

In line with the Payment System Comprehensive Strategy approved in 1380 and the use of modern information and communication technologies, various significant measures were adopted by the CBI for the further development of the country's payment system in 1395. These measures included: development of retail payment services by introducing PAYVAND system and establishing cross-border and card-based payment systems to render services to the Iranian banks' clients, strengthening CBI supervisory powers, enhancement of economic transparency, prevention of corruption in the banking system through expanding the Electronic Banking Authentication System (NAHAB) as the integrated inquiry center of Iran's banking system, development of the Credit Control and Oversight Center (MAKNA) as a priority on the project list of Resistance Economy Command Headquarters, and the establishment of the system for Bank-Wide Standard E-Checkbook Issuance (SAYAD) for raising the security and efficiency of checks as a payment instrument. Meanwhile,

in implementation of the approved projects in the CBI Roadmap 1400, a number of activities including the design and implementation of the cross-border communication project, establishment of a direct credit-based payment system, and enablement of payment international standards were put on CBI's agenda.

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 1395 amounted to Rls. 535.1 trillion. Notes and coins with the public (including CBI Iran-Checks) increased by 5.8 percent from Rls. 371.9 trillion at end-1394 to Rls. 393.3 trillion in 1395 year-end. Thus, the ratio of notes and coins with the public to GDP (at current prices) decreased by 0.2 percentage point compared with 1394, to reach 3.1 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)
1394	371.9	5.7	27.2	3.7	3.3	4,711 ▲
1395	393.3	5.8	24.1	3.1	3.1	4,921

Sight Deposits

Total sight deposits reached Rls. 1,237.0 trillion at end-1395, showing 24.3 percent increase compared with the year before. Shares of sight deposits in M1 and M2 were 75.9 and 9.9 percent, respectively, and their ratio to GDP was 9.7 percent at current prices. Moreover, sight deposits per capita reached Rls. 15,477 thousand, showing 22.8 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 19.3 percent from Rls. 1,367.0 trillion in 1394 year-end to Rls. 1,630.3 trillion at the end of 1395.

through CHAKAVAK reached 124.2 million, worth Rls. 17,317.3 trillion, with the total volume and value of checks transacted via both systems growing by respectively 1.3 and 1.9 percent. The average value of each transaction rose by 0.6 percent to Rls. 139,484 thousand compared with the corresponding figure for the previous year (Rls. 138,667 thousand). The total number of check transactions per capita was 1.6 and their value per capita was Rls. 216,667 thousand in 1395.

Check Settlement System

With the implementation of CHAKAVAK as the infrastructure of systematic and electronic processing of checks and other banking documents as of mid-1393, which gradually replaced the Interbank Clearing House by end-Khordad 1394, the check clearance was executed solely through CHAKAVAK system in 1395. The number of checks channeled

Electronic Payment System

Expansion of Electronic Payment Instruments

In 1395, the number of cards issued in the banking sector increased by 25.3 percent to 414.6 million. Among these cards, 272.9 million were debit cards (65.8 percent), 140.2 million were prepaid cards in the form of purchase and gift cards (33.8 percent), and merely 1.5 million were credit cards (0.4 percent). The number of cards issued for each individual increased from 4.2 at end-1394 to 5.2 cards in 1395 year-end.

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)
1394	995.1	16.3	72.8	9.8	8.9	12,606▲
1395	1,237.0	24.3	75.9	9.9	9.7	15,477

Table 14.3. Transactions Processed through Checks

	Volume (million)		Percentage change	Value (trillion rials)		Percentage change
	1394	1395		1394	1395	
CHAKAVAK	119.4	124.2	4.0	16,732.8	17,317.3	3.5
Interbank Clearing House	3.2	0.0	-100.0	260.9	0.0	-100.0
Total	122.6	124.2	1.3	16,993.7	17,317.3	1.9

The number of ATMs increased by 7.9 percent to 47,374 in 1395. The number of PIN pads (electronic devices used in debit, credit, or smart card-based transactions) rose by 0.7 percent to 72,187 and that of POSs surged by 18.9 percent to 5,272 thousand. Higher growth in the number of POSs compared with the lower increase in the number of ATMs signifies the positive trend of the banking sector in expanding electronic payments. Ratios of issued cards to ATMs, PIN pads, and POSs increased to 8,751, 5,743, and 79, respectively.

