

Assessing the Impact of COVID-19 on Digital Payments in Azerbaijan

Khayaladdin R. Taghiyev¹

Tamerlan H. Rustamov²

Murad Taghiyev³

Abstract

The COVID19 pandemic, which has lasted for more than a year, has had a significant impact on the economies of the world's countries and economic relations between them. One of the most specific features of the pandemic is the minimization of physical contact and the establishment of relationships at a distance. In such circumstances, we considered it expedient to analyze the impact of the pandemic on digital payments in the Republic of Azerbaijan. As it is known, digital payments are mainly carried out remotely in electronic form, in this regard, the pandemic creates favorable conditions for expanding the use of digital payments, but on the one hand leads to the contraction of the economy. That is why the article first analyzes the current situation and infrastructure opportunities for digital payments in Azerbaijan, and examines the situation in the ecosystem in this regard. Also, payment card transactions before and after the pandemic period, non-cash payments, e-commerce transactions, transactions through exchange systems and e-banking services, and key macroeconomic indicators were compared. However, it was defined whether the pandemic will affect digital payments. At the same time, the impact of the pandemic on digital payments in international practice has been studied and the situation in several countries has been studied. In the end, the results obtained on the basis of the analysis are presented in the conclusion section of the article.

Keywords: COVID-19, digital payments, payment cards, electronic commerce, GDP.

JEL Classifications: F23, I81

DOI: 10.24818/REJ/2022/83/06

Introduction

The COVID-19 pandemic is a global health crisis and a global humanitarian catastrophe. Millions of people around the world lose their lives, and many people

¹ P.h.D on economy, senior researcher in Institute of Scientific Research on Economic Reforms, of Ministry of Economy of the Republic of Azerbaijan, AZ 1011, H.Zardabi prospect, 88a, Baku Azerbaijan, e-mail: khayaladdin_taghiyev@cbar.az, xstagiye@gmail.com

² Doctoral student, Institute of Scientific Research on Economic Reforms of Ministry of Economy of the Republic of Azerbaijan, AZ 1011, H.Zardabi prospect, 88a, Baku Azerbaijan, e-mail: thrustamov@bankofbaku.com, tamerlanrustamov@gmail.com

³ A junior specialist, Payment Systems and Settlements Department, The Central Bank of the Republic of Azerbaijan, AZ1014, 32, R. Behbudov str., Baku, Azerbaijan, e-mail: murad_taghiyev@cbar.az

lose their jobs due to the quarantine regime and restrictions imposed by the disease, wages are reduced, and businesses incur financial losses.

It should be noted that the quarantine regime in Azerbaijan came into force on March 24, 2020. From August 5, 2020, the system of leaving citizens on the basis of SMS permits, service cards and portal permits in cities and regions included in the hardened special quarantine zone was abolished. A state of war has been declared in Azerbaijan since September 28, 2020. On December 12, 2020, the curfew was lifted. Since the beginning of July 2021, large shopping centres, mosques and wedding halls have been restored in the country, and now only the use of medical masks indoors is mandatory.

As a result of the pandemic, people's lifestyles and consumer behaviour have changed, consumer spending has decreased, and payment methods and forms have changed significantly. The World Health Organization's report on the potential spread of the disease as a result of the use of cash has further expanded the use of digital payments. We believe that the existence of the pandemic has led to a decline in global economic activity, a decline in cross-border transactions and remittances, an accelerated transition from cash to cashless or digital, an increase in the use of digital payment platforms and lower fees for payment services. [2, 5].

Infrastructure opportunities and current situation on digital payments in Azerbaijan

The digital payment ecosystem in Azerbaijan is based on payment systems created by the Central Bank, participating financial institutions and the payment solutions and technologies they provide, as well as processing infrastructure. In recent years, the activities of non-bank payment service providers in the payment ecosystem in the direction of issuing electronic money, the formation of payment gateways, the application of open banking technology and the issuance of virtual payment cards are expanding. [8, 12]. In 2001 and 2002, the Central Bank established AZIPS, a national real-time settlement system, and the BCSS, a retail payment system that allows for small payments. According to statistics, the number of transactions through AZIPS in 2020 was 908,000, with a volume of 195.6 billion. manats, and the number of transactions in the BCSS was 58,917,000 and amounted to 27.8 bln. manat. It should be noted that over the past five years, the volume of transactions in AZIPS increased by 1.48 times, and the volume of transactions in the BCSS increased by 1.73 times [13].

