
**ANALYSIS OF THE PAYMENT SPHERE IN THE
MACEDONIAN BANKING SECTOR**

Marina Blazhekovikj Toshevski PhD¹, Stevcho Dimeski PhD²

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Abstract

The rapid technological transformation, which, in addition to advantages, also has challenges, as in the banking sectors of other countries, has its influence in the payment sphere of the Macedonian banking sector. In the past year, the most significant activity in this domain is actually the application of the new Law on Payment Services and its regulations, which were adopted by the National Bank. They made a significant contribution in the direction of harmonizing our legislation with European standards and regulations. Also, as a result of the change in habits and the payment culture of individuals and legal entities, payment functions that were less used until now are increasingly being used. For that, in this paper is made an analysis of non-cash payment transactions and payment transactions with credit transfers initiated by individuals and legal entities in our country. Also, is given a review of the use of payment cards in everyday transactions. A comparative analysis of their application by individual years was also made. The goal is to perceive the dynamics of their movement in the analyzed period, as a result of rapid technological changes.

Keywords: payment sphere, transactions, payment cards.

¹Faculty of Information and Communication technologies - Bitola,
marina.blazekovic@yahoo.com; marina.blazekovic@uklo.edu.mk

²Stopanska banka AD Skopje, International Slavic University ST. NICHOLAS, Sveti Nikole,
Stevco.dimeski@msu.edu.mk, Stevco.dimeski@stb.com.mk

1. Introduction

The analysis of this paper has been made by using data from the annual reports of the National bank, of the e-commerce Association of R. Macedonia, and the information on the payments in our country. Its aim is to view the state of the payment sphere in the Macedonian banking sector, with an accent on cashless payment transactions (by number and value) in each year of the analyzed period, and the use of payment cards in realization of these transactions.

The analysis gives a review of the realized positive movements in the payment infrastructure, considers the progress on annual level according to the available data compared to the previous years, which is a challenge for further acting by the banks for even higher improvement.

2. Cashless payment transactions

Digital payment channels that are offered by the payment service providers to individuals and legal entities especially enabled the cashless payments growth in the previous 2023. Good payment infrastructure for using contactless technology has provided growth for both the number and the value of transactions realized by contactless technology.

According to the data contained in the Reports issued by the National bank, the use of digital ways for realizing payments in the country, especially by the natural persons, has been significantly increased. This trend is not noticed only in the use of the payment cards, but also in the use of mobile apps for realizing electronic credit transfers.

In the previous 2023, there was significant annual growth of 16,8% in the use of payment cards for paying products and services in the country, and also higher growth of 17,4% in the payments made in the physical points of sale, and growth of 11,1% in the payments on internet points of sale.

When it comes to the number and value of payment transactions made by use of payment cards, the data shows a decrease in cash withdrawals from ATMs, against the growth in the use of payment cards in commerce.

Cashless payment transactions among individuals and legal persons in 2022/2023 show an annual growth of 12.4% in the number of transactions against the annual growth of 6.6% in the number of transactions in 2021/2022. Positive annual growth rates in credit transfers of 4.1% in 2022/2023 are also noticeable, against the negative annual changes of -2.6% in 2021/2022. Regarding payment cards as payment instruments, the annual changes in the number of transactions amounted to 17.3% in 2022/2023, compared to 13.1% in 2021/2022, which is a noticeable improvement over the past year.

These changes in the number of non-cash payment transactions can be seen in the following table 1 (Authors' calculations using the data from the annual information on payments from NBRM and reports from the Association of e-commerce of Macedonia):

Table 1. Non-cash payment transactions (number of transactions)

Payment tools	(number of transactions) (in millions)				
	2021	2022	2023	Annual growth 2021/2022	Annual growth 2022/2023
Total payment transactions in the country	182	194	218	6,6%	12,4%
Credit transfers	75	73	76	-2,6%	4,1%
Payment cards	107	121	142	13,1%	17,3%

