

**PAYMENT SYSTEMS  
DEPARTMENT**



**NBRM**

# **Annual Information on Payment Operations Developments in the Republic of Macedonia in 2017**

## Most frequently used terminology:

**Total domestic payment operations** - covers all sectors of the economy, including the monetary financial institutions sector.

**MIPS** - a system for settlement of large-value and urgent payments in denars and in euros in real time on a gross basis (RTGS - Real Time Gross Settlement System).

**KIBS** - Clearing House - Clearing InterBank Systems AD Skopje operates the system for multilateral deferred net settlement for processing of small payments of below Denar 1,000,000.00.

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

**Credit transfer** - a payment instrument that allows the payer to order the institution that maintains his/her account to transfer funds to the beneficiary's account.

**Direct debit** is a payment service for debiting the payer's account, usually on a multiple basis, where the payment transaction is initiated by the beneficiary, and the direct debit is previously authorized, i.e. the payer gives consent for payment transaction to the beneficiary, to the beneficiary's payment service provider or his/her own payment service provider, before it is initiated.

**Electronic money** is money value recognized as claim on issuer stored on an electronic device, issued on the basis of a receipt of money in the amount not less than the value of issued electronic money, accepted as a means of payment by entities which are not issuers of such money.

**Payment card** - a payment instrument used by an authorized holder to initiate payments or withdraw cash.

**Contact-contactless payment card** allows payment on points of sale that also offer contact payment by reading the card on the terminal and contactless payment using radio frequency identification by simply waving the card in front of the contactless payment terminal.

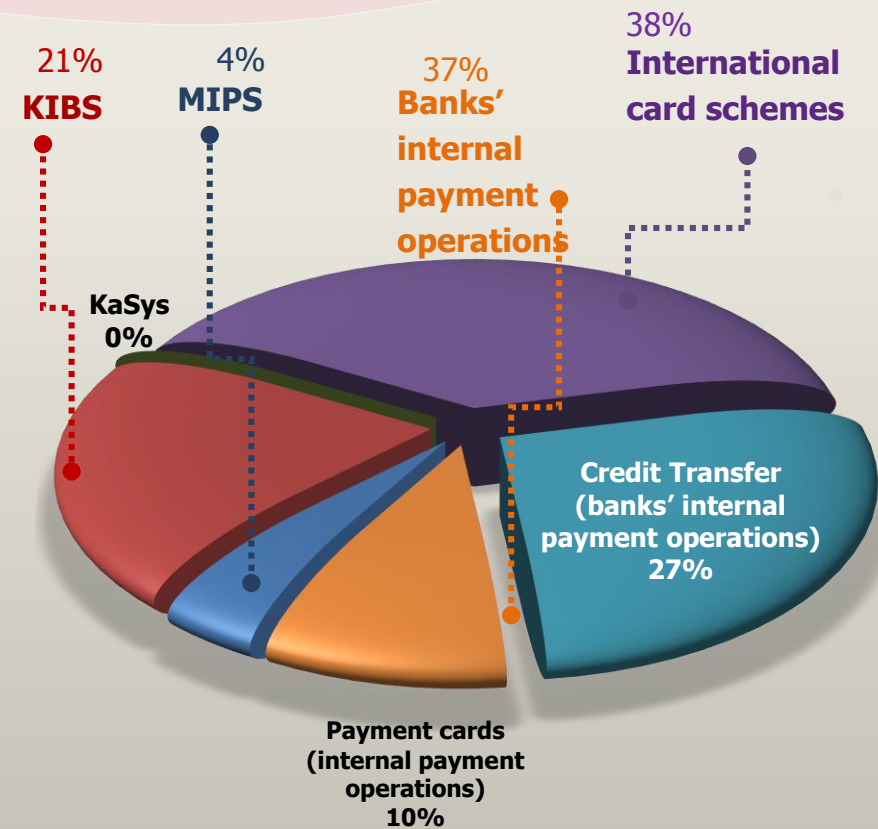
**Virtual POS terminals** - allow online purchase of goods and services through virtual stores in the country.

**Physical POS terminals** - allow use of payment cards on physical (non-virtual) points of sale.

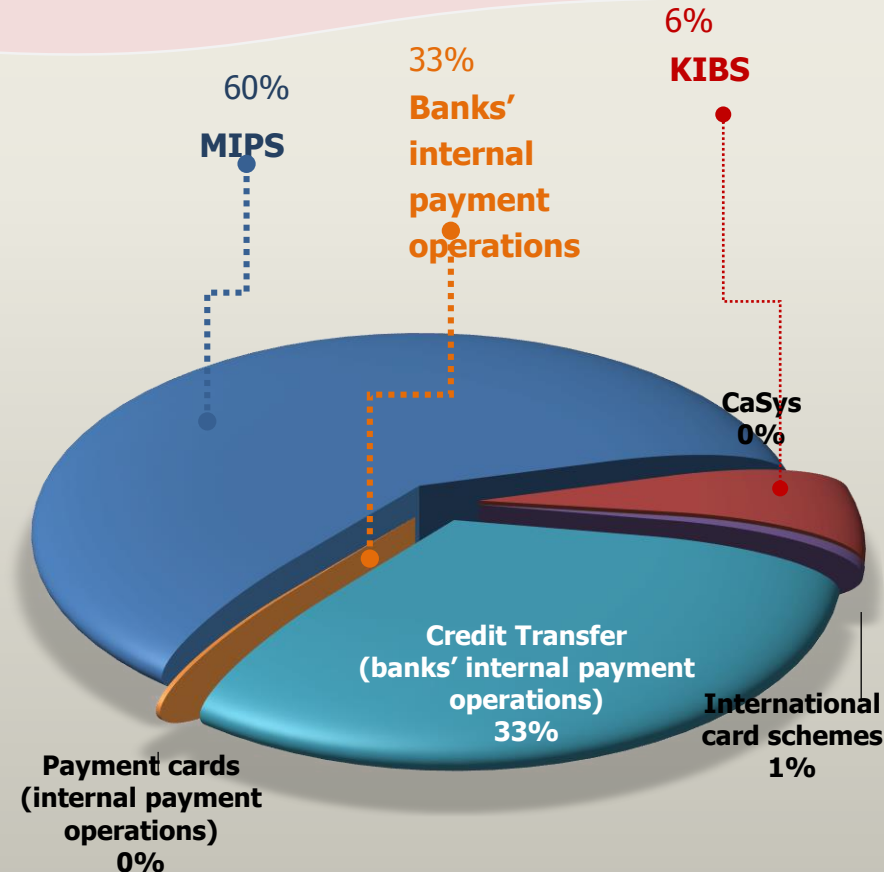
**Contact-contactless card terminals** - accept payment instruments that contain a record on a magnetic tape, chip or contactless chip.

# Increase in the domestic cashless payment operations

The total number of domestic cashless payment transactions in 2017 recorded an annual increase of 13% and reached 116.8 million. Most of them were carried out through international card schemes and internal payment operations of banks.



The total value of domestic cashless payment transactions in 2017 amounted to Denar 5,929 billion, which is an annual growth of 9%. Most of them were executed through MIPS and the banks' internal payment system.



# Payment card are increasingly used for domestic cashless payments

**Cashless domestic payment transactions** are made using two payment instruments: **credit transfers** and **payment cards**. Data on cashless payment transactions include transactions initiated by or intended for natural persons and legal entities (excluding the monetary financial institutions sector - the National Bank, banks and savings houses).

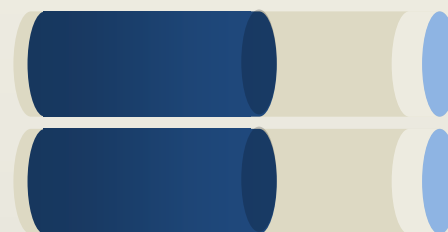
In 2017, the **payment cards** increased their share in the total number of cashless payment transactions to 43%. **Credit transfers** account for the most of the total value of cashless payment transactions, almost equally paper-based and electronically initiated.

Share in the total **value**

Share in the total **number**

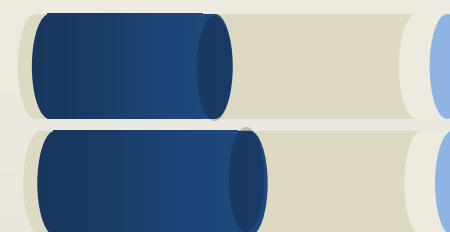
**Credit transfers**  
*(paper-based)*

49%  
49%



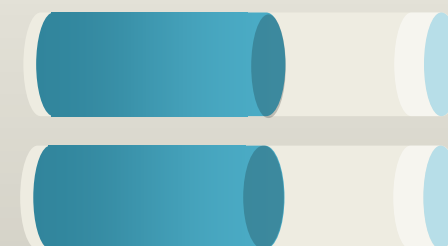
2017  
2016

33%  
37%



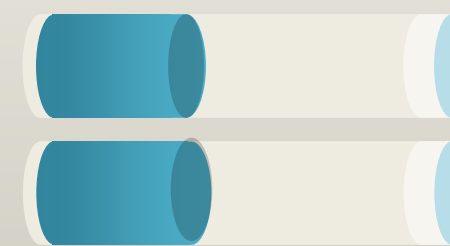
**Credit transfers**  
*(electronic)*

50%  
50%



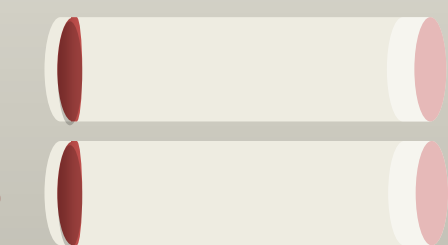
2017  
2016

24%  
25%



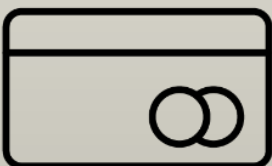
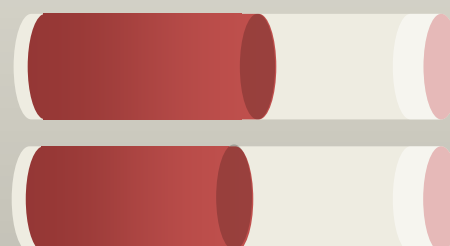
**Payment cards**

