



Payment Cards and Card Transactions

Payment Statistics

2017

Year IV · June 2018



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Overview of the cards market of the Republic of Croatia

Payment card issuers

25 credit institutions
2 electronic money institutions

Acquirers of payment cards at EFTPOS terminals

20 credit institutions
2 electronic money institutions

Card schemes (in alphabetic order)

Four-party card schemes

- MasterCard®
- Visa®

Three-party card schemes

- American Express®
- Diners Club International®

Basic statistics of the Republic of Croatia

Population/business entities

Population: **4.285** million
Business entities (non-consumers): **0.255** million
Surface: **56,594** km²

Number of cardholders

Consumers: **3.381** million
Business entities (non-consumers): **0.209** million

Number of payment cards

Debit: **7.012** million
Credit: **1.882** million

National card payments (issuers in the RC)

Number: **407.39** million
Value: HRK **140,198.53** million

Infrastructure

EFTPOS terminals: **118,621**
ATMs: **4,941**

Payment instruments (purchase of goods and services – fiscalisation)

Number:
86.1% cash
12.5% payment card
1.4% other

Value:
56.1% cash
37.2% payment card
6.7% other

1 Introduction

Competitive and efficient financial services markets are very important for every economy, including the economy of the Republic of Croatia (hereinafter referred to as 'RC'). A clear and transparent legal framework is one of the preconditions for an efficient and competitive market. The Payment Services Directive 2007/64/EC¹, whose provisions have been transposed into the Payment System Act (Official Gazette 133/2009 and 136/2012; hereinafter referred to as 'PSA'), regulates the payment services for the entire European Economic Area in a uniform manner, this first time this has been the case. The PSA regulates payment services, payment service providers, the obligations of payment service providers to provide payment service users with information as well as other rights and obligations related to the provision and use of payment services, transaction accounts, the establishment, operation and supervision of payment institutions and the establishment, operation and supervision of payment systems. The service of issuing and acquiring payment cards is one of the payment services regulated by the PSA.

The payment card is the most frequently used payment instrument in the RC, and the market of payment cards and card payments has recorded constant growth and development. Over eleven years, the number of national card-based payment transactions increased by 100%, i.e. from the 203.68 million executed in 2006 to the 407.39 million executed in 2017. In addition, in the same period the value of national card-based payment transactions increased by 64%, i.e. from HRK 85,331.34 million to HRK 140,198.53 million.

With the increase in card payments and the rise of alternative payment methods, the future of cash is under discussion. According to statistical data, 86.1% of the transactions of fiscalised accounts in the RC still refer to cash payments, while card-based payments only account for 12.5%. Cash payments account for 56.1% and payments by payment cards account for 37.2% of the value of transactions of fiscalised accounts.

The European Central Bank (hereinafter referred to as 'ECB') conducted a comprehensive study² in 2017 to analyse the use of cash, cards and other payment instruments used at points of sale (POS) by euro area consumers in 2016. The survey results show that in 2016, 79% of all transactions were carried out using cash at POS in the euro area, 19%

- 1 Directive 2007/64/EC of the European Parliament and of the Council of 13 November 2007 on payment services in the internal market.
- 2 Esselink, H., and L. Hernández: *The use of cash by households in the euro area*, Occasional Paper Series, No 201, ECB, November 2017.

of all transactions were settled using a payment card and 2% using other payment instruments, such as cheques, credit transfers or mobile payments. In terms of value, cash payments accounted for 54% of all POS payments, cards for 39% and other means of payment (e.g. cheques) accounted for the remaining 7%. However, large differences in payment behaviour have been observed among different euro area countries, with respect to both the number and the value of transactions.

The purpose of this publication is to provide a comprehensive overview of the market of payment cards and card-based payment transactions in the RC in 2017, with a comparison of the data with those for 2016, which should be equally useful to the users, payment service providers and the public in general.

1.1 Structure of the publication

The publication is divided into seven chapters.

The first chapter is the Introduction, which gives, in addition to the purpose and structure of the publication, a brief overview of the legal framework from which statistical data and basic methodological explanations have been collected.

The second chapter, under the title of ‘Structure of the card market and payments infrastructure’, gives an insight into the models of card schemes and an overview of the basic accepting devices for payment cards (ATMs and EFTPOS terminals).

In the third chapter, Payment cards market in the RC, data are presented on the number of payment cards and the degree of their technological development.

Card-based payment transactions, i.e. the fourth chapter, gives an insight into data submitted by payment service providers – issuers for all national and international card-based payment transactions made using payment cards, issued by these same issuers.

The fifth chapter, Acquiring of payment cards, provides insight into data submitted by payment service providers – acquirers for all national and international transactions of acquiring of payment cards. A comparison of the use of payment cards and cash in the RC is also given.

The sixth chapter is a glossary.

The seventh chapter contains a list of tables, figures and boxes from the publication.

1.2 Legal framework

The Republic of Croatia has completely aligned its legislation with the *acquis* in the area of payment operations. The PSA regulates payment services in the RC in the same way as they are regulated in the EU. Thus the services of payment cards issuing and acquiring are among the payment services defined by Article 3, item (5) of the PSA.

Statistical data on payment cards, card-based payment transactions and accepting devices for payment cards are collected according to the Decision on the obligation to submit data on the payment system and electronic money (Official Gazette 147/2013; hereinafter referred to as 'Decision'), which entered into force on 1 January 2014. The Decision prescribes the obligation of reporting to the Croatian National Bank (hereinafter referred to as 'CNB') on data with regard to the payment system and electronic money, as well as the content and manner of such reporting and reporting deadlines.

The Decision was adopted pursuant to two acts:

- the Payment System Act (Official Gazette 133/2009 and 136/2012); and
- the Electronic Money Act (Official Gazette 139/2010; hereinafter referred to as 'EMA').

The Decision prescribes the scope of the data and also the reporting entities. In addition to data on national payment transactions, data on international payment transactions are also collected, and the reporting period is a month.

Pursuant to the Decision, the reporting entities are the following:

1. credit institutions (banks and savings banks) with registered offices in the RC;
2. electronic money institutions with registered offices in the RC;
3. payment institutions with registered offices in the RC;
4. branches of third-country credit institutions (or branches of banks) with registered offices in the RC;
5. branches of third-country electronic money institutions with registered offices in the RC;
6. branches of credit institutions from other member states with registered offices in the RC;

7. branches of electronic money institutions from other member states with registered offices in the RC;
8. branches of payment institutions from other member states with registered offices in the RC;
9. agents of payment service providers from other member states with registered offices in the RC, through which these payment service providers provide payment services in the RC, provided that these agents have been authorised to provide payment services; and
10. the Financial Agency.

The Decision prescribes the compilation and submission of data on the payment system and electronic money through 11 Reports:

- “Credit transfer” Report;
- “Money remittance” Report;
- “Direct debit” Report;
- “Credits to/debits from the accounts by simple book entry” Report;
- “Cash” Report;
- “Cheques and bills of exchange” Report;
- “Issuing of payment cards” Report;
- “Accounts” Report;
- “Infrastructure” Report;
- “Acquiring of payment cards” Report; and
- “Legal authority” Report.

The publication gives an overview of payment cards and card-based payment transactions for 2017 with a comparison of data with the data for 2016, 2015 and partially for 2014 through statistical data collected in three reports: Issuing of payment cards, Acquiring of payment cards and Infrastructure.

1.3 Methodology

The methodology of collecting data in accordance with the Decision is based on predefined terms, which are harmonised with legal provisions, the ECB’s Regulation (EU) No 1409/2013 of 28 November 2013 on payment statistics (ECB/2013/43)³ and other standards accepted in the cards market.

It was data obtained from payment service providers (reporting entities) that were primarily used in preparing the publication. A much smaller share of data was collected from business entities – providers of card

³ Regulation (EU) No 1409/2013 of the European Central Bank of 28 November 2013 on payment statistics (ECB/2013/43).

infrastructure services (Sub-chapter 2.2) and in the data of the Ministry of Finance of the Republic of Croatia – Tax Administration (Sub-chapter 5.2).

The payment service providers (reporting entities), whose data were used in the preparation of the publication include:

1. credit institutions (banks) that have obtained authorisation from the CNB, which includes authorisation to provide the payment services of issuing and acquiring of payment cards, and
2. electronic money institutions⁴ that have obtained authorisation from the CNB to provide the payment services of issuing and acquiring of payment cards.

The publication provides a complete overview of the cards market in the RC for 2017, i.e. it presents aggregated statistical data on:

- payments infrastructure – shown with the balance at the end of the last day of the reporting period (month);
- payment cards – shown at a monthly level or with the balance at the end of the last day of the reporting period (month);
- card-based payment transactions – shown at a monthly or an annual level;
- transactions of the acquiring of payment cards – shown at a monthly or an annual level.

Data on card-based payment transactions are collected in the original currency, i.e. in the currency in which the transaction takes place (transaction currency). For the purposes of the publication, all transactions in other currencies are recalculated in kuna at the CNB's midpoint exchange rate on the last day of the reporting period. Data on the par value of transactions are shown in kuna without lipa.

Detailed methodological explanations related to the individual terms of the Report are given in each chapter separately.

The basic terms defined by the PSA, which refer to the area of payment cards and card-based payment transactions, are the following:

- **'payment card'** means a payment instrument enabling its holder to make payments for goods and services either through an accepting device for payment cards or remotely, and/or to withdraw cash and/or use other services at an ATM or another self-service device;

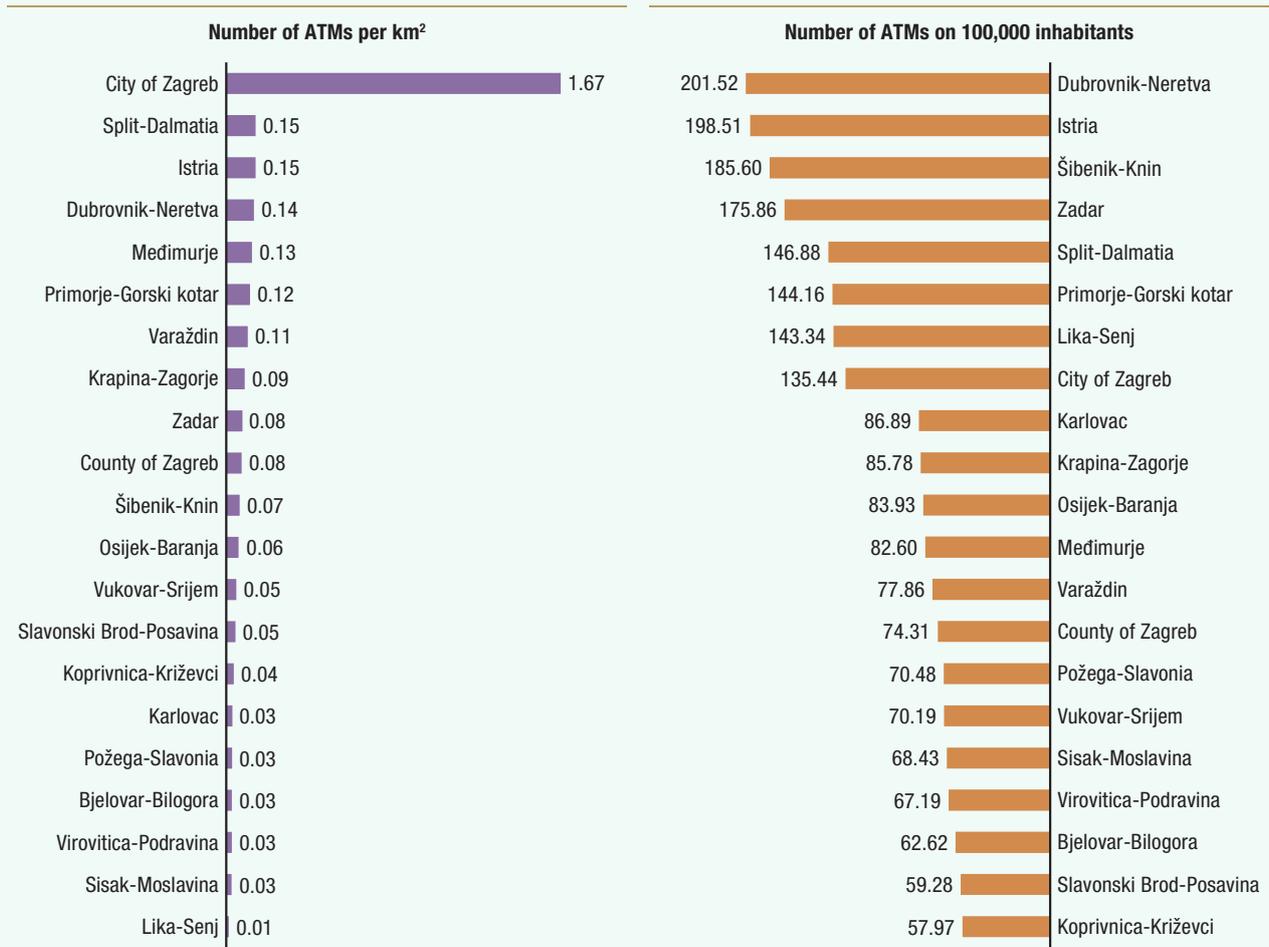
⁴ Not including data submitted by electronic money institutions that at the same time carry out the activity of telecommunications services.

- **‘national payment transaction’** means a payment transaction the execution of which involves a payer’s payment service provider and a payee’s payment service provider, or only one payment service provider, operating in the RC;
- **‘international payment transaction’** means a payment transaction the execution of which involves two payment service providers one of which (of either the payer or the payee) operates in the RC, while the other payment service provider (of either the payer or the payee) operates pursuant to the regulations of a third country or another member state;
- **‘card payment scheme’** means a set of functions, procedures, rules and devices enabling the holder of a payment card to effect a payment and/or cash withdrawal transaction with a payment service provider.

2 Structure of the card market and payments infrastructure

This chapter shows card payment schemes (Sub-chapter 2.1) and payments infrastructure by accepting devices for payment cards, such as ATMs and EFTPOS terminals (Sub-chapter 2.2).

Box 1 Distribution of terminals in the RC on 31 December 2017



ATMs and EFTPOS terminals in the RC

Total number of ATMs	4,941
Total number of EFTPOS terminals	118,621
Number of ATMs on 100,000 inhabitants	115.31
Number of EFTPOS terminals on 100,000 inhabitants	2,768.36
Number of ATMs per km ²	0.09
Number of EFTPOS terminals per km ²	2.10

Source: CNB.

2.1 Card payment schemes

‘Card payment scheme’ means a set of functions, procedures, rules and devices enabling the holder of a payment card to effect a card-based payment transaction and/or cash withdrawal with a payment service provider.

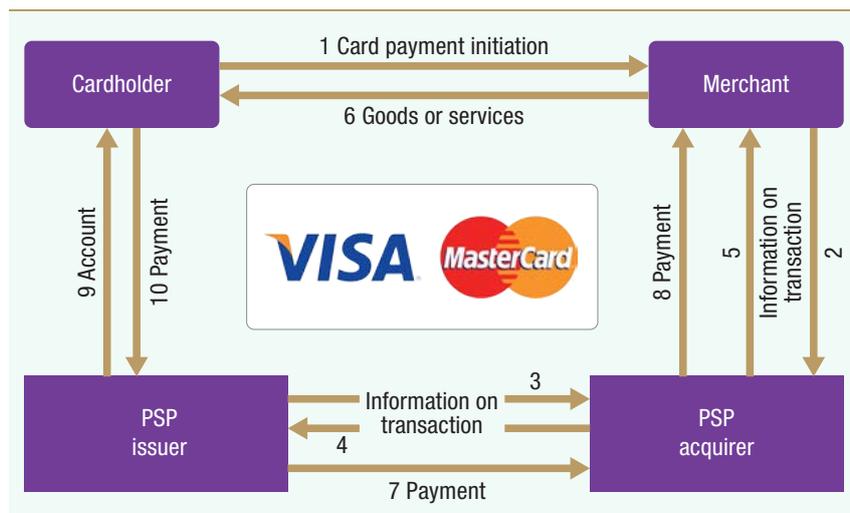
In the RC, two models of card schemes are recognised: the model with four stakeholders, i.e. the four-party card scheme and the model with three parties or stakeholders, i.e. the three-party card scheme.

