

Annual Information
on Payment Operations in the
Republic of North Macedonia
in 2018

NATIONAL
BANK OF THE
REPUBLIC OF
NORTH
MACEDONIA

PAYMENT SYSTEMS
DEPARTMENT

CONTENTS

1.	LEGAL FRAMEWORK AND METHODOLOGICAL BASIS	3
2.	PAYMENT SYSTEMS IN THE COUNTRY	4
3.	PAYMENT TRANSACTIONS	6
	3.1. CREDIT TRANSFERS	8
	3.2 PAYMENT CARDS	9
4.	PAYMENT INFRASTRUCTURE	. 13
5.	USE OF CASH	. 16
6.	E-COMMERCE TRENDS	. 17

SUMMARY

The National Bank constantly carries out numerous activities and projects for improving the type and quality of payment statistics data and ensuring their international comparability. In order to improve the overall process of collecting, processing and disseminating data in the field of payment statistics, the National Bank during 2016 adopted new bylaws. They achieved significant compliance of data with the requirements of the Regulation on Payment Statistics No. 1409/2013 of the European Central Bank (ECB), ensuring simultaneously consistency with the methodology for payment statistics of the Bank for International Settlements (BIS). The new payment statistics framework contributes to achieving one of the **National Bank's strategic goals for providing qualitative statistical data that comply with the European statistical standards,** thus taking into account the reporting burden, their efficiency, on time and simple dissemination to the users.

In 2018, the **value of payments made by natural persons and legal entities** (that excludes the monetary financial institutions sector) in the Republic of North Macedonia registered an annual growth of 10.2% to Denar 3,813 billion. The largest portion, or 99%, are credit transfers, and the rest (1%) are executed with payment cards.

Most of the **credit transfer** transactions was made by legal entities (71%), while the rest by natural persons. Electronic initiation of credit transfers accounted for 43.8% of the total number of credit transfers in 2018. In addition, legal entities mostly initiate electronic credit transfers using a personal computer (99.4%), while natural persons, besides personal computers (81%), use mobile phone (18%) and ATMs (1%). In comparison with the EU countries, the Republic of North Macedonia reported a relatively low share of electronic credit transfers (43.8%) in the total number of credit transfers (in the old EU member states¹ this share was 92%, and in the Central, Eastern and Southeast Europe (CESEE) countries² it was 87%).

Payment cards issued by resident PSPs, in terms of the number of transactions at terminals located in the country in 2018, were mostly used in the trade for making payments at POS terminals (share of 64% in the total number of transactions with payment cards) which is an increase of 4 percentage points compared to 2017, at the expense of reduction of the share of the use of payment cards for ATM cash withdrawals of 3 percentage points. (from 36% in 2017 to 33% in 2018). The share of transactions with payment cards for making payments in e-commerce in 2018 is still low and equals 3%, and the share of ATM cash deposits is very low.

E-commerce has become increasingly important, where the percentage of the population in the Republic of North Macedonia that shops online increased from 5% in 2012 to 25% in 2018. Yet, this level is almost two and a half times below the EU average, although 81% of the population in the Republic of North Macedonia used the Internet, which is relatively close to the EU average (87%). At the end of 2018, 5 banks in the Republic of North Macedonia supported e-commerce with a relatively small number of Internet merchants (749).

¹ Austria, Belgium, Germany, Greece, Denmark, Ireland, Italy, the United Kingdom, Portugal, Finland, France, the Netherlands, Sweden and Spain.

² Bulgaria, Estonia, Cyprus, Latvia, Lithuania, Poland, the Czech Republic, Romania, Slovakia, Slovenia, Hungary and Croatia.

1. LEGAL FRAMEWORK AND METHODOLOGICAL BASIS

Providing internationally comparable data on payment statistics by applying the methodological bases and requirements of the BIS and their harmonization with the requirements of the European Central Bank is a continuing commitment of the National Bank. The adoption of the bylaws achieved a significant progress in this area at the beginning of 2016 when the National Bank adopted a completely new regulation³ that transposed a large part of the methodological bases and requirements of the Regulation on Payment Statistics No. 1409/2013 of the ECB, ensuring simultaneously consistency with the methodology for payment statistics of the BIS.

The following **reporting agents** submit payment statistics data to the National Bank: banks, micropayment intermediaries, legal entities involved in payment system or perform other services related to payments and payment system operators. Reporting agents submit **monthly data** on the accounts for making payments, payment cards in terms of the type of card, payment card accepting devices, payment transactions by type of payment instrument and type of device, types of participants in payment systems and on payments processed through payment systems. Reporting agents also submit **annual data** on the total number of merchants and the total number of points of sale of the merchants in the country that are clients of the payment services provider and accept their cards, store fees⁴ charged to merchants and fees charged to payment card holder.

