

DIGITAL PAYMENTS REVIEW FOR JANUARY-JUNE 2022

July, 2022

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EXECUTIVE SUMMARY

Ensuring stable and reliable functioning of payment systems in the reporting period was one of the priority areas of the Central Bank's activity. Functioning of the main components of the national payment system created and administered by the Central Bank have been maintained in a continuous and secure manner. In an era of growing cyber threats following global digitalization, increasing the resilience of systems against cyber attacks has been the focus of attention.

In the first half of 2022, total value of payment transactions made through the Real Time Gross Settlement System (AZIPS) and Low Value Payments Clearing and Settlement System (LVPCSS), which are the main components of the National Payment System, was AZN128.2B (2 times of GDP) and the number of payments was 38.8 mln units.

Over the reporting period, the Bank continued to expand the coverage of the Government Payment Portal (GPP) created to ensure electronic collection of budget payments and payments on public services in a centralized manner. Currently, this infrastructure includes 11 central executive authorities, 3 state agencies, 4 utility companies, 5 fixed and mobile communication operators, 122 judicial bodies, 19 insurance companies, 1438 municipal bodies, more than 100 higher and secondary educational institutions and other social important institutions. The collection of payments for more than 1100 types of services in favor of institutions integrated to the GPP is provided. It is possible to make payments on these services in cash and with payment cards at 26 banks and more than 2,500 branches and departments of Azerpost LLC, and at nearly 4,000 payment terminals.

Over the reporting period, a positive trend continued in the development of the card infrastructure, as well as the business continuity of the Interbank Card Center (IBC) was maintained. In the first half of 2022, 84.6 million card transactions were conducted over the IBC, the value of national currency denominated transactions was AZN4.1B, and \$14.7M and €4.7M in foreign currency.

Significant progress has been achieved in the statistical indicators of e-banking services, which is one of the main challenges of our time. Over the reporting period, the total number of transfers from current accounts through e-banking was 54.9 mln units, and the value of transfers was AZN111B. The number and value of transfer yoy increased by 2.8 times and 71%, respectively.

Over the reporting period, the scope and functionalities of the 24/7 Instant Payments System (IPS) have been expanded. By the end of the reporting period, 24 banks, Azerpost LLC, the State Treasury Agency of the Ministry of Finance and the Mortgage and Credit Guarantee Fund have been integrated to the IPS, which allows settlements between individuals and legal entities, as well as state bodies, through simplified identifiers (FIN, TIN, mobile number, e-mail) over bank accounts.

Works were done on the development of data formats (DF) and corresponding conversion rules on Real Time Gross Settlement System (AZIPS) and Low Value Payments Clearing and Settlement System (LVPCSS) under ISO20022 in accordance with the Action Plan of the

project 'Application of the ISO20022 international standard in financial infrastructure' provided for in the 'Digital Payment Strategy of the Central Bank of the Republic of Azerbaijan for 2021-2023'. Since 25 April 2022, AZIPS has introduced new message formats. The functional opportunity of information exchange between information systems of AZIPS member organizations on the basis of new formats in accordance with the ISO20022 standard has been created. The initial phase of works on the development of a sandbox based on the new version of LVPCSS, functioning according to the ISO20022 standard, and the improvement of workplaces intended for banks has also been completed.

Under the "Project on payment of fares on suburban railways with contactless bank cards" that launched in 2020, within the Memorandum of Cooperation signed among the Central Bank, the Azerbaijan Railways CJSC, the International Bank of Azerbaijan and Visa International to encourage the transition to cashless payments in the transport sector, a total of 91 card reader devices were installed at all stations of the Absheron circular railway. The number of payments made with contactless bank cards by railway passengers was 206.5 thousand units and the value was AZN170.4 thousand over the reporting period. Moreover, contactless payment opportunity has been created within the framework of the pilot project implemented in Shamakhi city transport with the involvement of MasterCard International. Over the reporting period, the number of cashless payments on the relevant project was 693 thousand units, and the value was AZN262 thousand. The number of cashless payments in order to increase the balance of 'BakuCard', which is used for payment of transport fares in Baku city, was 550 thousand units and the value was AZN1.76M over the reporting period.

Over the reporting period, the Central Bank focused on the expansion of cooperation relations established with international organizations to enhance the coverage of digital payments. Thanks to the initiative of the Central Bank together with the support of banking sector and international card organizations to boost the range of contactless payment solutions and apply innovative technologies in the country, the number of payments made over the reporting period through the ApplePay payment solution activated in our country since 2021 was 6.9 million units, and the value was AZN121.3M. In the current year, active work is being done to attract other innovative payment service providers to the country's market.