Four-party card scheme in the RC

In the four-party card scheme in the RC the stakeholders are: the cardholder – payer, the merchant – payee, the payment service provider as the payment card issuer (hereinafter referred to as ‘issuer’) and the payment service provider as the payment card acquirer (hereinafter referred to as ‘acquirer’).

- **Cardholder – payer:** consumer and/or non-consumer, i.e. a natural and/or legal person initiating a card-based payment transaction using a payment card.
- **Merchant – payee:** legal or natural person accepting a payment card issued by the issuer that has established an agreement with the acquirer.
- **Issuer:** payment service provider that has issued the cardholder (payer) with the payment card that serves to initiate card-based payment transactions.

Chart 1 Four-party card scheme in the RC



Note: The figure shows the course of a card-based payment transaction between the cardholder, the merchant, the acquirer and the issuer at a physical point of sale (EFTPOS terminal) with the physical presence of the cardholder.

Source: CNB.

- **Acquirer:** payment service provider that provides payment card acquiring and the processing of a card-based payment transaction for the payee (merchant), which results in the transfer of cash to the payee (merchant).

The course of execution of a card payment in the four-party card scheme between the cardholder, the merchant, the acquirer and the issuer at a physical point of sale, i.e. EFTPOS terminal with the physical presence of the cardholder:

1. The cardholder uses a payment card at a merchant's to initiate a card payment for the purchase of goods and services.
2. The cardholder initiates a card-based payment transaction to the acquirer at an EFTPOS terminal, through the merchant, i.e. data are transmitted to the acquirer through the EFTPOS terminal.
3. The acquirer forwards the data on the transaction to the issuer for authorisation.
4. The issuer verifies and authorises the transaction and notifies the acquirer about it.
5. After receiving the authorisation from the issuer, the acquirer notifies the merchant about it through the EFTPOS terminal.
6. After the transaction has been authorised, the merchant delivers the goods and services to the cardholder.
7. The issuer forwards the amount to the acquirer for the purchase of goods and services carried out through a payment card.
8. The acquirer makes funds available to the merchant.
9. The issuer sends data on the cost of the transaction made through the payment card to the cardholder.
10. The cardholder settles the obligation for the transaction made through the payment card.

Currently, MasterCard® and Visa® four-party card schemes are operational in the territory of the RC. Both debit and credit payment cards are issued in the four-party card scheme. In 2017, in all 26 issuers/ stakeholders of the four-party card scheme were recorded.

Three-party card scheme in the RC

In the three-party card scheme in the RC the stakeholders are: the cardholder – payer, the merchant – payee, the payment service provider as the payment card issuer (hereinafter referred to as 'issuer'), which is at the same time the payment service provider as the payment card acquirer (hereinafter referred to as 'acquirer').

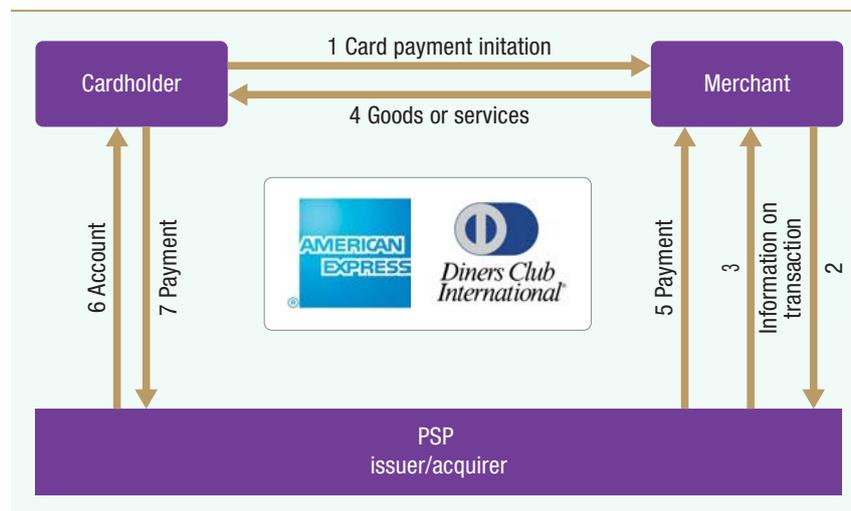
- **Cardholder – payer:** consumer and/or non-consumer, i.e. a natural and/or legal person initiating a card transaction using a payment card.

- **Merchant – payee:** legal or natural person/payee, accepting the payment card issued by the issuer that has established an agreement with the acquirer.
- **Issuer/acquirer:** in the three-party card scheme, the same payment service provider is the issuer and the acquirer.

As the issuer, the payment service provider is bound by a contract with the cardholder, and it has issued the cardholder (the payer) with a payment card, which serves for initiating card-based payment transactions.

As the acquirer, the payment service provider is bound by a contract with the payee (merchant), to whom it ensures the acquiring of the payment card and the processing of the card-based payment transaction, which results in the transfer of funds to the payee (merchant).

Chart 2 Three-party card scheme in the RC



Note: The figure shows the course of a card-based payment transaction between the cardholder, the merchant, the issuer that is at the same time the acquirer at a physical point of sale (EFTPOS terminal) with the physical presence of the cardholder.

Source: CNB.

The course of execution of a card payment in a three-party card scheme between the cardholder, the acquirer and the issuer at a physical point of sale, i.e. EFTPOS terminal involving the physical presence of the cardholder:

1. The cardholder uses a payment card at a merchant's to initiate a card payment for the purchase of goods and services.
2. The cardholder initiates a card-based payment transaction to the acquirer at an EFTPOS terminal, through the merchant, i.e. data are transmitted to the acquirer through the EFTPOS terminal.
3. The issuer/acquirer verifies and authorises the transaction and notifies the merchant about it through the EFTPOS terminal.

4. After the transaction has been authorised, the merchant delivers the goods and services to the cardholder.
5. The issuer/acquirer makes funds available to the merchant.
6. The issuer/acquirer sends data on the cost of the transaction made through the payment card to the cardholder.
7. The cardholder settles the obligation for the transaction made through the payment card.

Three-party card schemes are usually credit card schemes and no debit cards are issued under them. A total of two payment service providers – stakeholders in the three-party scheme were recorded in 2017. Diners Club International® and American Express® are three-party card schemes in the territory of the RC.

2.2 Payments infrastructure

Data on the payments infrastructure are collected from payment service providers and from legal persons that are the owners of accepting devices for payment cards (EFTPOS terminals and ATMs) through which payment service providers – acquirers provide the payment service of acquiring payment cards.

In the market of the RC, on 31 December 2017, there were 124,467 terminals at which cards are accepted, of which 4,941 were ATMs, 118,621 EFTPOS terminals and 905 EFTPOS terminals for withdrawal and deposit that allow cardholders to initiate only the payment transactions of withdrawal and/or deposit of cash through a payment card, but not the payment of goods and services (Table 1).

Table 1 Total number of terminals acquiring payment cards in the RC

Accepting terminals	Total on 31 Dec. 2014	Total on 31 Dec. 2015	Total on 31 Dec. 2016	Total on 31 Dec. 2017
ATMs	4,222	4,418	4,543	4,941
EFTPOS terminals	99,515	103,434	106,081	118,621
EFTPOS terminals for withdrawal and deposit	1,519	1,633	936	905

Source: CNB.

ATM

An ATM is an electromechanical terminal allowing cardholders to make cash withdrawals and/or deposits and to use the service of providing information and other services.

Table 2 Number of ATMs by counties in the RC on 31 December 2017

County	Total number of ATMs
County of Zagreb	236
Krapina-Zagorje	114
Sisak-Moslavina	118
Karlovac	112
Varaždin	137
Koprivnica-Križevci	67
Bjelovar-Bilogora	75
Primorje-Gorski kotar	427
Lika-Senj	73
Virovitica-Podravina	57
Požega-Slavonia	55
Slavonski Brod-Posavina	94
Zadar	299
Osijek-Baranja	256
Šibenik-Knin	203
Vukovar-Srijem	126
Split-Dalmatia	668
Istria	413
Dubrovnik-Neretva	247
Medimurje	94
City of Zagreb	1,070
Total	4,941

Source: CNB.

On 31 December 2017, 4,941 ATMs were recorded in the territory of the RC. The largest number of ATMs was recorded in the City of Zagreb (1,070), and the smallest number of ATMs was recorded in Požega-Slavonia County (55) (Table 2). The total number of ATMs in the RC increased by 8.8% from 31 December 2016 (Table 1).

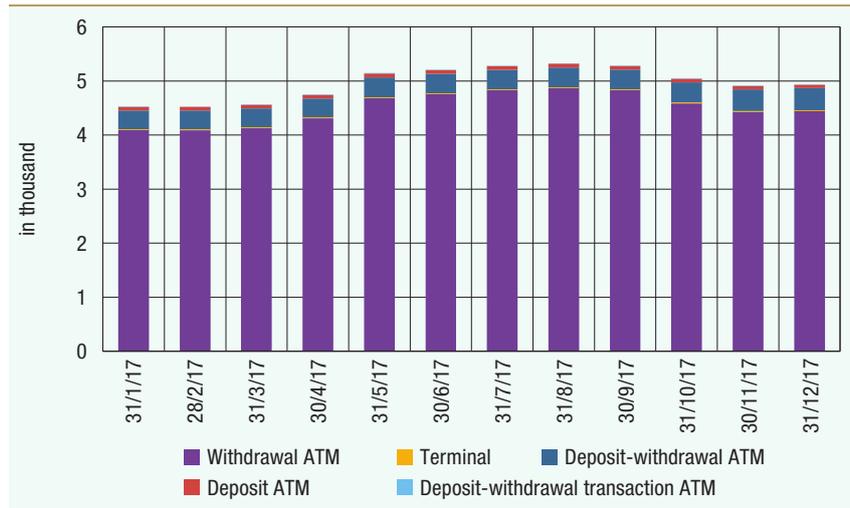
ATMs can be broken down by functions and features.

ATM functions are divided by payment services, i.e. by the function of cash deposit and the function of cash withdrawal.

The breakdown of ATMs by functions also shows the data on ATMs that allow users to use different services, such as the review of payment account transactions, the purchase of vouchers, the use of electronic banking, etc., at which it is not possible to effect the payment services of cash deposits, cash withdrawals and execution of credit transfers. For the purposes of the publication, such an ATM is called a 'terminal'.

According to their functions, we can distinguish four types of ATM in the territory of the RC (Figure 1).

Figure 1 Number of ATMs in the RC according to functions



Note: Data refer to the balance on the last day of each reporting month in 2017.
Source: CNB.

On 31 December 2017, 4,446 withdrawal ATMs, 409 deposit-withdrawal ATMs, 10 terminals, 67 deposit ATMs and 9 deposit-withdrawal-transaction ATMs were recorded in the territory of the RC (Figure 1).

On 31 December 2017, of the total number of ATMs, 1,440 of them were in a video surveillance system and 908 were in a secure location. ATMs in a secure location are ATMs located in a special, enclosed area for that purpose, and physical access is ensured by applying adequate measures of physical and/or technical protection. An ATM can be categorised in both of the above features.

EFTPOS terminal

An EFTPOS terminal (electronic funds transfer at point of sale) is an electronic terminal allowing cardholders to initiate card-based payment transactions at a point of sale.

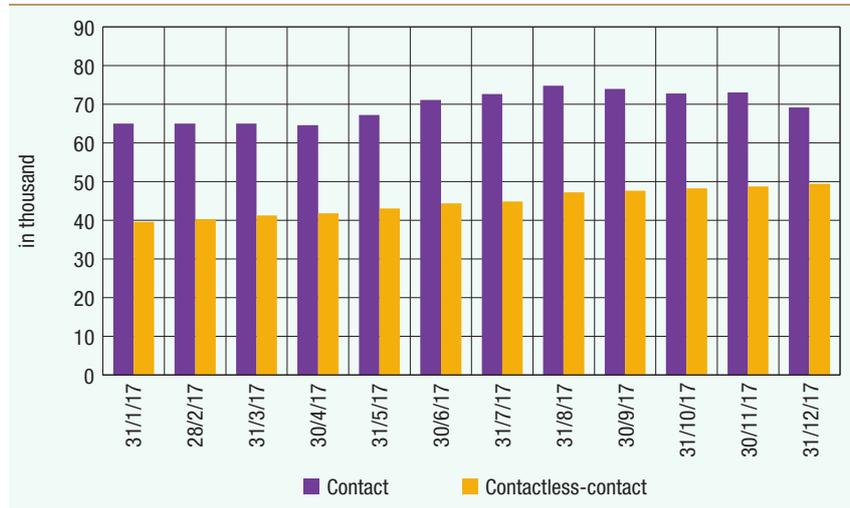
On 31 December 2017, a total of 118,621 EFTPOS terminals were recorded, an 11.8% increase from 31 December 2016 (Table 1).

EFTPOS terminals can be divided into contact and contactless-contact terminals. Contact EFTPOS terminals support the acquiring of payment cards, which contain records based only on a chip and/or magnetic stripe. Contactless-contact EFTPOS terminals support the acquiring of payment cards, which, in addition to the record based on a magnetic stripe and/or chip, also contain records based on contactless technology (proximity card reading, NFC, etc.).

As in 2016, in 2017, within the category of EFTPOS terminals, the number of contactless-contact EFTPOS terminals continued to

increase from 39,458, as recorded on 31 December 2016, to 49,476, as recorded on 31 December 2017, accounting for 41.7% of all EFTPOS terminals on 31 December 2017. The implementation of contactless EFTPOS terminals was observed for the first time in 2017, so that on 31 December 2017 a total of 8 contactless EFTPOS terminals and 69,137 contact EFTPOS terminals were recorded (Figure 2).

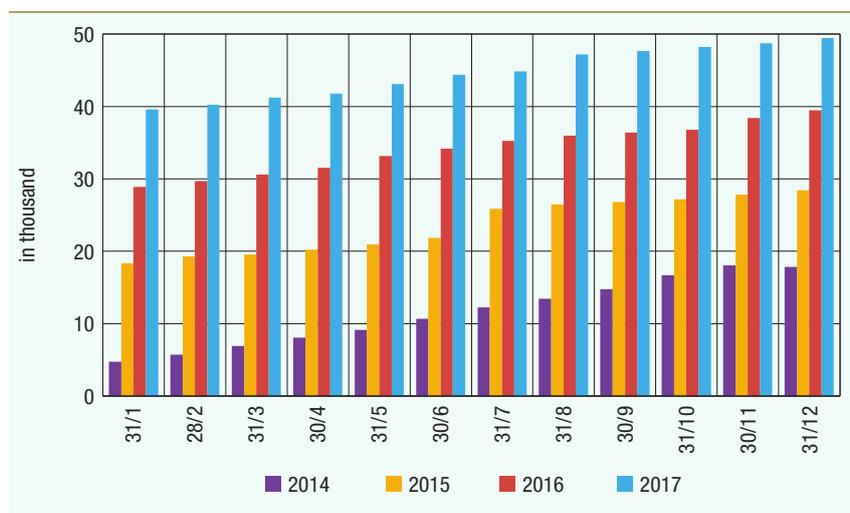
Figure 2 Number of EFTPOS terminals in the RC



Note: Data refer to the balance on the last day of each reporting month in 2017.
Source: CNB.