As for the value of transactions, there is an annual growth of 20% in the value of transactions with a realized number of 218 million non-cash payment transactions and 6,691 billion MKD value of transactions in 2022/2023 against the negative annual changes of -7.0% in 2021/2022 year. Positive annual changes in the value of transactions with credit transfers in 2022/2023 of 20.1% are also noticeable, against the negative annual changes in their value of -7.4% in 2021/2022. For the annual changes in the value of payment card transactions, the data shows annual growth of 16.7% in 2022/2023 compared to annual growth of 11.9% in 2021/2022. These changes in the value of non-cash payment transactions can be seen in the following table 2 (Authors' calculations using the data from the annual information on payments from NBRM and reports from the Association of e-commerce of Macedonia):

Table 2. Non-cash payment transactions (value of transactions)

Payment tools	(value of transactions) (in billions denars)				
	2021	2022	2023	Annual growth 2021/2022	Annual growth 2022/2023
Total payment transactions in the country	5.995	5.574	6.691	-7,0%	20,0%
Credit transfers	5.893	5.454	6.551	-7,4%	20,1%
Payment cards	101	120	140	11,9%	16,7%

With that, the share of the value of payment transactions by payment cards in the country's trade increases every year, and in the previous 2023 it reached 43,8%. That confirms the change in the habits of the individuals and legal entities, for higher use of the payment cards for making payment transactions in the trade.

This can be seen in the following figure 1 (Annual reports, NBRM):

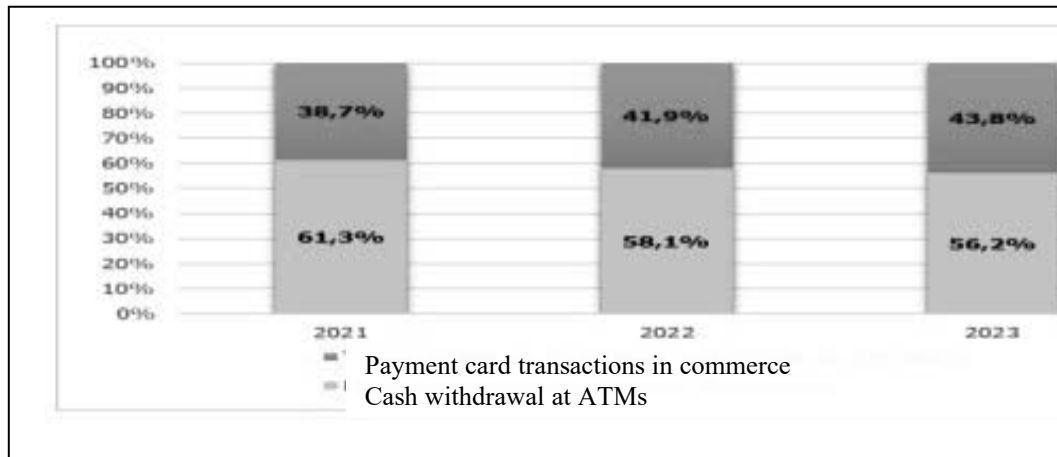


Figure 1. Value of payment transactions with payment cards in the country (%)

3. Payment infrastructure with payment cards

At the end of 2020, the total number of payment cards was 2.1 million cards. The biggest influence on the annual increase in the number of payment cards in 2020 is the issuance of the domestic payment card, as one of the measures of the Government of the Republic of North Macedonia to support economic activity in conditions of covid-19. Of the total number of payment cards, 83% belong to payment cards with a debit function and 17% are cards with a credit function. The biggest participation is the cards with debit function with 83%, from the "Visa" brand with a participation of 55% and the "Mastercard" brand with a participation of 42%. The other brands are less represented, i.e. with 3%.

At the end of 2020, the share of contact-contactless cards in the total number of cards with a payment function of 2.1 million payment cards was 62%. Also, in the same year, three banks offered the virtual wallet integrating the contactless card with the mobile application. With this technological innovation, the domestic market of payment services has been enriched with a modern and reliable way of making payments. For the application of contactless technology, in parallel with the growth in the number of contact-contactless cards, the number of installed devices at points of sale with contact and contactless technology also increased, and their participation reached 72.6% in the total number of devices for electronic payments on physical points of sale at the end of 2020, i.e. 24,466 installed contact- contactless devices of a total of 33,699 devices for electronic transfer of funds at physical points of sale. All this led to a change in the payment habits of individuals and legal entities, i.e. using the benefits of contactless technology, so that the number of payments with contactless cards increased in 2020.