The statistical data that the National Bank obtains on a monthly and annual basis, refer to denar accounts and credit transfers made in denars in the country, while data on transactions with payment cards refer to domestic and international transactions. Thus, reporting agents submit data on transactions at terminals provided by resident PSPs with cards issued by non-resident PSPs, as well as data on transactions at terminals provided by non-resident PSPs with cards issued by resident PSPs. This way, payment statistics covers data for cross-border transactions in payment cards operations.

In order to perceive the trends in the use of payment instruments and the change in the habits for payments of payment services users, the National Bank, according to the international standards that are also requirements of the ECB, distinguishes transactions that are carried out between monetary financial institutions from transactions that include natural persons and legal entities (or so-called non-monetary financial institutions) as a payer and/or recipient of the payment. Also, due to the national needs for additional analyses, the National Bank has a more detailed payment statistics than the requirements of the ECB by disseminating separate data on the number

³ "Decision on submitting payment operations data" (Official Gazette of the Republic of Macedonia No. 42/16) and "Instructions on submitting payment operations data" (Official Gazette of the Republic of Macedonia No. 73/16).

⁴ Data on store fees charged to merchants and fees charged to payment card holder are used solely for analytical purposes of the National Bank and they are not subject to disclosure in accordance with item 8 of the "Decision on submitting payment operations data" (Official Gazette of the Republic of Macedonia No. 42/16).

and value of transactions initiated by natural persons and legal entities, as well as in terms of whether payments are made between accounts that are held in the same bank (intrabank payments) or between accounts that are held in different banks (interbank payments). Furthermore, in its proactive approach, and in order to perceive the level of digitalization of payments in the country, the National Bank enriched the quality of data by covering online payments and contact-contactless payments, which is not covered by the methodology of the ECB, but is already a novelty in the revised payment statistics of the BIS from 2017.

The existing methodological payment statistics framework contributes to achieving one of the National Bank's strategic goals for **providing qualitative statistical data that fully comply with the international and the European statistical standards, taking into account the reporting burden, their efficiency, on time and simple dissemination to the users.** It provides collection of high-quality payments data, and will be revised in the future in accordance with the development of the technology of making payments and changes in the methodological setup of the payment statistics of the ECB and the Bank for International Settlements.

2. PAYMENT SYSTEMS IN THE COUNTRY

The speed and efficiency of payments nowadays, when most are made electronically, depend primarily on the functionality of payment systems used to send information and settle transactions. Payment systems are based on formal agreements between participants, based on regulations, standardized rules, formalized business processes and technical solutions that enable transfer of funds from the payer to the recipient of the payment. In the Republic of North Macedonia, payments in denars are made through multiple systems whereby MIPS⁵, which is operated by the National Bank, has a central place. All commercial banks have accounts with the National Bank through which within MIPS they settle the mutual transactions and the transactions with the National Bank.

In 2018, the total value of transactions in denars settled through the payment systems in the country amounted to Denar 7,745 billion and registered an annual growth of 93.6%, which is primarily a result of the increase in the value of transactions related to the monetary policy implementation. **Most of the value (95%) is settled through the system for large and urgent payments - MIPS**, used to settle the banks' transactions carried out through other payment systems in the country, as well as the transactions with the National Bank. The rest of the value is carried out through the clearing payment system KIBS⁶ (5%) and an insignificant portion through the card system CASYS⁷. The total number of settled transactions through the

⁵ MIPS - the Macedonian Interbank Payment System is a real-time gross settlement system (RTGS) of denar payments and is mainly used for high-value and urgent interbank payments.

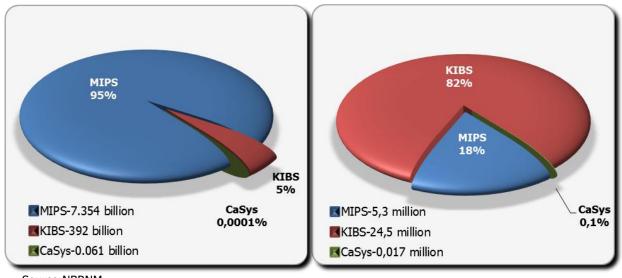
⁶ Clearing House - Clearing InterBank Systems AD Skopje operates the system for multilateral deferred net settlement for processing of small payments of below Denar 1,000,000.

⁷ International Card System AD Skopje (CaSys) is a system of multilateral deferred net settlement of payments with domestic brands of credit cards.

payment systems in the country in 2018 amounted to 29.9 millions and increased by 2.6% compared to the previous year. Unlike the value, a larger number of transactions are settled through KIBS (82%), and a smaller number through MIPS (18%).