Development of Electronic Transactions

In 1395, the total volume and value of electronic transactions settled through the banking sector reached 18,577 million and

Rls. 36,780 trillion, respectively. The volume of electronic transactions processed through ATMs and POSs grew by respectively 3.7 and 42.1 percent. Accordingly, the value of electronic transactions processed through these devices increased by 9.6 and 32.7 percent. The volume and value of transactions processed through PIN pads increased by respectively 1.3 and 18.6 percent. On the other hand, the volume of transactions processed through cell phones, landlines, kiosks, and internet decreased by 18.5 percent, mainly due to the exclusion of some transactions processed via cell phones¹ and the reorganization of bill payment transactions. The value of these transactions, however, rose 63.4 percent. The total volume of transactions per card was 44.8, indicating a reduction when compared with 47.2 transactions in 1394.

Table 14.4. Number of Electronic Payment Instruments

	Year-end		Percentage change
	1394	1395	
Bank cards (thousand)	330,851	414,590	25.3
ATM	43,924	47,374	7.9
POS (thousand)	4,434	5,272	18.9
PIN pad	71,699	72,187	0.7

Table 14.5. Bank Cards

	Number (thousand)		Growth (percent)	Share (percent)		Change in share (percentage points)
	1394	1395		1394	1395	
Debit cards	212,891	272,912	28.2	64.3	65.8	1.5
Credit cards	1,637	1,454	-11.2	0.5	0.4	-0.2
Prepaid cards	116,323	140,224	20.5	35.2	33.8	-1.3

Table 14.6. Electronic Transactions Processed through the Banking Sector

	Volume (million)		Growth (percent)	Value (trillion rials)		Growth (percent)
	1394	1395		1394	1395	
Total electronic transactions	15,630	18,577	18.9	30,318	36,780	21.3
ATM	5,063	5,251	3.7	13,721	15,042	9.6
POS	7,684	10,919	42.1	9,654	12,810	32.7
PIN pad	282	286	1.3	5,398	6,402	18.6
Cell phone, landline, kiosk, and internet	2,601	2,121	-18.5	1,545	2,526	63.4

¹ Subject of Letter No. 94/337346 dated Bahman 18, 1394.

The shares of ATMs in the total volume and value of electronic transactions processed through the banking sector were 28.3 and 40.9 percent and POSs had respectively 58.8 and 34.8 percent shares in the total volume and value of electronic transactions in 1395. The share of transactions processed through ATMs and PIN pads decreased by 4.4 and 0.4 percentage points in terms of value while the share of the value of POSs in total transactions increased by 3.0 percentage points, with that of "cell phones, landlines, kiosks, and internet" rising by 1.8 percentage points. This shows the growing public tendency towards the wider use of new electronic

payment instruments in daily transactions. Furthermore, PIN pads enjoyed respectively 1.5 and 17.4 percent shares in the total volume and value of electronic transactions in 1395.

The Interbank Information Transfer Network (SHETAB) plays a key role in processing electronic transactions in the banking sector. In 1395, the share of SHETAB center in the total volume of electronic transactions processed through the banking sector was 89.6 percent and in total value, 68.7 percent. This indicated a rise when compared with the corresponding figures in the year before (86.4 and 64.2 percent).

Figure 14.1. Share of electronic payment instruments in total volume of electronic transactions in the banking sector in 1395

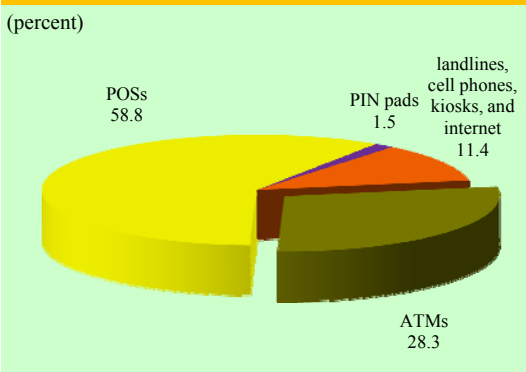


Figure 14.2. Share of electronic payment instruments in total value of electronic transactions in the banking sector in 1395