The number of contactless-contact terminals increased from January 2014. On 31 December 2015, 28,407 contactless-contact EFTPOS terminals were recorded, accounting for a 59% increase from 31 December 2014. In addition, on 31 December 2016, 39,458 contactless-contact EFTPOS terminals were recorded, a 39% increase from 31 December 2015. On 31 December 2017, 49,476 contactless-contact

Figure 3 Number of contactless-contact EFTPOS terminals in the RC



Note: Data refer to the balance on the last day of each reporting month.
Source: CNB.

EFTPOS terminals were recorded, accounting for a 25.4% increase from 31 December 2016 (Figure 3).

EFTPOS terminal for withdrawal and deposit

An EFTPOS terminal for withdrawal and deposit is a terminal that allows cardholders to initiate only the payment transactions of the withdrawal and/or deposit of cash using a payment card. This terminal is most frequently located in the premises of a third person, which, pursuant to a contract, operates on behalf and for the account of the payment service provider (e.g. the Financial Agency, Hrvatska pošta, etc.).

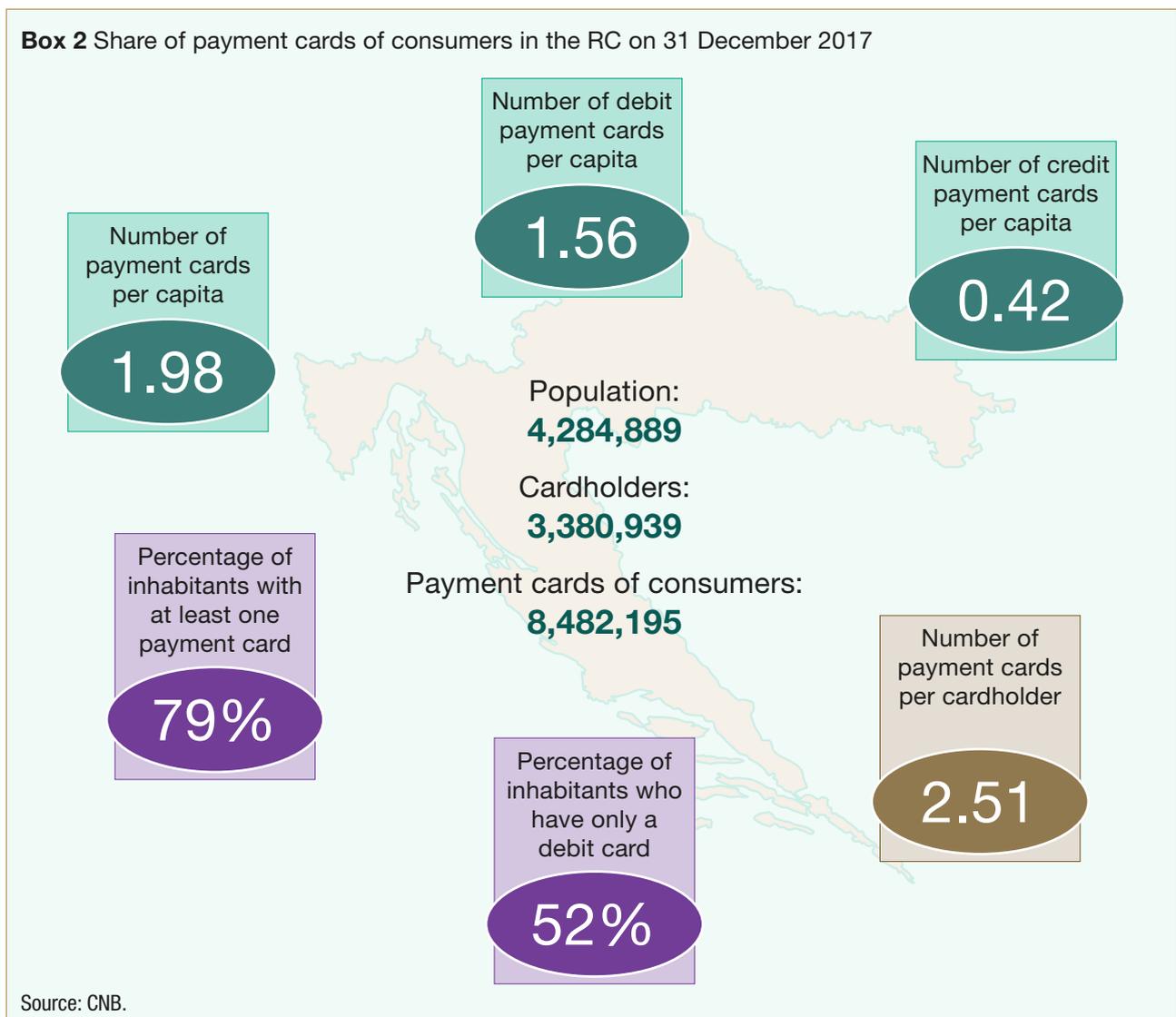
On 31 December 2017, a total of 905 EFTPOS terminals for withdrawal and deposit were recorded, while on 31 December 2016, there were 936 EFTPOS terminals for withdrawal and deposit (Table 1). The decline in the number of EFTPOS terminals for withdrawal and deposit is due to the technological improvement of some of the terminals, which in addition to deposits and withdrawals also allow purchases of goods and services, so that such terminals are categorised as EFTPOS terminals.

3 Payment cards market in the RC

Statistical data on payment cards issued by payment service providers – issuers in the RC are presented in this chapter.

Payment service providers – issuers (hereinafter referred to as ‘issuers’) in the RC include:

1. credit institutions (banks) that have obtained authorisation from the CNB, which includes the authorisation to provide the payment service of the issuance of payment cards; and
2. electronic money institutions⁵ that have obtained the authorisation of the CNB to provide the payment service of issuing payment cards.



⁵ Not including data submitted by electronic money institutions that at the same time carry out the activity of telecommunications services.

The issuer may issue several payment cards to a single cardholder. Also, a cardholder may have payment cards issued by several issuers.

The chapter is divided into three parts:

- the first part contains an overview of the number of payment cards in the market of the RC (Sub-chapter 3.1);
- the second part contains an overview of the degree of technological development of payment cards (Sub-chapter 3.1.1);
- the third part contains an overview of the number of payment cards by holder (Sub-chapter 3.2).

3.1 Payment cards

‘Payment card’ means a payment instrument enabling its holder to make payments for goods and services either through an accepting device for payment cards or remotely, and/or to withdraw and deposit cash and/or use other services at an ATM or at other accepting devices for payment cards.

The basic breakdown of payment cards is according to maturity and settlement of expenses, i.e. according to the moment when the holder settles the expenses incurred on a payment card. Accordingly, payment cards are divided into debit (pay now), credit (pay later) and prepaid cards⁶ (pay in advance).

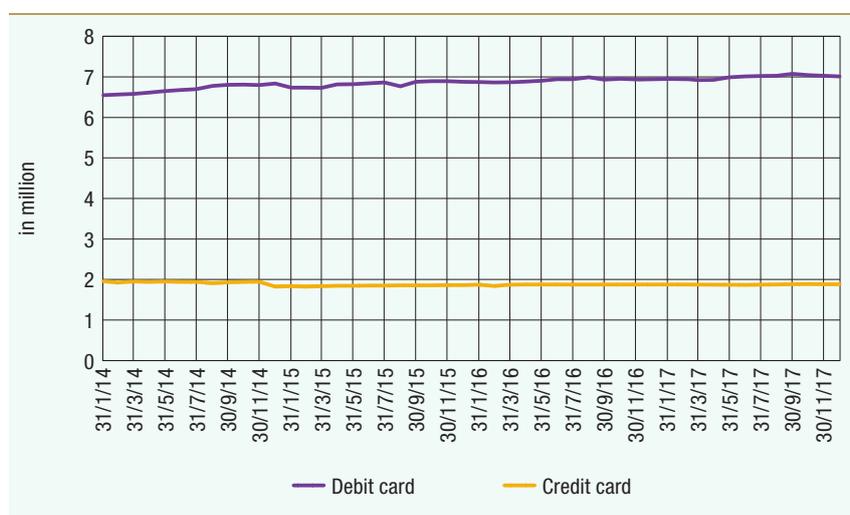
- **Debit payment cards** (hereinafter referred to as ‘debit cards’) allow the holder to pay for goods and services and withdraw cash through the ATM, other terminals and over the counter at credit institutions. When using a debit card, the cardholder’s payment account is debited for the incurred expense immediately after the execution of the card-based payment transaction, provided that there is coverage in the account. The coverage in the account also includes the amount of any unused allowed overdraft.
- **Credit payment cards** (hereinafter referred to as ‘credit cards’) allow the holder to pay for goods and services and withdraw cash through the ATM and other terminals.
The use of a credit card does not require the holder to ensure coverage in the payment account for the execution of a payment transaction at the time of its initiation. A credit line (limit) is granted to the credit card user for the execution of a payment transaction. Expenses incurred by using

⁶ Statistical data on prepaid payment cards are not included in the overview of this publication.

the credit card during a specific period are charged within deadlines defined by the agreement on the issuing of the credit card, i.e. after a specific time. Credit cards include credit, charge, revolving, delayed debit and membership cards.

On 31 December 2017, a total of 8,894,172 payment cards of consumers and business entities (non-consumers) were recorded in the RC, of which 7,012,090 were debit cards (79%) and 1,882,082 were credit cards (21%). On 31 December 2017, the total number of payment cards increased by 0.8% from 31 December 2016. In the same period, the number of debit and credit cards increased by 1% and 0.2% respectively (Figure 4).

Figure 4 Number of payment cards



Note: Data refer to the total number of used, unused and blocked payment cards on the last day of each reporting month.

Source: CNB.

Payment cards are issued to consumers and/or legal persons (non-consumers). A consumer may be issued a basic and an additional payment card. A payment card user that is a business entity (non-consumer) may be issued only the basic payment card.

Table 3 Number of payment cards issued in the RC by user on 31 December 2017

Type of payment card	Consumer		Non-consumer	Total
	Basic	Additional	Basic	
Debit card	5,576,950	1,096,974	338,166	7,012,090
Credit card	1,640,863	167,408	73,811	1,882,082
Total	7,217,813	1,264,382	411,977	8,894,172

Note: Data refer to the total number of payment cards on 31 December 2017.

Source: CNB.

On 31 December 2017, a total of 8,482,195 payment cards issued to consumers were recorded in the RC, 85.8% of which were basic payment cards (Table 3).

As explained in the introduction, payment cards are broken down into debit and credit cards. Credit cards can also be broken down by the type of contract between the issuer and cardholder and by the agreed manner of cost repayment. In accordance with the above, cards are broken down into debit cards, charge cards, revolving cards, delayed debit cards, credit cards and certain combinations of the above options.

On 31 December 2017, of the total number of cards in the RC, the most represented were debit cards with the share of 79%, followed by charge cards with the share of 8%, and cards with the delayed debit function and revolving cards with a 6% and 5% share respectively. The breakdown of payment cards by types is shown in Table 4.

Table 4 Number of payment cards issued in the RC by type of card on 31 December 2017

Type of payment card	Number of payment cards	Share
Debit card	7,012,090	79%
Charge card	677,806	8%
Delayed debit card	493,139	6%
Revolving card	400,902	5%
Credit card	190,142	2%
Other/membership	120,093	1%
Total	8,894,172	100%

Note: Data refer to the total number of payment cards on 31 December 2017.
Source: CNB.

A payment card may be in/on the following carrier mediums:

- a plastic card; and
- another carrier medium, such as the mobile phone, sticker (a payment card is stored or attached to/on another carrier medium), etc.

Of the total number of all payment cards, on 31 December 2017, 73,181 card stickers were recorded, of which 70,509 debit and 2,672 credit cards.

Payment cards by scheme

As explained in Sub-chapter 2.1, in the RC, debit and credit cards are issued in the four-party card scheme and only credit cards are issued in the three-party card scheme. Thus, a total of 7,946,726 or 89% of all payment cards were issued in the four-party card scheme system, of which 7,012,090 were debit cards and 934,636 were credit cards.

On 31 December 2017, in the RC, of the total number of credit cards, 947,446 or 50.3% of them were issued in the three-party card scheme system, while 934,636 or 49.7% of them were issued in the four-party card scheme system.

Payment cards statuses

An issued payment card may have one of these statuses: used, unused and blocked. The sum of used, unused and blocked payment cards makes up the total number of payment cards issued in the RC shown on the last day of each reporting month.

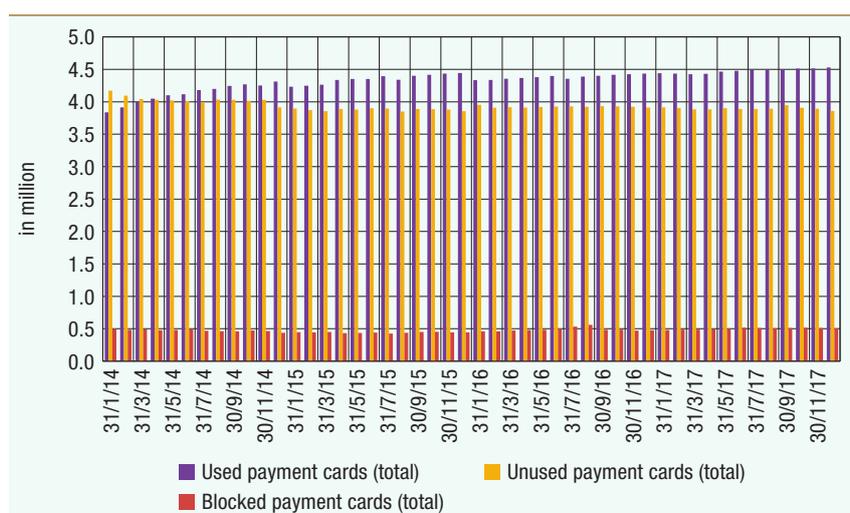
The term 'used' means that at least one card-based payment transaction was executed with the payment card over the past year, and the term 'unused' means that no card-based payment transaction was executed with the payment card over the past year. The term 'over the past year' means one year from the last day of the reporting period (month), and not a calendar year.

A 'blocked payment card' means a payment card in circulation that temporarily cannot be used for card-based payment transactions.

In 2017, the average monthly number of:

- used payment cards stood at 4.48 million;
- unused payment cards stood at 3.90 million;
- blocked payment cards stood at 0.50 million.

Figure 5 Number of used, unused and blocked payment cards



Note: Data refer to the total number of used, unused and blocked payment cards on the last day of each reporting month.

Source: CNB.

The received data on payment cards show that unused cards accounted for as much as 43.9% per month of the total number of payment cards in 2017. Used cards accounted for 50.4% and blocked cards for 5.7%.

A presentation of the number of used, unused and blocked payment cards at the end of each month in 2014, 2015, 2016 and 2017 is shown in Figure 5.