Share of the payment systems in the country in the total value of the payment operations in 2018 (%)

Share of the payment systems in the country in the total number of transactions in the payment operations in 2018 (%)



Source: NBRNM

The transactions of the clearing payment system KIBS and the card system CASYS were settled on a regular basis through MIPS of the National Bank, which in 2018 worked for 248 days, with a high availability for the participants in the system of 99.95%.

3. PAYMENT TRANSACTIONS

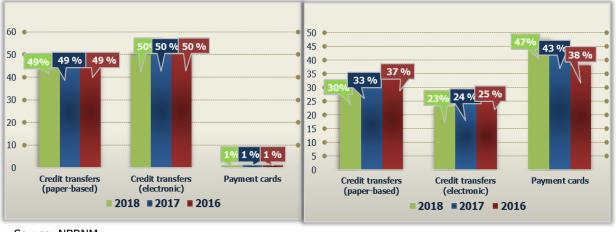
The total value of denar payments⁸ made by natural persons and legal entities in the country with the help of banks registered an annual growth of 10.2% in 2018 and reached Denar 3,813 billion.

Chart 3

Share in the total value of cashless transactions
(%)

Chart 4

Share in the total number of cashless transactions (%)



Source: NBRNM

Larger portion of the value of transactions (99%) is made with credit transfers (with almost equal share of paper-based and electronic credit transfers), and only 1% of the value was made with the use of payment cards. **The total number of transactions for the execution of payments was 114 million in 2018, which is by 11% more compared to the number of transactions of the previous year.** Most of the transactions were executed using payment cards (47%), while the rest were made using paper-based and electronic credit transfers (with a share of 30% and 23%, respectively). The share of payment card transactions increased by 4 percentage points compared to 2017, at the expense of the reduction mainly in the share of paper-based credit transfers. This change indicates an increasing use of payment cards by the households and companies for the execution of payments in trade.

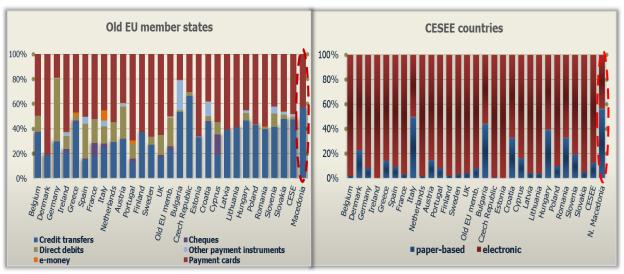
⁸ Payments refer to transactions of natural persons and legal entities that are not included in the monetary financial institutions sector. It includes all transactions in which natural persons and legal entities are payer and/or recipient of the payment. The payment instruments used for making payments in the Republic of North Macedonia are credit transfers and payment cards, whereas cheques were used until 2007, and direct debits are still not introduced as a payment instrument. At the same time, despite the legal possibility, there are no e-money transactions.

Chart 5

Share in the total number of cashless transactions (in %)

Chart 6

Share in the total number of transactions with credit transfers (in %)



Source: NBRNM and ECB

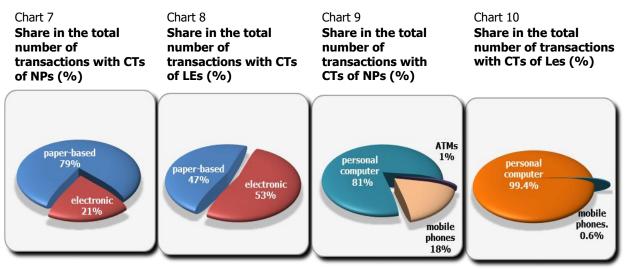
The comparative analysis with the CESEE countries and with the older EU member states9 shows that the use of payment cards in the Republic of North Macedonia is smaller compared to most countries of these two groups. Thus, the share of payment card transactions in the total number of payments in the Republic of North Macedonia of 47% is lower than the average of the CESEE countries and the old EU Member States (51.6% and 52.3%, respectively). On the other hand, payments in the country with credit transfers have a significant share (53%) in the total number of payment instrument transactions, which is above the average of the EU (22%) and CESEE (44%) countries. This situation in the Republic of North Macedonia is primarily due to the absence of other types of payment instruments (only credit transfers and payment cards), unlike the older EU member states and the CESEE countries that have a greater range of payment instruments, but also different habits of their usage. Thus, direct borrowing prevails in Germany (48.5%), there is a large use of cheques in Cyprus and Estonia (12.4% and 11.5%, respectively), and relatively high use of electronic money in Italy (9.7%). In terms of the manner of initiating credit transfers in the country, there is also a relatively low share of electronically initiated credit transfers (43.8%) in the total number of credit transfers, compared to the older EU member states (92%) and the CESEE countries (87.5%). This situation indicates the need for greater promotion and education for the use of the already established digital payment infrastructure in the domestic economy.