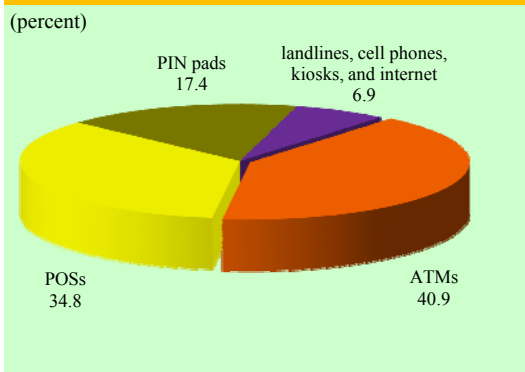


Table 14.7. Interbank Transactions Processed through SHETAB

	Volume (million)		Growth (percent)	Value (trillion rials)		Growth (percent)
	1394	1395		1394	1395	
Total transactions through SHETAB¹	13,511	16,636	23.1	19,453	25,262	29.9
ATM	3,167	3,530	11.4	6,369	7,562	18.7
POS	7,684	10,919	42.1	9,654	12,810	32.7
Others (landline, cell phone, internet, kiosk, and branches)	2,660	2,187	-17.8	3,430	4,891	42.6

¹Includes interbank electronic transactions processed through SAHAB.

Electronic Settlement System

SAHAB

The Retail Funds Transfer System (SAHAB) helped the transfer of 1,034 million transactions through ATMs in 1395, indicating 20.3 percent growth compared with the year before. Furthermore, 53 million transactions processed through PIN pads were related to SAHAB. The volume of transactions processed through SAHAB via the internet and kiosks increased by 79.2 percent. Shares of ATMs, PIN pads, and "internet and kiosks" in total transactions processed through SAHAB were 75.6, 3.9, and 20.5 percent in terms of volume, and 62.1, 23.5, and 14.3 percent in terms of value. In total, 1,368 million transactions, valued at Rls. 10,012 trillion, were processed through SAHAB in 1395.

SATNA

The total volume of transactions processed through RTGS (Real Time Gross Settlement) System or SATNA, as the main infrastructure

for large-value payments, increased by 22.6 percent to 9.5 million. Moreover, the value of transactions processed through SATNA reached Rls. 68,388 trillion, indicating 23.1 percent growth compared with 1394. The total volume of customer-to-customer transactions processed through SATNA increased by 23.9 percent to 9.1 million, with their value increasing by 23.5 percent to Rls. 21,510 trillion. Meanwhile, the volume and value of clearing settlement systems increased by 4.9 and 33.8 percent to 267 thousand and Rls. 35,721 trillion. The total volume and value of bank-to-bank transactions, on the other hand, decreased by respectively 12.0 and 2.6 percent, reaching 112 thousand transactions with a value of Rls. 11,157 trillion. Customer-to-customer transactions accounted for the highest share in total number of transactions processed through SATNA by 96.0 percent. The highest share in the value of these transactions was related to clearing settlement systems by 52.2 percent.

Table 14.8. Transactions Processed through SAHAB

	Volume (million)		Growth (percent)	Value (trillion rials)		Growth (percent)
	1394	1395		1394	1395	
Total transactions through SAHAB	1,060	1,368	29.0	7,813	10,012	28.1
ATM	860	1,034	20.3	5,112	6,223	21.7
PIN pad	44	53	19.9	1,873	2,358	25.9
Internet and kiosk	157	280	79.2	828	1,432	72.9

Table 14.9. Transactions Processed through SATNA

	Volume (thousand)		Growth (percent)	Value (trillion rials)		Growth (percent)
	1394	1395		1394	1395	
Bank-to-bank	127	112	-12.0	11,452	11,157	-2.6
Customer-to-customer	7,375	9,135	23.9	17,415	21,510	23.5
Clearing settlement systems (SHETAB, Interbank Clearing House, and PAYA)	255	267	4.9	26,688	35,721	33.8
Total¹	7,757	9,514	22.6	55,555	68,388	23.1

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 the destination bank. Accordingly, 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. Moreover, with the possibility of processing direct transfer orders through PAYA, this system together with SATNA and SAHAB covered and processed all electronic orders for fund transfers. SATNA and PAYA are utilized for the bank-to-bank transfer of funds while SAHAB is used for card to card retail funds transfer. In 1395, about 61 million banking transactions worth Rls. 4,119 trillion were processed through PAYA in the form of credit transfer, indicating 85.2 percent and 107.6 percent growth in volume and value. Meanwhile, 2,094 million transactions, worth Rls. 13,775 trillion, were processed via SHAPARAK. Total PAYA transactions were 2,155 million in number and Rls. 17,894 trillion in terms of value, indicating 29.5 and 46.3 percent increase, respectively.

