

In line with the further expansion of the country's payment systems and for the more effective utilization of modern information and communication technologies, the CBI adopted certain significant measures in 2020/21, aimed at making the transfer of money safer and more secure, deepening supervision, advocating maximum transparency in the monetary and credit areas, preventing corrupt practices, and improving retail payment services. On this basis, the CBI put on its agenda some important measures, namely the improvement of the system for the Bank-Wide Standard E-Checkbook Issuance (SAYAD) in accordance with the "Amendment of the Law on Check Issuance"; continuous improvement of the information collected under the Electronic Banking Authentication System (NAHAB); setting of the holding of an Online Banking Authentication Code by the customers as a requirement for the processing of interbank transactions; and granting of loans and facilities to natural and legal persons only after they are identified as eligible parties by the Centralized Electronic System of Facilities and Obligations known as SAMAAT. As the two-year deadline under the "Amendment of the Law on Check Issuance" was due to come to an end in November 2020, the development and versioning of the relevant platforms were completed in April 2020. On this basis, the CBI held specialized meetings and provided technical documents to banks for the sound and effective implementation of the said law. Accordingly, the Check Exchange Tracking

System (PICHAK) was designed and formulated in association with the banking network as of January 2021, after completing the test procedures for check registration, confirmation, and transfer. Meanwhile, in line with the provisions of the Law of Store Terminals and the System of Taxpayers, the card readers or store terminals of those falling short of filing tax returns, or being deceased, were blocked.

### 15.1. Cash Payment

#### 15.1.1. Banknotes and Coins

Banknotes and coins are the most common means of cash payment. With the inclusion of Iran-Checks issued by the CBI, the approximate value of banknotes and coins issued by March 2021 totaled Rls. 815.0 trillion. Banknotes and coins with the public (including the Iran-Checks issued by the CBI) increased by 20.2 percent to Rls. 735.0 trillion in March 2021, up from Rls. 611.4 trillion in March 2020. The share of the banknotes and coins with the public in GDP (at current prices) decreased by 0.5 percentage point compared with the year before to reach 1.8 percent in March 2021. The share of the banknotes and coins in broad money amounted to 2.1 percent in March 2021, indicating a decrease of 0.4 percentage point compared with March 2020. Similarly, the share of the banknotes and coins in money decreased by 3.7 percentage points compared with March 2020, to reach 10.6 percent in March 2021.

**Table 15.1. Banknotes and Coins with the Public, Ratio to Macroeconomic Indicators**

	Value (trillion rials)	Percentage change (annual)	Share in money (percent)	Share in broad money (percent)	Share in GDP <sup>1</sup> (percent)	Value per capita (thousand rials)
March 2020	611.4	11.7	14.3	2.5	2.3	7,360
March 2021	735.0	20.2	10.6	2.1	1.8	8,744

<sup>1</sup> At current prices.

The value of banknotes and coins with the public per capita amounted to Rls. 8,744 thousand in March 2021. This indicated a rise of 18.8 percent compared with March 2020.

### 15.1.2. Sight Deposits

The total value of sight deposits reached Rls. 6,174.6 trillion in March 2021, up by 68.6 percent compared with March 2020. The shares of sight deposits in money, broad money, and GDP were 89.4, 17.8 and 15.5 percent, respectively, at current prices. Sight deposits per capita increased by 66.7 percent to Rls. 73,459 thousand. Due to the rise in the value of banknotes and coins with the public as well as sight deposits, total money supply (banknotes and coins with the public plus sight deposits) increased by 61.7 percent from Rls. 4,273.0 trillion in March 2020 to Rls. 6,909.6 trillion in March 2021.

## 15.2. Check Settlement System

The implementation of CHAKAVAK in 2014 and its gradual replacement for the Interbank Clearing House by June 2015 paved the way for the execution of check clearance solely via CHAKAVAK as of 2016. The number of the checks channeled via

CHAKAVAK reached 109.6 million in March 2021, up by 8.0 percent. The value of these checks reached Rls. 36,792.1 trillion, showing an increase of 20.5 percent. Thus, the average value per transaction increased by 11.6 percent to about Rls. 335.6 million, compared with roughly Rls. 300.8 million in March 2020. The number of transactions via checks per capita was 1.3 and the value of check transactions per capita was Rls. 437.7 million. The ratio of the value of check transactions to GDP was 0.9 at current prices, indicating a decrease compared with the respective figure in the year before (1.2).