⁹ The latest available data for the EU member states are as of 2017.

3.1. CREDIT TRANSFERS

In 2018, the total number of credit transfer transactions was 60.4 million and registered an annual growth of 3%. The share of electronically initiated credit transfers in the total number of credit transfers in 2018 was 43.8% and registered moderate growth compared to 2017 (42%). The structure of the number of credit transfer transactions carried out by legal entities and natural persons remained unchanged in 2018, with a share of 71%, i.e. 29%, respectively. Moreover, legal entities use the services of e-banking more than natural persons (53% of the number of credit transfers are initiated electronically, while in natural persons, 21% of the number of credit transfers are initiated electronically). In terms of the terminal at which electronic credit transfers are initiated in 2018, the personal computer had the largest use (99.4%) with legal entities, while natural persons registered a more significant change in the habits of payments, i.e. an increased use of the applications installed on mobile phones (with a structural share of 18%, or by 6 percentage points more compared to 2017) at the expense of the reduced use of the personal computer for initiating payments (from 86% structural share in 2017, to 81% in 2018).

Given that direct debits are not used in the country, an increasing use was registered in standing orders that are type of credit transfers, but have certain functional characteristics similar to direct debits. The number of the transactions executed with standing orders for 2018 was 3.4 million, or 5.6% of the total number of transactions with credit transfers in the country, thus registering an annual growth of 3%.



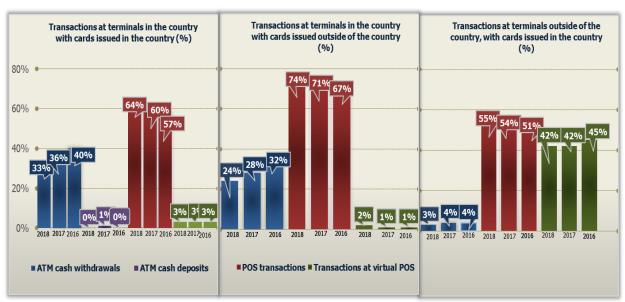
3.2 PAYMENT CARDS

The total number of transactions with payment cards issued by resident PSPs that are carried out in order to buy products and services in the country, in 2018 was 53.7 million, which is an annual increase of 22%.

Regarding the use of payment cards issued by resident PSPs at terminals located in the country, there is a clear trend of increasing the use of payment cards for making payments at POS terminals. Namely, POS transactions accounted for 64% of the total number of transactions with payment cards issued by resident PSPs that are carried out at terminals located in the country, which is an increase in the share of 4 percentage points compared to 2017, at the expense of the reduced share of the use of payment cards for ATM cash withdrawals by 3 percentage points (from 36% in 2017 to 33% in 2018). The share of transactions with payment cards for making payments at virtual points of sale in 2018 is still low and equals 3%, and the share of ATM cash deposits is very low.

Chart 11

Share in the total number of transactions with payment cards



Source: NBRNM

The number of transactions with payment cards issued by resident PSPs at terminals located abroad in 2018 amounted to 6.7 million. Moreover, there is an increased use of payment cards at POS terminals (whose share is 55% which is a slight increase of 1 percentage point compared to 2017), at the expense of the reduced share of ATM cash withdrawals (3%, or a decrease of 1 percentage point, compared to 2017), while the share of cards for payments at virtual points of sale remains stable (42%).

A similar trend of increasing the share of payment cards for payments at POS terminals at the expense of the reduced share of ATM cash withdrawals was also registered in the use of payment cards issued by non-resident PSPs at terminals located in the country. Namely, in 2018, 5.5 millions of transactions were carried out, of which 74% are carried out at POS terminals, 24% for ATM cash withdrawals and 2% for online payments, compared with 2017, when the percentage share was 71%, 28% and 1%, respectively.

The total value of transactions with payment cards issued by resident PSPs that are carried out in order to buy products and services in the country, in 2018 was Denar 48.8 billion, which is an annual increase of 17%.

Regarding the value of transactions with payment cards issued by resident PSPs that are used at terminals located in the country, although the use of payment cards for ATM cash withdrawals (70%) prevails, there is a trend of increasing the share of payment cards for making payments at POS terminals, at the expense of the reduction of their share for withdrawing cash in the country of 2 percentage points in 2018 compared with the previous year. The share of payment cards for making payments at virtual points of sale in 2018 increased by 1 percentage point, but is still low (only 2% share), while the share of ATM cash deposits is 3% and decreased by 1 percentage point on an annual basis.