Total Value of Transactions

In 1395, the nominal value of total transactions rose 19.5 percent compared with 1394 to reach Rls. 79,727 trillion. Moreover,

the real value of total transactions (considering 9.0 percent growth in the CPI of goods and services) increased by 9.6 percent. Due to the unrestricted circulation in cash transactions and unaccounted circulation frequency, notes and coins with the public and CBI Iran-Checks are not included in calculations.

The value share of electronic transactions increased in 1395 while the share of checks in total value of transactions decreased in this year. Accordingly, the share of various kinds of checks in total transactions decreased by 3.8 percentage points to 21.7 percent while the share of electronic transactions in the total value of transactions increased by 3.8 percentage points to 78.3 percent in nominal terms. Despite a decline of 1.7 percentage points in ATM share in total value of transactions, ATM transactions increased by 9.6 percent compared with 1394, accounting for 2.0 percentage points of the growth in the total value of transactions. The value of transactions through POSs increased by 32.7 percent in this year and the share of POS transactions in the total value rose by 1.6 percentage points to 16.1 percent. The value share of customer-to-customer transactions processed through SATNA, with the lion's share in total value of transactions, increased from 26.1 percent in 1394 to 27.0 percent in 1395. The value of PAYA transactions (credit transfer), with 107.6 percent rise compared with the year before, accounted for 5.2 percent of the total value of transactions in 1395.

Table 14.10. Transactions Processed through PAYA

	Volume (million)		Growth (percent)	Value (trillion rials)		Growth (percent)
	1394	1395		1394	1395	
Credit transfer	33	61	85.2	1,984	4,119	107.6
SHAPARAK	1,631	2,094	28.4	10,248	13,775	34.4
Total	1,664	2,155	29.5	12,232	17,894	46.3

Share of Non-cash Payment Instruments

Developments of electronic banking and expansion of electronic payment instruments reduced the share of the volume of transactions through various checks in the total volume of non-cash transactions by 0.2 percentage point. On the other hand, the share of PAYA in the total volume of non-cash transactions increased by 0.2 percentage point. Of the total volume of non-cash transactions, 98.8 percent were related to bank cards, 0.7 percent to various checks, and 0.5 percent to PAYA and SATNA collectively. The average value of each transaction settled through bank cards reached Rls. 2,116 thousand in 1395, constituting about 44.5 percent of the total value of non-cash transactions. The high average value of each transaction settled through various checks at Rls. 139.5 million brought the share of these checks in the total value of non-cash transactions to 22.4 percent.

The customer-to-customer transactions through SATNA accounted for 0.1 percent of the total volume of non-cash transactions in 1395. As transactions through SATNA were

mostly large-value transactions with a high average value of Rls. 2,354.7 million per transaction, these transactions accounted for 27.8 percent of the total value of non-cash transactions in 1395. Meanwhile, the total share of ordinary checks in the value of non-cash transactions decreased by 4.0 percentage points while the overall share of cards, PAYA, and SATNA rose by 4.0 percentage points.

Figure 14.3. Share of non-cash payment instruments in total volume of non-cash transactions in 1395

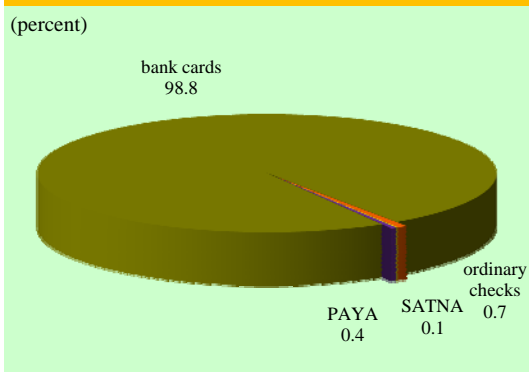


Table 14.11. Transactions Processed through the Banking Sector

	Value (trillion rials)		Growth (percent)	Share in growth (percentage points)	Share in total value of transactions (%)		Change in share (percentage points)
	1394	1395			1394	1395	
Checks¹	16,994	17,317	1.9	0.5	25.5	21.7	-3.8
Electronic payment instruments and systems	49,718	62,409	25.5	19.0	74.5	78.3	3.8
Electronic payment instruments	30,318	36,780	21.3	9.7	45.4	46.1	0.7
ATM	13,721	15,042	9.6	2.0	20.6	18.9	-1.7
POS	9,654	12,810	32.7	4.7	14.5	16.1	1.6
PIN pad	5,398	6,402	18.6	1.5	8.1	8.0	-0.1
Cell phone, landline, kiosk, and internet	1,545	2,526	63.4	1.5	2.3	3.2	0.9
Electronic payment systems	19,400	25,629	32.1	9.3	29.1	32.1	3.1
SATNA (customer-to-customer)	17,415	21,510	23.5	6.1	26.1	27.0	0.9
PAYA (credit transfer)	1,984	4,119	107.6	3.2	3.0	5.2	2.2
Total transactions (nominal)	66,711	79,727	19.5		100.0	100.0	
Total transactions (real)²	72,739	79,727	9.6				

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

² CPI is used for the calculation of total transactions in real terms (1395=100).