Another payment infrastructure created by the Central Bank in 2008 and later renamed is called the Government Payment Portal. In addition to mass payments, this payment platform allows budget payments to be made both electronically and in cash. In 2020, the number of transactions through the GPP reached 51.9 million.

units, and the volume is 3.25 billion. manat, which is an increase of 1.7 times and 1.58 times in volume compared to the last five years [13].

Taking into account the latest development trends in the field of digital payments globally, the Central Bank launched the Instant Payments System (IPS) in October 2020. It is possible to make instant payments 24/7/365 via mobile number, ID card FIN number, e-mail by directly managing the current account without participating in the payment card via IPS.

The systems created by banks include their banking programs and integrated mobile and internet banking systems, as well as in-house service centers. Recently, the mobile banking services of banks have developed very rapidly, and through this service it is possible to carry out most banking services.

Examples of card processing services are AzeriKart LLC and MilliKart LLC and banks providing in-house services. Infrastructure has been created by these organizations to transfer, process, collect and clear data on transactions with payment cards.

Statistical analysis of the impact of the pandemic on digital payments in Azerbaijan

To determine the impact of the pandemic on digital payments in Azerbaijan, we analyzed the most important indicators of digital payments on a quarterly basis from the last quarter of 2019 to the second quarter of 2021. First of all, let's analyze the number and volume of transactions conducted by payment cards in the country. As can be seen from Figure 1, since March 2020, despite the declaration of a pandemic in the country, the number and volume of transactions conducted by domestic payment cards has been growing at a quarterly rate. Thus, compared to the second quarter of 2020, the number of transactions with payment cards in the second quarter of 2021 increased by 48.2%, and the volume of transactions increased by 27.2% [13].

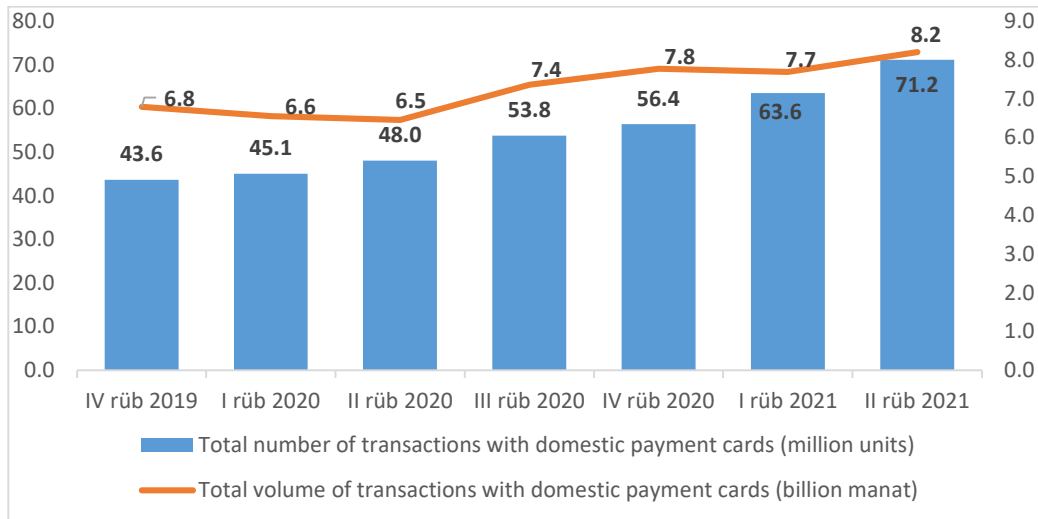


Figure 1. Number and volume of transactions with domestic payment cards

Another important indicator in determining the impact of the pandemic on digital payments is to analyze the statistics on non-cash payments with payment cards. In fact, the most important indicator of digital payments is to determine the share of non-cash transactions with payment cards. It should be noted that in the second quarter of 2021, the share of non-cash transactions in payment cards was 29.2%, in fact, this figure is lower than in developed countries, but this figure is growing significantly every year. As can be seen from Figure 2, the number and volume of non-cash payments by payment cards has increased significantly. Thus, compared to the last quarter of 2019, the number of non-cash transactions with payment cards in the second quarter of 2021 increased by 2.2 times and the volume by 71.4%. As can be seen, the number and volume of non-cash payments in retail payments increased significantly during the pandemic.

