value of customer to customer transactions through SATNA were considerably lower than 1389 year-end. In this year, total customer to customer transactions processed through SATNA, in terms of volume and value, rose 57.4 and 75.4 percent, respectively, much lower than the corresponding figures of the year before (100.0 and 138.8 percent, respectively). The highest share in total transactions processed through SATNA, in terms of volume, belonged to customer to customer transactions by 98.8 percent and in terms of value, 54.2 percent. Total transactions processed through SATNA, in terms of volume, reached nearly 14 million, indicating 55.5 percent growth compared with 1389. In terms of value, transactions processed through SATNA rose by 74.0 percent to Rls. 10,313 trillion.

Table 15.8. Volume and Value of Transactions Processed through SAHAB

	Volume (thousand)		Growth (percent)	Value (trillion rials)		Growth (percent)
	1389	1390		1389	1390	
Total transactions through SAHAB	81,643	179,168	119.5	385	910	136.3
ATM	77,030	166,315	115.9	324	755	132.7
PIN pad	1,750	4,179	138.8	49	118	140.9
Internet	2,863	8,675	203.0	12	37	215.8

Table 15.9. Volume and Value of Transactions Processed through SATNA

	Volume (thousand)		Growth (percent)	Value (trillion rials)		Growth (percent)
	1389	1390		1389	1390	
Bank to bank	176	96	-45.3	1,341	1,705	27.1
Customer to customer	8,753	13,779	57.4	3,184	5,586	75.4
Clearing settlement systems (SHETAB, Interbank Clearing House, and PAYA)	39	69	78.2	1,401	3,022	115.7
Total¹	8,968	13,945	55.5	5,927	10,313	74.0

¹ Excludes intraday liquidity facility and settlement by the CBI.

¹ Referred to in Circular No. 90/251146 dated Dey 19, 1390

PAYA

The Automated Clearing House System (PAYA), which was put into test operation in Dey 1388, became officially operational in 1389. During the first phase, the "credit transfer" core was put into operation for individual and multiple payment orders. Moreover, this payment service was developed in order to give coverage to multiple commercial payment orders and transactions. Therefore, as of 1389, PAYA as well as SATNA and SAHAB operated for the electronic transfer of funds throughout the country. SATNA and PAYA were utilized for bank to bank transfers, while SAHAB was used for retail funds transfer (card to card). In 1390, about 3.3 million banking transactions worth Rls. 317.6 trillion (net) were processed through PAYA, indicating a noticeable growth as compared with the year before.

TABA

The Scripless Securities Settlement System (TABA), a pillar of the comprehensive payment system, was established in 1388 as the infrastructure for the electronic issue and settlement of securities. TABA permits electronic issue and exchange of participation papers and Certificates of Deposit (CDs). Moreover, banks can easily get access to liquidity facility for use in SATNA by placing their securities in TABA. For the first time, in 1389, TABA paved the way for scripless issue and settlement of securities. Thus, Rls. 6,500 billion participation papers were offered by Bank Saderat Iran through TABA, of which Rls. 20 billion were purchased by Karafarin Bank and the remaining by the Central Bank. Furthermore, the Central Depository System (CDS) was created for the public access to TABA during 1389-1390, enabling scripless issue and exchange of all securities.

Total Value of Transactions

The total transactions surged by 51.6 percent in nominal terms in 1390 compared with 1389 and reached Rls. 24,683 trillion. In 1390, the real value of total transactions (including the CPI) grew by 24.8 percent. This trend indicates that growth in the value of transactions was larger than the increase in prices. Therefore, the value of transactions increased in real terms, compared with the year before.

Issuance of CBI Iran-Checks and their replacement for those issued by banks as of 1387 decreased the gross value of banks' Iran-Checks cleared through the Interbank Clearing House to Rls. 3 billion. Conversely, the value of ordinary checks cleared through the Interbank Clearing House advanced by 18.9 percent compared with the preceding year.

Considering the reduction in total transactions through various kinds of checks, value of electronic transactions increased in 1390. Therefore, share of electronic transactions in total value of transactions went up by 13.6 percentage points while the value of transactions through ordinary checks decreased by the same figure. Despite the slight growth of the value of transactions through ordinary checks, these checks still had the highest share in total value of transactions by 49.5 percent. Total value of customer to customer transactions through SATNA, up by 75.4 percent compared with the year before, had the highest share in the growth of the total value of transactions by 14.8 percentage points. Thus, share of SATNA in the total value of transactions grew by 3.1 percentage points to 22.6 percent in 1390. POSs held a share of 9.4 percent in total transactions, representing a rise of 6.5 percentage points compared with 1389.

