

PAYMENT SYSTEMS

n 1392, in line with the development of banks' retail payment systems and quality promotion of electronic banking services, CBI made great attempts to improve transparency and standards as well as oversight of electronic payment systems within the framework of development and completion of a comprehensive wire transfer system. The development of retail funds transfer systems, inception of Interbank Financial Telecommunication (SEPAM) as an infrastructure for banks' electronic services. operation of a customized RTGS (SATNA) system, the expansion of SHETAB for trilateral funds transfer, improvement of government financial operation through CBI integrated comprehensive wire transfer system, debut of scripless securities through the central depository system, as well as design of Mobile Payment System (SEPAS) and Electronic Wallet (KIVA) were among measures adopted and supervised by the CBI in implementation of the global comprehensive wire transfer system. Moreover, the CBI

put Electronic System for Checks Clearance (CHAKAVAK) into test run, aiming at standardization and harmonization of banks' check issuance and processes as well as the elimination of paperwork on check clearance, by introducing a fully electronic global clearance and settlement system for checks.

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 1392 amounted to Rls. 420.9 trillion. Notes and coins with the public (including CBI Iran-Checks) increased by 1.2 percent from Rls. 330.2 trillion at end-1391 to Rls. 334.1 trillion in 1392 year-end. Thus, the ratio of notes and coins with the public to GDP (at current prices) decreased by 1.1 percentage points compared with 1391, to reach 3.6 percent.

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

	Value (trillion rials)	Percentage change (annual)	Share in money (percent)	Share in liquidity (percent)	Ratio to GDP (percent)	Notes and coins per capita (thousand rials)
1390	263.2	16.9	29.3	7.4	4.2	3,502
1391	330.2	25.4	29.0	7.2	4.7	4,342
1392	334.1	1.2	27.9	5.2	3.6	4,342

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Sight Deposits

Total sight deposits reached Rls. 861.9 trillion at end-1392, showing 6.9 percent growth compared with the year before. Shares of sight deposits in money and liquidity were 72.1 and 13.5 percent, respectively, and their ratio to GDP was 9.2 percent (at current prices). Moreover, sight deposits per capita reached Rls. 11,202 thousand, showing 5.6 percent increase 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 5.2 percent from Rls. 1,136.7 trillion in 1391 year-end to Rls. 1,196.0 trillion at end-1392.

Interbank Clearing House

A total of 119.3 million checks worth Rls. 17,949.6 trillion were channeled through the Interbank Clearing House in 1392. Total number of banks' Iran-Checks

channeled through the Interbank Clearing House came to zero. In 1392, the number of ordinary checks¹ delivered to the Interbank Clearing House rose 1.1 percent and total transactions settled through ordinary checks, in terms of value, grew by 22.0 percent. Therefore, the average value of each transaction of ordinary checks grew by 20.6 percent to Rls. 150,418 thousand compared with the corresponding figure for the previous year (Rls. 124,678 thousand).

Electronic Payment System

Expansion of Electronic Payment Instruments

In 1392, electronic payment instruments expanded with an admissible growth. The number of cards issued in the banking sector grew by 23.6 percent to 279.1 million. Among these cards, 189.8 million were debit cards (68.0 percent), 87.0 million were prepaid

Table 14.2. Sight Deposits and their Ratio to Macroeconomic Indicators

	Value (trillion rials)	Percentage change (annual)	Share in money (percent)	Share in liquidity (percent)	Ratio to GDP (percent)	Sight deposits per capita (thousand rials)
1390	634.4	18.9	70.7	17.9	10.2	8,441
1391	806.6	27.1	71.0	17.5	11.4	10,607
1392	861.9	6.9	72.1	13.5	9.2	11,202

Table 14.3. Volume and Value of Transactions Processed through Interbank Clearing House

	Volume	(million)	Percentage	Value (tri	Percentage		
	1391	1392	change	1391	1392	change	
Iran-Checks issued by banks	0.0006	-	θ	0.0006	-	θ	
Ordinary checks	118.1	119.3	1.1	14,718.7	17,949.6	22.0	
Total	118.1 119.3		1.1	14,718.7	17,949.6	22.0	

¹ Includes coded and personal checks.

cards in the form of purchase and gift cards (31.2 percent), and merely 2.2 million were credit cards (0.8 percent). The number of cards issued in the country for each individual went up from 3.0 in 1391 year-end to 3.6 at end-1392

The number of ATMs increased by 11.9 percent to 33,773 in 1392. The number of PIN pads (electronic devices used in debit, credit, or smart card-based transactions) rose 5.7 percent to 56,152. The number of POSs surged by 15.6 percent to 3,110 thousand which, compared with the lower increase in the number of ATMs, signifies the positive trend of the banking sector in expanding electronic payments.