## 15.3. Electronic Payment Systems

### 15.3.1. Expansion of Electronic Payment Instruments

In March 2021, the number of cards issued by the banking network rose by 7.2 percent to 358.8 million. Out of the total number of cards, 241 million were debit cards (67.2 percent), 113 million (31.4 percent) were prepaid cards (purchase and gift cards), and merely 5 million (1.4 percent) were credit cards. The number of issued cards per capita increased by 0.3 point, from 4.0 cards in March 2020 to 4.3 cards in March 2021.

**Table 15.2. Sight Deposits, Ratio to Macroeconomic Indicators (at current prices)**

	Value (trillion rials)	Percentage change (annual)	Share in money (percent)	Share in broad money (percent)	Share in GDP (percent)	Value per capita (thousand rials)
March 2020	3,661.6	58.9	85.7	14.8	13.8	44,076
March 2021	6,174.6	68.6	89.4	17.8	15.5	73,459

**Table 15.3. Transactions Processed through Checks**

	Number (million)		Percentage change	Value (trillion rials)		Percentage change
	March 2020	March 2021		March 2020	March 2021	
CHAKAVAK	101.5	109.6	8.0	30,531.7	36,792.1	20.5

The number of ATMs rose by 1.7 percent to 60,455, that of PIN pads (electronic devices used in debit, credit, or smart card-based transactions within bank branches) fell by 4.4 percent to 67,045, and that of POSs surged by 10.1 percent to 7.2 million. The ratios of issued cards to ATMs, PIN pads, and POSs were respectively 5,935, 5,352 and 50.

### 15.3.2. Development of Electronic Transactions

In March 2021, the total number and value of electronic transactions reached 43,186 million and Rls. 111,407 trillion, respectively. The number of electronic transactions processed through the ATMs increased by 4.2 percent and that of the POSs grew by 26.2 percent. Accordingly, the value of transactions processed via the ATMs rose by 55.6

percent, and that of the POSs surged by 58.6 percent. The number of PIN pad transactions fell by 20.5 percent, while the value of PIN pad transactions increased by 6.2 percent compared with March 2020. Moreover, the number and value of transactions processed through "landlines, cell phones, kiosks, and internet" rose by 54.1 and 100.1 percent, respectively. The total number of transactions per card was 120.4 in March 2021, indicating a rise of 17.7 percent when compared with 102.3 transactions in March 2020. The ratio of the number of ATM transactions to each ATM was 94,037 in March 2021. This ratio was 4,132 for POS and 4,161 for PIN pad transactions. In March 2021, the ratio of the value of transactions to the number of transactions amounted to Rls. 4,349 thousand per ATM, Rls. 1,514 thousand per POS, and Rls. 73,971 thousand per PIN pad.

**Table 15.4. Number of Electronic Payment Instruments**

	March		Percentage change
	2020	2021	
Bank cards (million)	334.7	358.8	7.2
ATM (thousand)	59.4	60.5	1.7
POS (thousand)	6,556.8	7,219.9	10.1
PIN pad (thousand)	70.1	67.0	-4.4

**Table 15.5. Bank Cards**

	Number (million)		Growth (percent)	Share (percent)		Change in share (percentage points)
	March 2020	March 2021		March 2020	March 2021	
Debit cards	228	241	6.0	68.1	67.2	-0.8
Credit cards	3	5	49.0	1.0	1.4	0.4
Prepaid (purchase and gift) cards	104	113	8.6	31.0	31.4	0.4

**Table 15.6. Electronic Transactions Processed through the Banking Network**

	Number (million)		Growth (percent)	Value (trillion rials)		Growth (percent)
	March 2020	March 2021		March 2020	March 2021	
ATM	5,455	5,685	4.2	15,885	24,725	55.6
POS	23,638	29,836	26.2	28,498	45,184	58.6
PIN pad	351	279	-20.5	19,434	20,638	6.2
Landline, cell phone, kiosk, and internet	4,794	7,386	54.1	10,427	20,860	100.1
<b>Total</b>	<b>34,238</b>	<b>43,186</b>	<b>26.1</b>	<b>74,244</b>	<b>111,407</b>	<b>50.1</b>

