

In 1389, upon completion of the infrastructures for electronic payment and settlement, CBI focused on expansion of electronic payment through the use of infrastructures, standardization of payment methods and instruments, and enhancement of oversight over the national payment system. In this regard, two major steps were taken in 1389; the introduction of nationwide standard bank account numbers (SHEBA) and the design and implementation of electronic card payment and settlement system (SHAPARAK). Moreover, the Central Bank supervisory approach has changed from the traditional to the data-based and electronic oversight and for the first time in 1389, electronic exchange and settlement of securities, the scripless securities settlement system (TABA), was officially put into operation. In Azar and Esfand 1389, the first two phases of government cash deposits and households' withdrawals of subsidies under the Energy Sector Reform Plan of the FYDP were implemented, reflecting the banking system potential and strength in realization of targets of such an extensive countrywide program.

Central Bank real-time supervisory and reporting systems for quick identification and alleviation of weaknesses became operational in this year. Qualitative and quantitative growth of electronic payment instruments, and extensive use of electronic payment systems were among other outstanding achievements of the banking sector in 1389.

Cash Payment

Notes and Coins

Notes and coins act as cash payment instruments. With inclusion of Central Bank Iran-Checks, total notes and coins issued reached Rls. 331.4 trillion. Notes and coins with the public (including CBI Iran-Checks) increased by 17.1 percent from Rls. 192.3 trillion in 1388 year-end to Rls. 225.2 trillion at end-1389. Thus, ratio of notes and coins with the public to GDP (at current prices) dipped by 0.2 percentage point to 5.2 percent, compared with 1388. Notes and coins per capita went up by 15.4 percent to Rls. 3,013 thousand compared with the previous year.

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)
1387 ¹	157,764	97.4	30.0	8.3	4.7	2,174
1388	192,314	21.9	32.0	8.2	5.4	2,611
1389	225,155	17.1	29.7	7.6	5.2	3,013

¹ Surge in the value of notes and coins with the public in 1387 was due to issuance of CBI Iran-Checks to replace check notes issued by banks, which were widely used by the public previously, and their inclusion in the notes issued by the CBI.

Sight Deposits

Total sight deposits rose 30.3 percent to Rls. 533.6 trillion compared with the year before. Share of these deposits in money was 70.3 percent, and in liquidity 18.1 percent. Meanwhile, ratio of sight deposits to GDP was 12.4 percent (at current prices). Due to the collection and cancellation of banks' checks, net value of check notes issued by banks¹ (upon deduction of the checks of other banks) decreased from Rls. 14.6 trillion at end-1388 to Rls. 9 trillion in 1389 year-end. Thus, share of these checks in banks' sight deposits decreased from 3.6 percent in 1388 year-end to 1.7 percent at end-1389. Sight deposits per capita increased by 28.4 percent to Rls. 7,140 thousand compared with the preceding year.

Interbank Clearing House

In this year, 111.1 million checks worth Rls. 10,284.2 trillion were channeled through the interbank clearing houses. Total Iran-Checks channeled through the Interbank Clearing House, in terms of volume and value,

amounted to 18 thousand worth Rls. 20 billion, with each transaction at Rls. 1,102 thousand, on average.

In 1389, the number of ordinary checks, comprising coded checks and personal checks, delivered to the Interbank Clearing House rose 3.8 percent. Total transactions settled through ordinary checks increased by 31 percent to Rls. 10,284.2 trillion. Therefore, the average value of each transaction went up by 26.2 percent to Rls. 92,622 thousand compared with the corresponding figure for the previous year (Rls. 73,368 thousand).

In the review year, total volume and value of transactions processed through the Interbank Clearing House advanced by 3.3 and 31 percent, respectively. This was largely due to rise in the use of ordinary checks and their substitution for Iran-Checks issued by banks. Thus, ratio of total value of transactions processed through the Interbank Clearing House to GDP (at current prices) rose from 2.2 in 1388 to 2.4 in this year.