Transactions at terminals in the country Transactions at terminals outside of the Transactions at terminals in the country with cards issued in the country (%) with cards issued outside of the country country, with cards issued in the country (%) (%) 80% 60% 40% 20% 10% 11% 13% ■POS transactions ■ Transactions at virtual POS ATM cash withdrawals ■ ATM cash deposits

Chart 12 Share in the total value of transactions with payment cards

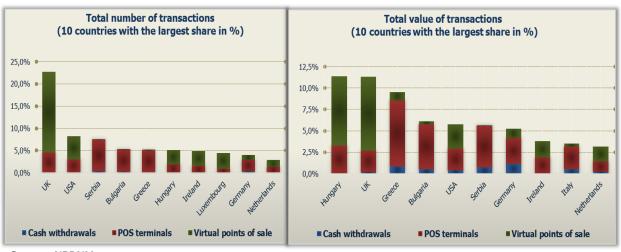
Source: NBRNM

The value of transactions with payment cards issued by resident PSPs at terminals located abroad in 2018 amounted to Denar 15.1 billion. Moreover, there is a high use of payment cards at POS terminals abroad, with an equal share as the previous year (55%). On the other hand, the use of payment cards at virtual points of sale recorded moderate growth of the share of 1 percentage point on an annual basis (35% in 2018), at the expense of the reduced share of ATM cash withdrawals (10% in 2018).

A similar trend of increasing the share of the value of transactions with payment cards for payments at POS terminals at the expense of the reduced share of ATM cash withdrawals was also registered in the use of payment cards issued by non-resident PSPs at terminals located in the country. Namely, in 2018, transactions worth Denar 22.7 billion were carried out, amid a high share of transactions for ATM cash withdrawals (57%), but amid discernible trend of decrease in their share of 3 percentage points, compared to 2017. On the other hand, the share of transactions with payment cards for making payments at POS terminals in trade registered an annual growth of 3 percentage points and reached 42% in 2018.

Chart 13

Share in the total number and value of transactions with cards issued by resident PSPs at terminals located abroad



Source: NBRNM

The total number of transactions with payment cards issued by resident PSPs at terminals located abroad registered an annual growth of 26%. Residents executed most of the transactions on terminals located in the United Kingdom, followed by the United States and Serbia. In addition, most of transactions were made at virtual points of sale in the United Kingdom, the United States, Luxembourg, Ireland and Hungary.

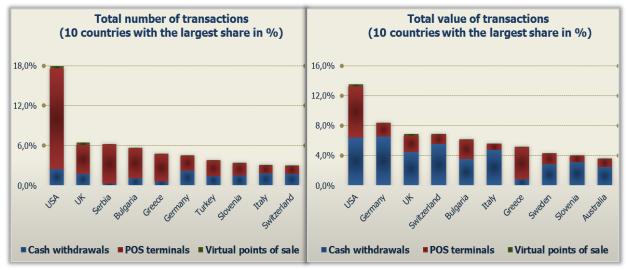
The value of transactions using payment cards issued by resident PSPs at terminals located abroad registered an annual growth of 13.2%. Significant part of the value is realized in Hungary, the United Kingdom and Greece. Transactions in trade executed at POS terminals make up most of the total value (especially in Greece, Bulgaria and Serbia), but there is also a relatively high share in online transactions in the United Kingdom, Hungary, the United States, Ireland and the Netherlands.

In 2018, the total number of transactions in the country with payment cards issued by non-resident PSPs registered a significant annual growth of 27%. In terms of the country of the issuer, most of the transactions were executed using payment cards issued in the United States, followed by the United Kingdom and Serbia. Non-residents mostly used payment cards at POS terminals in trade, except for the payment cards issued in Italy and

Switzerland that were used more for ATM cash withdrawals. On the other hand, the number of transactions with foreign payment cards on virtual points of sale in the country is insignificant.

Chart 14

Share in the total number and value of transactions with cards issued by non-resident PSPs at terminals located in the country



Source: NBRNM

The total value of transactions with payment cards issued by non-resident PSPs at terminals located in the country registered an annual growth of 14.7%. Analyzing by countries, payment cards issued in the United States had the largest share in the total value, followed by Germany and the United Kingdom. Most of the transaction value accounts for cash withdrawal, except the payment cards issued in Greece, where the highest transaction value was executed in trade through POS terminals.

4. PAYMENT INFRASTRUCTURE

The total number of transaction accounts in denars in the Republic of North Macedonia at the end of 2018 was 3,953 thousand, which is a moderate annual growth of 2.4%. Thus, 3,765 thousand transaction accounts or 95% of the total number of transaction accounts are owned by natural persons, i.e. each depositor has an average of 2.3 transaction accounts in one bank or more. The remainder consists of accounts of legal entities, whose number is 187 thousand transaction accounts, where each depositor has an average of 1.6 transaction accounts.