Table 14.4. Number of Electronic Payment Instruments

	Year	Year-end				
	1391	1392	change			
Bank cards (thousand)	225,764	279,058	23.6			
ATM	30,173	33,773	11.9			
POS	2,689,253	3,109,507	15.6			
PIN pad	53,117	56,152	5.7			

Development of Electronic Transactions

In 1392, along with the expansion of electronic payments technologies, banks' electronic transactions increased significantly. Total volume and value of electronic transactions settled through the banking sector

reached 9,696 million and Rls. 18,405 trillion, respectively. The volume of electronic transactions processed through ATMs and POSs during this year grew by 2.7 and 66.1 percent, respectively. Accordingly, the value of electronic transactions processed through ATMs and POSs increased by 58.0 and 8.9 percent. During 1392, the volume and value of transactions processed through PIN pads increased by 7.7 and 38.9 percent. Moreover, the volume and value of transactions processed through cell phones, landlines, kiosks, and internet increased by 4.1 and 2.7 times as much as the year before. Total volume of transactions per card was 34.7, indicating growth when compared with 30.6 transactions in 1391.

Share of ATMs in total volume and value of electronic transactions processed through the banking sector was 42.5 and 42.3 percent, and share of POSs in total volume and value of electronic transactions was 40.3 and 33.6 percent, respectively. Shares of ATMs and PIN pads in total volume of electronic transactions decreased by respectively 15.6 and 0.6 percentage points (a total of 16.2 percentage points) while share of POSs increased by 6.2 percentage points and that of cell phones, landlines, kiosks and internet increased by 10.0 percentage points. This shows the growing public tendency towards the wider use of new electronic payment instruments in daily transactions. It is expected that with the extensive use of credit and prepaid cards, as well as more availability of electronic payment instruments throughout

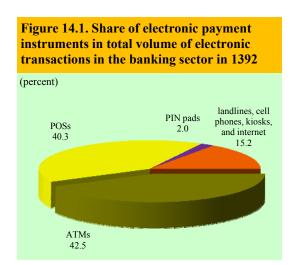
Table 14.5. Bank Cards

	Number	(thousand)	Growth	Share (percent)	Change in share	
	1391	1392	(percent)	1391	1392	(percentage points)	
Debit cards	154,862	189,825	22.6	68.6	68.0	-0.6	
Credit cards	1,759	2,237	27.1	0.8	0.8	0.0	
Prepaid cards	69,143	86,996	25.8	30.6	31.2	0.6	

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the country, the share of electronic transactions will increase and the use of cash will decrease in the future. Furthermore, PIN pads enjoyed a share of 21.3 percent in total value of electronic transactions in 1392.

The Interbank Information Transfer Network (SHETAB) plays a key role in processing electronic transactions in the banking sector. The share of SHETAB center in the total volume and value of electronic transactions processed through the banking sector was 80.6 and 61.1 percent, respectively, indicating a rise when compared with the respective figures of the year before (67.5 and 56.4 percent). This was attributable to the conducting of all POS transactions to SHETAB network via SHAPARAK system.



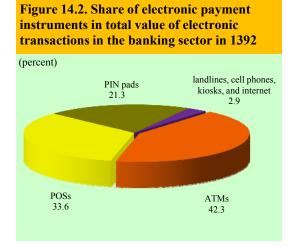


Table 14.6. Volume and Value of Electronic Transactions Processed through the Banking Sector

	Volume	Volume (million)		Value (tri	llion rials)	Growth
	1391	1392	(percent)	1391	1392	(percent)
Total electronic transactions	6,900	9,696	40.5	13,616	18,405	35.2
ATM	4,010	4,120	2.7	4,924	7,780	58.0
POS	2,355	3,910	66.1	5,673	6,177	8.9
PIN pad	180	194	7.7	2,824	3,922	38.9
Cell phone, landline, kiosk, and internet	356	1,472	313.7	195	526	170.4

Table 14.7. Volume and Value of Interbank Transactions Processed through SHETAB

	Volume (million)		Growth	Value (trillion rials)		Growth
	1391	1392	(percent)	1391	1392	(percent)
Total transactions through SHETAB ¹	4,655	7,816	67.9	7,675	11,236	46.4
ATM	2,211	2,404	8.7	2,286	3,665	60.3
POS	2,067	3,910	89.2	4,843	6,177	27.6
Others (landline, cell phone, internet, kiosk, and branches)	377	1,502	298.2	546	1,394	155.1

¹ Includes interbank electronic transactions processed through SAHAB.