1%  
1%



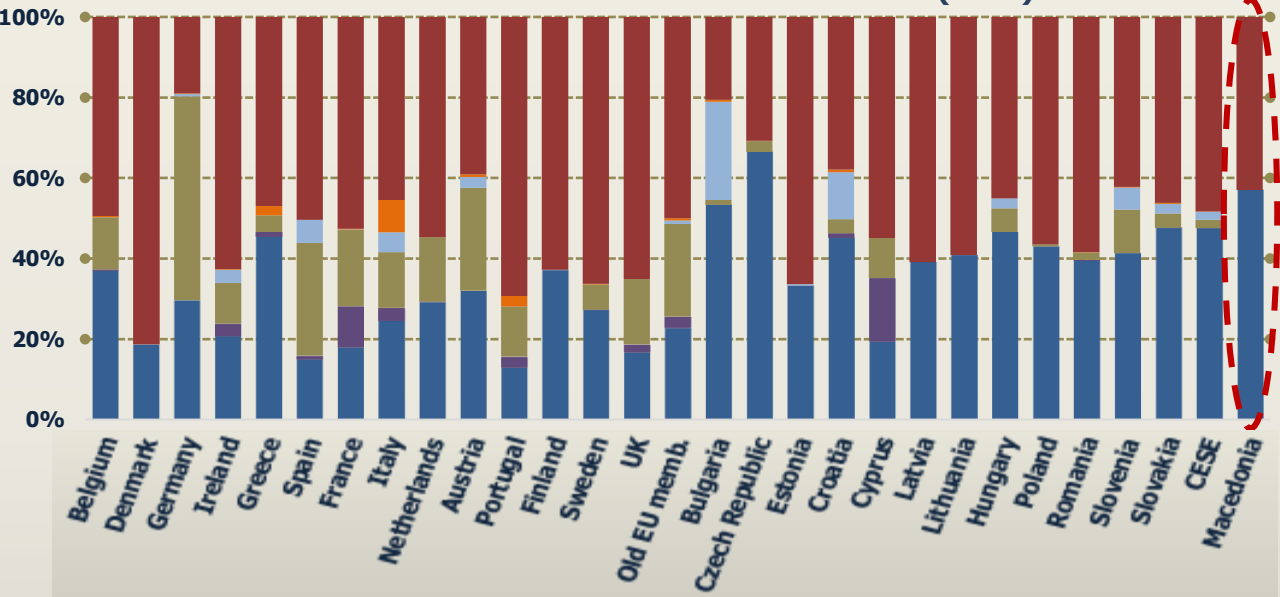
2017  
2016

43%  
38%

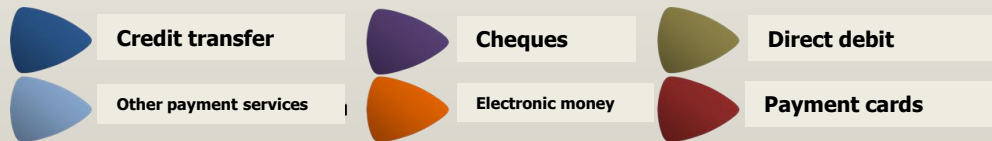


However, payment cards are used relatively less in the Republic of Macedonia compared to the old EU member states and CESEE countries

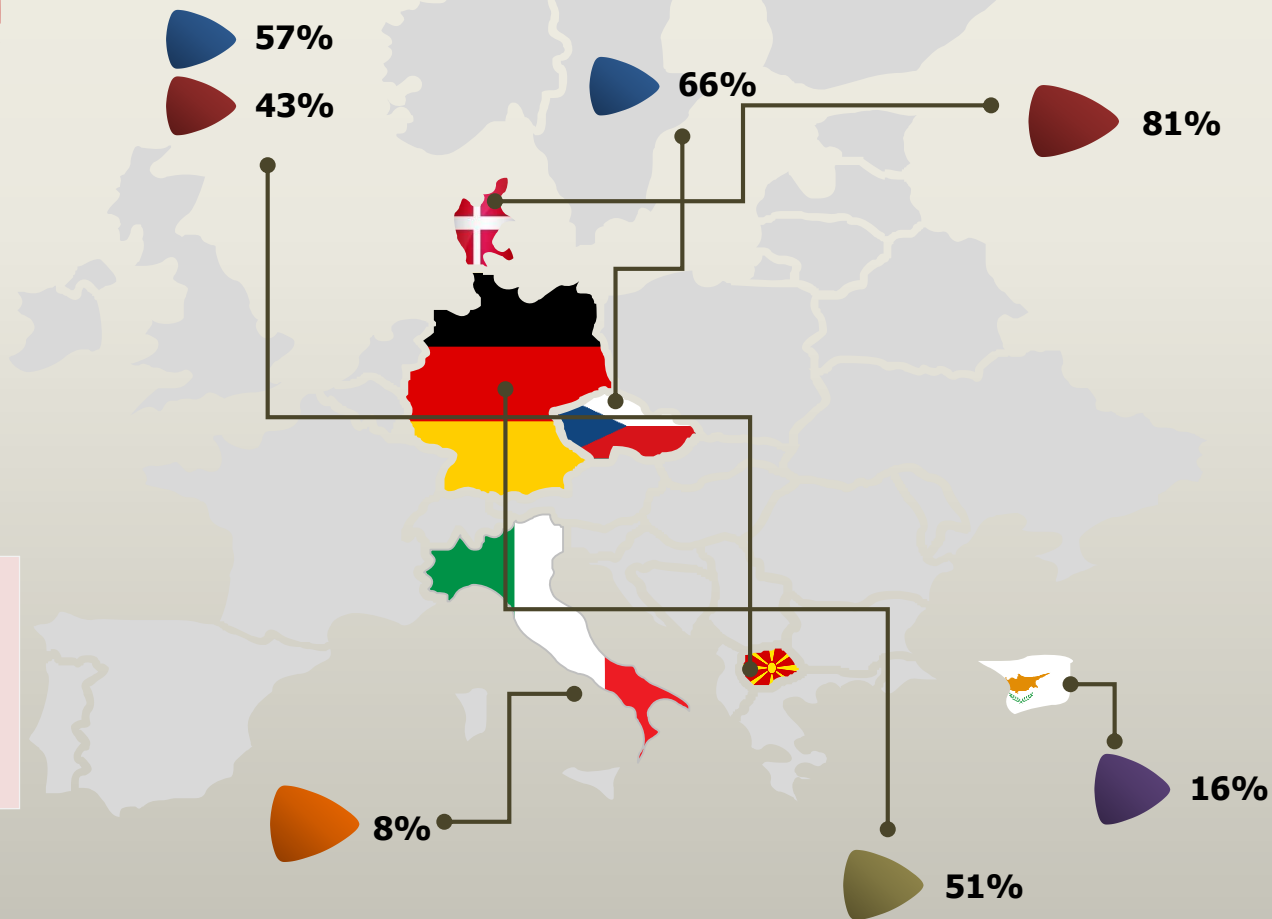
Share in the total number of cashless transactions (in %)



Source: ECB and NBRM



Highest share of cashless payment instruments in certain countries



**The payment cards are used relatively less in the Republic of Macedonia** (the share of payment cards transactions in the total number of cashless payments in 2017 was 43%), compared to the CESEE countries and the old EU member states (on average, 48% and 50%, respectively). On the other hand, **credit transfers** in the Republic of Macedonia **had a significant share** (57%) in the total number of transactions in cashless payment instruments, which is above the average of the old EU member states (22%) and CESEE (47%) countries.

# Credit transfers are initiated more often on paper-based form than electronically

## Countries with the largest share of electronic credit transfers

Estonia - **99.6%**  
 Ireland - **99.2%**  
 Czech Republic - **98.8%**



Old EU members

paper-based



electronic

## Countries with the largest share of paper-based credit transfers

Macedonia - **57.8%**  
 Italy - **54.0%**  
 Bulgaria - **46.5%**



CESEE

paper-based



electronic

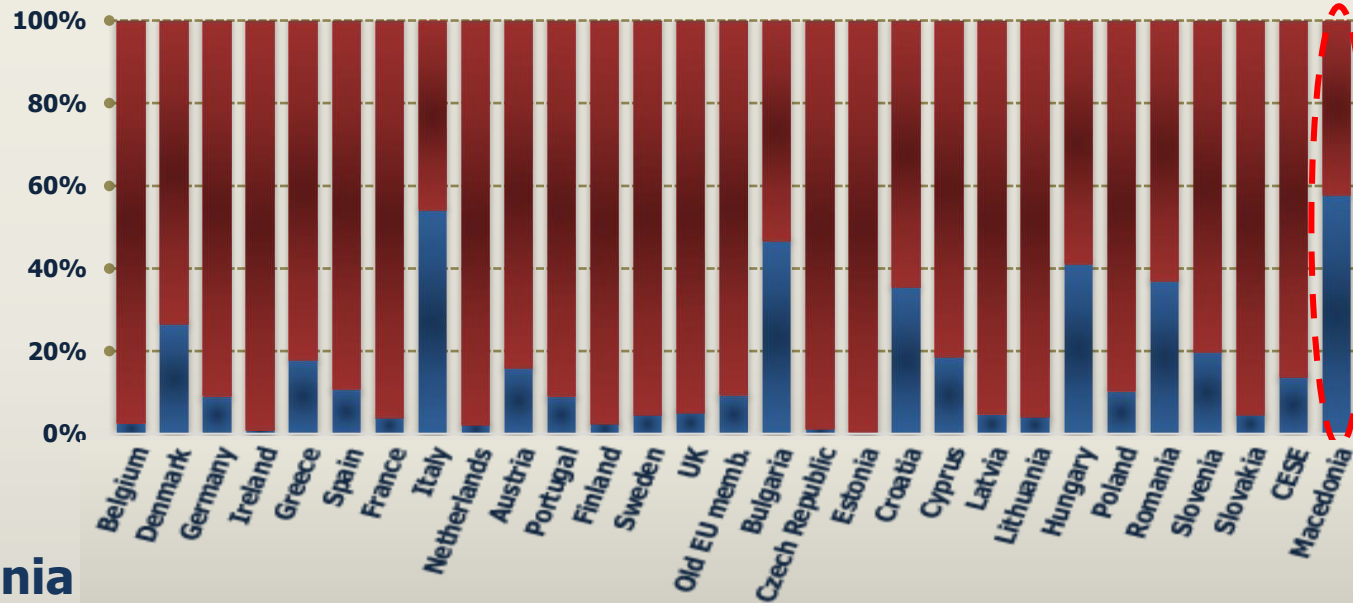
Macedonia

paper-based



electronic

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



Source: ECB and NBRM

In the Republic of Macedonia, there is a **relatively low share of electronic credit transfers** (42%) in the total number of credit transfers, compared to the old EU member states (91%) and the CESEE countries (86%). *This situation indicates to the need for greater promotion of the already established digital payment infrastructure in the domestic economy.*

# Legal entities have higher usage of e-banking services compared to natural persons

paper-based

electronic

paper-based

electronic

49%



51%

In 2017, the total number of credit transfer transactions was 58.7 million, most of which were initiated by legal entities (71%), and the rest by natural persons. Legal entities and natural persons initiate 51% and 20%, respectively, of the credit transfers in the country electronically.