Newly issued and deactivated payment cards

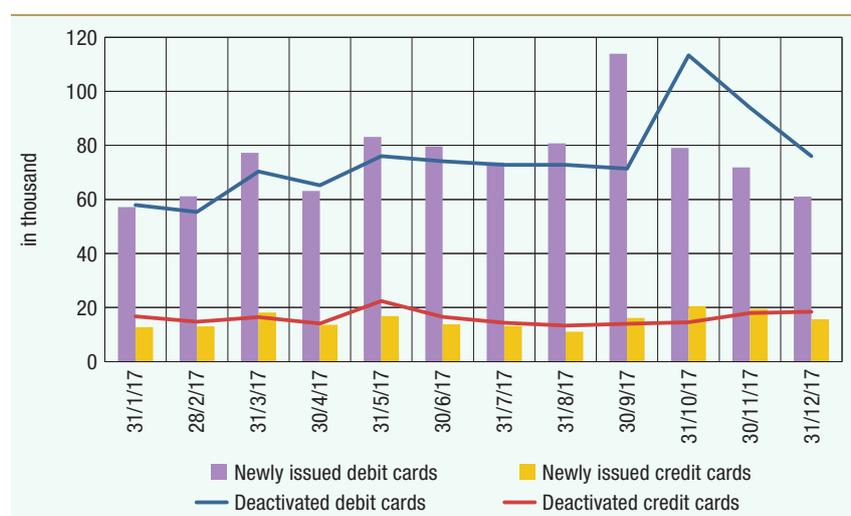
‘Newly issued payment card’ means a payment card that is issued to the holder for the first time during the reporting month. A payment card provided to the holder on the occasion of a regular reissue of the card, for instance, because of the expiry of the card’s validity period, card damage, etc., is not included in this status.

Data on payment cards with the status of ‘newly issued’ refer to the newly issued cards throughout the reporting month, and not to their status on the last day of the reporting month.

In 2017, a total of 1,087,069 payment cards were newly issued, of which 902,064 or 83% were debit cards and 185,005 or 17% were credit cards (Figure 6). In 2017, the average monthly number of newly issued debit cards was 75,172, and the average monthly number of newly issued credit cards was 15,417.

‘Deactivated payment card’ means a payment card the use of which for card-based payment transactions has been permanently disabled. Data

Figure 6 Number of newly issued and deactivated payment cards by type of card



Note: Data refer to the total number of newly issued and deactivated payment cards during each reporting month in 2017.

Source: CNB.

on payment cards with the status of 'deactivated' refers to deactivated cards throughout the reporting month.

In 2017, a total of 1,094,128 payment cards were deactivated, of which 899,623 or 82% were debit cards and 194,505 or 18% were credit cards (Figure 6).

A payment card can be deactivated at the user's initiative, or it can be deactivated by the issuer.

Of the total number of deactivated payment cards, 719,102 or 66% of them were deactivated at the user's initiative, while 375,026 or 34% of them were deactivated by the issuer.

3.1.1 Degree of technological development of payment cards in the RC

Employing different technologies, payment card issuers issue EMV chip cards, chip cards, magnetic and contactless cards and combinations of them to users.

Payment cards that possess both an EMV chip and a magnetic stripe (hereinafter referred to as 'EMV payment cards') currently prevail in the market of the RC, while the number of cards possessing only a magnetic stripe is constantly on the decline.

The EMV standard was started by a working group created in 1993 by the world's payment organisations: Europay, MasterCard and Visa. In fact, the name EMV is derived from the first letter of each of these three institutions. The standard covers the processing of microchip-based credit and debit cards (smart cards), i.e. it defines a set of rules with the aim of setting up secure and smooth communication between smart cards and accepting devices for payment cards. EMV standard-based cards are a significant improvement over magnetic stripe-based cards, primarily because of the higher level of security and the prevention of card fraud.

The total number of EMV payment cards:

- on 31 December 2014, stood at 8,039,663, accounting for 93% of the total number of all payment cards;
- on 31 December 2015, stood at 8,145,400, accounting for 93% of the total number of all payment cards;
- on 31 December 2016, stood at 8,259,687, accounting for 94% of the total number of all payment cards;
- on 31 December 2017, stood at 8,321,251, accounting for 94% of the total number of all payment cards.

Contactless and contact payment cards

Depending on the applied technology of initiation of payment transactions, all payment cards can be divided in two basic types: contact and contactless.

- **‘Contact payment card’** means a payment card that enables the execution of contact card-based payment transactions and contains records based on a chip and/or magnetic stripe. Contact card-based payment transactions are initiated by swiping or inserting a payment card through/into a device (e.g. an EFTPOS terminal).
- **‘Contactless payment card’** means a payment card that enables the execution of contact and contactless card-based payment transactions and contains records based on a chip and/or magnetic stripe, and records based on contactless technology. Contactless card-based payment transactions are initiated by the payment card being brought close to the accepting device for payment cards (e.g. an EFTPOS terminal), which possesses readers for contactless payments. As a rule, contactless payment cards retain all the functionalities of contact payment cards and have the additional possibility of initiating contactless card-based payment transactions.

On 31 December 2017, of the total number of payment cards, 6,776,918 or 76.2% of them were contact and 2,117,254, i.e. 23.8% were contactless (Table 5). The share of contactless payment cards in total payment cards increased from 22.5%, as recorded on 31 December 2016, to 23.8%, as recorded on 31 December 2017. Of the total number of contactless payment cards, 1,968,866 or 93% were debit cards.

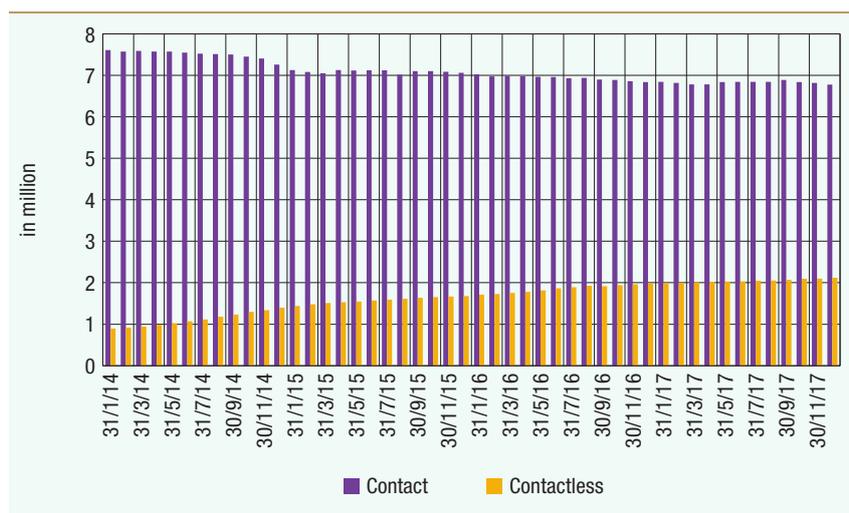
In 2017, the number of contact payment cards continued to decrease from 6,837,748, as recorded on 31 December 2016, to 6,776,918, as recorded on 31 December 2017, which represents a fall of 0.9%. In the same period, the number of contactless payment cards increased by 6.7%, i.e. from 1,985,072, as recorded on 31 December 2016, to 2,117,254, as recorded on 31 December 2017 (Figure 7). It can be assumed that further growth in the share of contactless cards will also

Table 5 Number of contact and contactless payment cards issued in the RC on 31 December 2017

Type of payment card	Contact	Contactless	Total
Debit card	5,043,224	1,968,866	7,012,090
Credit card	1,733,694	148,388	1,882,082
Total	6,776,918	2,117,254	8,894,172

Note: Data refer to the total number of payment cards on 31 December 2017.
Source: CNB.

Figure 7 Number of contact and contactless payment cards



Notes: Data refer to the total number of contact and contactless payment cards on the last day of each reporting month.

Includes used, unused and blocked payment cards.

Source: CNB.

depend on the dynamics of the usual replacement of old cards by new ones by the issuer.

3.2 Cardholders

This chapter gives an overview of the number of payment cards by holder. As already explained in the introduction, several payment cards may be issued to a single cardholder by the same issuer. Also, a cardholder may have payment cards issued by several issuers. This overview covers payment cards issued by issuers in the RC.

A cardholder may be a consumer and a business entity (non-consumer).

Consumer

On 31 December 2017, a total of 3,380,939 cardholders (consumers) were recorded, i.e. of the total RC population of 4,284,889⁷, 79% had at least one payment card.

Sixty-five per cent of all cardholders (consumers) hold payment cards issued by only one issuer, 26% hold payment cards issued by two issuers, and 9% of consumers hold payment cards issued by three or more issuers (Table 6).

⁷ Croatian Bureau of Statistics: *Census of population, households and dwellings in 2011*.

Table 6 Number of cardholders in the RC (consumers)

Number of PSP issuers	Number of holders	Total debit cards	Total credit cards	Total payment cards
One	2,186,761	3,422,007	421,150	3,843,157
Two	878,705	2,160,422	783,600	2,944,022
Three	249,938	812,164	419,855	1,232,019
Four	54,353	224,065	139,036	363,101
Five and more	11,182	58,959	40,937	99,896
Total	3,380,939	6,677,617	1,804,578	8,482,195

Note: Data refer to the total number on 31 December 2017.

Source: CNB.

On 31 December 2017, the total number of cardholders (consumers) holding a debit card stood at 3,365,680, i.e. 79% of the population of the RC hold at least one debit card. In addition, on 31 December 2017 the number of cardholders holding only a debit card stood at 2,233,941, i.e. 52% of the population of the RC hold only debit cards, i.e. do not hold a credit card. The total number of cardholders (consumers) holding a credit card stood at 1,146,998 or 27% of the population of the RC.

Business entities (non-consumers)

On 31 December 2017, a total of 209,574 cardholders – business entities (non-consumers) were recorded.

Table 7 gives a presentation of the number of cardholders – business entities (non-consumers) by the number of issuers. It is evident that the largest number of cardholders – business entities (non-consumers), 85% of them, hold payment cards issued by one issuer (Table 7).

Of the total number of cardholders (non-consumers), 58% hold only one payment card, and 25% hold two payment cards. In addition, of the total number of cardholders (non-consumers), 85.42% hold only debit cards, 11.81% hold debit and other payment cards, and 2.77% hold other payment cards.

Table 7 Number of cardholders in the RC – business entities (non-consumers)

Number of PSP issuers	Number of holders	Total debit cards	Total credit cards	Total payment cards
One	178,256	253,337	23,609	276,946
Two	24,638	58,214	29,088	87,302
Three	5,154	18,964	13,554	32,518
Four	1,182	6,180	5,131	11,311
Five and more	344	2,496	1,404	3,900
Total	209,574	339,191	72,786	411,977

Note: Data refer to the total number on 31 December 2017.

Source: CNB.

4 Card-based payment transactions

This chapter presents statistical data on the total number and value of national and international payment transactions made using payment cards issued by payment service providers – issuers in the RC.

Payment service providers – issuers (hereinafter referred to as ‘issuers’) in the RC include:

1. credit institutions (banks) that have obtained authorisation from the CNB that includes authorisation to provide the payment service of the issuance of payment cards; and
2. electronic money institutions⁸ that have obtained the authorisation of the CNB to provide the payment service of issuing payment cards.

‘Card-based payment transaction’ means a service based on a payment card’s acquiring infrastructure and card scheme business rules to make a payment transaction by means of a debit or a credit card.

Card-based payment transactions may be:

- **national card-based payment transactions** – card-based payment transactions the execution of which involves a payer’s payment service provider (issuer) and a payee’s payment service provider (acquirer), or only one payment service provider (the issuer, which is at the same time the acquirer), both of which operate in the RC.

The total number and value of card-based payment transactions executed in the RC by consumers and business entities (non-consumers) with an issuer’s payment cards are included.

- **international card-based payment transactions** – card-based payment transactions the execution of which involves two payment service providers, one of which (the issuer) operates in the RC, and the other (the acquirer) operates pursuant to the regulations of a third country or another member state.

The total number and value of payment transactions executed outside the RC (in other member states or third countries) by consumers and business entities (non-consumers) with issuer’s payment cards are included.

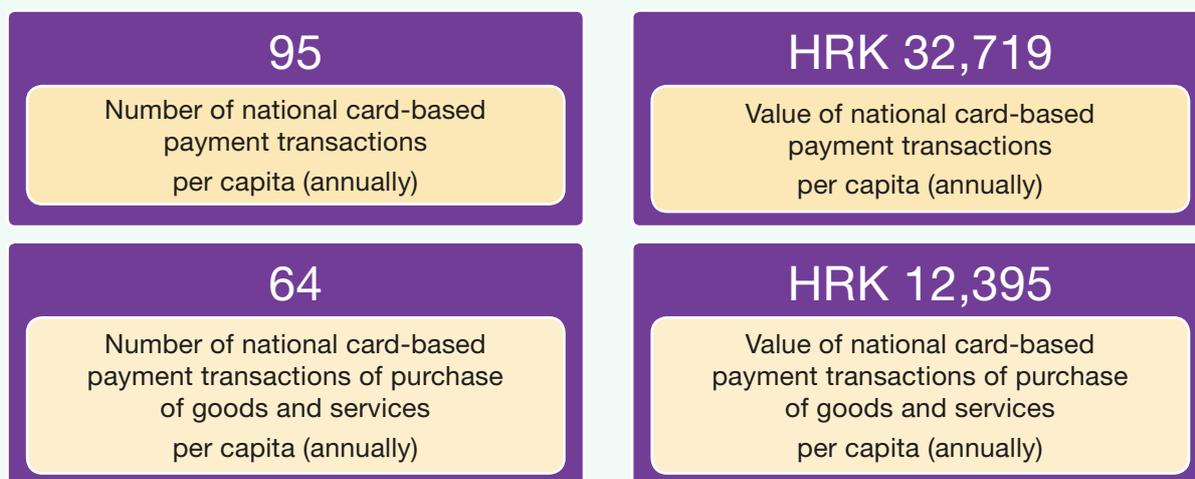
⁸ Not including data submitted by electronic money institutions that at the same time carry out the activity of telecommunications services.

Along with the development of the payment cards market, card-based payment transactions have also developed, for they are no longer restricted to the transactions of the purchases of goods and services through EFTPOS terminals and transactions of cash withdrawal and deposit at ATMs, but also cover the transactions of the purchases of goods and services through the Internet, direct debit and standing order transactions through a payment card and cash withdrawals through an EFTPOS terminal and other channels and methods.

The chapter is divided into three parts:

- the first part shows the total number and value of national and international card-based payment transactions executed using issuers' payment cards (Sub-chapter 4.1);
- the second part shows the total number and value of national card-based payment transactions executed using issuers' payment cards (Sub-chapter 4.1.1);
- the third part shows the total number and value of international card-based payment transactions executed using issuers' payment cards (Sub-chapter 4.1.2).

Box 3 National card-based payment transactions per capita in 2017



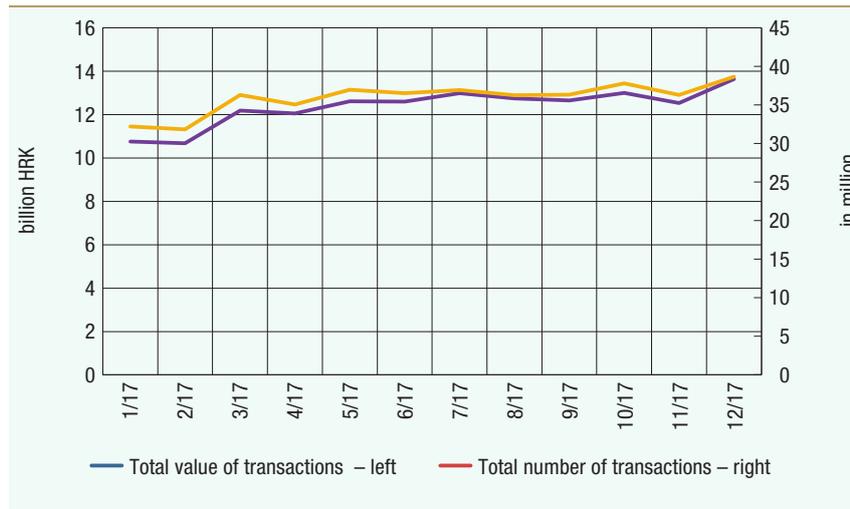
Source: CNB.