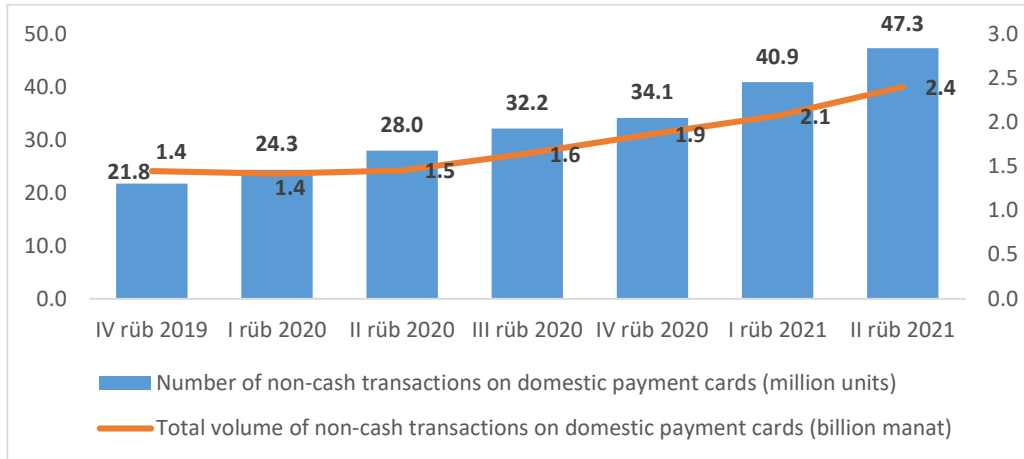


Figure 2. Number and volume of non-cash transactions with domestic payment cards

One of the indicators of the general picture of non-cash payments during the pandemic is domestic e-commerce transactions with payment cards. As can be seen from Figure 3, although the volume of e-commerce transactions decreased in the early stages of the pandemic, this figure began to increase significantly in subsequent periods. Thus, compared to the second quarter of 2020, the number of transactions through e-commerce in the second quarter of 2021 increased by 36%, and the volume of transactions increased by 44.4%.

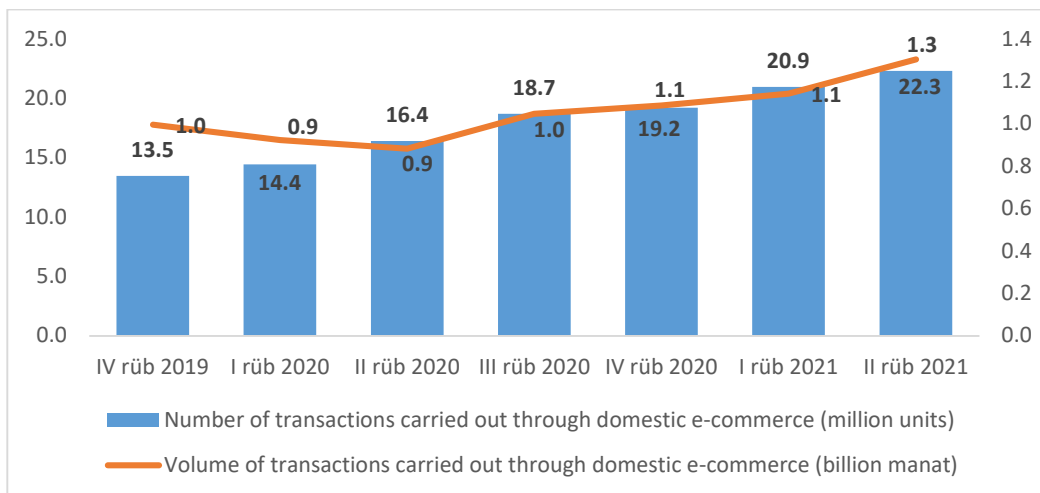


Figure 3. Number and volume of transactions carried out through domestic e-commerce

At present, the process of digitalization of banks is progressing rapidly, and it should be noted that the COVID19 pandemic has accelerated this measure. In Azerbaijan, during the pandemic, the use of e-banking services such as the Internet and mobile banking has increased. As can be seen from Figure 4, the number of transactions through e-banking services in the second quarter of 2021 increased by 34% and the volume of transactions by 69.5% compared to the fourth quarter of 2019. As can be seen, the pandemic has made a significant contribution to remote banking.