80%



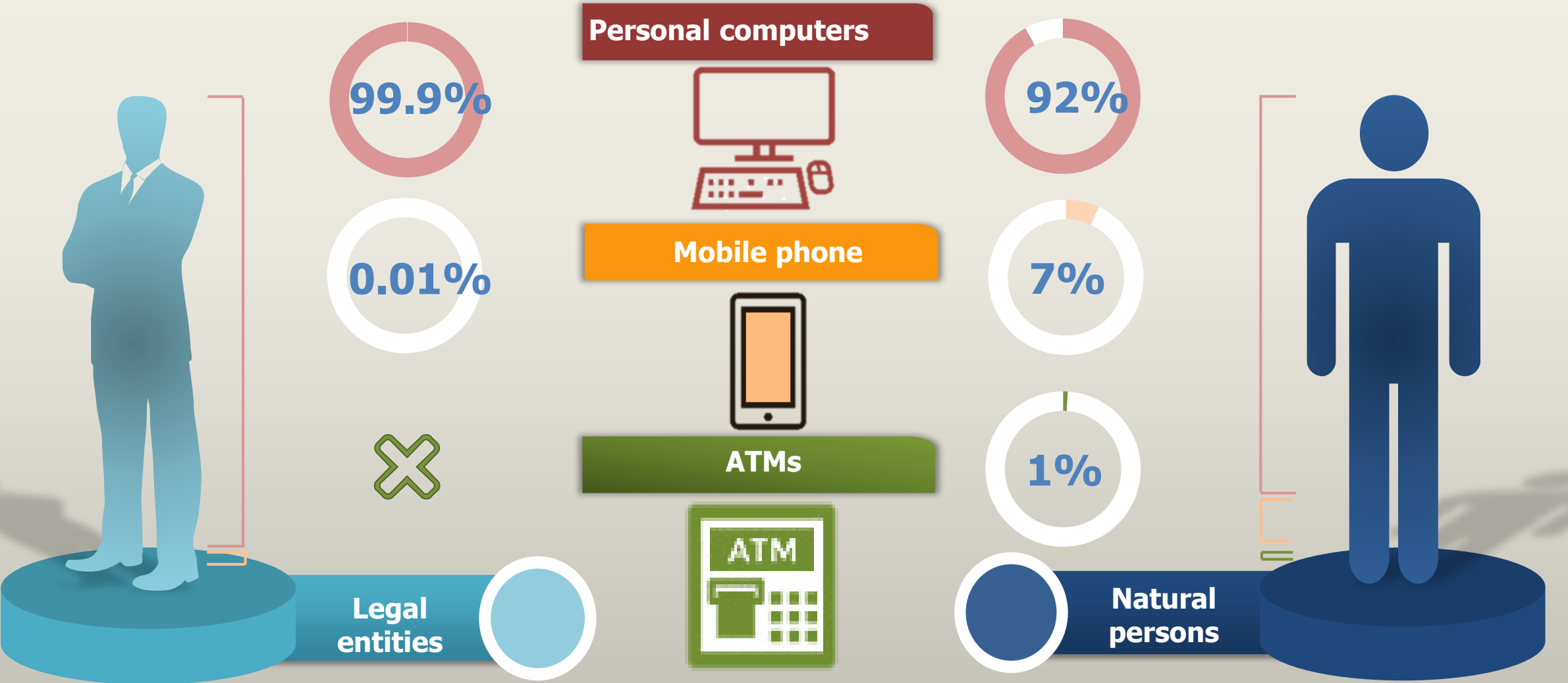
20%

Legal entities

Natural persons

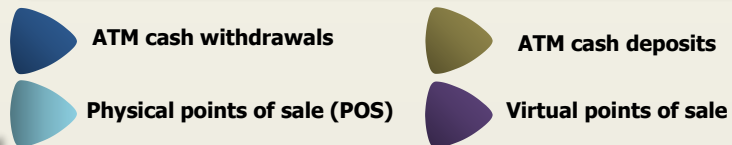
Electronic credit transfers are usually initiated via personal computers

Legal entities initiate most of the electronic credit transfers (99.9%) via *personal computer*. Natural persons use **mobile phones and ATMs** moderately when initiating electronic credit transfers.

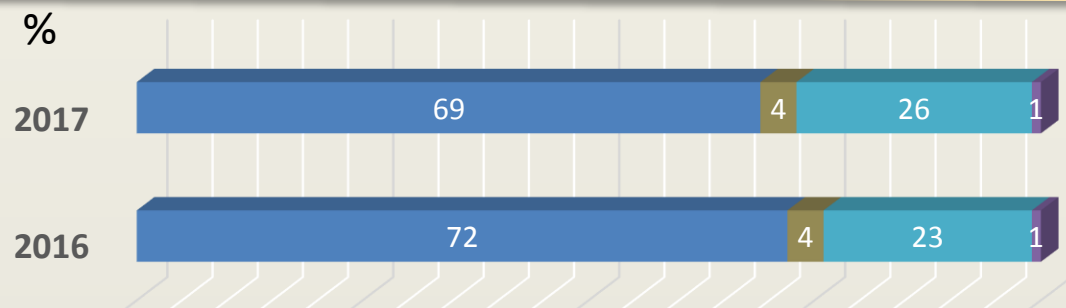




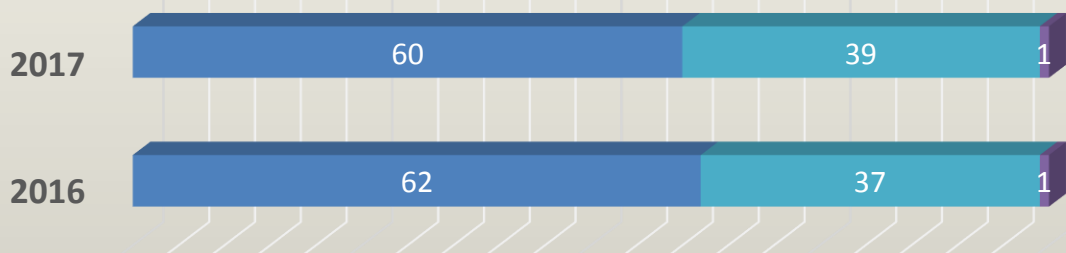
## Payment card are mostly used for commercial payments



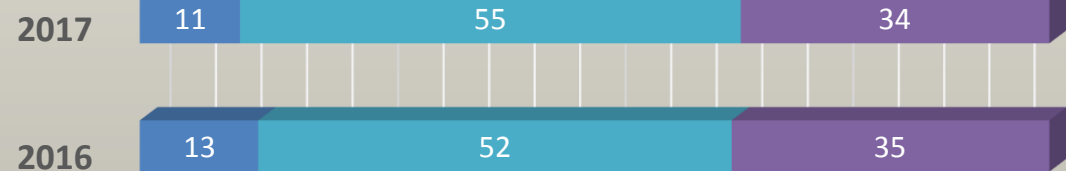
Residents and non-residents increasingly use payment cards for payments in trade, at the expense of the relative decrease in the share of cash withdrawal transactions. Nonetheless, in 2017, residents and non-residents used the payment cards on terminals in the country mostly for cash withdrawal. On the other hand, residents mostly used payment cards abroad in physical and virtual points of sale.