4.1 Total card-based payment transactions

This sub-chapter presents statistical data on national and international card-based payment transactions executed by issuers' payment cards.

In 2017, 25 credit institutions and 2 electronic money institutions were recorded; they issue payment cards in the RC, and their users executed a total of 431.31 million of card-based payment transactions with a total value of HRK 148,420.53 million (Figure 8). In 2017, the number of total

Figure 8 Number and value of national and international card-based payment transactions



Note: Data refer to the total number and value of national and international card-based payment transactions in 2017.

Source: CNB.

card-based payment transactions increased by 8.4%, and their value increased by 6.8% from 2016.

The average monthly number of card-based payment transactions stood at 35.94 million, and the average monthly value of transactions at HRK 12,368.38 million.

On average, 8.03 card-based payment transactions were executed monthly per used payment card issued in the RC, worth a total of HRK 2,763.

4.1.1 National card-based payment transactions

This sub-chapter presents statistical data on national card-based payment transactions executed by an issuer's payment cards.

National card-based payment transactions include:

- payment transactions of the purchases of goods and services using a payment card;
- payment transactions of cash withdrawals using a payment card;
- payment transactions of cash deposits using a payment card;
- standing orders and direct debits charged through a payment card; and
- fees, membership fees, interest and similar, charged from an issuer through a payment card.

A total of 407.39 million national card-based payment transactions worth a total of HRK 140,198.53 million were executed in the RC in 2017. In

Table 8 Number and value of national card-based payment transactions by type of payment card in HRK

Type of payment card	Purchases of goods and services	Cash withdrawals	Cash deposits	Contractual debit	Total
Number of transactions					
Debit payment card	190,409,880	100,110,263	3,535,092		294,055,235
Credit payment card	84,624,538	4,566,719	7,466	24,134,291	113,333,014
Total	275,034,418	104,676,982	3,542,558	24,134,291	407,388,249
Value of transactions					
Debit payment card	31,886,983,632	73,748,152,017	7,641,668,801		113,276,804,450
Credit payment card	21,224,350,881	4,537,485,502	8,314,582	1,151,578,503	26,921,729,468
Total	53,111,334,513	78,285,637,519	7,649,983,383	1,151,578,503	140,198,533,918
Average value of transaction					
Debit payment card	167	737	2,162		385
Credit payment card	251	994	1,114	48	238
Total	193	748	2,159	48	344

Note: Data refer to the total number and value of national card-based payment transactions in 2017.
Source: CNB.

2017, the total number of national card-based payment transactions increased by 7.5%, and their value increased by 6.3% from 2016.

Of all national card-based payment transactions, 294.06 million transactions, or 72.2%, were executed using debit cards, worth a total of HRK 113,276.8 million or 80.8% (Table 8). In 2017, the total number of national payment transactions executed using debit cards increased by 10.1%, and the value increased by 7.4% from 2016.

Of the total number of national card-based payment transactions, 113.33 million transactions, or 27.8%, were executed using credit cards, worth a total of HRK 26,921.73 million or 19.2% (Table 8). In 2017, the total number of national payment transactions executed using credit cards increased by 1.2% and the value of transactions increased by 1.9% from 2016.

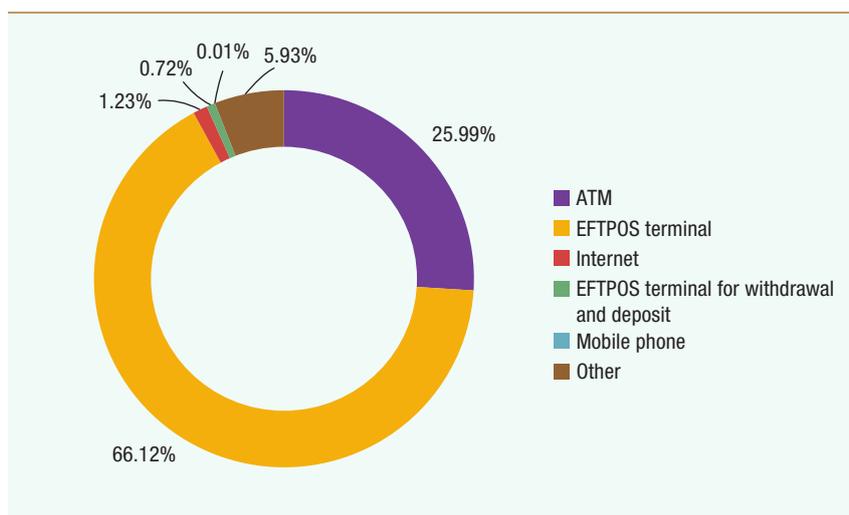
National card-based payment transactions by accepting devices for payment cards

Of the total number of national card-based payment transactions in 2017, broken down by accepting devices for payment cards, the following were executed:

- **through ATMs:** 105.87 million card-based payment transactions worth a total of HRK 81,058.99 million;
- **through EFTPOS terminals:** 269.4 million card-based payment transactions worth a total of HRK 51,588.7 million;
- **through the Internet:** 5 million card-based payment transactions worth a total of HRK 1,406.61 million;

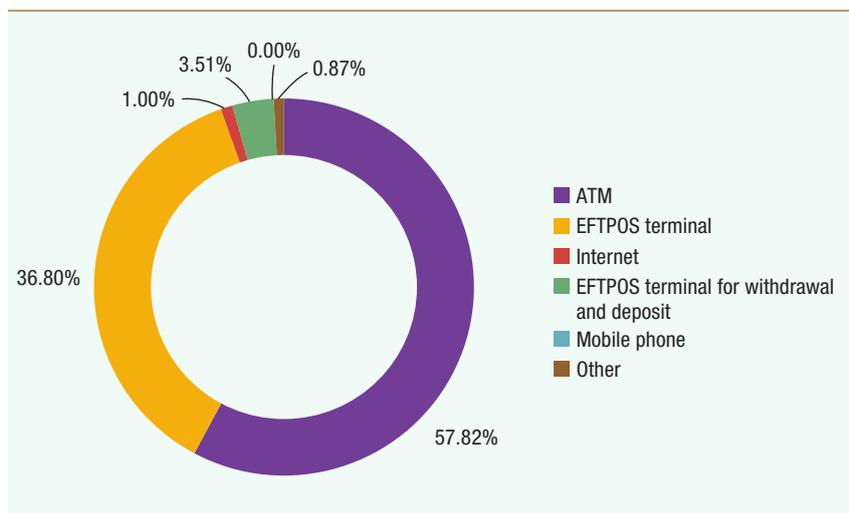
- **through EFTPOS terminals for withdrawal and deposit:** 2.93 million card-based payment transactions worth a total of HRK 4,925.98 million;
- **by mobile telephone:** 0.03 million card-based payment transactions worth a total of HRK 3.36 million; and
- **other:** covers 24.16 million direct debit, standing order, fee, interest and commission transactions, worth a total of HRK 1,214.9 million.

Figure 9 Number of national card-based payment transactions by accepting devices for payment cards



Note: Data refer to the total number of national card-based payment transactions in 2017.
Source: CNB.

Figure 10 Value of national card-based payment transactions by accepting devices for payment cards



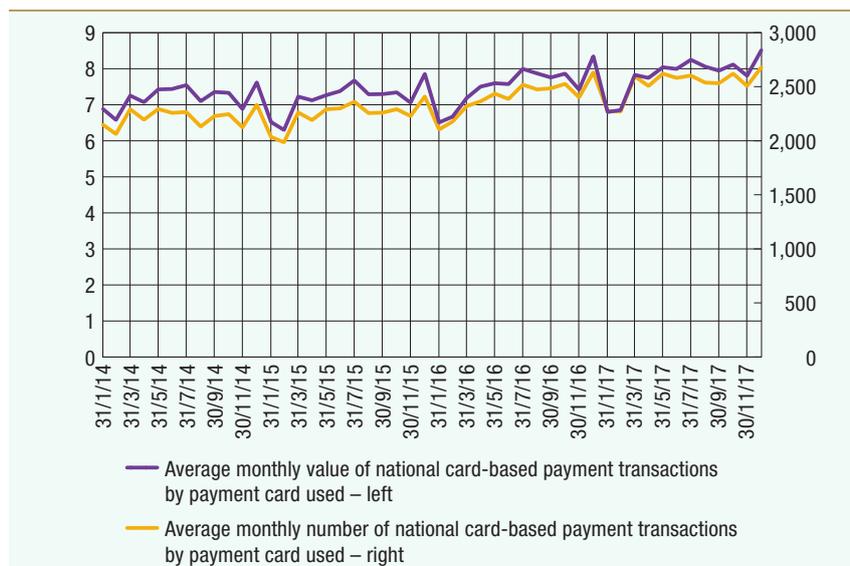
Note: Data refer to the total value of national card-based payment transactions in 2017.
Source: CNB.

It is evident from the data shown that 66.13% of national card-based payment transactions were executed through EFTPOS terminals, and 25.99% through ATMs (Figure 9). The value of transactions, however, shows an inverse ratio: in terms of the total value of national card-based

payment transactions, ATM transactions accounted for 57.82% and EFTPOS terminals 36.80% (Figure 10).

Per one payment card used in the RC, on average 7.6 national card-based payment transactions were executed monthly, worth a total of HRK 2,610 (Figure 11).

Figure 11 Average monthly number and value of national card-based payment transactions by payment card used in HRK



Note: Data refer to the average number and value of national card-based payment transactions during each reporting month.
Source: CNB.

Purchases of goods and services

The term ‘purchases of goods and services’ includes all card-based payment transactions for the purchases of goods and services executed using the issuer’s payment card through EFTPOS terminals, the Internet, mobile phone, SMS and through ATMs.

A total of 275.03 million national card-based payment transactions of the purchases of goods and services, worth a total of HRK 53,111.33 million, were executed in 2017. Of this number, 190.41 million national card-based payment transactions (69.2%) were executed using debit cards, worth a total of HRK 31,886.98 million or 60%. The remaining 84.62 million (30.8%) national card-based payment transactions of purchases of goods and services, worth a total of HRK 21,224.35 million (40%) were made using credit cards.

In 2017, the total number of national payment transactions of the purchases of goods and services increased by 15.09%, and the total value increased by 14.39% from 2016.

In 2017, the average value of a national card-based payment transaction of the purchase of goods or services stood at HRK 193. The average value of a national card-based payment transaction of the purchase of goods or services in which a debit card was used stood at HRK 167, and in which a credit card was used stood at HRK 251 (Table 8).

Of the above 275.03 million national card-based payment transactions, a total of 261.3 million transactions were executed using consumer payment cards, worth a total of HRK 46,865.52 million. Accordingly, 95% of the number and 89% of the value of national card-based payment transactions of the purchases of goods and services were executed using consumer payment cards.

The average value of a national card-based payment transaction of the purchase of goods or services in which a consumer payment card was used stood at HRK 192, while the average for a similar transaction in which a payment card of a business entity (non-consumer) was used was HRK 454.

Card-based payment transactions of the purchases of goods and services can be broken down by the function of the payment card used. The cardholder selects the function when initiating the card-based payment transaction through an accepting device for payment cards. We distinguish the following functions:

- **debit function** – coverage on the payment account is ensured for the execution of a card-based payment transaction at the moment of its initiation, and the card-based payment transaction is charged immediately and directly from that cardholder's payment account;
- **charge function** – the amount of total expenses incurred through the use of this function is settled in full, in a specified time interval, most frequently by a credit transfer;
- **delayed debit function** – the amount of total expenses incurred through the use of this function is settled in full, in a specified time interval, most frequently by direct debit of the cardholder's payment account;
- **credit function** – every card-based payment transaction initiated using the credit function is automatically divided, at the time of its initiation, into the agreed number of repayment instalments, in other words, according to the agreed model;
- **revolving function** – the amount of total expenses incurred through the use of this function is settled, in a specified time interval, in a percentage of the total amount; and
- **function of payment in instalments** – the amount of transactions incurred through the use of this function is divided to the number of repayment instalments in a specified time interval, according to the choice of the cardholder, within the model agreed at the point of sale.

Of all national card-based payment transactions of the purchases of goods and services, 68% were executed using the debit function. The value of transactions executed by the debit function accounted for 56% of the total value of national card-based payment transactions of the purchases of goods and services. An overview of the number and value of national card-based payment transactions of the purchases of goods and services by function is presented in Table 9.

Table 9 Number and value of national card-based payment transactions of purchases of goods and services by function in HRK

Function	Number of transactions of purchases of goods and services	Value of transactions of purchases of goods and services	Average value of the transaction of purchase of goods or services
Debit function	187,364,140	29,780,920,457	159
Charge function	46,783,962	10,081,740,012	215
Function of repayment in instalments	6,448,326	7,032,797,528	1,091
Delayed debit function	22,520,348	4,088,779,390	182
Revolving function	10,293,948	1,655,803,863	161
Credit function	1,623,694	471,293,263	290
Total	275,034,418	53,111,334,513	193

Note: Data refer to the total number and value of national card-based payment transactions of purchases of goods and services in 2017.

Source: CNB.

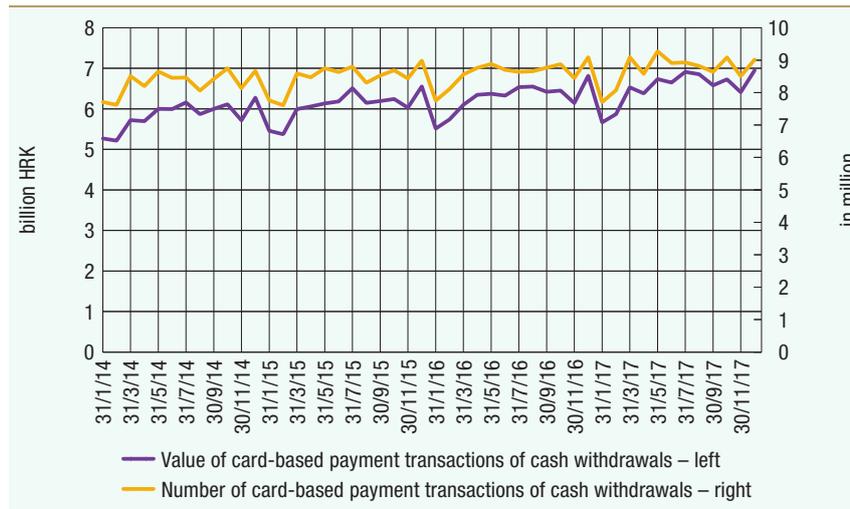
The largest average value of the national card-based payment transaction of the purchase of goods or services in the amount of HRK 1,091 was recorded for card-based payment transactions using the function of repayment in instalments (Table 9).

Cash withdrawals

'Cash withdrawals' covers card-based payment transactions of cash withdrawals executed using the issuer's payment card through an ATM, EFTPOS terminal, EFTPOS terminal for withdrawal and deposit and other channels.

In all, 104.68 million national card-based payment transactions of cash withdrawals, worth a total of HRK 78,285.64 million, were executed in 2017. Debit cards accounted for 100.11 million (95.6%) executed national card-based payment transactions of cash withdrawals, worth a total of HRK 73,748.15 million (94.2%; Table 8). Credit cards accounted for 4.57 million (4.4%) executed national card-based payment transactions of cash withdrawals, worth a total of HRK 4,537.49 million (5.8%; Table 8).

Figure 12 Number and value of national card-based payment transactions of cash withdrawals



Note: Data refer to the total number and value of national card-based payment transactions during each reporting month.
Source: CNB.