Table 1 **Transaction accounts and depositors**

2018											
Transaction accounts			of which:			of which:			Total number of depositors		
			Accounts accessed through a PS or other device only for reports			Accounts accessed through a PS or other device for payments and reports					
Total	NP	LE	Total	NP	LE	Total	NP	LE	Total	NP	LE
3.952.593	3.765.106	187.487	857.077	794.193	62.884	387.120	325.459	61.661			
Share of	Share of "Transaction accounts" (in %)		22%	21%	34%	10%	9%	33%	1.781.204	1.665.636	115.568
Share of "A	Share of "Accounts accessed through a PS or other device only for reports" (in %)				45%	41%	98%	2,22	2,26	1,62	
	Ratio with "Transaction accounts"										

Source: NBRNM

The total number of accounts available through a personal computer or other device for reports and/or payments (accounts provide insight into the balance, and some of them also initiating electronic payments) is 857 thousand, or 22% of the total number of transaction accounts. The share of accounts available for initiating electronic payments in accounts that provide insight into the account balance is 45%, amid high share of accounts for electronic payments of legal entities (98%) in the total number of legal entities' accounts for insight into the balance, which is an increase of 3 percentage points, i.e. 7 percentage points, respectively, compared to 2017. **Thus, there was a notable increase in 2018 of 2 percentage points in the share of the number of accounts that offer an opportunity for electronic payments in the total number of transaction accounts (10%), indicating a slight increase in the use of digital banking channels for making payments.** The relatively smaller use of digital channels for payments is especially pronounced in natural persons where only 9% of transaction accounts allow for initiation of electronic payments, while the situation with the legal entities is a bit favorable where 33% of the total accounts of legal entities offer an opportunity for electronic payments (in 2017 when these percents were 7% и 29%, respectively).

The total number of payment cards at the end of 2018 was 1.8 million, which is an insignificant annual fall of 0.03%. Although the total number of payment cards remained almost unchanged compared with 2017, the share of contact-contactless cards in the total number of payment cards significantly increased to 41.6% from 27.3% in 2017, amid high annual growth of 52%. About 80% of the total number of cards are debit cards and the rest are cards with a credit function, retaining the same structural share as in the previous two years.

Thus, natural persons and legal entities mostly hold Visa cards (56%), followed by MasterCard (40%), while the share of other brands is relatively small (4%).

Table 2 Payment infrastructure for payments with cards

PA YMENT INFRA STRUCTURE	2018	2017	2016
Total cards with a payment function	1.821.483	1.821.997	1.818.676
of which by type of payment technology			
contact/contactless	757.161	498.199	252.851
internet cards	19.753	19.337	18.764
ATMs	1.040	1.031	1.039
ATMs with a cash deposit function	138	118	86
ATMs with a credit transfer function	290	280	256
POS terminals	31.542	31.995	34.826
contact/contactless	18.492	15.807	12.056
Terminals at virtual points of sale	871	832	711

Source: NBRNM

Chart 15
Structure of the number of payment cards by function (% share in 2018)

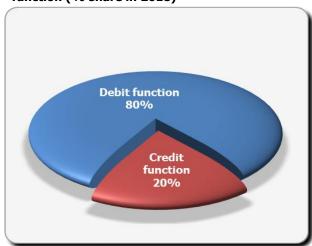
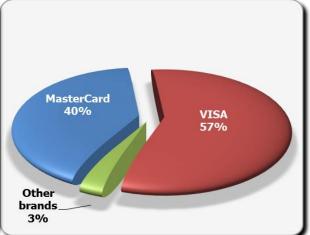


Chart 16
Structure of the number of payment cards by brand (% share in 2018)



Source: NBRNM

The number of contact-contactless cards increases along with the growth of the contactless payment terminals. Thus, the share of installed POS terminals that support contact-contactless cards in the total number of EFTPOS terminals at the end of 2018 was 58.6%, or by 9.2 percentage points larger share compared to the share in 2017. The trend of increased installation and use of modern digital payment devices registered in the past few years is also confirmed by the growth of the number of ATMs with additional function for initiating credit transfer in 2018 (annual growth of 3.6%). In addition, it is noteworthy that the banks tend to increase the number of ATMs with a cash deposit function (138 ATMs with a cash deposit function in 2018 compared to 118 in 2017). However, the total number of EFTPOS terminals at the end of 2018 declined by 1.4% compared to the end of 2017 and amounted to 31,542.

The total number of merchants in the country who accept payment cards at the end of 2018 was 12,422. Most of them are retailers who accept payments at POS terminals (93.6%), and only a small part (6.4%) are retailers who accept payments at virtual points of sale and payments on other devices (micropayment service providers¹⁰). At the end of 2018, 5 banks in the Republic of North Macedonia supported e-commerce with a relatively small number of Internet merchants (749).