The Bank attached importance to cashless payment literacy, awareness and promotion. The Central Bank held many incentive and awareness events with international card organizations and related institutions to promote digital payments and shape cashless payment habits among the population. Within the framework of joint cooperation with international card organizations, virtual courses on 'Banking and Digital Payments' were organized for about 200 schoolchildren over the reporting period in order to strengthen financial literacy and increase awareness of nationwide digital payments. At the same time, a series of webinars on 'Advantages of Digital Payments" was organized for about 500 employees and teachers of higher education institutions.

1. PAYMENT SYSTEM INDICATORS

1.1. National Payment System Indicators

In the first half of 2022, total value of payment operations through the National Payment System (AZIPS, LVPCSS) made AZN128.2B and the number was 38.8 mln units.

The number of payments through the Real Time Gross Settlement System (AZIPS) on large and instant payments was 0.6 mln units and the value was AZN109.4B over the reporting period, while the number of small and reiterating payments on the Low Value Payments Clearing and Settlement System (LVPCSS) was 38.2 mln units and the value was AZN18.8B. If to compare relevant periods, the number of transactions in the AZIPS increased by 27%, while the number of transactions in the LVPCSS increased by 8.9%, and the value of transactions increased by 31.5% and 23%, respectively.

The number and value of transfers by commercial banks via the NPS yoy increased by 9.2% and 39.1%, respectively.

Breakdown of payment operations through the National Payment System on participants

NPS participants	Over 6 months of 2021	Over 6 months of 2022	Increase/Decrease (%)
Nu	mber of payments (thousand units)	
AZIPS	471.3	598.7	27%
Central Bank	5.24	5.20	-0.8%
Commercial banks	336.6	456.8	35.7%
Other participants ¹	129.5	136.6	5.5%
LVPCSS	35,059.1	38,175.9	8.9%
Central Bank	25.7	28.5	10.9%
Commercial banks	34,888.9	37,997.6	8.9%
Other participants ²	144.4	149.9	3.8%
Value of payments (million manat)			
AZIPS	83,173	109,381	31.5%
Central Bank	13,982	15,363	9.9%
Commercial banks	52,542	75,650	44%

¹ Other participants on the AZIPS mean the State Treasury Agency, the National Deposit Center, the Agricredit NBCI.

² Other participants on the LVPCSS mean the Mortgage and Credit Guarantee Fund, the State Treasury Agency, the Agricredit NBCI.

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Other participants	16,649	18,368	10.3%
LVPCSS	15,318	18,842	23%
Central Bank	278	370	33.1%
Commercial banks	12,648	15,006	18.6%
Other participants	2,392	3,466	44.9%

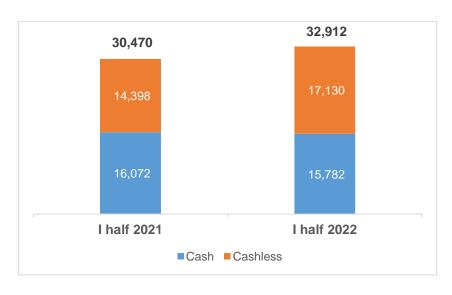
1.2. Government Payment Portal indicators

Efforts to expand the capacity of the Government Payment Portal (GPP) created to collect budget payments and payments on mass services in a centralized manner continued over the reporting period. Over 6 months of 2022, the total value of payment transactions was AZN2.3B and 64% of these transactions was in a cashless form. Total value of operations yoy increased by 18% and the value of cashless operations increased by 36%.

The value of transactions through the GPP (million manat)



The number of transactions through the GPP (thousand units)



1.3. Instant Payment System indicators

AZN225M worth 133 thousand payments were made through the IPS over 6 months of 2022.

AZN 5.8 thousand worth 1.7 thousand units of QR payments were made via the QR code over 6 months of 2022.

The number (thousand units) and value (million manat) of transactions through the IPS



2. PAYMENT CARD MARKET INDICATORS*

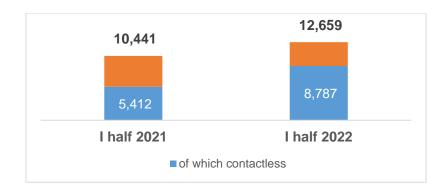
2.1. Indicators on the use of payment cards

Bankcards are used as the main payment instrument for cashless payments in the country. The volume of cashless payments increased significantly, the use of cashless technologies and e-commerce has expanded in the first half of 2022. As of 01.07.2022, the number of payment cards in circulation was 12.7 million units, out of which 69.4% supported contactless payments. 88% (11.1 million units) of issued payment cards are debit, while 12% (1.6 million) are credit cards. The number of payment cards yoy increased by 21%, and the number of contactless cards yoy increased by 64%.