In 2017, the total number of national card-based payment transactions of cash withdrawals increased by 1.4%, and their value increased by 3.9% from 2016 (Figure 12).

Of the total number of national card-based payment transactions, 101.48 million (97%) cash withdrawal transactions using consumer payment cards and 3.19 million (3%) using business entity (non-consumer) payment cards were executed.

Of the total value of national card-based payment transactions, HRK 72,368.46 million (92.4%) cash withdrawal transactions using consumer payment cards and HRK 5,917.18 million (7.6%) using business entity (non-consumer) payment cards were executed.

In 2017, the average value of a national card-based payment transaction of a cash withdrawal stood at HRK 748 (with the use of a debit card stood at HRK 737, while that with the use of a credit card was HRK 994).

The average value of a national card-based transaction of a cash withdrawal in which a consumer payment card was used stood at HRK 713, and the corresponding value in which a payment card of a business entity (non-consumer) was used was HRK 1,851.

Of the total number of national card-based payment transactions of cash withdrawals, 95% were executed using the debit function. The value of transactions executed using the debit function accounted for 94% of the total value of national card-based payment transactions of cash withdrawals. An overview of the number and value of national

Table 10 Number and value of national card-based payment transactions of cash withdrawal by function

in HRK

Function	Number of transactions of cash withdrawals	Value of transactions of cash withdrawals	Average value of the transaction of a cash withdrawal
Debit function	99,674,722	73,360,603,950	736
Charge function	1,103,651	1,445,911,747	1,310
Function of repayment in instalments	438,993	389,451,702	887
Delayed debit function	1,672,366	1,952,870,060	1,168
Revolving function	1,327,994	712,165,486	536
Credit function	459,256	424,634,574	925
Total	104,676,982	78,285,637,519	748

Note: Data refer to the total number and value of national card-based payment transactions of cash withdrawals in 2017.

Source: CNB.

card-based payment transactions of cash withdrawals by function is presented in Table 10.

The largest average value of a national card-based payment transaction of a cash withdrawal in the amount of HRK 1,310 was recorded for card-based payment transactions using the charge function (Table 10).

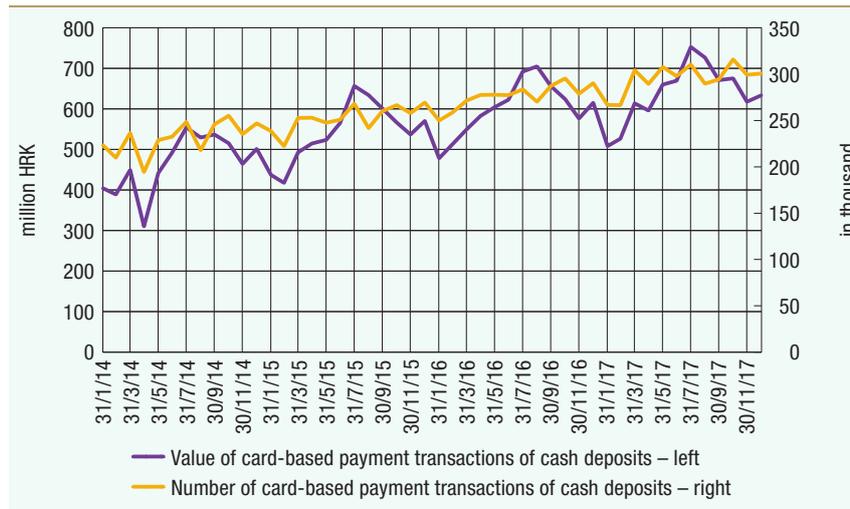
Cash deposits

‘Cash deposits’ covers card-based payment transactions of cash deposits to the account for payment using the issuer’s payment card through ATMs and EFTPOS terminals for withdrawal and deposit and other methods (channels), but it does not include the payment transactions of cash deposits into a day/night deposit box.

In 2017, a total of 3.54 million national card-based cash deposit payment transactions, worth a total of HRK 7,649.98 million were executed, 3.2 million transactions of which, worth a total of HRK 6,351.42 million, were executed through ATMs. Over 99.8% of all national card-based cash deposit payment transactions, in both number and value, were executed with the use of debit cards.

Of the total of 3.54 million national card-based payment transactions, 2.65 million (74.7%) cash deposit transactions were executed using consumer payment cards, worth a total of HRK 3,938.69 million, or 51.5%, while 0.89 million (25.3%) transactions, worth a total of HRK 3,711.29 million, or 48.5%, were executed using the payment cards of business entities (non-consumers).

Figure 13 Number and value of national card-based payment transactions of cash deposits



Note: Data refer to the total number and value of national card-based payment transactions during each reporting month.
Source: CNB.

In 2017, the total number of national card-based cash deposit payment transactions increased by 6.9%, the value having increased by 6.6% from 2016 (Figure 13).

In 2017, the average value of a national card-based payment transaction of a cash deposit stood at HRK 2,159. The average value of a national card-based payment transaction of a cash deposit in which a debit card was used stood at HRK 2,162, and the average in which a credit payment card was used was HRK 1,114.

The average value of a national card-based payment transaction of a cash deposit using a consumer payment card stood at HRK 1,488.9, while that in which a payment card of a business entity (non-consumer) was used was HRK 4,136.6.

Contractual debit

‘Contractual debit’ includes payment transactions for which collection through a payment card is contracted in advance, initiated by or through the payee; it may have the elements of a standing order or direct debit, including the cardholder’s obligations to the issuer, such as fees, commissions, interest, membership fees, etc. The contractual debit may be agreed for all types of payment cards, except debit cards.

A total of 24.13 million transactions of contractual debits, worth a total of HRK 1,151.58 million, were executed in 2017. The largest number of transactions, 21.93 million (90.89%) of them, worth a total of HRK 958.40 million (83.23%), were fee, membership fee, interest and similar transactions, which cardholders paid through payment cards to the

issuers. The remaining 2.19 million transactions (9.11%) are payment transactions of direct debits executed through payment cards, with a total value of HRK 193.17 million (16.77%).

In 2017, the average value of a contractual debit transaction stood at HRK 48. The average value of interest, fee, membership fee and similar transactions, which cardholders paid through payment cards stood at HRK 44, while the average value of payment transactions of direct debits executed through payment cards stood at HRK 88.

Unauthorised use (fraud)

‘Unauthorised use’ includes all card-based payment transactions in which unauthorised use of a payment card, or fraud, is established.

A total of 18,597 national card-based payment transactions of unauthorised use were established in 2017, worth a total of HRK 9,403,894. In 2017, the average value of a national card-based payment transaction in which unauthorised use was established stood at HRK 506.

Of the total national card-based payment transactions, 15,063 (81%) transactions of unauthorised use using consumer payment cards were identified, worth a total of HRK 8,062,777, or 86%, while 3,534 or 19% transactions, worth a total of HRK 1,341,117, or 14%, were identified in transactions using the payment cards of business entities (non-consumers).

4.1.2 International card-based payment transactions

This sub-chapter shows statistical data on international card-based payment transactions executed using issuers’ payment cards.

International card-based payment transactions include:

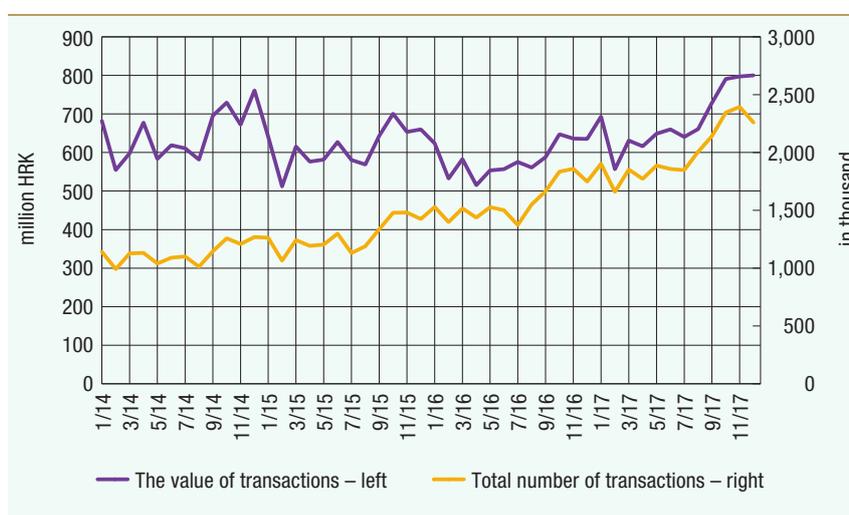
- payment transactions of the purchases of goods and services using an issuer’s payment cards executed outside the RC (in other member states or third countries); and
- payment transactions of cash withdrawals using an issuer’s payment cards executed outside the RC (in other member states or third countries).

Data on international card-based payment transactions are shown in kuna, i.e. the original currency of the card-based payment transaction is converted to kuna at the CNB’s exchange rate on the last day of the reporting period, i.e. the month for which the data are shown.

A total of 23.92 million international card-based payment transactions, worth a total of HRK 8,221.99 million were executed in 2017. The average value of an international card-based payment transaction stood at HRK 344.

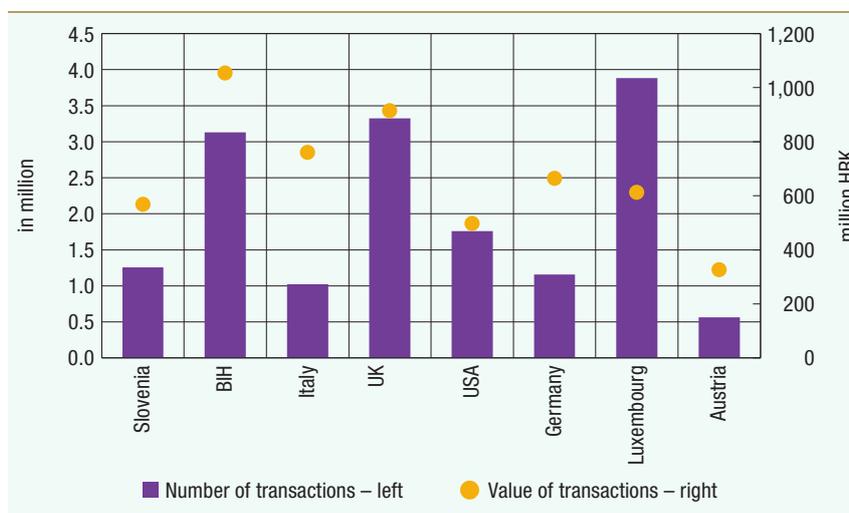
The average monthly number of international card-based payment transactions stood at 1.99 million, and the average monthly value of transactions at HRK 685.17 million. In 2017, the total number of international card-based payment transactions increased by 26% from 2016, while the total value of international card-based payment transactions increased by 17% in the same period (Figure 14).

Figure 14 Number and value of international card-based payment transactions in HRK



Note: Data refer to the total number and value of international card-based payment transactions during each reporting month.
Source: CNB.

Figure 15 Number and value of international card-based payment transactions for the eight most represented countries



Note: Data refer to the total number and value of international card-based payment transactions in 2017.
Source: CNB.

Of the total number and value of international card-based payment transactions, 93% of the number and 83% of the value of international card-based payment transactions were executed with the use of consumer cards, while 7% of the number and 17% of the value of international card-based payment transactions were executed with the use of the cards of business entities (non-consumers).

International card-based payment transactions were executed in 134 currencies and 222 countries.

From the received data on international card-based payment transactions broken down by countries it is evident that in the eight most represented countries (Bosnia and Herzegovina, Slovenia, Germany, Italy, the United States, the United Kingdom, Luxembourg and Austria) the total value of card-based payment transactions stood at HRK 5,400.19 million, accounting for 66% of the total value of all international card-based payment transactions (Figure 15).

Figure 15 also shows that the holders of payment cards issued in the RC realised the highest value of card-based payment transactions in Slovenia, then in Bosnia and Herzegovina, Italy, the United Kingdom, the United States, Germany, Luxembourg and Austria.

5 Acquiring of payment cards

This chapter shows statistical data on the number and value of transactions in which payment service providers – acquirers have provided the payment service of acquiring of payment cards through an accepting device for payment cards.

Payment service providers – acquirers (hereinafter referred to as ‘acquirers’) in the RC include:

1. credit institutions (banks) that have obtained authorisation from the CNB, which includes authorisation to provide the payment service of acquiring of payment cards; and
2. electronic money institutions⁹ that have obtained authorisation from the CNB to provide the payment services of acquiring payment cards.

An acquirer may acquire a payment card from:

- a payment service provider – issuer that has obtained its authorisation or the authorisation for the provision of the service of issuing of payment cards from the CNB (hereinafter referred to as ‘a Croatian issuer’); or
- a payment service provider – issuer that has obtained its authorisation or the authorisation for the provision of the service of issuing of payment cards from one of the competent bodies of other EU member states or third countries (hereinafter referred to as ‘a foreign issuer’).

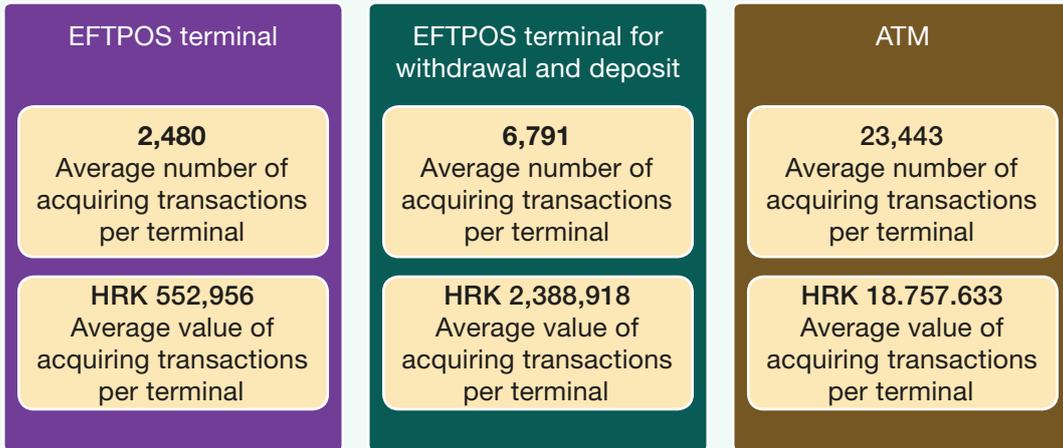
The acquiring of payment cards of Croatian issuers is divided into the acquiring of payment cards the acquirer itself has issued and the acquiring of payment cards of other Croatian issuers.

The chapter is divided into four parts:

- the first part shows the total number and value of transactions of the acquiring of payment cards of Croatian and foreign issuers (Sub-chapter 5.1);
- the second part shows the total number and value of transactions of the acquiring of payment cards, i.e. own cards and cards of other Croatian issuers (Sub-chapter 5.1.1);
- the third part shows the total number and value of transactions of the acquiring of payment cards of foreign issuers (Sub-chapter 5.1.2);
- the fourth part gives a comparison of the use of payment cards and the use of cash in the RC (Sub-chapter 5.2).

⁹ Not including data submitted by electronic money institutions that at the same time carry out the activity of telecommunications services.

Box 4 Transactions of the acquiring of payment cards according to accepting devices for payment cards in 2017



Source: CNB.