**Denar 179.8 billion**



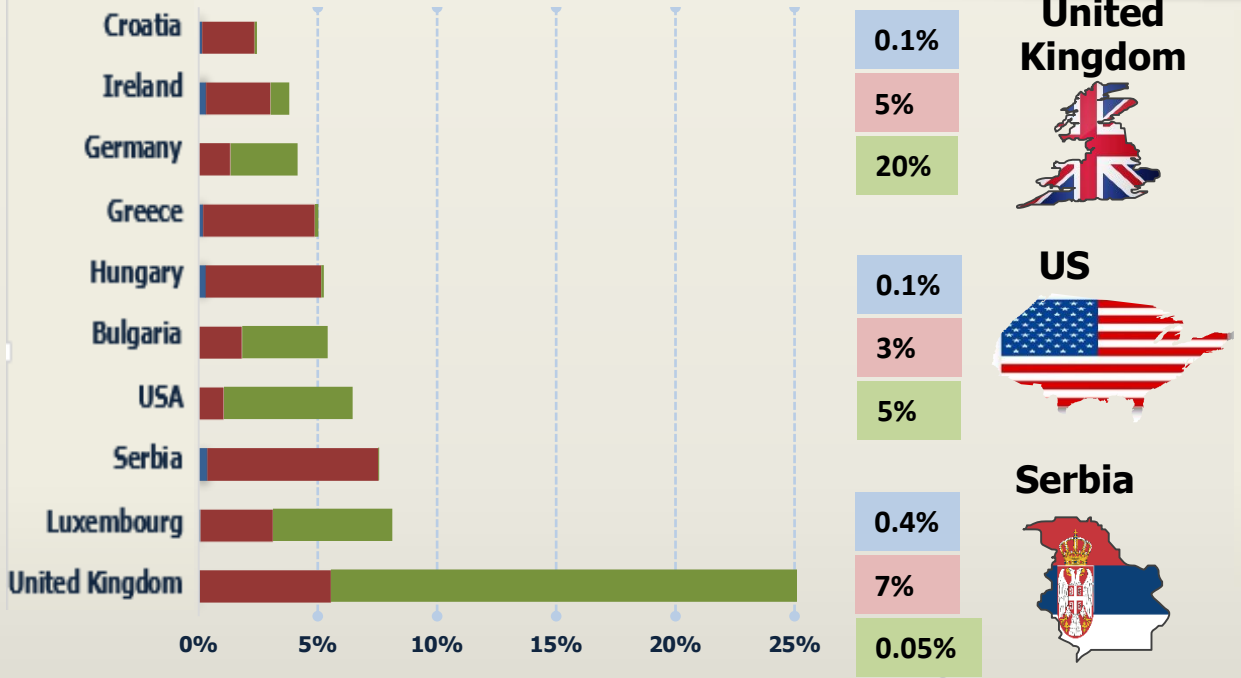
**Denar 19.8 billion**



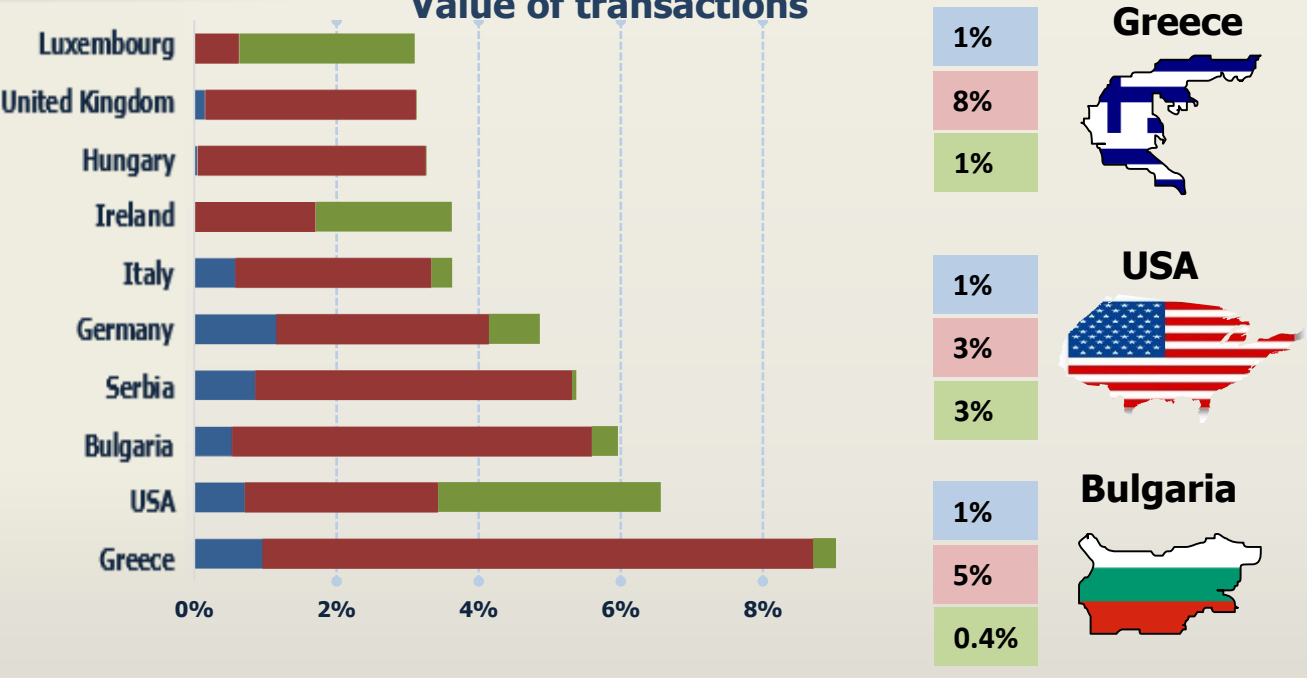
**Denar 13.4 billion**

# Residents mostly used payment cards in the United Kingdom, USA, Greece, Serbia, and Bulgaria

Number of transactions



Value of transactions



Domestic cards



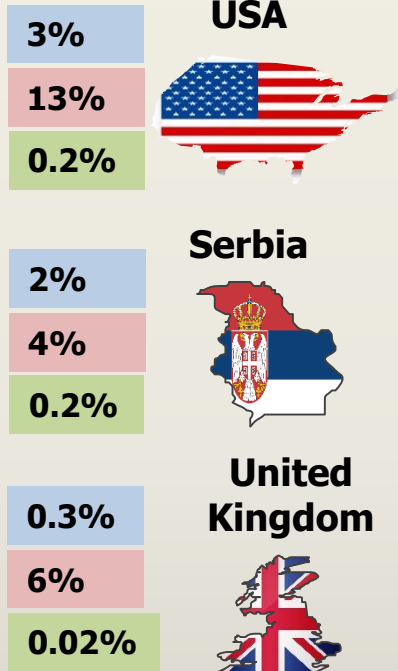
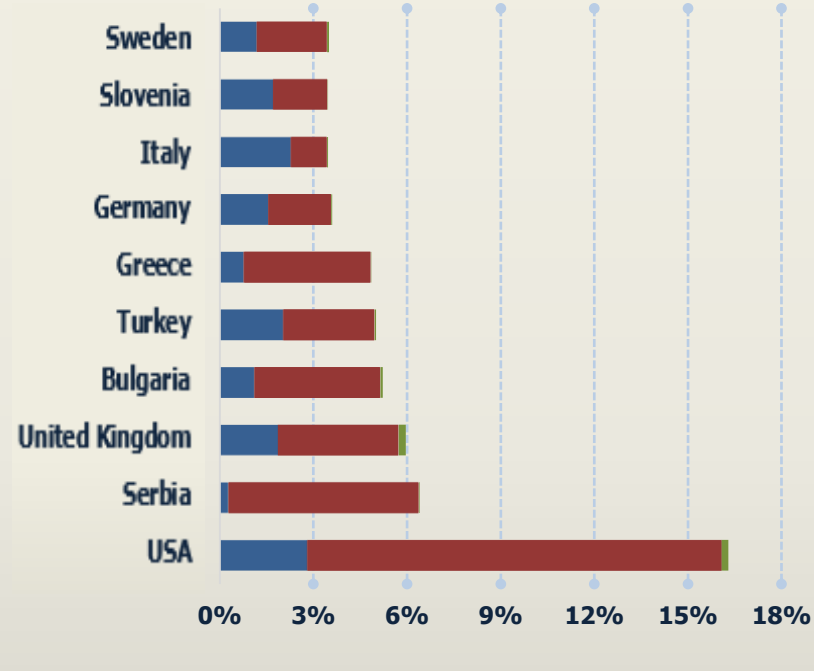
Terminals abroad



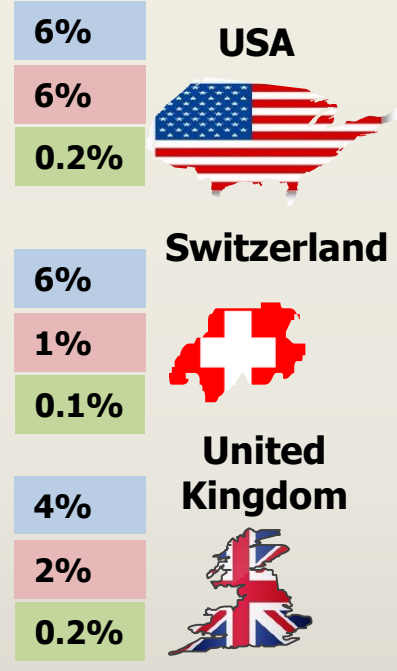
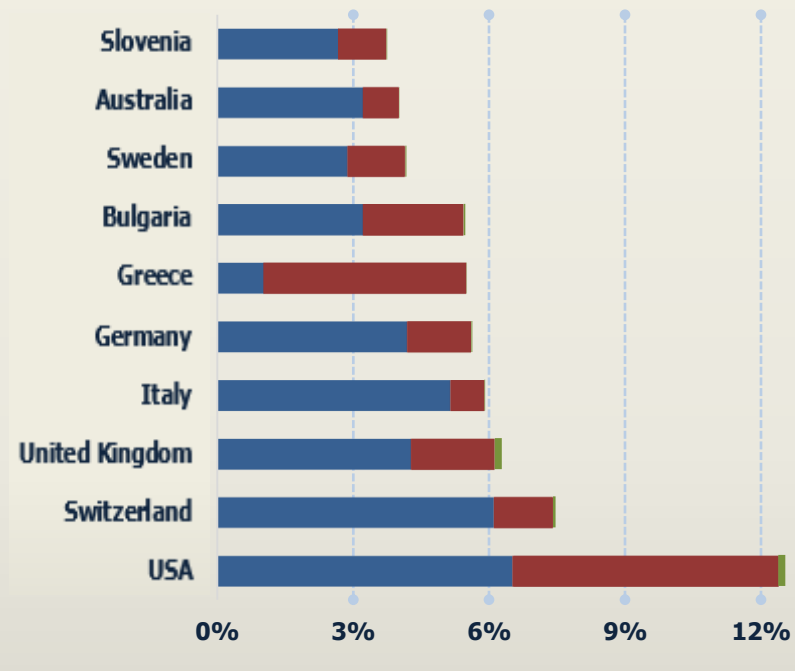
The total number of transactions with domestic payment cards on terminals abroad was **5.3 million**, with a total value of **13.4 billion Denars**.