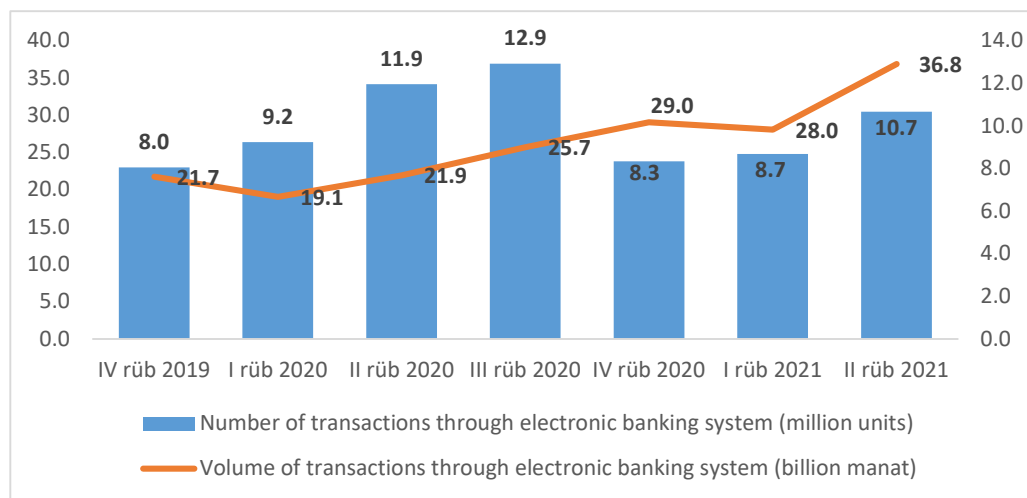


Figure 4. Number and volume of transactions through the electronic banking system

As it is known, all payments in the country are made through large-scale payment systems, which are interbank payment systems. The real-time interbank settlement system in Azerbaijan is called AZIPS and the small clearing system is called XOHKS, both of the systems is called the National Payment System (NPS). The ratio of the volume of transactions through the NPS to GDP is about 3. This figure is higher than 15 in developed countries. As can be seen from Figure 5, the volume of operations carried out through the NPS decreased during the pandemic. Thus, compared to the fourth quarter of 2019, the volume of transactions through the NPS in the second quarter of 2021 decreased by 25%.

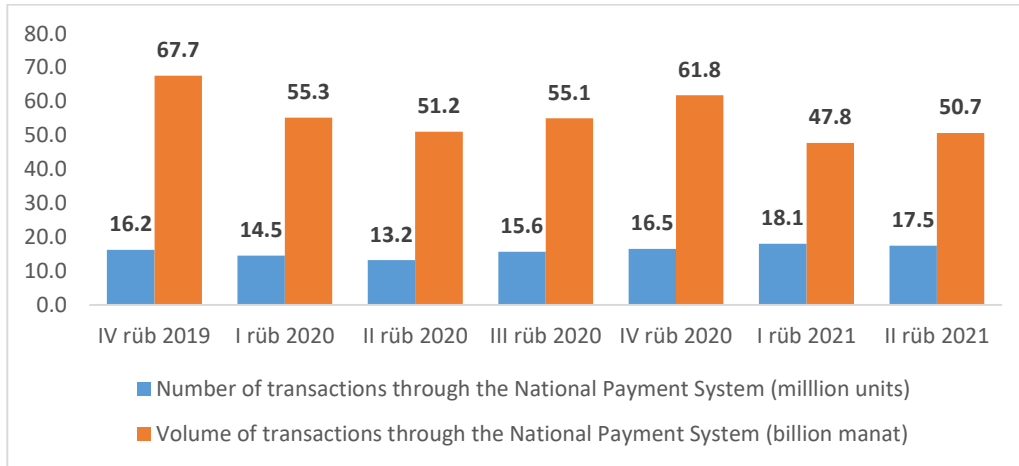


Figure 5. Number and volume of transactions through the National Payment System (AZIPS and XOHKS)

When analyzing the current situation with digital payments during the pandemic period, it is more logical to analyze the main macroeconomic indicators of the country in that period. That is why it is necessary to look at the statistics on Gross Domestic Product and consumption. Thus, according to Graph 6, compared to the fourth quarter of 2019, the volume of GDP in the second quarter of 2021 decreased by 9.4%, and consumption by 23.4%. Apparently, the pandemic has significantly reduced the size of the country's economy.