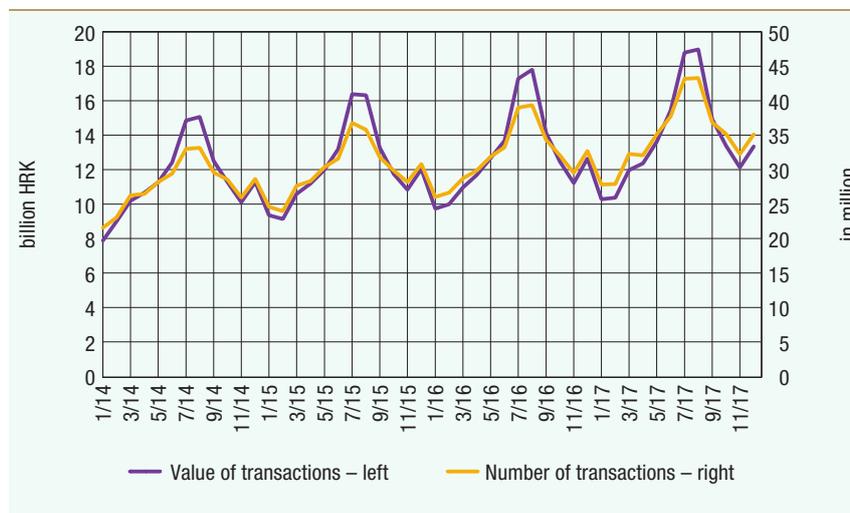
5.1 Total acquiring of payment cards

This sub-chapter shows statistical data on the total number and value of transactions of the acquiring of payment cards of Croatian and foreign issuers.

In all, 419.36 million payment card acquiring transactions, worth a total of HRK 165,816.73 million, were executed in 2017 (Figure 16). In 2017, the total number of payment card acquiring transactions increased by 9.2%, and their value increased by 7.3% from 2016.

A total of 27.9 million acquiring transactions, worth a total of HRK 10,310.55 million, were recorded in January 2017. During the subsequent months, the number and value of acquiring transactions grew until

Figure 16 Number and value of transactions of acquiring in the RC



Note: Data refer to the total number and the total value of transactions in HRK during the reporting month.

Source: CNB.

August in which they reached the highest level, 43.3 million transactions, worth a total of HRK 18,982.86 million. From September, the number and value of acquiring transactions had a downward trend until December in which 35.1 million acquiring transactions were recorded, with a total value of HRK 13,365.62 million.

The acquiring service is provided at contractual merchants, i.e. business entities that pursuant to a contract with the acquirer offer the possibility of payment by payment cards through accepting devices for payment cards at their point of sale (EFTPOS terminal and Internet). On 31 December 2017, a total of 32,003 contractual merchants were recorded, of which 2,103 offer the possibility of payment by payment cards through the Internet at their point of sale. Of the total number of contractual merchants (32,003), 29,102 offer the possibility of payment by payment cards only through EFTPOS terminals. Furthermore, 798 contractual merchants offer the possibility of payment by payment cards through the Internet, i.e. without the possibility of purchase through the physical EFTPOS terminal. The above number of contractual merchants is shown independently of the number of acquiring locations the merchant is using. A retail chain is thus recorded as a contractual merchant, regardless of the number of points of sale and accepting devices for payment cards that are used.

Of the total of the above 32,003 contractual merchants 14,506 or 45% of them have the service of acquiring contracted with only one payment service provider – acquirer, 8,698 (27%) of them have the service of acquiring contracted with two acquirers, and 7,246 (23%) with three acquirers.

Table 11 Number and value of transactions of the acquiring of payment cards by accepting device for payment cards

Payment service provider – acquirer	ATM	EFTPOS terminal	Internet	EFTPOS terminal for withdrawal and deposit	Other	Total
Number of transactions						
Credit institutions	114,785,430	105,253,655	265,677	3,049,059	–	223,353,821
Electronic money institutions	1,044,896	188,940,128	5,879,816	115,372	25,092	196,005,304
Total	115,830,326	294,193,783	6,145,493	3,164,431	25,092	419,359,125
Value of transactions, in HRK						
Credit institutions	91,478,379,966	24,187,179,472	189,253,521	4,987,626,443	–	120,842,439,402
Electronic money institutions	1,203,086,950	41,405,022,005	1,972,716,942	301,567,615	91,896,824	44,974,290,336
Total	92,681,466,916	65,592,201,477	2,161,970,463	5,289,194,058	91,896,824	165,816,729,738

Note: Data refer to the total number and value of transactions of acquiring in 2017.

Source: CNB.

Accepting devices for payment cards through which the acquiring service is provided include the ATM, the EFTPOS terminal, the Internet and the EFTPOS terminal for withdrawal and deposit (Table 11).

Of the total number of acquiring transactions, 27.62% of transactions were acquired through ATMs, 70.15% through EFTPOS terminals, 1.47% through the Internet and 0.75% through EFTPOS terminals for withdrawal and deposit and 0.01% were other transactions.

Of the total value of acquiring transactions, 55.89% of transactions were acquired through ATMs, 39.56% through EFTPOS terminals, 1.30% through the Internet and 3.19% through EFTPOS terminals for withdrawal and deposit and 0.06% were other transactions.

In all, 115.83 million transactions, worth a total of HRK 92,681.47 million, were acquired through ATMs in 2017. Credit institutions participated in the transactions of acquiring payment cards, executed for the purpose of cash withdrawals through ATMs with a share of 99% in the number and value of transactions.

In all, 294.19 million transactions, worth a total of HRK 65,592.20 million, were acquired through EFTPOS terminals in 2017. Electronic money institutions accounted for 67% of the share in the number of transactions and 64% in the value of transactions of the total payment card acquiring executed through EFTPOS terminals.

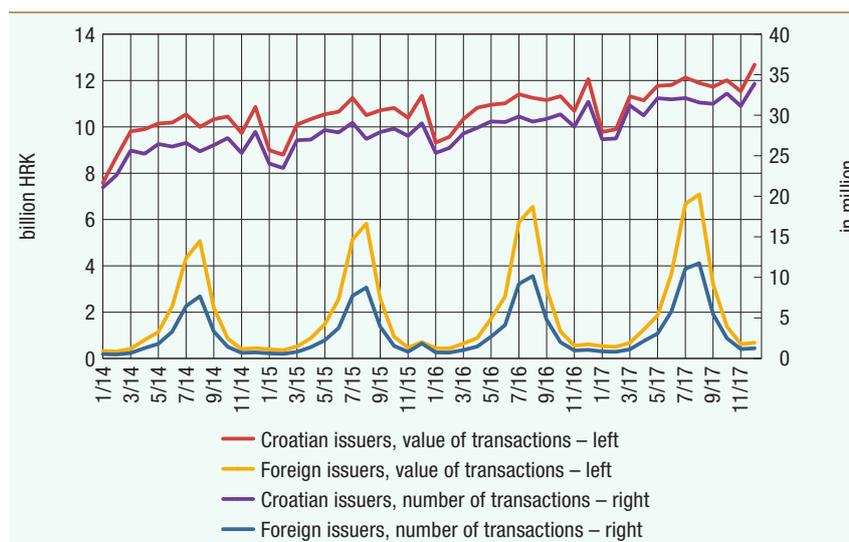
The total number of transactions of the acquiring of payment cards executed through the Internet in 2017 stood at 6.15 million with a total value of HRK 2,161.97 million. Of the total service of the acquiring of payment cards through the Internet, electronic money institutions accounted for a share of 96% in the number of transactions and 91% in the value of transactions.

The average value of a transaction of the acquiring of a payment card stood at HRK 395 in 2017.

- **through EFTPOS terminals:** HRK 223;
- **through the Internet:** HRK 352;
- **through ATMs:** HRK 800; and
- **through EFTPOS terminals for withdrawal and deposit:** HRK 1,671.

Of the total of 419.36 million transactions of the acquiring of payment cards executed in 2017, 89% refers to payment cards of Croatian issuers, and 11% to those of foreign issuers. In 2017, of the total HRK 165,816.73 million transactions of the acquiring of payment cards executed, 83% refers to payment cards of Croatian issuers, and 17% to

Figure 17 Total number and value of transactions of the acquiring of payment cards according to payment card issuer



Note: Data refer to the total number and value of transactions of acquiring of payment cards.
Source: CNB.

payment cards of foreign issuers (Figure 17). In 2017, the total number of transactions of the acquiring of payment cards of foreign issuers increased by 20.43%, and their value increased by 14.33% from 2016.

In 2017, the total number of transactions of the acquiring of payment cards of Croatian issuers increased by 7.93%, and their value increased by 5.99% from 2016.

In 2017, a total of 372.31 million transactions of the acquiring of payment cards of Croatian issuers were executed, worth a total of HRK 137,704.69 million, of which the following were acquired (Figure 18):

- **payment cards of consumers:** 354.44 million transactions, worth a total of HRK 122,294.78 million; and
- **payment cards of non-consumers (business entities):** 17.87 million transactions, worth a total of HRK 15,409.92 million.

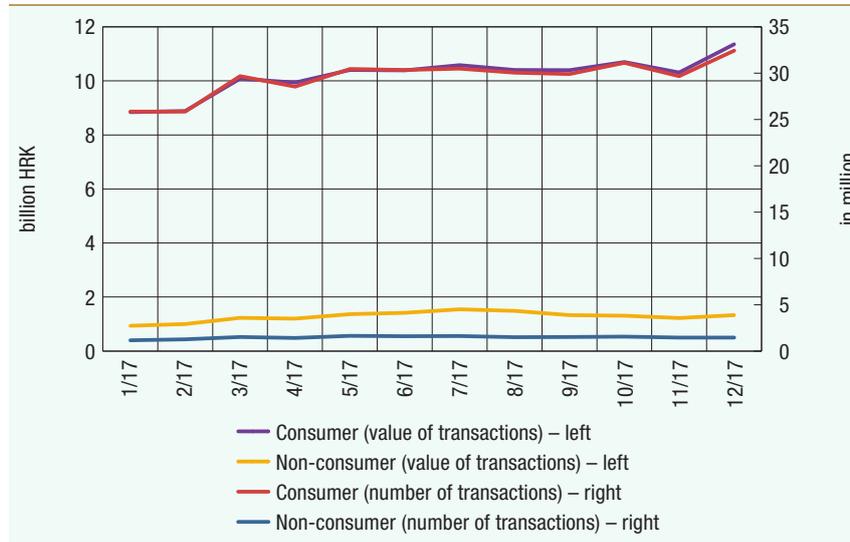
In 2017, in all 47.05 million transactions of acquiring payment cards of foreign issuers were executed, worth a total of HRK 28,112.04 million, of which the following were acquired (Figure 19):

- **payment cards of consumers:** 45.09 million transactions, worth a total of HRK 26,847.41 million; and
- **payment cards of non-consumers (business entities):** 1.96 million transactions, worth a total of HRK 1,264.63 million.

The service of acquiring of payment cards may be provided for:

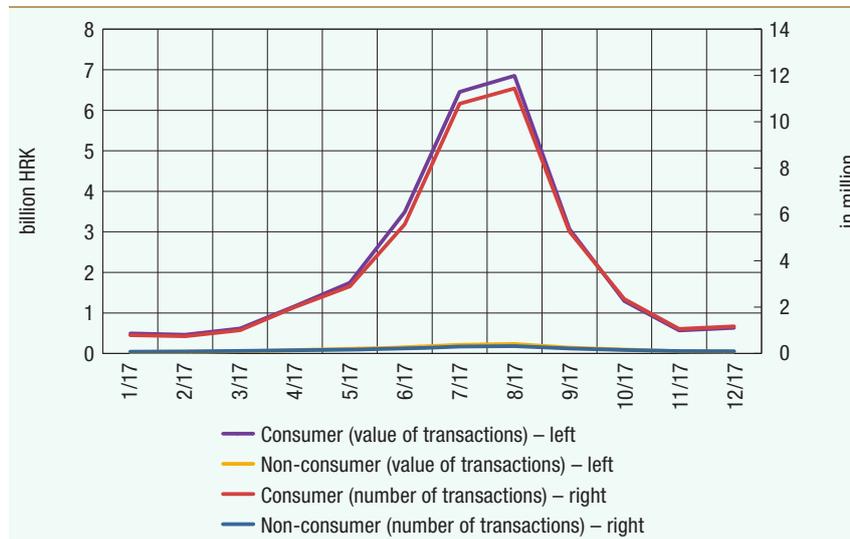
- the purchase of goods or services using a payment card;
- cash withdrawal and deposit using a payment card.

Figure 18 Total number and value of transactions of the acquiring of payment cards of Croatian issuers according to cardholder



Note: Data refer to the total number and value of transactions of acquiring of the Croatian issuers' payment cards.
Source: CNB.

Figure 19 Total number and value of transactions of acquiring of the payment cards of foreign issuers according to cardholder



Note: Data refer to the total number and value of transactions of acquiring of foreign issuers' payment cards.
Source: CNB.

Of the total number of payment card acquiring transactions, purchases of goods and services accounted for 72%, cash withdrawals accounted for 27% and cash deposits for 1%. In terms of value, a somewhat inverse ratio is seen: of the total value of payment card acquiring transactions, purchases of goods and services accounted for 40.88%, cash withdrawals accounted for 54.53% and cash deposits for 4.59%.

The term ‘purchases of goods and services’ includes the transactions of the acquiring of payment cards for the purchased goods and services executed through EFTPOS terminals, the Internet and ATMs.

In all, 301.1 million transactions of the acquiring of payment cards for the purchases of goods and services, worth a total of HRK 67,788.62 million (own cards, cards of other Croatian issuers and cards of foreign issuers) were executed in 2017. In 2017, the total number of payment card acquiring transactions for the purchases of goods and services increased by 12.46%, and their value increased by 12.49% from 2016.

‘Cash withdrawals’ covers payment card acquiring transactions of cash withdrawal executed through an ATM, EFTPOS terminal and EFTPOS terminal for withdrawal and deposit. In 2017, the total number of payment card acquiring transactions of cash withdrawal came to 114.74 million, with a total value of HRK 90,420.89 million, an increase of 1.58% in the number of transactions and 3.91% in the value of transactions from 2016.

‘Cash deposits’ covers payment card acquiring transactions of cash deposits executed through an ATM and EFTPOS terminal for withdrawal and deposit.

In 2017, the total number of payment card acquiring transactions of cash deposits came to 3.52 million, with a total value of HRK 7,607.22 million, an increase of 5.87% in the number of transactions and 15.40% in the value of transactions from 2016.

5.1.1 Acquiring of payment cards issued in the RC

This chapter shows statistical data on the number and value of the transactions of acquiring of payment cards of Croatian issuers.

The acquiring of payment cards of Croatian issuers is divided into the acquiring of payment cards the acquirer itself has issued (hereinafter referred to as ‘own cards’) and the acquiring of payment cards of other Croatian issuers (hereinafter referred to as ‘other Croatian issuers’).

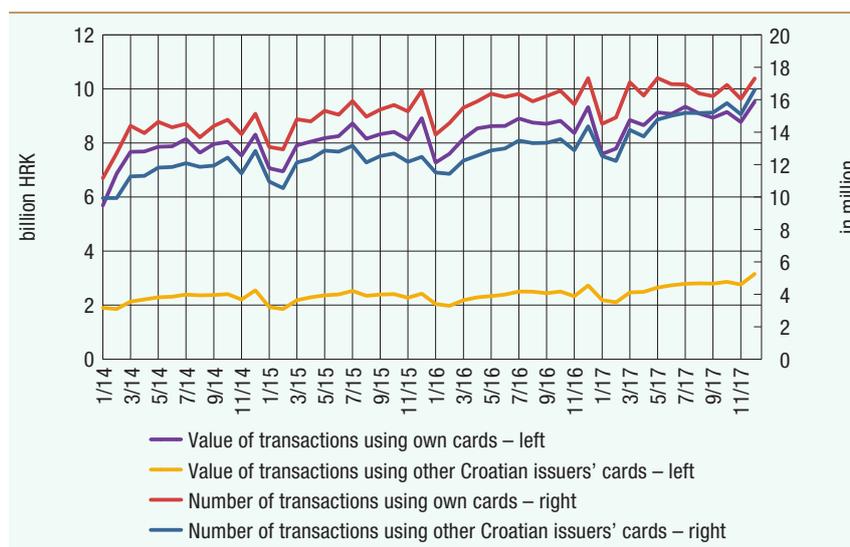
In 2017, a total of 372.31 million transactions of acquiring payment cards of Croatian issuers were executed, worth a total of HRK 137,704,69 million, of which the following were acquired (Figure 20):

- **own cards:** 196.84 million transactions, worth a total of HRK 105,903.27 million; and

- **cards of other Croatian issuers:** 175.47 million transactions, worth a total of HRK 31,801.42 million.