Payment cards issued in USA, Switzerland, Serbia and the United Kingdom were mostly used on POS terminals and ATMs in the country

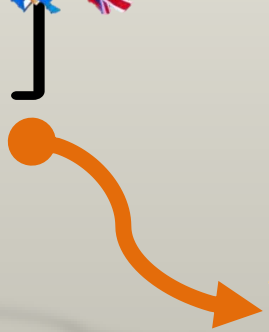
Number of transactions



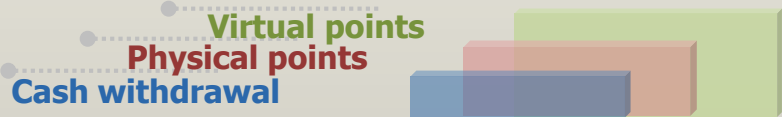
Value of transactions



Foreign cards



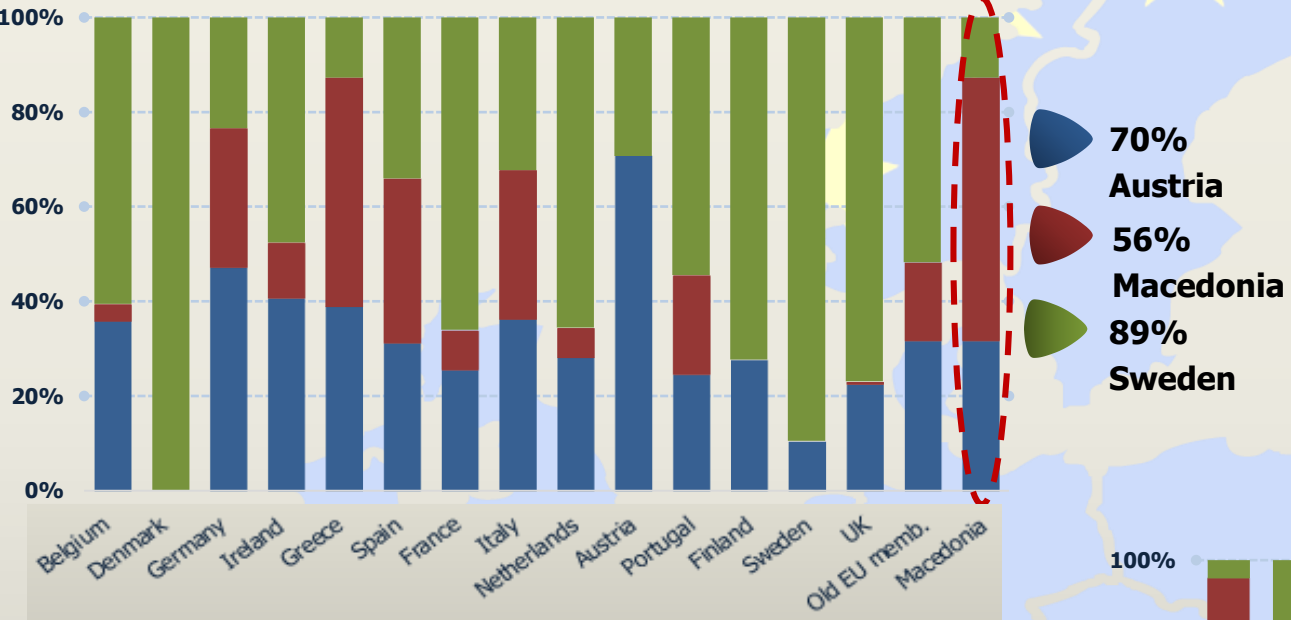
Domestic terminals



Geographically observed, in 2017, the total number of transactions in the country with payment cards issued abroad was **4.3 million**, with a total value of **19.8 billion Denars**.

# There is a need for systemic measures to decrease the high use of cash in the Republic of Macedonia

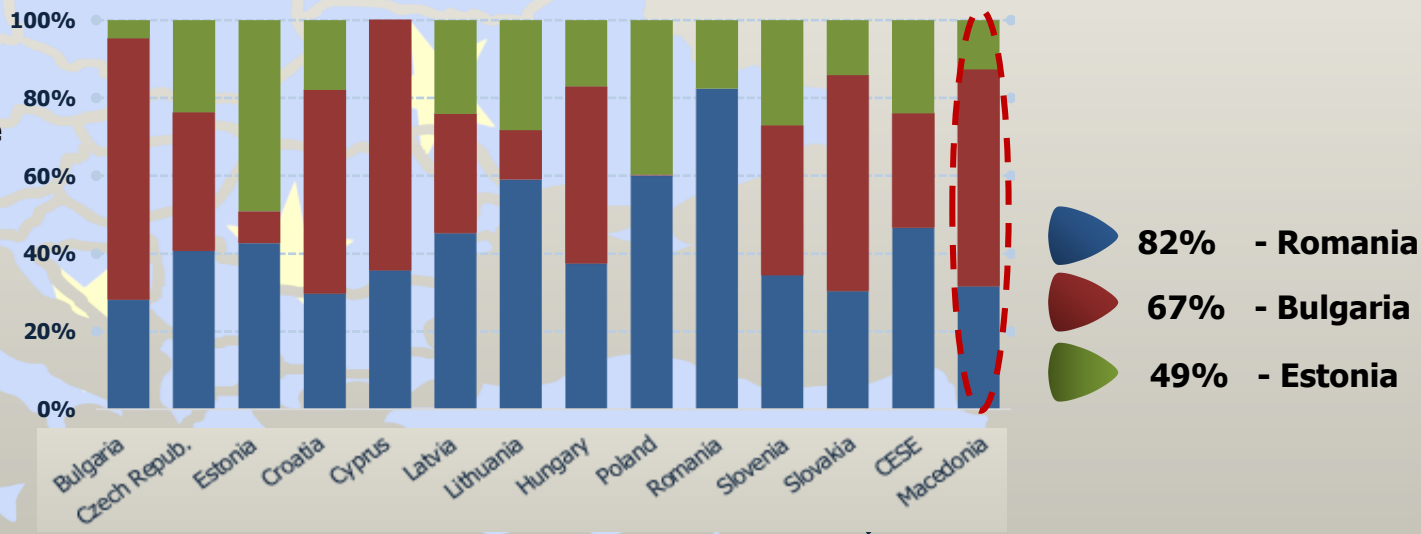
## Old EU member states



Cash can be withdrawn using a payment card at ATMs in the country or POS terminals located at the bank counters or using a payment order at the bank counters.

Unlike the **Republic of Macedonia**, where **payment cards are mainly used to withdraw cash** (56% from ATMs and 32% from bank counters), in the old EU member states, most of the value of transactions with domestic payment cards is in commerce (51.7%), and the cash withdrawal participates with 48.3% in the total value (31.8% from ATMs and 16.5% at bank counters and POS-terminals). On the other hand, CESEE countries report, on average, a high share of cash withdrawal using domestic payment cards from ATMs (47%), and bank counters and POS terminals (29%).

## CESE



Source: ECB and NBRM

**Cash - ATMs**      **Cash - windows and POS**      **Commerce**

*To achieve a higher level of digitization of the Macedonian society and reduce the use of cash, the NBRM, the Ministry of Finance and the banking sector representatives prepared a Draft Cash Reduction Strategy for the Republic of Macedonia.*

Source: ECB and NBRM

## Digital payments infrastructure has been advancing significantly

1,031

### ATMs

118 – Cash Deposit  
280 - Credit transfers



31,995

### Physical POS terminals

Contact -  
contactless 15,807



832

### Virtual POS terminals



Recently, there has been an increased number of ATMs with a cash deposit function (118 ATMs in 2017 and 86 in 2016). This trend is expected to contribute to reducing the queuing lines at bank counters that work with cash payments, as well as the tellers' manual operations.

The number of POS-terminals supporting contact-contactless cards has also been increasing (the share in the total number of POS-terminals reached 49.4% in 2017, by 15 percentage points more than in 2016). The number of online shops has also been growing (832 at the end of 2017, which is an annual growth of 17.2%).

2017 – 1.82 million  
2016 – 1.82 million

### Total number of payment cards

2017 – 498 thousand  
2016 – 253 thousand

### Contact-contactless cards

2017 – 19.3 thousand  
2016 – 18.7 thousand

### Internet cards

Debit - 79%  
Credit - 21%

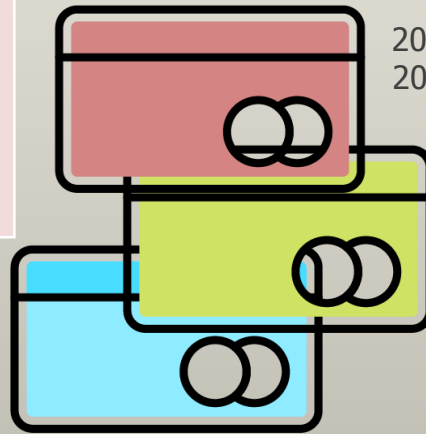
### By function

VISA - 59%  
MasterCard - 37%

### By brand

The total number of payment cards at the end of 2017 was 1.8 million, which is an annual growth of 0.18%. The number of contact-contactless cards in 2017 almost doubled on an annual basis and made up 27.3% of the total number of cards with a payment function.

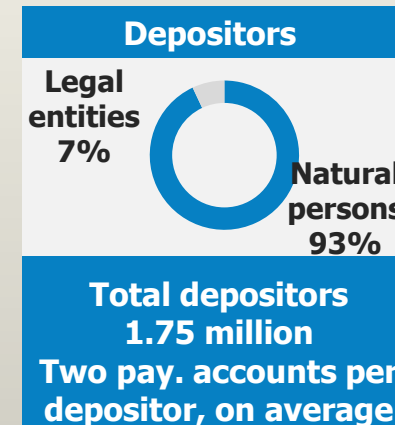
About four-fifths of the total number of cards are debit cards and the rest are cards with a credit function, retaining the same structural share as in 2016. Thus, natural persons and legal entities mostly hold VISA cards (59%), followed by MasterCard (37%) and other brands (4%).



## Restricted utilization of digital bank payment channels



In the Republic of Macedonia, there was a total of **3.86 million transaction accounts** at the end of 2017, which is a moderate annual decline of 0.18%. Thus, 95% of the total number of transaction accounts are held by natural persons-depositors, while the rest are accounts of legal entities-depositors. Depositors (natural persons and legal entities) may have one or more accounts in a same bank or in different banks. On average, each depositor has two payment accounts.