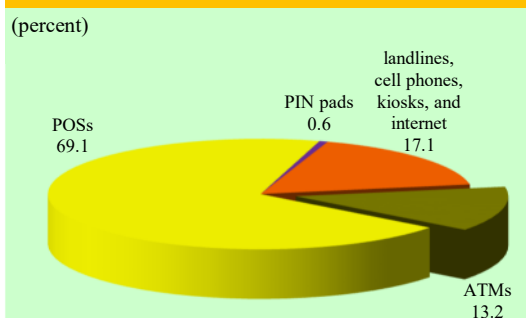
ATMs had shares of respectively 13.2 and 22.2 percent in the total number and value of electronic transactions processed through the banking network in March 2021. Meanwhile, POSs enjoyed shares of respectively 69.1 and 40.6 percent in the total number and value of electronic transactions. Of note, the shares of the number of transactions processed through the ATMs and PIN pads decreased by about 2.8 and 0.4 percentage points, respectively, compared with March 2020. On the other hand, the shares of the number of transactions via POSs and "landlines, cell phones, kiosks, and internet" increased by 0.1 and 3.1 percentage points, respectively.

The mentioned trend is indicative of the growing public tendency towards the wider use of new electronic payment instruments in daily transactions. PIN pads enjoyed shares of respectively 0.6 and 18.5 percent in the total number and value of electronic transactions in March 2021. PIN pads are widely used for the electronic transfer of funds via bank cards among various accounts in one bank or the interbank transfer of funds. The share of "landlines, cell phones, kiosks, and internet" in the number of electronic transactions was 17.1 percent and in the value of electronic transactions, 18.7 percent.

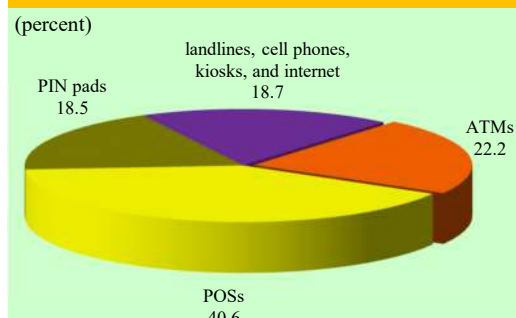
### 15.3.3. SHETAB

A large number of electronic transactions are settled via the Interbank Information Transfer Network, known in Iran as SHETAB. The share of the SHETAB center in the total number of electronic transactions processed through the banking network was 93.2 percent and that in the total value of electronic transactions was 85.4 percent in 2020/21. The corresponding figures in the year before were 95.7 and 76.3 percent. The numbers of the ATM and POS transactions processed via the SHETAB center increased by 16.6 and 26.2 percent to 4,936 million and 29,836 million, respectively. The value of SHETAB transactions via the ATMs and POSs amounted to Rls. 23,877 trillion and Rls. 45,185 trillion, respectively, in March 2021, up by respectively 90.5 and 58.6 percent compared with March 2020. POSs had the highest shares of the number and value of SHETAB transactions by 74.1 and 47.5 percent, respectively, in March 2021. The total number of transactions processed through the SHETAB center topped 40,256 million, and the total value of transactions via SHETAB amounted to Rls. 95,177 trillion, indicating increases of 22.9 and 68.1 percent, respectively, compared with March 2020.

**Figure 15.1. Share of Electronic Payment Instruments in Total Number of Electronic Transactions in March 2021**



**Figure 15.2. Share of Electronic Payment Instruments in Total Value of Electronic Transactions in March 2021**



**Table 15.7. Interbank Transactions Processed through SHETAB**

	Number (million)		Growth (percent)	Value (trillion rials)		Growth (percent)
	March 2020	March 2021□		March 2020	March 2021□	
ATM	4,234	4,936	16.6	12,535	23,877	90.5
POS	23,633	29,836	26.2	28,498	45,185	58.6
Other (landline, cell phone, kiosk, internet, and branches)	4,901	5,484	11.9	15,581	26,116	67.6
<b>Total<sup>1</sup></b>	<b>32,768</b>	<b>40,256</b>	<b>22.9</b>	<b>56,614</b>	<b>95,177</b>	<b>68.1</b>

<sup>1</sup> Includes interbank electronic transactions processed through SAHAB (Retail Funds Transfer System).