Electronic Settlement System

SAHAB

The Retail Funds Transfer System (SAHAB) helped the transfer of more than 448 million transactions through ATMs in 1392, indicating 51.5 percent growth compared with the year before. Furthermore, approximately 21.0 million transactions processed through PIN pads were related to SAHAB. The volume of transactions processed through SAHAB via the internet and kiosks increased more than twice as much as the year before. Shares of ATMs, PIN pads, and internet and kiosks in volume of total transactions processed through SAHAB were 86.6, 4.1, and 9.3 percent and, in terms of value, 70.6, 22.5, and 6.9 percent, respectively.

SATNA

Total volume of transactions processed through RTGS (Real Time Gross Settlement) System or SATNA, as the main infrastructure for large-value payments, increased by 5.5

percent to 4.8 million. Moreover, total value of transactions processed through SATNA reached Rls. 34,429 trillion, indicating 110.8 percent growth compared with 1391. Total volume of customer to customer transactions processed through SATNA increased by 3.3 percent to 4.5 million and value of customer to customer transactions increased by 18.3 percent to Rls. 8,235 trillion. Accordingly, total volume and value of bank to bank transactions increased by 28.2 and 35.8 percent, respectively. The volume and value of other subsystem transactions (SHETAB, Interbank Clearing House, and PAYA), processed through SATNA, rose by respectively 82.4 and 236.5 percent to reach 211 thousand transactions and Rls. 22,570 trillion. The highest share in total transactions processed through SATNA, in terms of volume, belonged to customer to customer transactions by 94.6 percent and in terms of value, to clearing settlement systems by 65.6 percent.

Table 14.8. Volume and Value of Transactions Processed through SAHAB

	Volume	Volume (million)		Value (trillion rials)		Growth	
	1391	1392	(percent)	1391	1392	(percent)	
Total transactions through SAHAB	325	517	58.8	1,968	3,827	94.5	
ATM	295	448	51.5	1,516	2,700	78.1	
PIN pad	10	21	106.6	351	863	145.9	
Internet and kiosk	20	48	143.9	101	264	162.6	

Table 14.9. Volume and Value of Transactions Processed through SATNA

	Volume (thousand)		Growth	Value (trillion rials)		Growth	
	1391	1392	(percent)	1391	1392	(percent)	
Bank to bank	34	44	28.2	2,668	3,623	35.8	
Customer to customer	4,352	4,496	3.3	6,960	8,235	18.3	
Clearing settlement systems (SHETAB, Interbank Clearing House, and PAYA)	115	211	82.4	6,708	22,570	236.5	
Total ¹	4,502	4,750	5.5	16,336	34,429	110.8	

¹ Excludes intraday liquidity facility and settlement by the CBI.

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 destination bank. Accordingly, upon the launching of Electronic Card Payment and Settlement System (SHAPARAK), completion of transactions and the transfer of funds to accounts of goods and services suppliers would be directed through the PAYA system. Moreover, with the possibility of processing direct transfer orders through PAYA, this system together with SATNA and SAHAB could cover and process all electronic funds transfer orders. SATNA and PAYA are utilized for bank to bank funds transfer, while SAHAB is used for card to card retail funds transfer. In 1392, about 20.0 million banking transactions worth Rls. 3,460 trillion were processed through PAYA in the form of credit transfer, indicating 32.9 and 97.0 percent growth, respectively.

Total Value of Transactions

Nominal value of total transactions surged by 29.7 percent in 1392 compared with 1391, and reached Rls. 48,049 trillion. On the other hand, the real value of total transactions (considering 34.7 percent growth in CPI) decreased by 3.7 percent, indicating rise in the general price level.

Issuance of CBI Iran-Checks and their replacement for those issued by banks as of the year 1387 reduced the gross value of

banks' Iran-Checks cleared through the Interbank Clearing House and brought it to zero in 1392. Conversely, the value of ordinary checks cleared through the Interbank Clearing House advanced by 22.0 percent compared with 1391.

Considering the reduction in total transactions through various kinds of checks, the value of electronic transactions increased in 1392. Therefore, share of electronic transactions in total value of transactions went up by 2.4 percentage points while share of transactions through ordinary checks in total value of transactions decreased by 2.4 percentage points, in nominal terms. As in previous years, ordinary checks still had the highest share in total value of transactions by 37.4 percent. ATM transactions, up by 58.0 percent compared with the year before, accounted for 7.7 percentage points of the growth in total value of transactions. Thus, share of ATMs in total value of transactions grew by 2.9 percentage points to 16.2 percent in 1392.