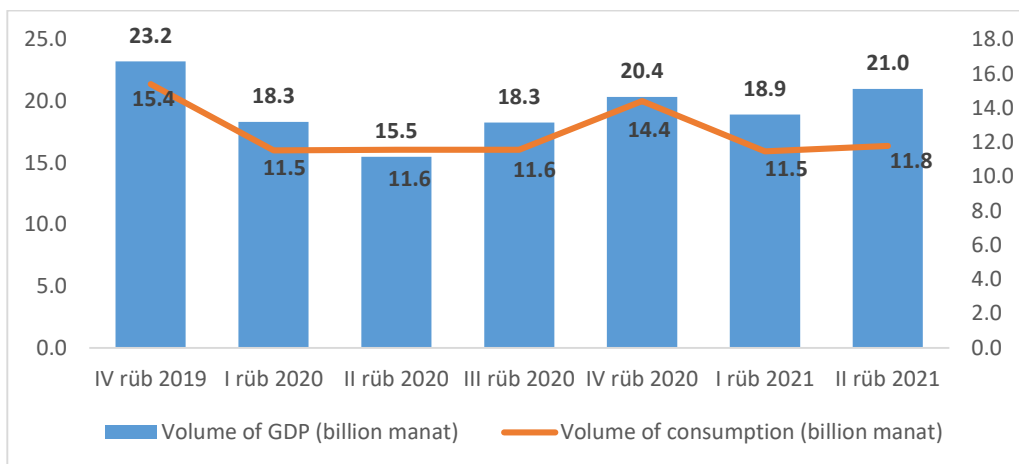


Figure 6. Volume of GDP and consumption

In conclusion, it should be noted that during the period of quarantine in our country, compared to the pre-pandemic period, there has been an increase in the number and volume of digital payments. However, a decline in key macroeconomic indicators was observed due to the pandemic. As it is known, the decline in key macroeconomic indicators is normal, as the pandemic has led to the closure of most economic centers of the country and the paralysis of various sectors of the economy. However, in addition to the negative effects of the pandemic, there are many positive aspects. Thus, the implementation of all services and measures remotely, minimizing physical contact to prevent the disease, initially forced people to use computers and smartphones, and in this context created favorable conditions for remote payments. That is why our analysis has shown that the pandemic has indeed had a positive effect on expanding the use of digital payments.

The purpose of analyzing the volume of consumption along with GDP in this section is that the increase in digital payments has a positive impact on consumer spending, and the increase in consumer spending, in turn, has a positive impact on GDP growth. However, the statistics shows that Azerbaijan produced 72.4 billion manat GDP in 2020, or 4.3% less than the previous year. The value of products sold and services provided to meet consumer needs decreased by 8.1% compared to the previous year.

Analysis of the impact of the pandemic on digital payments in international practice

According to World Economic Forum, COVID19 has identified 7 key benefits for improving digital payments: first of all complaint and feedback channels have been formed, financial knowledge and digital behaviours has been increased significantly, a large data has been created to increase financial inclusion, an extensive experience in operational downtime has been accumulated, detailed information about payment terminals has been obtained, additional service fees have been waived on the basis of a competitive environment, social distance habits has been formed.

COVID19 has had a huge impact on the payments ecosystem globally. During the pandemic, the digitalization of payments has led to an increase in the number and volume of non-cash payments amid attempts to minimize physical contact. During the pandemic, the digitalization of payments to minimize physical contact has led to an increase in the value and volume of non-cash payments. For example, in April 2020, 3 million payment cards were used for internet payments for the first time in a month in Turkey. In Singapore, with a population of 5.7 million, 100,000 customers made online payments for the first time in the first three months of 2020 [6, 7, 9]. During COVID19 in Singapore, along with the further development of cashless payments, e-commerce has increased sharply, while cash transactions have

declined. Online food orders increased by 41% and e-commerce transactions by 36% in a year.