## 15.4. Electronic Settlement Systems

### 15.4.1. SAHAB

The total number of the interbank transactions processed through the Retail Funds Transfer System (SAHAB), as a major service rendered by the SHETAB center, amounted to 3,664 million, worth Rls. 38,441 trillion, in March 2021. A total of 1,757 million fund transfers, valued at Rls. 22,029 trillion, were processed via the ATMs connected to SAHAB, showing growth rates of 23.3 percent in terms of number and 103.2 percent in terms of value. Furthermore, 77 million SAHAB transactions, with a value of Rls. 5,246 trillion, were processed through PIN pads, down by 16.5 percent in terms of number and up by 1.9 percent in terms of value. The number of SAHAB transactions via the "kiosks and internet" was 1,829 million with a value of Rls. 11,166 trillion, up by 20.2 percent in terms of number and 62.8 percent in terms of value.

The shares of the ATMs, PIN pads, and "kiosks and internet" were respectively 48.0, 2.1 and 49.9 percent in the total number and 57.3, 13.6 and 29.0 percent in the total value of SAHAB transactions. Thus, the expansion of the use of electronic money orders in the future is well expected.

### 15.4.2. SATNA

The number of transactions processed through the Real Time Gross Settlement System (RTGS or the Iranian SATNA), as the main infrastructure for large-value payments, increased by 66.7 percent to 55.6 million in March 2021. The value of transactions processed via SATNA amounted to Rls. 330,910 trillion, indicating a growth rate of 61.3 percent compared with March 2020. The number of customer-to-customer transactions processed through SATNA increased by 67.2 percent to 55.0 million, with their value rising by 142.6 percent compared with March 2020, to Rls. 142,285 trillion in March 2021.

**Table 15.8. Transactions Processed through SAHAB**

	Number (million)		Growth (percent)	Value (trillion rials)		Growth (percent)
	March 2020	March 2021□		March 2020	March 2021□	
ATM	1,426	1,757	23.3	10,844	22,029	103.2
PIN pad	93	77	-16.5	5,149	5,246	1.9
Kiosk and internet	1,522	1,829	20.2	6,857	11,166	62.8
<b>Total</b>	<b>3,041</b>	<b>3,664</b>	<b>20.5</b>	<b>22,849</b>	<b>38,441</b>	<b>68.2</b>

The number of clearing settlement systems operating via SATNA decreased by 2.1 percent to 197 thousand, while their value increased by 53.0 percent to Rls. 123,152 trillion. The number of bank-to-bank transactions increased by 54.8 percent compared with March 2020, to 336 thousand transactions in March 2021, while the value of bank-to-bank transactions decreased by 0.7 percent to Rls. 65,474 trillion. In March 2021, the customer-to-customer transactions accounted for the highest shares in the number and value of transactions processed through SATNA by 99.0 and 43.0 percent, respectively.

### 15.4.3. PAYA

The Automated Clearing House System (PAYA) is an infrastructure of interbank transactions, receiving payment orders from the originating bank and sending orders to the destination bank upon processing. With the full launching of SHAPARAK (the Electronic Card Payment and Settlement System), the

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, covers 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 March 2021, about 312 million banking transactions worth Rls. 17,778 trillion were processed through PAYA in the form of direct credit transfers, indicating growth rates of 45.7 and 80.0 percent in terms of number and value, respectively, compared with the year before. Meanwhile, a total of 1,843 million transactions, worth Rls. 53,276 trillion, were processed via SHAPARAK. Thus, the total number of PAYA transactions was 2,155 million, with a value of Rls. 71,055 trillion, indicating growth rates of 18.4 and 70.7 percent, respectively, when compared with March 2020.

**Table 15.9. Transactions Processed through SATNA**

	Number (thousand)		Growth (percent)	Value (trillion rials)		Growth (percent)
	March 2020	March 2021		March 2020	March 2021	
Bank-to-bank transactions	217	336	54.8	65,959	65,474	-0.7
Customer-to-customer transactions	32,904	55,028	67.2	58,643	142,285	142.6
Clearing settlement systems	201	197	-2.1	80,497	123,152	53.0
<b>Total<sup>1</sup></b>	<b>33,322</b>	<b>55,560</b>	<b>66.7</b>	<b>205,099</b>	<b>330,910</b>	<b>61.3</b>

<sup>1</sup>Excludes CBI's intraday liquidity facility and settlements.