Share of Non-cash Payment Instruments

Development of electronic banking and expansion of electronic payment instruments reduced the share of volume of transactions through ordinary checks settled in the Interbank Clearing House in total volume of non-cash transactions by 1.8 percentage points. Moreover, share of bank cards in the total volume of non-cash transactions increased by 2.0 percentage points while

Table 14.10. Volume and Value of Transactions Processed through PAYA

	Volume (million)		Growth	Value (trillion rials)		Growth	
	1391	1392	(percent)	1391	1392	(percent)	
Credit transfer	15	20	32.9	1,757	3,460	97.0	
SHAPARAK	239	855	257.9	2,814	5,921	110.4	
Total	254	875	244.6	4,571	9,381	105.2	

shares of SATNA and PAYA each decreased by about 0.1 percentage point. In this year, of total volume of non-cash transactions, 97.5 percent was related to bank cards, 2.1 percent to ordinary checks, and 0.4 percent to PAYA and SATNA. The average value of each transaction settled through bank cards reached Rls. 1,905 thousand, constituting 26.4 percent of total value of non-cash transactions. Moreover, the high average value of each transaction settled through ordinary checks at Rls. 150.4 million brought the share of these checks in total value of non-cash transactions to 44.6 percent.

In 1392, customer to customer transactions through SATNA accounted for 0.1 percent of total volume of non-cash transactions. As transactions through SATNA were mostly large-value transactions, with a high average value of Rls. 1,831.7 million per transaction, these transactions accounted for 20.4 percent of total value of non-cash transactions. In this year, total share of cards, ordinary checks, and SATNA in the value of non-cash transactions declined by about 3.1 percentage points while the share of PAYA (in the form of credit transfer) increased by 3.1 percentage points.

Figure 14.3. Share of non-cash payment instruments in total volume of non-cash transactions in 1392

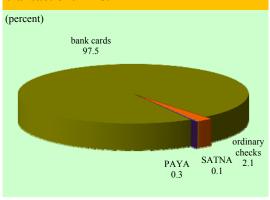


Figure 14.4. Share of non-cash payment instruments in total value of non-cash transactions in 1392

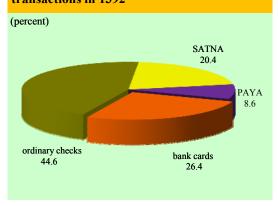


Table 14.11. Total Value of Transactions Processed through the Banking Sector

	Value (trillion rials)		Growth	Share in growth	Share in total value of transactions (%)		Change in share	
	1391	1392	(percent)	(percentage points)	1391	1392	-(percentage points)	
Iran-Checks issued by banks	0.0006	0	-	0.0	*	0.0	-	
Ordinary checks	14,719	17,950	22.0	8.7	39.7	37.4	-2.4	
ATM	4,924	7,780	58.0	7.7	13.3	16.2	2.9	
POS	5,673	6,177	8.9	1.4	15.3	12.9	-2.4	
PIN pad	2,824	3,922	38.9	3.0	7.6	8.2	0.6	
SATNA (customer to customer)	6,960	8,235	18.3	3.4	18.8	17.1	-1.7	
PAYA (credit transfer)	1,757	3,460	97.0	4.6	4.7	7.2	2.5	
Cell phone, landline, kiosk and								
internet	195	526	170.4	0.9	0.5	1.1	0.6	
Total transactions (nominal)	37,051	48,049	29.7	29.7	100.0	100.0		
Total transactions (real) 1	28,383	27,319	-3.7					

¹ CPI is used for the calculation of total transactions in real terms (1390=100).

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

		Share in total volume (percent)		otal value cent)	_	Average value per transaction (thousand rials)	
	1391 ▲	1392	1391 ▲	1392	1391 ▲	1392	
Bank cards ¹	95.5	97.5	27.1	26.4	3,007	1,905	
Ordinary checks ²	3.9	2.1	45.8	44.6	124,678	150,418	
SATNA (customer to customer)	0.1	0.1	21.7	20.4	1,599,321	1,831,736	
PAYA (credit transfer)	0.5	0.3	5.5	8.6	117,079	173,465	
Total non-cash transactions	100.0	100.0	100.0	100.0	10,610	7,039	

¹ Includes transactions processed through POS, PIN pad, cell phone, landline, kiosk and internet while 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.