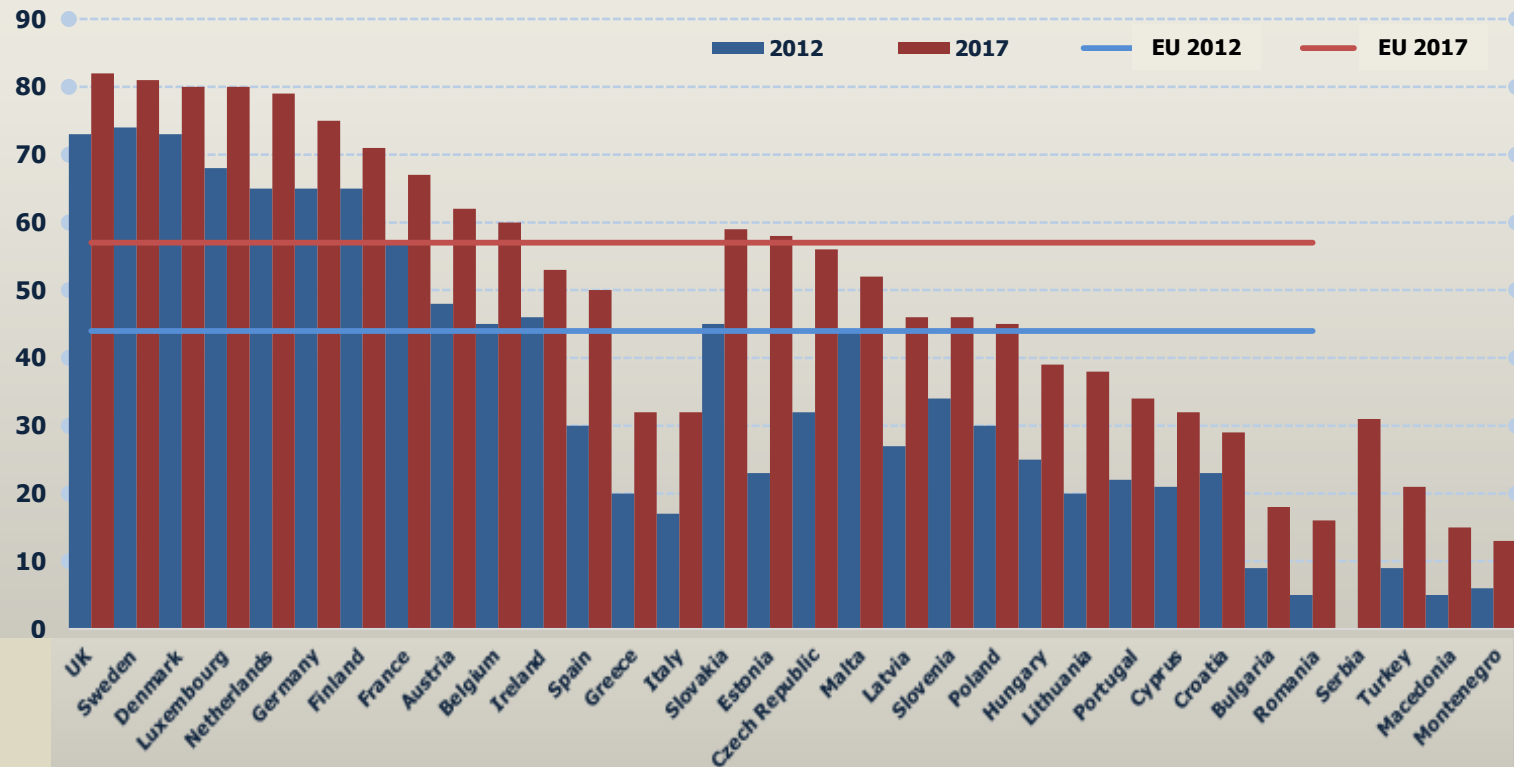
**Only 8% of the total number of payment accounts offer an opportunity for electronic payments, indicating limited use of digital banking channels for making payments.** This limitation is especially pronounced in **natural persons** where only **7% of payment accounts allow for initiation of electronic payments**, while the situation with the legal entities is a bit favorable (29% of the total payment accounts of legal entities offer electronic payments).

## Macedonian citizens shop online increasingly, but there is still a large gap compared to EU citizens

The results of the EUROSTAT survey in online trade in 2017, conducted in the EU member states and in the Republic of Macedonia reveal that **online shopping is becoming increasingly used**.

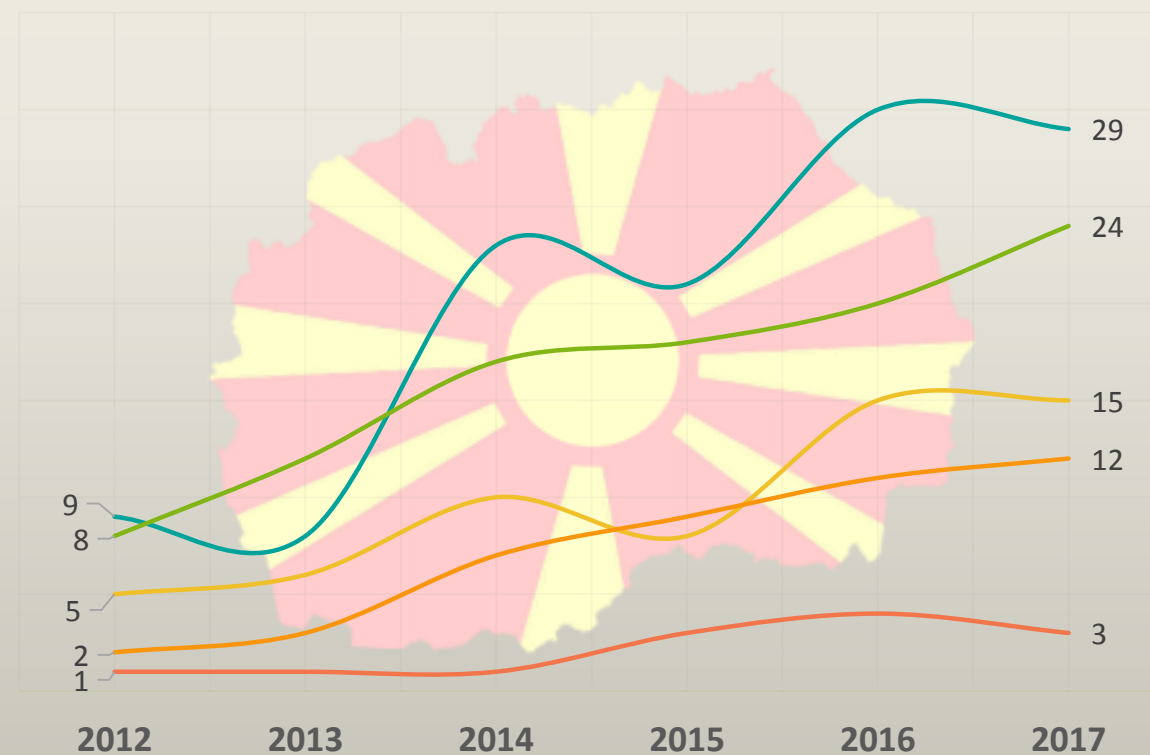
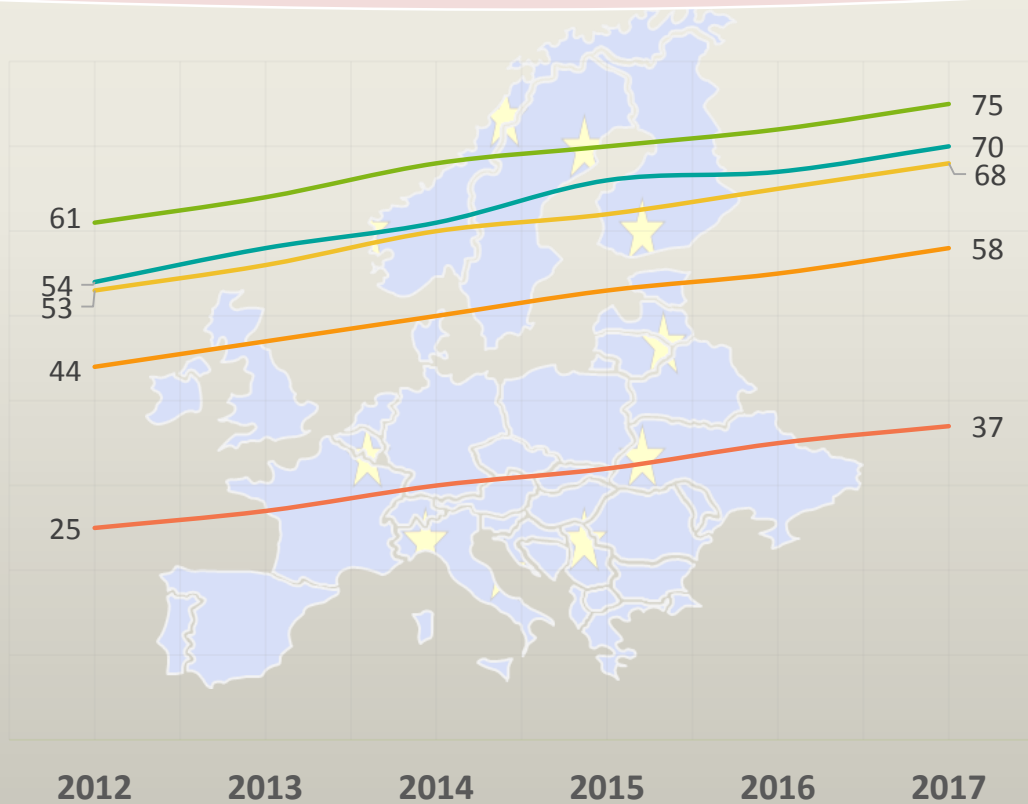
In the five-year period (2012-2017), there is a significant 13 percentage points increase in the average share of **EU households that shop online, which is 57%** of the households that used Internet in 2017.