**Table 15.10. Transactions Processed through PAYA**

	Number (million)		Growth (percent)	Value (trillion rials)		Growth (percent)
	March 2020	March 2021		March 2020	March 2021	
Direct credit transfers	214	312	45.7	9,877	17,778	80.0
SHAPARAK	1,607	1,843	14.7	31,743	53,276	67.8
<b>Total</b>	<b>1,821</b>	<b>2,155</b>	<b>18.4</b>	<b>41,620</b>	<b>71,055</b>	<b>70.7</b>



#### 15.4.4. SIMA

Upon the launching of the Scripless Securities Settlement System (TABSA) in 2010/11, which was introduced as an infrastructure for the electronic issuance 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. 106.3 trillion worth of electronic participation papers was issued by 13 municipalities (Kerman-shah, Tabriz, Karaj, Yazd, Tehran, Shiraz, Isfahan, Mashhad, Qom, Semnan, Hamedan, Sanandaj, and Islamshahr) via the SIMA system by March 2021. These papers were placed on the market via several agent banks including Bank Sepah, Bank Melli Iran, Shahr Bank, Tejarat Bank, Refah Kargaran Bank, Bank Mellat, and Bank Saderat Iran.

#### 15.5. Total Value of Transactions

In March 2021, the nominal value of the transactions of the banking network, processed through both electronic payment instruments and checks, increased by 77.9 percent compared with March 2020, to reach Rls. 308,262 trillion. The real value of transactions, considering the increase in the CPI of goods and services, rose by 20.9 percent. Due to their unrestricted circulation frequency, the banknotes and coins with the public as well as the Iran-Checks issued by the CBI were not included in calculations. The share of the value of check transactions in all electronic transactions decreased by 5.7 percentage points to 11.9 percent. However, the share of the value of electronic payment instruments and systems in the total value increased by 5.7 percentage points to reach 88.1 percent. The value of transactions processed through "landlines, cell phones, kiosks, and internet" experienced the highest rise by 100.1 percent

and the share of the value of transactions processed through "landlines, cell phones, kiosks, and internet" rose by 0.8 percentage point. The value of transactions processed through POSs and ATMs increased by 58.6 and 55.6 percent, respectively, while the shares of the value of these transactions in total decreased by almost 1.8 and 1.1 percentage points, respectively, compared with the year before. The value of PIN pad transactions rose by 6.2 percent, while the share of the value of transactions through PIN pads declined by 4.5 percentage points. Data on transactions processed through electronic payment systems indicate that the value of customer-to-customer transactions processed through SATNA increased by 142.6 percent compared with March 2020. The share of the value of customer-to-customer transactions processed via SATNA increased from 33.8 percent in March 2020 to 46.2 percent in March 2021 (enjoying the highest share as in March 2020). The value of PAYA transactions (direct credit transfers), with a rise of 80.0 percent compared with March 2020, accounted for 5.8 percent of the total value of transactions in March 2021.

#### 15.6. Share of Non-cash Payment Instruments

Of the total number of non-cash transactions processed in the banking network, 98.9 percent was related to bank cards in March 2021. PAYA, SATNA, and checks constituted respectively 0.74, 0.13 and 0.26 percent of the number of non-cash transactions, totaling 1.1 percent. Of the total value of non-cash transactions, SATNA constituted the highest share by 46.3 percent, while PAYA held the lowest share by 5.8 percent. The average value of each transaction settled via SATNA reached Rls. 2,586 million and that settled through PAYA topped Rls. 57 million.

The share of bank cards in the total value of non-cash transactions experienced a fall, amounting to 35.9 percent. The average value of each transaction processed through bank cards was Rls. 2.6 million. In March 2021, the share of checks in the total value of non-cash transactions amounted to 12.0 percent. The average value of each transaction processed through different types of checks amounted to Rls. 336 million, which was higher than the average value of transactions processed via

PAYA and bank cards in March 2021. The total share of the value of the transactions via bank cards and checks declined by 12.2 percentage points, while the share of the value of the customer-to-customer transactions processed via SATNA experienced an increase of about 12.2 percentage points. The share of the value of PAYA transactions (direct credit transfers) remained almost unchanged at 5.8 percent in March 2021 when compared with the year before.