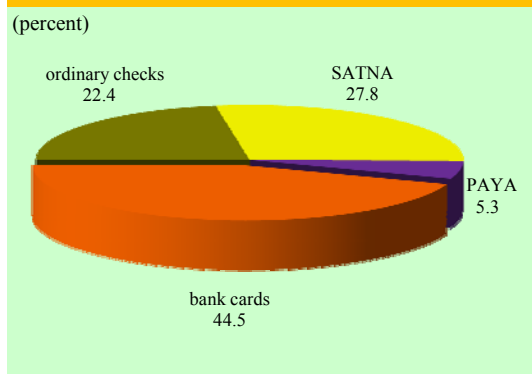
Table 14.12. Share of Non-cash Payment Instruments in Total Volume and Value of Non-cash Transactions

	Share in total volume (percent)		Share in total value (percent)		Average value per transaction (thousand rials)	
	1394	1395	1394	1395	1394	1395
Bank cards ¹	98.8	98.8	43.4	44.5	2,096	2,116
Checks ²	0.9	0.7	26.4	22.4	138,667	139,484
SATNA (customer-to-customer)	0.1	0.1	27.1	27.8	2,361,249	2,354,730
PAYA (credit transfer)	0.2	0.4	3.1	5.3	60,664	68,003
Total non-cash transactions	100.0	100.0	100.0	100.0	4,772	4,695

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

² Includes only ordinary checks channeled through the Interbank Clearing House and CHAKAVAK system, excluding intra-bank documents.

Figure 14.4. Share of non-cash payment instruments in total value of non-cash transactions in 1395



PAYA direct credit transfer service commensurate with international standards, design and implementation of CHAKAVAK, SEPAM (Electronic Financial Messaging System), SHAPARAK, and KASHEF (the Center for Network Control and Banking Emergency Measures). Of other important achievements of the banking system in this period are the qualitative and quantitative advancement of payment instruments, widespread use of electronic payment systems, and the increasing share of electronic transactions in total.

5th Five-Year Development Plan (1390-1395)

CBI Measures

The CBI managed to expand electronic banking over the course of the 5th FYDP, through customizing payment systems and utilizing current capacities to improve supervision on the operations of banks and credit institutions. Important measures were taken during the mentioned period including the reform and customization of SATNA for the development of ARIA system, revision of

In line with Articles 90 and 91 of the 5th FYDP, the CBI launched the Comprehensive Banking Customers Database during the mentioned period, aimed at providing a strong instrument for the better rendering of banking services and strengthening customers' credit rating. This database included information about banking facilities and commitments, CBI request number activation service, and data on bounced checks. With the completion of the mentioned systems, banks and credit institutions are now obligated to inquire information prior to extending any type of facility, issuing LGs, and opening LCs or current accounts. As per Article 94 on restructuring the public sector accounts,

the implementation of the national project for the transfer of public accounts (receive-only and send-only) to the CBI was put on the joint agenda of CBI and the Ministry of Economic Affairs and Finance. For the transfer of receive-only accounts in the first step, upon the launching of CBI centralized banking system (NASIM) and its connection to the national payment systems as well as the implementation of major developments, depositing cash into accounts opened with the CBI from the most remote parts of the country and without any technical impediments was made possible. The second step was concerned with the transfer of send-only accounts to CBI. Given the fact that CBI headquarters is located in Tehran and relevant executive bodies as well as provinces' treasury support offices are dispersed around the country, initially the traditional payment instruments i.e. checks were used and later, electronic payment orders through banks' send-only instruments were utilized. Considering the significance of Treasury General and treasury support offices in provinces in terms of current and development expenditures, the government managed to successfully cover the transition period from a traditional phase to a modern and technology-based one for the channeling of the payment orders of the country and providing a secure, up-to-date, swift, and strong basis for the timely allocation of funds by the government.