As a result of the benefits of the technological development on payments and the increasing need for purchases via the Internet and in the domestic economy, the number of virtual points of sale at the end of 2018 increased by 4.7% compared to the end of 2017 and amounted to 871. The increasing use of e-commerce payments compared to the traditional payment methods is due primarily to the wide range of benefits they offer for buyers; namely, quick and efficient payments initiated at home or office available 24/7, transparent reports on the successfulness of the transactions executed, promotional discount of certain categories of products to stimulate online sale, timely disposal of products and services and saving time, free delivery of products to the addresses specified by the buyers or their delivery at a low rate, etc. Hence, the application of the new payment technologies by the domestic banking sector affects the propensity of population and companies for online payments, and also confirms the need for greater promotion of the already established online payments infrastructure in the domestic economy.

¹⁰ Micropayment is payment of products and services in a single amount not exceeding Denar 1,000, with the approval for making the payment being issued through telecommunication, digital or IT devices.

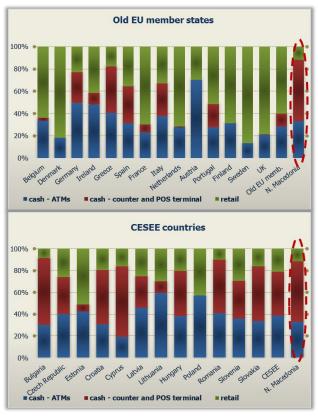
5. USE OF CASH

In the country, cash can be withdrawn from the ATMs in the country and at the banks' counters with a payment order or by using a payment card at the POS terminal located at the bank's counter. According to the data, in 2018, transactions with payment cards for cash withdrawal accounted for 88% (55% from counters and 33% from ATMs), while transactions with payment cards in trade accounted for 12% of the total value of transactions with payment cards issued by resident PSPs at domestic terminals.

Unlike the Republic of North Macedonia, where the use of payment cards is mainly aimed at withdrawing cash, in the old EU member states, most of the value of transactions with payment cards issued by resident PSPs is in trade (60.1%), withdrawal and the cash participates with 39.9% in the total value (28.2% from ATMs and 11.7% from counters and POS-terminals¹¹). Sweden is the leader in this group of countries for using payment cards in trade, with a high 86.5%. On the other hand, CESEE countries report, on

Chart 17

Share in the total value of transactions of residents at terminals located in the country (in %)



Source: NBRNM and ECB

average, a high share of cash in the total value of transactions with payment cards issued by resident PSPs at ATMs (38.8%), and counters and POS terminals (40%). However, the residents of Estonia and Poland are relatively more likely to use payment cards in trade compared to other CESEE countries¹².

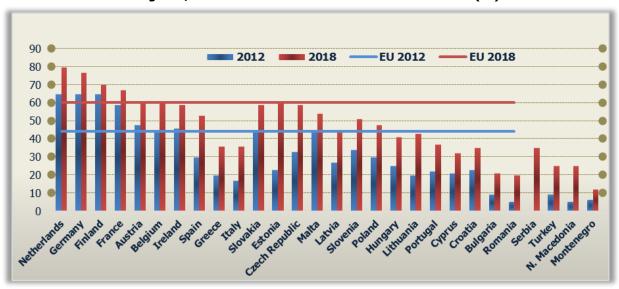
¹¹ Withdrawing cash on terminals for electronic transfer of funds on POS-terminals is used in the countries of the group of old EU member states and in the group of CESEE countries, but not in the Republic of North Macedonia.

¹² In the CESEE countries, the largest share of payment card transactions in trade in the total value of transactions with payment cards issued by resident PSPs at terminals located in the country is registered in Estonia (51.1%), while the lowest share is recorded in Bulgaria (8.7%).

6. E-COMMERCE TRENDS

The results of the survey in e-commerce ¹³ in 2018, conducted in the EU member states and several non-EU countries reveal that online shopping is becoming increasingly important. In the six-year period (2012-2018), there is a significant 16 percentage points increase in the share of EU households that use e-commerce, which is 60% of the households that used Internet in 2018. Similar tendencies were observed in the Republic of North Macedonia, where the percentage of households that use Internet and e-commerce increased from 5% in 2012 to 25% in 2018. Yet, this level is almost two and a half times below the EU average, although 81% of the population in the Republic of North Macedonia used the Internet, which is relatively close to the EU average (87%).