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)
1387	367,718	-19.3	70.0	19.3	10.9	5,066
1388	409,383	11.3	68.0	17.4	11.5	5,558
1389	533,561	30.3	70.3	18.1	12.4	7,140

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

	Volume (million)		Percentage change	Value (trillion rials)		Percentage change
	1388	1389		1388	1389	
Iran-Checks issued by banks	0.52	0.02	-96.5	0.57	0.02	-96.5
Ordinary checks	107.0	111.0	3.8	7,851.5	10,284.2	31.0
Total	107.5	111.1	3.3	7,852.0	10,284.2	31.0

¹ Includes balance of all checks (except personal checks).

Electronic Payment System

Expansion of Electronic Payment Instruments

In 1389, electronic payment instruments expanded with an admissible growth. The number of cards issued by the banking sector picked up by 46.9 percent to 128.4 million. Among these cards, 93.6 million (72.8 percent) were debit cards, 33.5 million (26.1 percent) prepaid cards (purchase, gift, and e-money cards), and merely 1.3 million (1.1 percent) credit cards. Thus, the number of cards issued in the country for each individual went up from 1.2 in 1388 to 1.7 in 1389 year-end.

In the review year, the number of ATMs increased by 20.4 percent to 20,623. The number of PIN pads, electronic devices used in debit, credit, or smart card-based transactions, rose by 35.1 percent to 43,046. The number of POSs surged by 31.9 percent to 1,513 thousand, signifying the positive trend of the banking sector in expanding electronic payments compared with the rise in the number of ATMs. At end-1389, the ratio of cards issued per ATM, PIN pad, and POS indicated an uptrend, reaching 6,227, 2,983 and 85, respectively.

Development of Electronic Transactions

In 1389, 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 2,892 million and Rls. 3,084 trillion, respectively. The number of transactions processed through ATMs, POSs and PIN pads during this year rose by 63.5, 190 and 10.1 percent, respectively.

Table 15.5. Electronic Payment Instruments

	Year-end		Percentage change
	1388	1389	
Bank cards (thousand)	87,425	128,413	46.9
ATMs	17,133	20,623	20.4
POSs	1,147,602	1,513,318	31.9
PIN pads	31,853	43,046	35.1

In this year, despite the surge in the volume and value of transactions processed through POSs, the highest share still belonged to ATMs. Share of ATMs in total volume of transactions processed through the banking sector was 72.6 percent and in total value 38.1 percent. On the other hand, the share of POSs in total volume of transactions was 21.3 percent and in total value 16.6 percent. This reveals the limited use of POSs by the public as compared with ATMs, which are mostly used for receipts and payments. It is expected that with the extensive use of credit cards and prepaid cards, as well as more availability of POSs throughout the country,

Table 15.4. Bank Cards

	Volume (thousand)		Growth (percent)	Share (percent)		Change in share (percentage points)
	1388	1389		1388	1389	
Debit cards	67,633	93,570	38.3	77.3	72.8	-4.5
Credit cards	424	1,368	222.2	0.5	1.1	0.6
Prepaid cards ¹	19,380	33,485	72.8	22.2	26.1	3.9

¹ Includes purchase, gift, and e-money cards with a total number of 12.2 thousand in 1388 and 10.2 thousand in 1389.

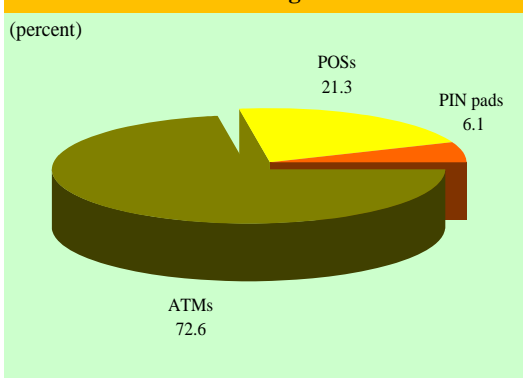
Table 15.6. Volume and Value of Electronic Transactions Processed through the Banking Sector

	Volume (million)		Growth (percent)	Value (trillion rials)		Growth (percent)
	1388	1389		1388	1389	
Total electronic transactions	1,658	2,892	74.5	1,555	3,084	98.4
ATMs	1,285	2,100	63.5	565	1,176	108.2
POSs	212	615	190.0	132	511	287.5
PIN pads	161	177	10.1	858	1,398	62.9

the share of transactions through POSs increases and the use of cash decreases in the future.