Performance of Payment Systems

Development of Electronic Payment Instruments and Expansion of Electronic Transactions

The 5th FYDP years were the period of transition from infrastructure development to sustainable growth in terms of electronic payment systems and the advancement of electronic banking. As the infrastructure was completed during the 4th Plan, the number of electronic payment instruments decreased compared to the 4th FYDP period. The annual average growth in the number of bank cards was 21.6 percent during the mentioned period, ATMs 14.9 percent, POSs 23.1 percent, and PIN pads 9.0 percent, which were lower than the corresponding figures in 4th Plan years (63.5, 43.8, 141.5, and 34 percent). POSs indicated higher growth in number than ATMs during the course of the 5th Plan, exactly the same as in the 4th FYDP period. This shows the appropriate direction of the banking system for the further expansion of electronic payments.

With the development of electronic equipment and increase in the number of electronic instruments, the value of transactions processed via such instruments also had a favorable growth rate. The nominal value of total banking transactions showed an annual average growth rate of 37.5 percent during

Table 14.13. Electronic Payment Instruments during the 5th FYDP

Number	1389	1390	1391	1392	1393	1394	1395	Annual average growth (percent)
Bank cards (thousand)	128,413	174,025	225,764	279,058	333,891	330,851	414,590	21.6
ATMs	20,623	26,626	30,173	33,773	40,369	43,924	47,374	14.9
POSs (thousand)	1,513	2,184	2,689	3,110	3,721	4,434	5,272	23.1
PIN pads	43,046	52,782	53,117	56,152	65,337	71,699	72,187	9.0

the 5th FYDP course. Meanwhile, the average growth of electronic transactions through electronic instruments and systems at 47.9 percent was higher than that of transactions processed through checks at 9.1 percent. Therefore, the share of check transactions followed a downward trend to reach 21.7 percent in 1395, down by 41.6 percentage points compared with 1389. The share of transactions via electronic payment instruments and systems, on the other hand, increased by 41.6 percentage points and reached 78.3 percent in 1395.

The development of electronic payment instruments as well as the expansion of appropriate infrastructures for secure interbank transactions was the major factor behind the fall in the share of transactions processed through various kinds of checks on the one hand and the rise in the share of electronic transactions in total, on the other. Moreover, with the rise in the security of electronic

infrastructures and services, the share of notes and coins with the public in liquidity decreased from 7.6 percent in 1389 to 3.1 percent in 1395. This in turn led to a relative decrease in the costs of issuance, production, distribution, and destruction of currency notes at a nationwide scale.

Figure 14.5. Share of notes and coins with the public in liquidity

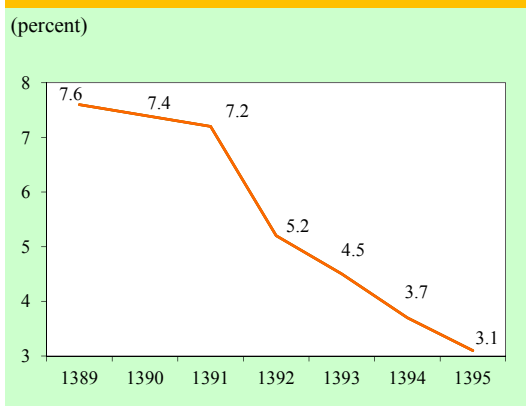


Table 14.14. Total Value of Transactions Processed via Payment Instruments during the 5th FYDP

	1389	1390	1391	1392	1393	1394	1395	Annual average growth (percent)
Checks	10,284	12,225	14,719	17,950	24,331	16,994	17,317	9.1
Electronic payment instruments and systems	5,962	12,685	22,332	30,100	43,106	49,718	62,409	47.9
Electronic payment instruments	2,777	6,638	13,616	18,405	28,693	30,318	36,780	53.8
Electronic payment systems	3,184	6,047	8,717	11,695	14,414	19,400	25,629	41.6
Total	16,246	24,911	37,051	48,049	67,437	66,711	79,727	37.5

Table 14.15. Share of Payment Instruments in Total Value of Banking Transactions during the 5th FYDP

	1389	1390	1391	1392	1393	1394	1395	1395 compared with 1389 (percentage points)
Checks	63.3	49.1	39.7	37.4	36.1	25.5	21.7	-41.6
Electronic payment instruments and systems	36.7	50.9	60.3	62.6	63.9	74.5	78.3	41.6
Electronic payment instruments	17.1	26.6	36.7	38.3	42.5	45.4	46.1	29.0
Electronic payment systems	19.6	24.3	23.5	24.3	21.4	29.1	32.1	12.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-