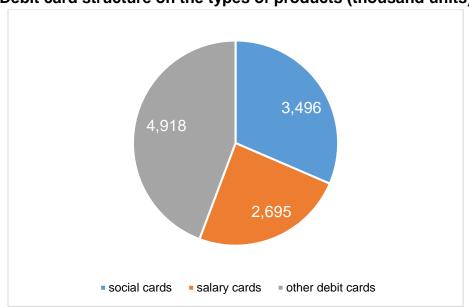
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^{*} Including the service network of the Azerpost LLC

Dynamics of payment cards (thousand units)



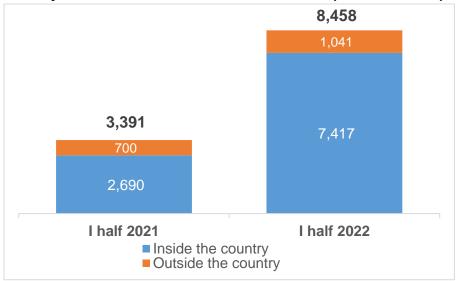
Debit card structure on the types of products (thousand units)



Over 6 months of 2022 total value of domestic payment card operations yoy increased by 54.5% to AZN24.6B, and the value of cashless payments increased by 2.2 times to AZN9.9B. The weight of cashless settlements in domestic payment card operations yoy increased by 12.2% to 40.4%.

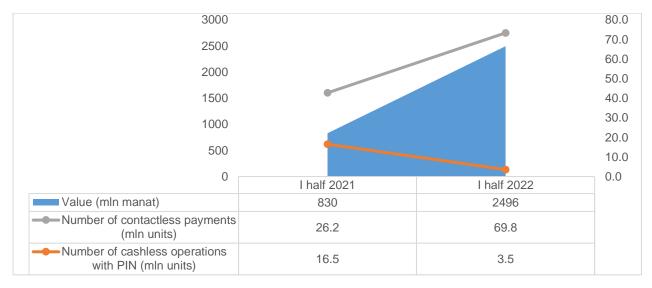
E-commerce transactions account for major part of cashless payments with bankcards. Over 6 months of 2022 the number of e-commerce transactions you increased by 2.3 times to 105 mln units, while the value you increased by 2.8 times to AZN7.4B.





The number of POS-terminal transactions in merchants yoy increased by 93% to 82.4 mln units, while their value yoy increased by 41.2% to AZN2.5B in the first half of 2022. The number and value of contactless payments with POS-terminals yoy increased by 2.8 (73.3 mln units) and 2.1 times (AZN2B), respectively.

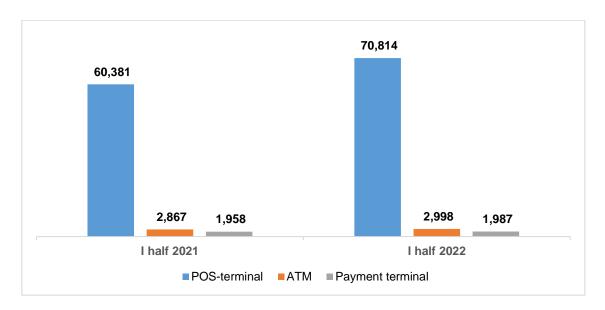
Dynamics of domestic cashless operations via POS-terminals



2.2. Card infrastructure indicators

Over the reporting period, development of the card infrastructure also followed a positive trend.





There were 2998 ATMs as of 07.01.2022 (up by 4.6% over recent one year).

ATM location across economic regions

		out of which			
Economic regions	Total	Cash-in	Foreign currency ATMs (without card)	Recycle ATMs	Contactless ATMs
Baku	1 580	276	208	273	321
Nakhchivan	120	1	-	5	5
Absheron-Khizi	200	20	8	14	29
Mountainous Shirvan	49	1	1	2	1
Ganja-Dashkasan	161	16	6	14	11
Garabagh	99	1	1	4	3
Gazakh-Tovuz	122	3	3	8	4
Guba-Khachmaz	109	9	2	9	5
Lankaran-Astara	105	3	2	5	2
Central Aran	140	3	2	6	4
Mil-Mugan	78	1	-	-	-
Shaki-Zagatala	132	6	4	5	5

East Zangazur	4	-	-	1	0
Shirvan-Salyan	99	4	3	6	3
TOTAL	2 998	344	240	352	393

ATM transactions across economic regions

Economic regions	Number of transactions (mln units)	Value of transactions (mln manat)
Baku	34.9	8186
Nakhchivan	1.4	352
Absheron-Khizi	3.3	721
Mountainous Shirvan	0.9	206
Ganja-Dashkasan	3.4	755
Garabagh	2.4	560
Gazakh-Tovuz	2.3	614
Guba-Khachmaz	1.7	385
Lankaran-Astara	2.3	546
Central Aran	2.7	600
Mil-Mugan	1.8	391
Shaki-Zagatala	2.0	542
East Zangazur	0.1	15
Shirvan-Salyan	2.0	447
TOTAL	61.2	14 321

As of 01.07.2022 there were 70 814 POS-terminals in the country (yoy up by 17%). The number of POS terminals accepting contactless payments increased by 49% to 58 204 units over the reporting period.