The interbank information transfer network (SHETAB) plays a key role in processing electronic transactions in the banking sector. Total volume of interbank transactions processed through SHETAB amounted to 1,350.6 million, and net value of these transactions surged by 132.4 percent to over Rls. 171 trillion compared with the preceding year.

Figure 15.1. Share of electronic payment instruments in total number of electronic transactions in the banking sector in 1389



It is noteworthy that PIN pads enjoyed a notable share of 45.3 percent in total value of transactions in 1389 year-end. PIN pads are largely used for electronic transfer of funds through bank cards and between banks.

Figure 15.2. Share of electronic payment instruments in total value of electronic transactions in the banking sector in 1389

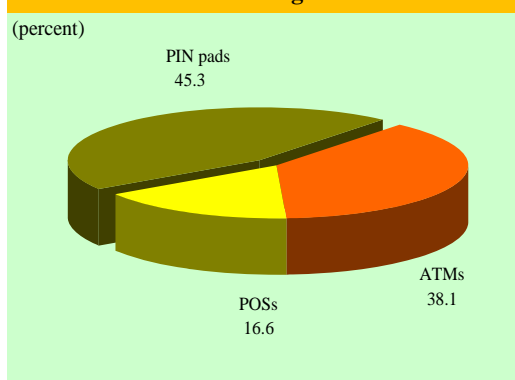


Table 15.7. Volume and Net Value of Transactions Processed through SHETAB

	Volume (thousand)		Growth (percent)	Net value (billion rials)		Growth (percent)
	1388	1389		1388	1389	
Total transactions through SHETAB¹	811,937	1,350,556	66.3	73,590	171,031	132.4
ATMs	647,493	952,766	47.1	θ
POSs	164,444	368,894	124.3	θ
Others (landlines, cell phones, Internet, branches)	..	28,896	θ	θ

¹Includes interbank electronic transactions processed through SAHAB.

Electronic Settlement System

SAHAB

The retail fund transfer system (SAHAB) helped transfer of more than 77 million transactions through ATMs, up by 167.9 percent compared with the previous year. Furthermore, approximately 1,750 thousand transactions processed through PIN pads were related to SAHAB. The number of transactions processed through SAHAB via the Internet rose 8 times compared with the previous year. Shares of ATMs, PIN pads and Internet in total transactions processed through SAHAB, in terms of volume, reached 94.4, 2.1 and 3.5 percent, and in terms of value, 84.2, 12.7 and 3.1 percent, respectively. Therefore, 81.6 million transactions valued at Rls. 385 trillion were processed through SAHAB in 1389, revealing a remarkable rise compared with 1388.

SATNA

In 1389, CBI's and the banking sector's approach towards development and expansion

of the customer to customer real time electronic payment services through RTGS (Real Time Gross Settlement) raised the use of such services, in terms of volume and value, by 100 and 138.8 percent, respectively. The highest share in total transactions processed through SATNA, in terms of volume and value, belonged to customer to customer transactions by 97.6 and 53.7 percent, respectively. Thus, total transactions processed through SATNA, in terms of volume, increased by 92.3 percent and reached 9 million, and in terms of value, rose by 40 percent to Rls. 5,927 trillion compared with the previous year.