**Table 15.11. Transactions Processed through the Banking Network**

	Value (trillion rials)		Growth (percent)	Share in growth (percentage points)	Share in total value of transactions (%)		
	March 2020	March 2021			March 2020	March 2021	Change in share (percentage points)
<b>Checks<sup>1</sup></b>	<b>30,532</b>	<b>36,792</b>	<b>20.5</b>	<b>3.6</b>	<b>17.6</b>	<b>11.9</b>	<b>-5.7</b>
<b>Electronic payment instruments and systems</b>	<b>142,764</b>	<b>271,470</b>	<b>90.2</b>	<b>74.3</b>	<b>82.4</b>	<b>88.1</b>	<b>5.7</b>
<b>Electronic payment instruments</b>	<b>74,244</b>	<b>111,407</b>	<b>50.1</b>	<b>21.4</b>	<b>42.8</b>	<b>36.1</b>	<b>-6.7</b>
ATM	15,885	24,725	55.6	5.1	9.2	8.0	-1.1
POS	28,498	45,184	58.6	9.6	16.4	14.7	-1.8
PIN pad	19,434	20,638	6.2	0.7	11.2	6.7	-4.5
Landline, cell phone, kiosk, and internet	10,427	20,860	100.1	6.0	6.0	6.8	0.8
<b>Electronic payment systems</b>	<b>68,520</b>	<b>160,063</b>	<b>133.6</b>	<b>52.8</b>	<b>39.5</b>	<b>51.9</b>	<b>12.4</b>
SATNA (customer-to-customer)	58,643	142,285	142.6	48.3	33.8	46.2	12.3
PAYA (direct credit transfers)	9,877	17,778	80.0	4.6	5.7	5.8	0.1
<b>Total (nominal)</b>	<b>173,295</b>	<b>308,262</b>	<b>77.9</b>	<b>N/A</b>	<b>100.0</b>	<b>100.0</b>	<b>N/A</b>
<b>Total (real)<sup>2</sup></b>	<b>85,283</b>	<b>103,132</b>	<b>20.9</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>

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

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

**Table 15.12. Share of Non-cash Payment Instruments in Total Number and Value of Non-cash Transactions**

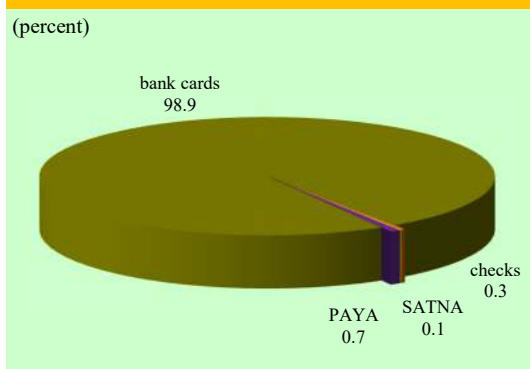
	Share in total number (percent)		Share in total value (percent) <sup>1</sup>		Average value per transaction (thousand rials)	
	March 2020	March 2021	March 2020	March 2021	March 2020	March 2021
Bank cards <sup>2</sup>	98.9	98.9	42.3	35.9	2,255	2,641
Checks <sup>3</sup>	0.3	0.3	17.8	12.0	300,764	335,591
SATNA (customer-to-customer)	0.1	0.1	34.2	46.3	1,782,262	2,585,688
PAYA (direct credit transfers)	0.7	0.7	5.7	5.8	46,077	56,933
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>5,273</b>	<b>7,273</b>

<sup>1</sup> The discrepancy between the figures in this column with the corresponding column in Table 15.11 is due to rounding.

<sup>2</sup> Includes transactions processed through POSs, PIN pads, landlines, cell phones, kiosks, internet, and ATMs (excluding cash withdrawals).

<sup>3</sup> Includes only ordinary checks processed through the Interbank Clearing House and CHAKAVAK system, excluding intra-bank transactions.



**Figure 15.3. Share of Non-cash Payment Instruments in Total Number of Non-cash Transactions in March 2021****Figure 15.4. Share of Non-cash Payment Instruments in Total Value of Non-cash Transactions in March 2021**