According to the survey conducted by an Indian consulting firm named Local Circles, in India, 42% of the population has significantly increased their use of e-commerce platforms and digital payments after the pandemic.

According to the study by FSD Kenya, digital payments in Kenya have risen by 35% in the food sector, 18% in the pharmacy chain and 54% in the agrobusiness sector since the pandemic.

Pakistan's mobile money platform Easypaisa reports that, during the lockdown, there was a 35% increase in new customers, the volume of daily transactions increased by 17%, and the volume of bank transfers through mobile wallets increased by 185%.

In the Philippines, the mobile money operator Gcash notes that during the pandemic, the number of customers registered on their mobile money accounts increased by 150%, and the volume of transactions through the platform increased by 8 times.

The pandemic has accelerated the transition of the banking sector from physical banking to virtual banking. In many parts of the world, banks have been forced to close branches and ATMs. During the pandemic, the top four banks in Australia closed 2,150 ATMs and 175 bank branches [8, 9, 11].

Conclusion

This article identifies the impact of the pandemic on digital payments in Azerbaijan. First of all, the current digital payment infrastructure in Azerbaijan has been shown and their growth dynamics has been given for each system on the basis of statistical indicators for the last five years. In the next stage several areas of digital payments have been analyzed separately. Statistical figures and graphs have proved that the pandemic has had a positive impact on digital payments in Azerbaijan. Only the number and volume of transactions carried out through the AZIPS and XOHKS systems which constitute the National Payment System has decreased during the pandemic. In fact, it has an economic essence, because these systems are a system of interbank settlements, and the economic turnover of the whole country is carried out through these systems. Based on the analysis, it was determined that the country's macroeconomic indicators decreased significantly during the pandemic. In fact, the usage of restrictions in all areas of the country, the implementation of a special quarantine regime, the execution of restrictions on international operations and other bans have had a negative impact on the country's economic performance. However, the pandemic's requirement to minimize physical contact and conduct

events remotely has led to an increase in the use of digital payments. The article also examines international experience in this area and found that the pandemic has had a positive impact on digital payments and e-banking services in many countries.

References

- Central Bank of Kenya (2020) Implementation of the emergency measures to mitigate the adverse impact of the Corona virus (Covid-19) pandemic on loans and advances Banking Circular No. 3 of 2020.
- Daniel Tut, FinTech and the Covid-19 Pandemic: Evidence from Electronic Payment Systems, July 2020, Ryerson University, 42 p.
- Taghiyev Kh.R., Rustamov T.H (2020) Digital payments and electronic banking services. Textbook for all universities, 408 pages.
- Taghiyev Kh.R, Rustamov E, Gasimov R, Rasullu K. (2019) Banking and digital payments. Supportive textbook for all schools, 56 pages.
- <https://www.weforum.org/agenda/2021/01/davos-agenda-digital-payments-7-lessons-covid-19-taught-us/>
- <http://www.fao.org/3/cb2109en/CB2109EN.pdf>
- <https://www.prnewswire.com/news-releases/middle-east--africa-online-payment-methods-market-report-2021-covid-19-impact---consumers-were-open-to-adopting-new-digital-payments-such-as-cryptocurrency-biometrics--qr-codes-301348438.html>
- <https://www.mckinsey.com/~media/McKinsey/Industries/Financial%20Services/Our%20Insights/How%20the%20COVID%2019%20crisis%20may%20affect%20electronic%20payments%20in%20Africa/How-the-COVID-19-crisis-may-affect-electronic%20payments-in-Africa.pdf>
- <https://www.cnbc.com/2020/03/16/electronic-payments-look-more-appealing-as-coronavirus-spreads.html>
- <https://www.rolandberger.com/en/Insights/Publications/How-will-the-COVID-19-crisis-impact-the-payments-industry.html>
- <https://www.kansascityfed.org/research/payments-system-research-briefings/covid19-pandemic-may-reshape-digital-payments-landscape/>
- <https://www.pwc.in/consulting/financial-services/fintech/dp/impact-of-the-covid-19-outbreak-on-digital-payments.html>
- www.cbar.az
- <https://stat.gov.az/>