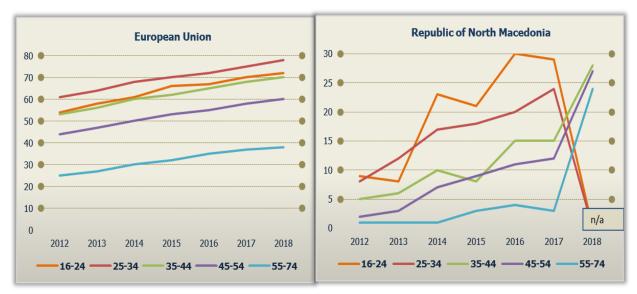
Chart 18
Users who have ordered goods/services via e-commerce in the last 12 months (%)



Source: Eurostat

¹³ Data for the Republic of North Macedonia and the EU countries are obtained from the official database of Eurostat.

Chart 19 **E-commerce users who have bought products/services for personal needs by age groups (2018, %)**



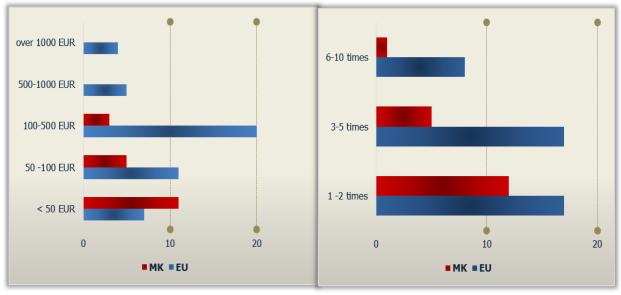
Source: Eurostat

E-commerce increased in all age groups. In 2018, the age groups from 25 to 34, 16 to 24 and 35 to 44 years were the most frequent e-commerce users in the EU (with 78%, 72% and 70%, respectively), while in the Republic of North Macedonia, it was the age group from 35 to 44 years (28%). Elderly people, particularly those in the 55-74 age group shopped less via the Internet, which is especially noticeable in the Republic of North Macedonia where their share is 24%. Data on the age groups from 16 to 24 years and from 25 to 34 years, for which the largest share in E-commerce was expected, are not available.

The population in the Republic of North Macedonia shops less frequently and spends less money in e-commerce compared to the EU countries. Most e-commerce users in the Republic of North Macedonia (12%) made 1-2 purchases in 2018, while in the EU, the share of purchases in the categories 1-2 times and 3-5 times (17%) is the same. Most of the population in the Republic of North Macedonia spent less than 50 euros for purchase of goods and services online, while most of the EU population spent more from 100 to 500 euros.

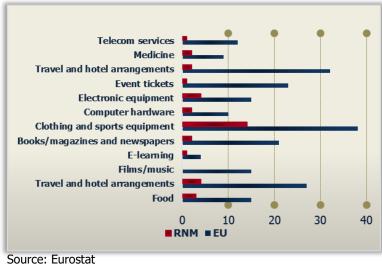
Chart 20 Amount of funds spent in e-commerce in the last Number of e-commerce payments in the last 3 months (2018,% EU/RNM)

Chart 21 months (2018, % EU/RNM)



Source: Eurostat

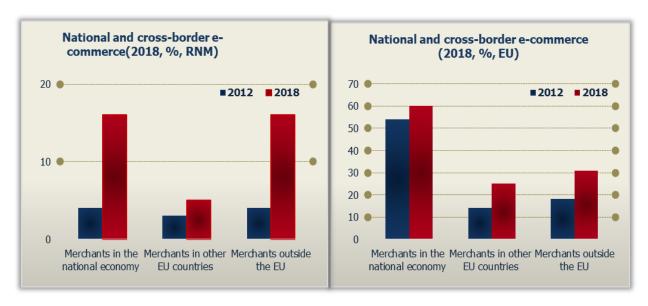
Chart 22 E-commerce in terms of the type of goods and services (2018, % EU and RNM)



Analyzing the type of and services, goods population in the Republic of Macedonia mostly purchased clothes and sports equipment on the Internet, while in the EU, there is a greater variety of goods and services purchased online (clothing and sports equipment, travel and hotel household arrangements, products, event tickets, books, magazines and newspapers, etc.).

The population of the Republic of North Macedonia equally purchased from Internet merchants in the national economy and Internet merchants outside the EU (16% in 2018), which is an increase of 12 percentage points compared to 2012. On the other hand, the largest percentage of the EU population purchased from Internet merchants in the national economy (60% in 2018). However, there is an increase in the population that purchased from Internet merchants in other EU countries and outside the EU compared to 2012.

Chart 23 National and cross-border e-commerce (2018, %)



Source: Eurostat

According to the survey results, **the most important reasons why people do not use e-commerce** is that they want to shop personally and see the product, the security aspect of payment, the lack of adequate knowledge and skills for making payments, the lack of a payment card and distrust that the purchased products will really be delivered. Hence, the digitalisation of payments imposes the need for more active education of the population, which would overcome the barriers related to e- commerce and increase the confidence in the quality, reliability and efficiency of e-services.