Those changes had continuity in the following years in the analyzed period.

At the end of 2023, the total number of payment cards amounted to 1.9 million cards, and the largest share is the cards with debit function with 83.9%, from the "Visa" brand with a share of 55.9% and the "Mastercard" brand with a share of 41.7%.

Of the total payment cards 75.9% are based on contactless technology and they are used on 94.5% of the total number of devices for electronic payments at physical points of sale with an annual growth of these devices of 7.3%. A high annual growth of 38.3%, i.e. 325 ATMs, is observed in the number of ATMs with an additional function for depositing cash, and there is also an annual growth of 4.7% for ATMs with the function of initiating a credit transfer, i.e. 312 ATMs. These changes can be seen in the following table 3 (data available from Annual information on payments, NBRM):

Table 3. Payment infrastructure for paying with payment cards

Payment infrastructure	2020	2021	2022	2023
Total cards with payment function	2.114.133	2.125.888	2.112.004	1.947.189
Of which according to the function of the card				
debit	1.756.294	1.754.171	1.753.654	1.634.288
credit	357.839	371.717	358.350	312.901
of which according to the brand of the card				
Master card	899.085	922.100	927.370	817.428
Visa	1.173.563	1.161.512	1.145.211	1.094.377
Other brands	63.914	59.784	52.819	46.732
of which according to payment technology				
Contact/non-contact	1.317.290	1.450.704	1.468.428	1.472.794
contactless		2.144	2.498	5.119
internet	10.872	11.410	11.983	10.880
ATMs	1.001	981	1.013	1.023
with a cash deposit function	193	202	235	325
credit transfer function	359	297	298	312
Devices at physical points of sale	33.699	29.807	29.916	32.113
Contact/non-contact	24.466	25.008	25.771	3.348
Devices at points of sale for e-commerce	1.459	1.652	1.891	2.123

4. The impact of the new Law on Payment Services and Payment Systems

The new Law on Payment Services and Payment Systems, which entered into force in January 2023, represents a challenge for the payment services market whose impact will be felt in the coming years. This law is expected to increase the competitiveness of the market as a result of the offer of new providers of payment services, which have to meet certain criteria in order to receive a permit from the National Bank. As with banks, individuals and legal entities will be able to open payment accounts with new payment service providers, use payment cards and other forms of electronic banking to make payments. All that will certainly have reflection on the payment infrastructure and payment transactions in our country. If we take into account the experience of the countries where such new payment service providers are present, it is expected that they will offer innovative ways to

make payments easier and faster. As an additional benefit for individuals and legal entities is considered the possibility to make their payments using electronic money that will be issued by payment service providers. During market competition, existing payment service providers are expected to offer new and innovative payment services for individuals and legal entities for easier and faster execution of payments.

One of the more significant benefits of the new regulatory framework is the application of the concept of the so-called "open banking" which will include the fintech sector in the offer of new payment solutions for individuals and legal entities. Then, the National Bank will play a key role in the payments market as a regulator of this market, in the direction of encouraging competition and contributing to the increase of digital solutions for payment services, as well as encouraging the process of financial inclusion of individuals and legal entities.

5. Conclusion

It can be unanimously concluded that several years after Covid-19, the digital transformation has become imperative for all on the global level, and in our country as well. Fast digital changes have come as a blessing for development of the banks' payment infrastructure, especially in the emerging markets, because it has put forward the digitalization in their economies in a few years. The digital payment channels offered by the banks played very important role in the society, providing safe access to their clients. That was an important boost for adaptation of the banks in order to keep the existing clients and attract new ones. Result of that is the significant growth and development of the payment infrastructure in all analyzed years. Despite the growth in the past years, of course there is potential that should be utilized for even higher progress. In this direction, it is necessary to work on enhancing and advancing the digital skills, education on the market, the awareness raising, trust building, advancement of payment solutions etc. The challenge is not only to keep, but also to increase the growth realized in all previous years and to take advantages offered by the digital payment channels.

Also, there is the challenge that will bring the new Law on Payment Services and Payment Systems in the coming years, its impact on market competitiveness with new payment service providers and their offer of innovative ways to make payments.

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