Share of Non-cash Payment Instruments

Development of electronic banking and expansion of electronic payment instruments reduced the number of transactions through ordinary checks (including banks' checks) settled in the Interbank Clearing House by almost 6.0 percentage points, raising the share of bank cards in the total number of non-cash transactions by 6.0 percentage points, however. In this year, of total number of non-cash transactions, 91.6 percent was related to bank cards, and 7.3 percent to ordinary checks. The average value of each transaction settled through bank cards reached Rls. 2,798 thousand, constituting 18.5 percent of total value of non-cash transactions. Moreover,

the high average value of each transaction settled through ordinary checks by Rls. 104,155 thousand brought the share of these checks in total value of non-cash transactions to 55.0 percent.

In 1390, SATNA accounted for 0.9 percent of total number of non-cash transactions, indicating a reduction of 0.2 percentage point compared with the year before. As transactions through SATNA were mostly large-value transactions, with a high average value of Rls. 405,424 thousand per transaction, transactions through SATNA accounted for 25.1 percent of total value of non-cash transactions.

Table 15.10. Total Value of 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)
	1389▲	1390			1389▲	1390	
Iran-Checks issued by banks	0.02	0.003	-84.9	*	*	0.0	0.0
Ordinary checks	10,284	12,225	18.9	11.9	63.2	49.5	-13.6
ATM	1,052	2,443	132.1	8.5	6.5	9.9	3.4
POS	472	2,324	392.0	11.4	2.9	9.4	6.5
PIN pad	1,253	1,786	42.6	3.3	7.7	7.2	-0.5
SATNA (customer to customer)	3,184	5,586	75.4	14.8	19.6	22.6	3.1
PAYA ¹	37	318	☐	1.7	0.2	1.3	1.1
Total transactions (nominal)	16,283	24,683	51.6	51.6	100.0	100.0	
Total transactions (real)²	7,136	8,904	24.8				

¹ As of Dey 1388, PAYA was put into operation. Figures represent the net value of transactions.

² CPI is used for the calculation of total transactions in real terms.

Table 15.11. Share of Non-cash Payment Instruments in Total Volume and Value of Non-cash Transactions

	Share in total volume (percent)		Share in total value (percent)		Average value per transaction (thousand rials)	
	1389▲	1390	1389▲	1390	1389▲	1390
Bank cards ¹	85.6	91.6	11.3	18.5	2,424	2,798
Ordinary checks ²	13.3	7.3	67.5	55.0	92,622	104,155
SATNA ³	1.1	0.9	20.9	25.1	363,807	405,424
PAYA ⁴	0.05	0.2	0.3	1.4	96,457	96,589
Total	100.0	100.0	100.0	100.0	18,312	13,871

¹ Includes transactions processed through POS and PIN pad, and excludes ATM. Non-cash payment transactions processed through ATM (such as payment of utility bills and cash transfers whose breakdown is not available) are excluded from this calculation.

² Includes only ordinary checks channeled through the Interbank Clearing House.

³ Includes only customer to customer transactions.

⁴ Share in total value is calculated based on the net value of transactions processed through PAYA.

Figure 15.3. Share of non-cash payment instruments in total volume of non-cash transactions in 1390

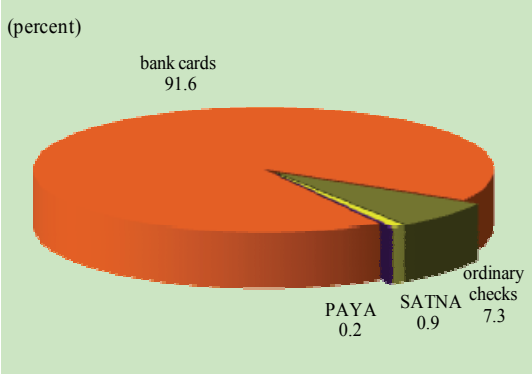


Figure 15.4. Share of non-cash payment instruments in total value of non-cash transactions in 1390