POS-terminals location across economic regions

Economic regions	Total	those that accept contactless payments
Baku	40 672	32 994
Nakhchivan	1624	658
Absheron-Khizi	2 677	2 104
Mountainous Shirvan	540	360
Ganja-Dashkasan	2 414	1 623
Garabagh	1207	788
Gazakh-Tovuz	2 231	524

Guba-Khachmaz	1 520	937
Lankaran-Astara	2 309	905
Central Aran	1 125	838
Mil-Mugan	380	281
Shaki-Zagatala	2 147	1 363
East Zangazur	5	5
Shirvan-Salyan	2 327	539
TOTAL	61 178	43 919

POS-terminal transactions across economic regions

Economic regions	Number of trasactions (mln units)	Value of transactions (mln manat)
Baku	66.8	2789
Nakhchivan	0.4	29
Absheron-Khizi	6.5	168
Mountainous Shirvan	1.2	23
Ganja-Dashkasan	2.1	89
Garabagh	0.4	27
Gazakh-Tovuz	0.7	35
Guba-Khachmaz	1.1	61
Lankaran-Astara	0.7	37
Central Aran	1.0	43
Mil-Muğan	0.3	14
Shaki-Zagatala	0.9	47
East Zangazur	0	0
Shirvan-Salyan	0.5	24
TOTAL	82.5	3 386

As of 01.07.2022 the number of self-service payment terminals installed by banks yoy decreased by 4.3% to 1845 units.

Self-service payment terminals location across economic regions

Economic regions	Total	those that accept payments with cards
Baku	960	185
Nakhchivan	104	12
Absheron-Khizi	124	14

Mountainous Shirvan	38	4
Ganja-Dashkasan	86	13
Garabagh	55	14
Gazakh-Tovuz	51	8
Guba-Khachmaz	98	12
Lankaran-Astara	67	6
Central Aran	81	13
Mil-Mugan	38	8
Shaki-Zagatala	81	14
East Zangazur	-	-
Shirvan-Salyan	62	8
TOTAL	1 845	311

Self-service terminal transactions across economic regions

Economic regions	Number of transactions (thousand units)	Value of transactions (mln manat)
Baku	3341	304
Nakhchivan	38	12
Absheron-Khizi	627	41
Mountainous Shirvan	108	5
Ganja-Dashkasan	182	35
Garabagh	113	14
Gazakh-Tovuz	87	14
Guba-Khachmaz	405	20
Lankaran-Astara	90	6
Central Aran	275	16
Mil-Mugan	45	1
Shaki-Zagatala	186	8
East Zangazur	0	0
Shirvan-Salyan	155	10
TOTAL	5 653	485

3. DIGITAL BANKING INDICATORS

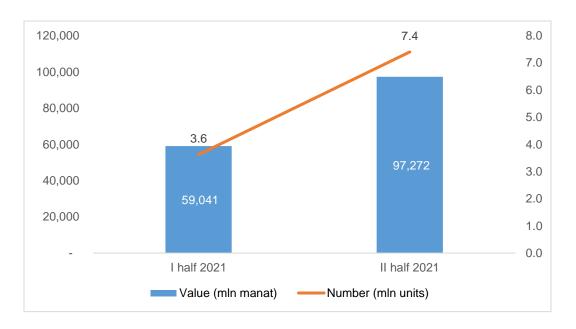
Nowadays digital banking is rapidly replacing traditional banking services. The main reason for lower reliance of people on traditional banking is the convenient and easy availability of digital banking services without wasting time and waiting in long queues.

There is a positive trend in the development of digital banking in Azerbaijan too, which is one of the main challenges of modern times. As of 01.07.2022, 25 out of 26 banks operating in the country provide Internet banking and 22 provide mobile banking services.

Over the reporting period, there were significant improvements in statistics on digital banking services. Total number of transfers from current accounts of bank customers in the first half of 2022 amounted to 111.7 mln units and the value made AZN151.1B. 79% (88.5 mln. units) in terms of number and 77% (AZN116B) in terms of value were made through digital banking.

The value of customer transfers via Internet banking services yoy increased by 65% to AZN 97.3B in the first half of 2022.

Customer transfers via Internet banking



In the first half of 2022 the value of customer transfers by customers via Mobile banking yoy increased by 2.8 times to AZN4.5B.

Customer transfers via Mobile banking