Similar tendencies were observed in the Republic of Macedonia, where the percentage of households that use Internet and shop online **increased from 5% in 2012 to 15% in 2017**. Yet, this level is almost four times below the EU average, although 76% of the Macedonian population used the Internet, which is relatively close to the EU average (85%).



## Internet users of young group age are the most common online customers

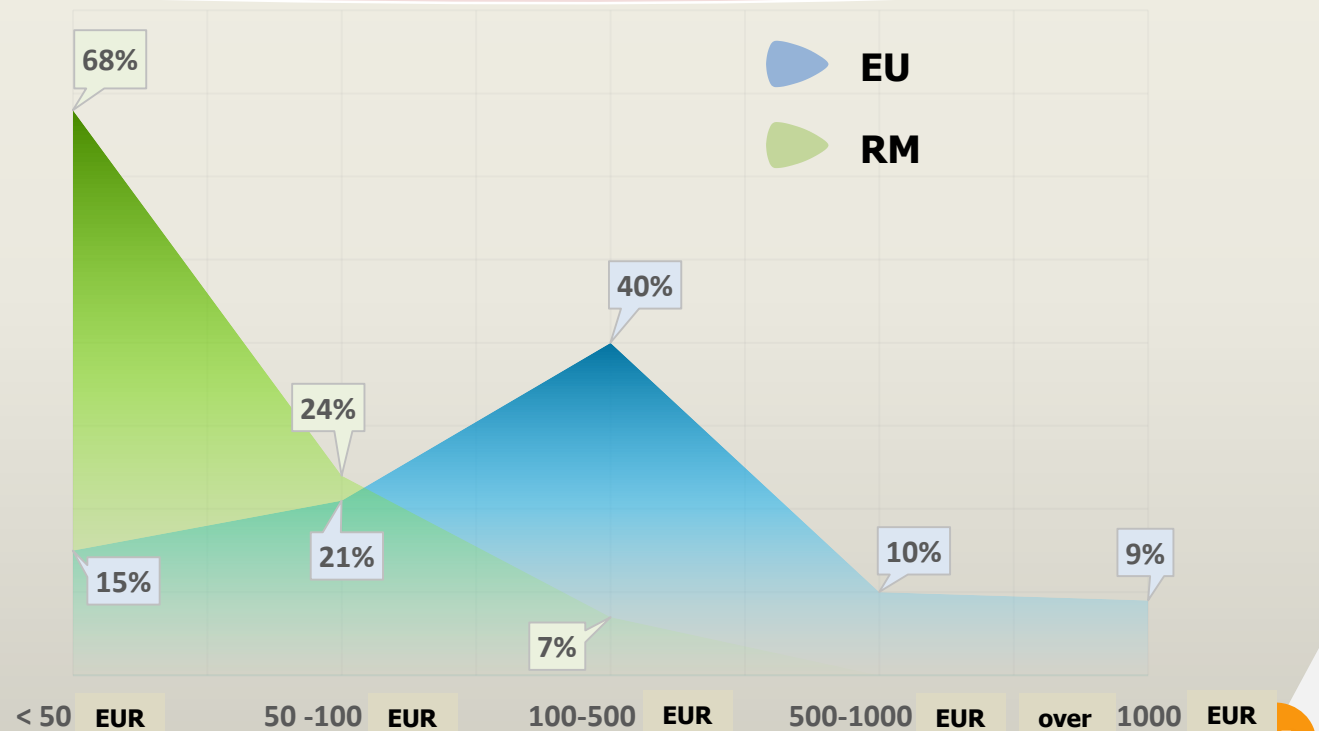
**Online shopping increased in all age groups.** In 2017, 25 to 34 year olds were the most frequent online shoppers in the EU (75%), while **in the Republic of Macedonia, it was the age group from 16 to 24 years (29%)**. Elderly people, particularly those in the **55-74 age group shopped less via the Internet, which is especially noticeable in the Republic of Macedonia where their share is minor (below 5%)**.





## Macedonian citizens shop less frequently and spend less money online compared to EU citizens.

Most online shoppers in the Republic of Macedonia (73%) made 1-2 purchases in 2017, while in the EU, the share of purchases in the categories 1-2 times and 3-5 times (35%) is the same. The largest share of the population in the Republic of Macedonia (68%) spent less than 50 euros for purchase of goods and services online, while about 60% of the EU population spent more than 100 euros.



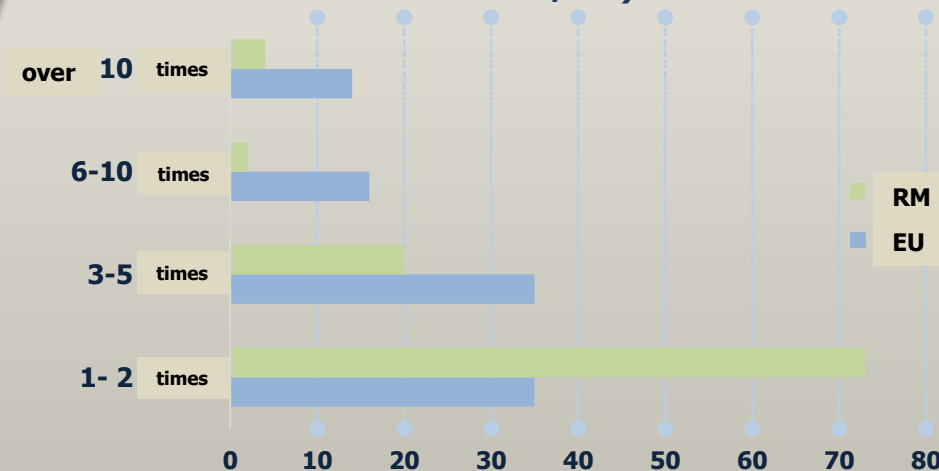
EU



RM

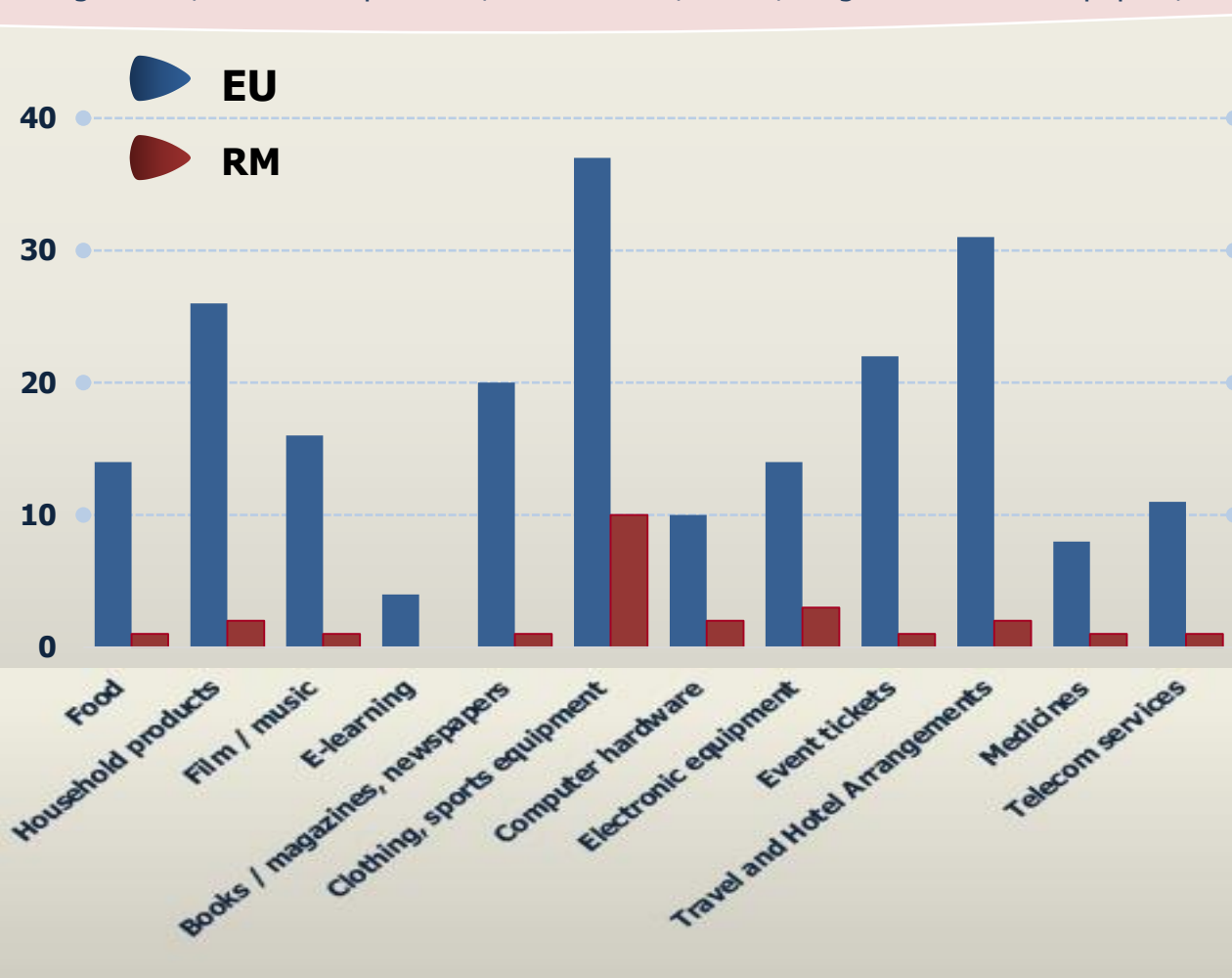


Number of online shoppings in the last 3 months (2017, % EU/RM)