PAYA

The Automated Clearing House System (PAYA), which consists of two separate components of "direct debit" and "credit transfer", was experimentally put into operation in Dey 1388. PAYA became fully operational

Table 15.8. Volume and Value of Transactions Processed through SAHAB

	Volume (thousand)		Growth (percent)	Value (billion rials)		Growth (percent)
	1388	1389		1388	1389	
Total transactions through SAHAB	29,785	81,643	174.1	136,435	385,035	182.2
ATMs	28,748	77,030	167.9	117,011	324,307	177.2
PIN pads	679	1,750	157.6	17,901	48,854	172.9
Internet	358	2,863	☐	1,523	11,874	☐

Table 15.9. Volume and Value of Transactions Processed through SATNA

	Volume		Growth (percent)	Value (trillion rials)		Growth (percent)
	1388	1389		1388	1389	
Bank to bank	258,701	175,879	-32.0	1,087	1,341	23.4
Customer to customer	4,375,838	8,753,126	100.0	1,333	3,184	138.8
Clearing settlement systems (SHETAB, Interbank Clearing House, and PAYA)	29,049	38,892	33.9	1,813	1,401	-22.7
Total¹	4,663,588	8,967,897	92.3	4,233	5,927	40.0

¹ Excludes intraday liquidity facility and settlement by the CBI.

in 1389. During the first phase, the "direct debit" component of this system was utilized for the individual and multiple payment orders. Moreover, the Standard for Multiple Commercial Payment Orders was formulated and communicated to banks for the coverage of these orders. Therefore, in 1389, to initiate electronic funds transfer, PAYA, together with SATNA and SAHAB, was put into operation. SATNA and PAYA were used for account-based transfers and SAHAB was used for card-based transfers. According to relevant data, almost 384 thousand transactions worth Rls. 37,034 billion were processed through PAYA in this year.

TABA

The scripless securities settlement system (TABAs), a pillar of the comprehensive payment system, was established in 1388 as the infrastructure for the scripless issue and settlement of securities. TABA permits electronic issue and exchange of participation papers and certificates of deposit. Moreover, banks can easily get access to liquidity facility for use in SATNA by placing their participation papers in TABA.

For the first time, in 1389, TABA paved the way for scripless issue and settlement of securities. Thus, Rls. 500 billion governmental participation papers were offered through TABA for developmental and profitable projects and were sold to 15 banks. These papers reached maturity in Dey 1389. Moreover, the Central Depository System (CDS) was created for the public access to TABA, enabling scripless issue and exchange of all securities.

Total Value of Transactions

The total transactions surged by 54.5 percent in nominal terms in 1389 compared with 1388 and reached Rls. 16,590 trillion.

After adjusting this figure for inflation in 1389, the growth of total transactions was 37.4 percent. This trend shows the unprecedented growth of electronic transactions in 1389.

Issuance of CBI Iran-Checks and their replacement for those issued by banks as of 1387 declined the gross value of banks' Iran-Checks cleared through the Interbank Clearing House to Rls. 20 billion. Conversely, the value of ordinary checks cleared through the Interbank Clearing House advanced by 31 percent compared with the preceding year.

Considering the reduction in total transactions through various kinds of checks, value of electronic transactions increased in 1389. Therefore, share of electronic transactions in total went up by 11.1 percentage points, and the value of transactions through Iran-Checks issued by banks and ordinary checks decreased by the same figure. Despite the slight growth of the value of transactions through ordinary checks, the highest share in transactions (62 percent) still belonged to these checks. The value of transactions through POSs surged by 287.5 percent in 1389; however, POSs held a share of only 3.1 percent in total transactions. Meanwhile, share of ATMs in total value of transactions rose by 1.8 percentage points from 5.3 percent in previous year to 7.1 percent in 1389. Notably, total value of customer to customer transactions through SATNA, up by 138.8 percent compared with the previous year, had the highest effect on raising total value of transactions by 17.2 percentage points. Thus, share of these transactions in total, in terms of value, grew by 6.8 percentage points from 12.4 percent in 1388 to 19.2 percent in 1389.

Share of Non-cash Payment Instruments

Development of electronic banking and expansion of electronic payment instruments

Table 15.10. Total Value of Transactions Processed through the Banking Sector

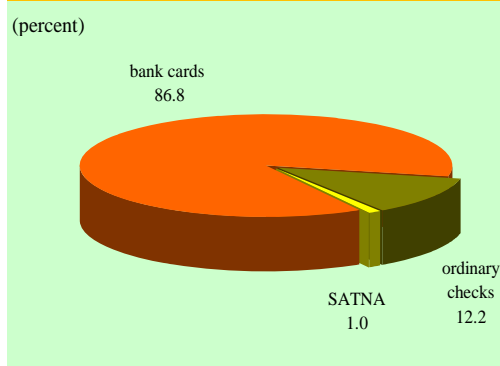
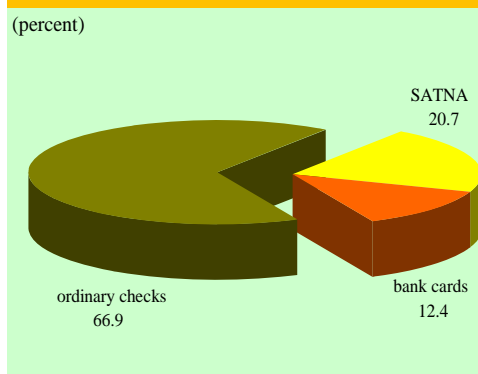
	Value (trillion rials)		Growth (percent)	Share in growth (percentage points)	Share in total value of transactions (percent)		Change in share (percentage points)
	1388	1389			1388	1389	
Iran-Checks issued by banks	0.57	0.02	-96.5	-0.01	0.01	*	-0.01
Ordinary checks	7,851	10,284	31.0	22.7	73.1	62.0	-11.1
ATMs	565	1,176	108.2	5.7	5.3	7.1	1.8
POSs	132	511	287.5	3.5	1.2	3.1	1.9
PIN pads	858	1,398	62.9	5.0	8.0	8.4	0.4
SATNA (customer to customer)	1,333	3,184	138.8	17.2	12.4	19.2	6.8
PAYA ¹	..	37	0	0	0	0.2	0.2
Total transactions (nominal)	10,740	16,590	54.5	54.5	100.0	100.0	
Total transactions (real)²	5,290	7,270	37.4				

¹ As of Dey 1388, PAYA was put into operation. Figures represent the net value of transactions in 1389.

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

reduced transactions through ordinary checks (including bank checks) settled in the Inter-bank Clearing House by 9.9 percentage points, raising share of bank cards in total non-cash transactions by 9.8 percentage points, however. Therefore, the highest share in total non-cash transactions, in terms of volume, belonged to bank cards by 86.8 percent as compared with that of ordinary checks by 12.2 percent. The average value per transaction settled through bank cards reached Rls. 2,410 thousand, constituting 12.4 percent of total value of non-cash transactions. Meanwhile, the high average value per transaction settled through ordinary checks by Rls. 92,622 thousand resulted in 66.7 percent share of these checks in total value of transactions.

In the review year, SATNA accounted for one percent of total number of non-cash transactions, remaining relatively unchanged compared with the previous year (0.9 percent). As transactions through SATNA were mostly in large-value funds, with an average value of Rls. 363,807 thousand per transaction, transactions through SATNA accounted for 20.7 percent of total value of non-cash transactions.

Figure 15.3. Share of non-cash payment instruments in total number of non-cash transactions in 1389**Figure 15.4. Share of non-cash payment instruments in total value of non-cash transactions in 1389**

Chapter 15 PAYMENT SYSTEMS

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)	
	1388	1389	1388	1389	1388	1389
Bank cards ¹	77.0	86.8	9.7	12.4	2,655	2,410
Ordinary checks ²	22.1	12.2	77.2	66.7	73,368	92,622
SATNA ³	0.9	1.0	13.1	20.7	304,683	363,807
PAYA	–	0.04	–	0.2	–	96,457 ⁴
Total	100.0	100.0	100.0	100.0	21,009	16,897

¹ Includes transactions processed through POSs and PIN pads, and excludes ATMs. Non-cash payment transactions processed through ATMs (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 It refers to the net value.