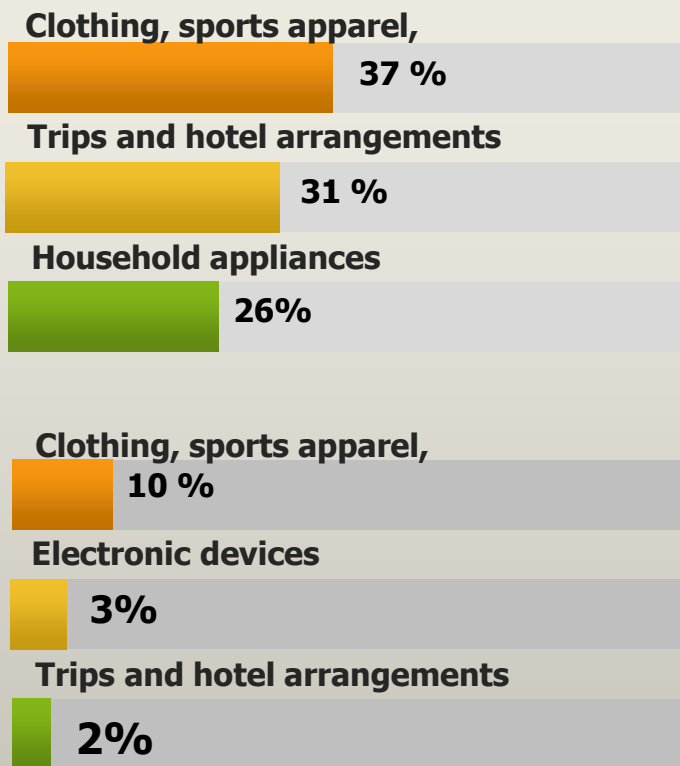


## Macedonian citizens mostly buy clothes and sports equipment online

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



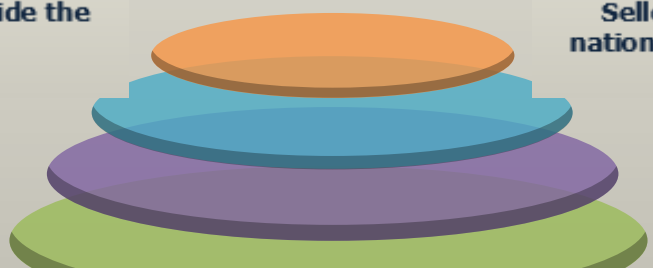
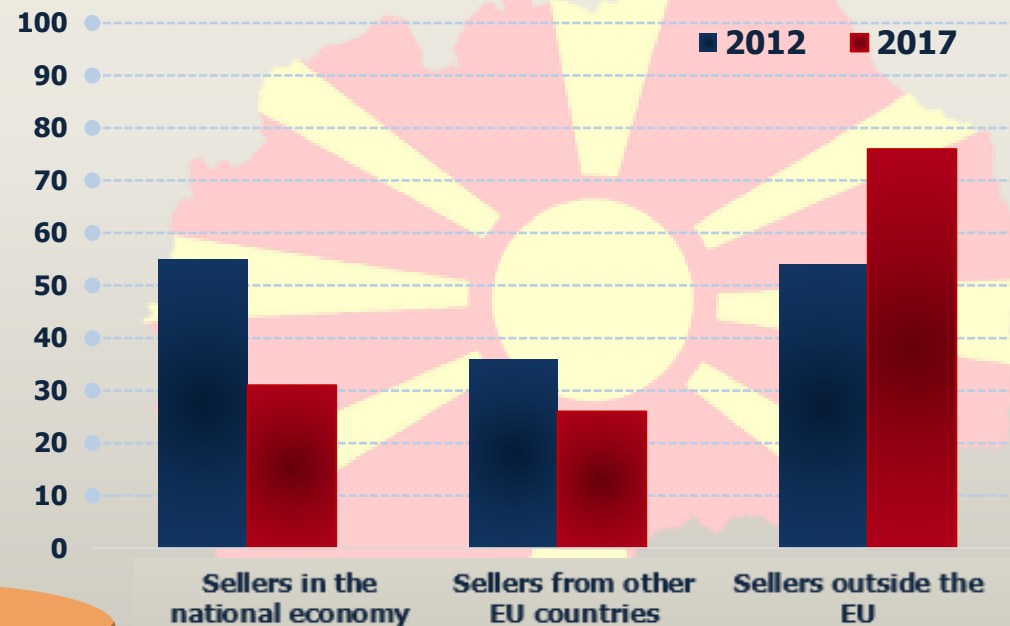
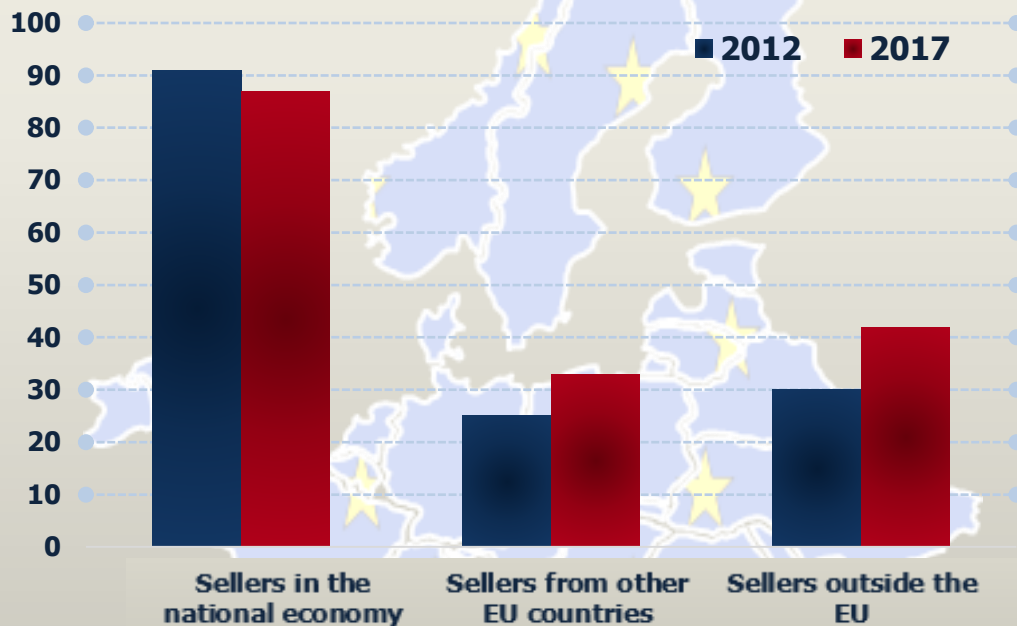
### Top 3 online shoppings in 2017 in the EU and the RM



**Given the restricted offer of goods and services by online merchants in the country, the Macedonian citizens mostly purchase from foreign online merchants**

**The Macedonian population mostly purchased from Internet merchants outside the EU (76% in 2017), and only 30% of the population purchased from domestic online merchants, which may point to a limited offer of products and services from the domestic Internet-merchants. Compared to 2012, the percentage of the population in the Republic of Macedonia that shopped online from merchants outside the EU significantly increased, with simultaneous decline in online purchases from merchants in the country and in the EU.**

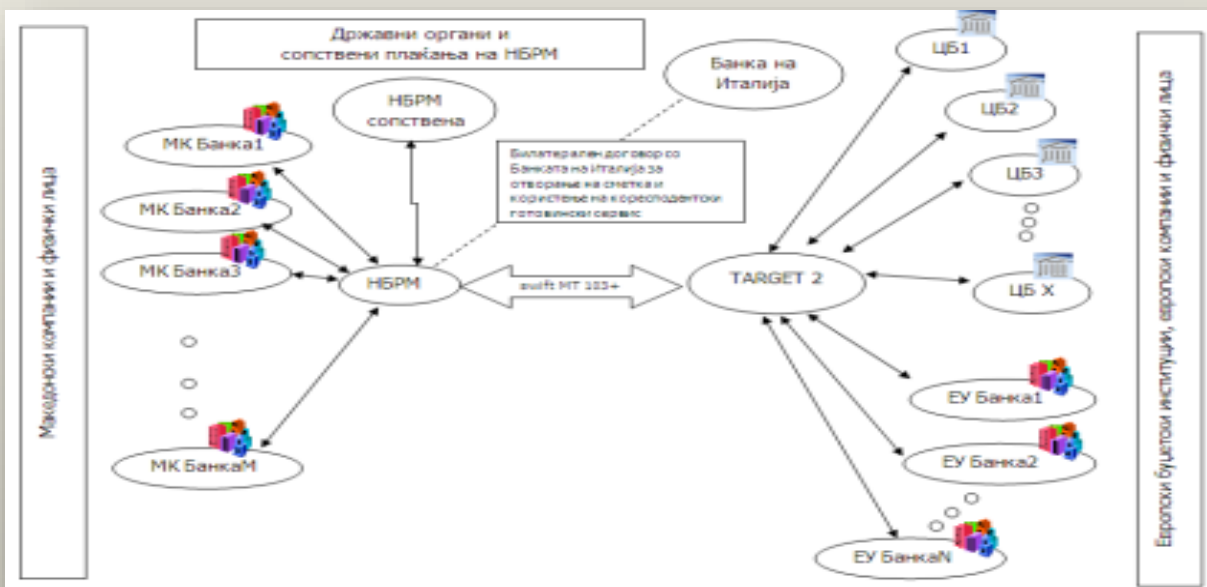
On the other hand, **the largest percentage of the EU population purchased from Internet merchants in the national economy (87% in 2017).** However, there is a significant increase in the population that purchased from Internet merchants in other EU countries and outside the EU compared to 2012.



# Payment integration of the Republic of Macedonia into the EU



In early 2017, the National Bank began operating a system for cross-border payments in euros, by connecting the Macedonian Interbank Payment System (MIPS) with TARGET 2 (Trans-European Automated Real-Time Gross Settlement Express Transfer System) of the Eurosystem. This project fully implemented the recommendation for creating an alternative channel for payments in euros, besides the correspondent banking, under the IPA Needs Analysis Report of the NBRM conducted by representatives of the European Central Bank and the central banks that form the Eurosystem.



In 2017, the total value of **euro outflows** through MIPS reached Euro 343 million, while the total number of outflows was about 4.6 thousand transactions. Analyzing the **euro inflows**, about 0.5 thousand transactions were executed through TARGET2 and MIPS, with a total value of Euro 303 million.