In 2017, the total number of transactions of acquiring payment cards of Croatian issuers increased by 7.9%, and the total value increased by 6% from 2016.

Figure 20 Number and value of transactions of the acquiring of payment cards issued in the RC



Note: Data refer to the total number and value of transactions of acquiring during each reporting month.

Source: CNB.

Figure 20 shows the total number and value of transactions of the acquiring of payment cards by issuer at a monthly level in 2014, 2015, 2016 and 2017. It is evident that acquirers most frequently acquired their own cards, i.e. the cards they have issued themselves. Of the total number of transactions of acquiring of Croatian issuers' payment cards, 28.44% of transactions were acquired through ATMs, 69.32% through EFTPOS terminals, 1.42% through the Internet, 0.82% through EFTPOS terminals for withdrawal and deposit and 0.01% through other means. If total values of transactions of acquiring of Croatian issuers' payment cards are observed, 58.99% of transactions were acquired through ATMs, 36.20% through EFTPOS terminals, 1.1% through the Internet, 3.64% through EFTPOS terminals for withdrawal and deposit and 0.07% through other means.

In 2017, the average value of a transaction of the acquiring of Croatian issuers' payment cards stood at:

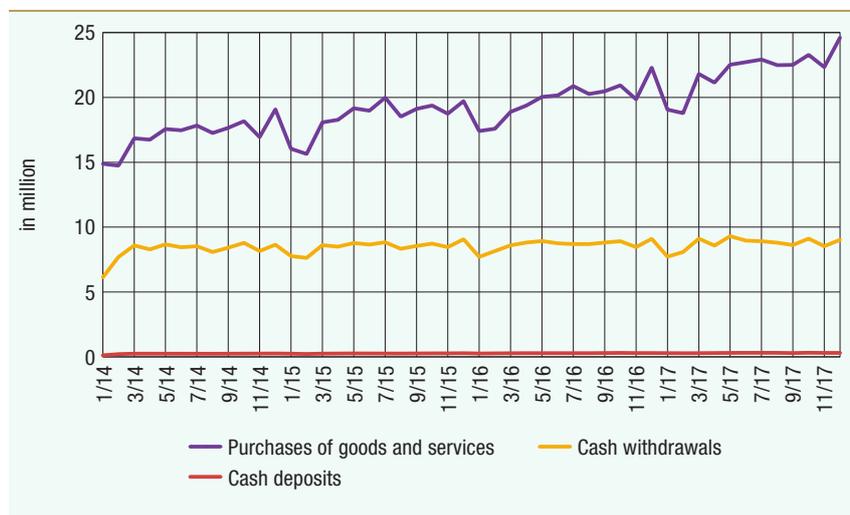
- **through EFTPOS terminals:** HRK 193;
- **through the Internet:** HRK 287;
- **through ATMs:** HRK 767;

- through EFTPOS terminals for withdrawal and deposit: HRK 1,650; and
- through other means: HRK 3,662.

In 2017, the average number of transactions of acquiring of payment cards issued in the RC stood at 31.03 million a month, and the average value of transactions was HRK 11,475.39 million a month.

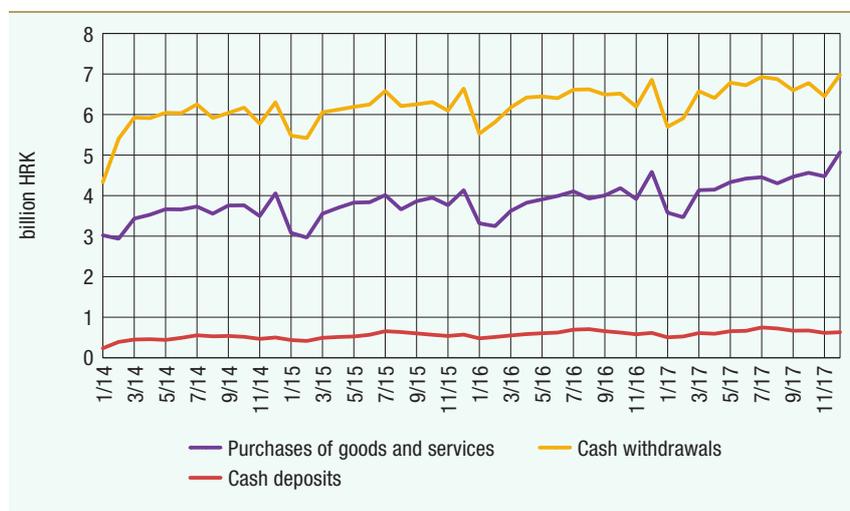
From a review of the transactions of acquiring of payment cards according to type of transaction, cash withdrawals were the most represented, accounting in the total value of acquiring transactions for 57.15%, followed by the purchases of goods and services with 37.33%, and cash deposit with 5.52% (Figures 21 and 22).

Figure 21 Number of transactions of the acquiring of payment cards issued in the RC by type of transaction



Note: Data refer to the total number of transactions of acquiring during each reporting month. Source: CNB.

Figure 22 Value of transactions of the acquiring of payment cards issued in the RC by type of transaction



Note: Data refer to the total value of transactions of acquiring during each reporting month. Source: CNB.

Purchases of goods and services

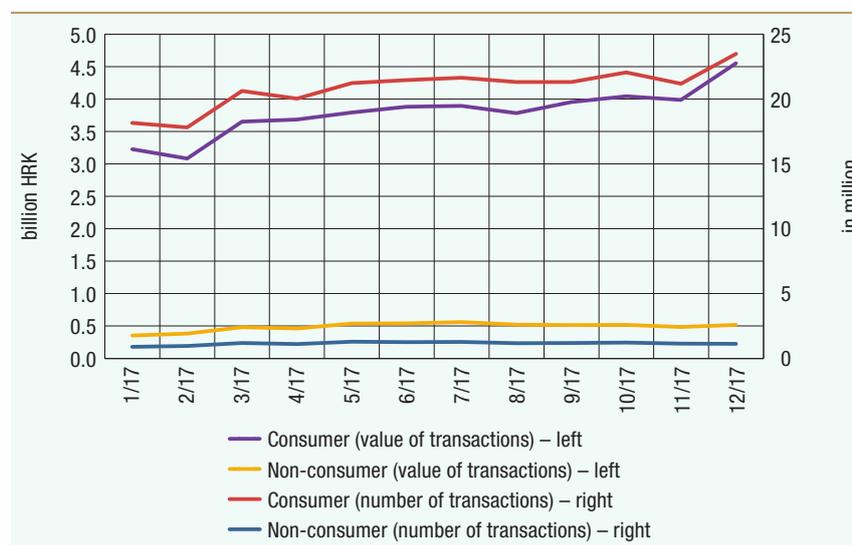
The term ‘purchases of goods and services’ includes the transactions of the acquiring of payment cards for the purchased goods and services executed through EFTPOS terminals, the Internet and ATMs.

In 2017, 264.1 million transactions of acquiring of payment cards of Croatian issuers for the purchases of goods and services were recorded, worth a total of HRK 51,403.78 million, executed by payment cards issued in the RC.

Of the total transactions of acquiring of payment cards for the purchases of goods and services, executed using payment cards of Croatian issuers:

- **through EFTPOS terminals:** 258.02 million transactions (97.70%) were acquired, worth a total of HRK 49,837.78 million (96.95%);
- **through the Internet:** 5.28 million transactions (2%) were acquired, worth a total of HRK 1,516.59 million (2.95%); and
- **through ATMs:** 0.80 million transactions (0.30%) were acquired, worth a total of HRK 49.39 million (0.10%) (most frequently purchase of phone vouchers, plane tickets, etc.).

Figure 23 Total number and value of acquiring transactions for the purchases of goods and services



Note: Data refer to the total number and value of transactions of acquiring of Croatian issuers' payment cards for the purchases of goods and services.
Source: CNB.

The average value of transactions of acquiring of payment cards for the purchases of goods and services, executed using payment cards of Croatian issuers in 2017 stood at:

- **through EFTPOS terminals:** HRK 193;

- **through the Internet:** HRK 287; and
- **through ATMs:** HRK 61.

Of the total transactions of acquiring of payment cards for the purchases of goods and services, executed using payment cards of Croatian issuers (Figure 23):

- **consumers:** 250.27 million transactions (94.8%) were acquired, worth a total of HRK 45,531.48 million (88.6%); and
- **non-consumers:** 13.83 million transactions (5.2%) were acquired, worth a total of HRK 5,872.29 million (11.4%).

Cash withdrawals

‘Cash withdrawals’ covers payment card acquiring transactions of cash withdrawals executed through ATMs, EFTPOS terminals and EFTPOS terminals for withdrawal and deposit using a payment card and other means (over the counter, certain applications, etc.).

In all, 104.68 million transactions of acquiring of payment cards of Croatian issuers for cash withdrawals, worth a total of HRK 78,693.68 million, were executed in 2017.

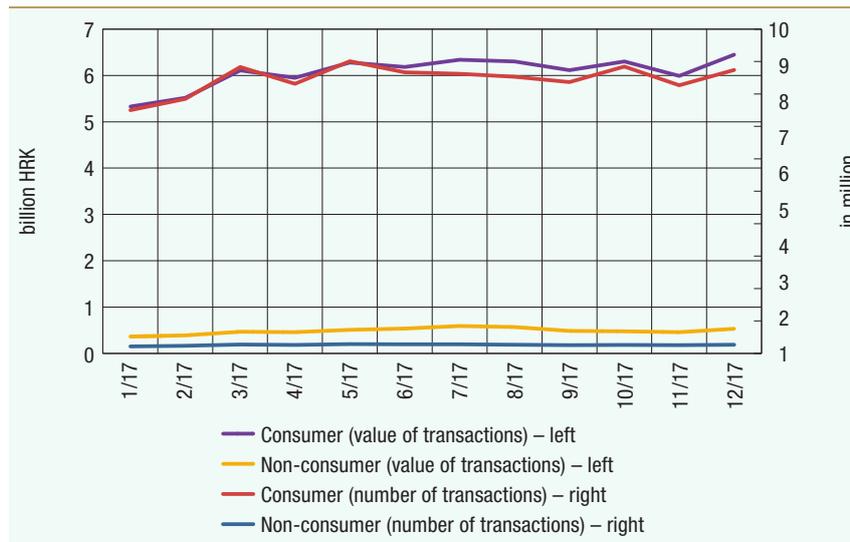
Of all the transactions of acquiring of payment cards for cash withdrawals executed using payment cards issued in the RC:

- **through ATMs:** 101.88 million transactions (97.33%) were acquired, worth a total of HRK 74,866.12 million (95.14%);
- **through EFTPOS terminals for withdrawal and deposit:** 2.72 million transactions (2.59%) were acquired, worth a total of HRK 3,721.83 million (4.73%);
- **through EFTPOS terminals:** 0.05 million transactions (0.05%) were acquired, worth a total of HRK 13.83 million (0.02%); and
- **through other means:** 0.02 million transactions (0.02%) were acquired, worth a total of HRK 91.89 million (0.12%).

The average value of transactions of acquiring of payment cards for cash withdrawals executed using payment cards issued in the RC in 2017 stood at:

- **through ATMs:** HRK 735;
- **through EFTPOS terminals for withdrawal and deposit:** HRK 1,370;
- **through EFTPOS terminals:** HRK 254; and
- **other:** HRK 3,662.

Figure 24 Total number and value of acquiring transactions for cash withdrawals



Note: Data refer to the total number and value of transactions of acquiring of Croatian issuers' payment cards for cash withdrawals.
Source: CNB.

Of all the transactions of acquiring of payment cards of Croatian issuers for cash withdrawals executed using payment cards of (Figure 24):

- **consumers:** 101.54 million transactions (97%) were acquired, worth a total of HRK 72,852.53 million (92.6%); and
- **non-consumers:** 3.14 million transactions (3%) were acquired, worth a total of HRK 5,841.15 million (7.4%).

Cash deposits

'Cash deposits' covers payment card acquiring transactions of cash deposits executed through ATMs and EFTPOS terminals for withdrawal and deposit.

A total of 3.52 million transactions of acquiring of payment cards of Croatian issuers for cash deposits, worth a total of HRK 7,607.22 million, were recorded in 2017.

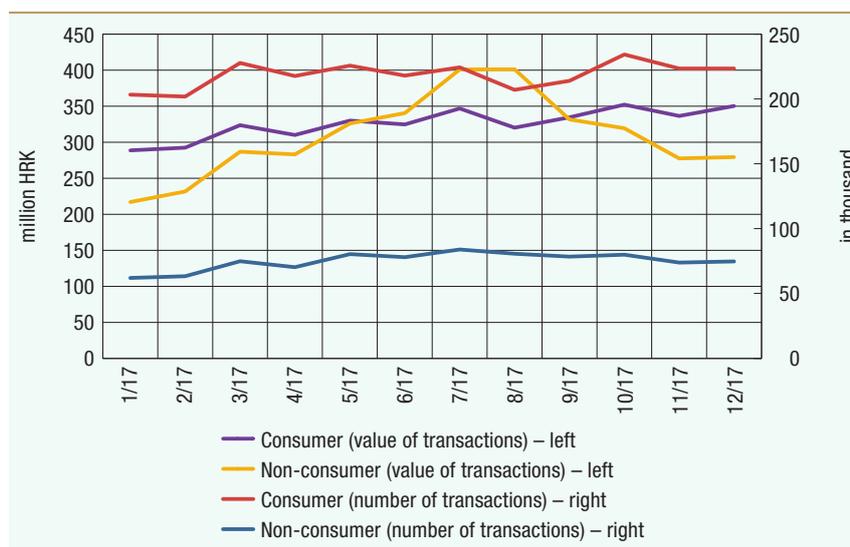
Of all the transactions of acquiring of payment cards for cash deposits executed using payment cards issued in the RC:

- **through ATMs:** 3.2 million transactions (90.78%) were acquired, worth a total of HRK 6,312.37 million (82.98%); and
- **through EFTPOS terminals for withdrawal and deposit:** 0.32 million transactions (9.22%) were acquired, worth a total of HRK 1,294.85 million (17.02%).

The average value of transactions of acquiring of payment cards for cash deposits executed using payment cards issued in the RC in 2017 stood at:

- **through ATMs:** HRK 1,974; and
- **through EFTPOS terminals for withdrawal and deposit:** HRK 3,987.

Figure 25 Total number and value of acquiring transactions for cash deposits



Note: Data refer to the total number and value of transactions of the acquiring of Croatian issuers' payment cards for cash deposits.

Source: CNB.

Of all the transactions of acquiring of payment cards for cash deposits, executed using payment cards of Croatian issuers (Figure 25):

- **consumers:** 2.62 million transactions (74.4%) were acquired, worth a total of HRK 3,910.76 million (51.4%); and
- **non-consumers:** 0.90 million transactions (25.6%) were acquired, worth a total of HRK 3,696.46 million (48.6%).

5.1.2 Acquiring of payment cards issued abroad

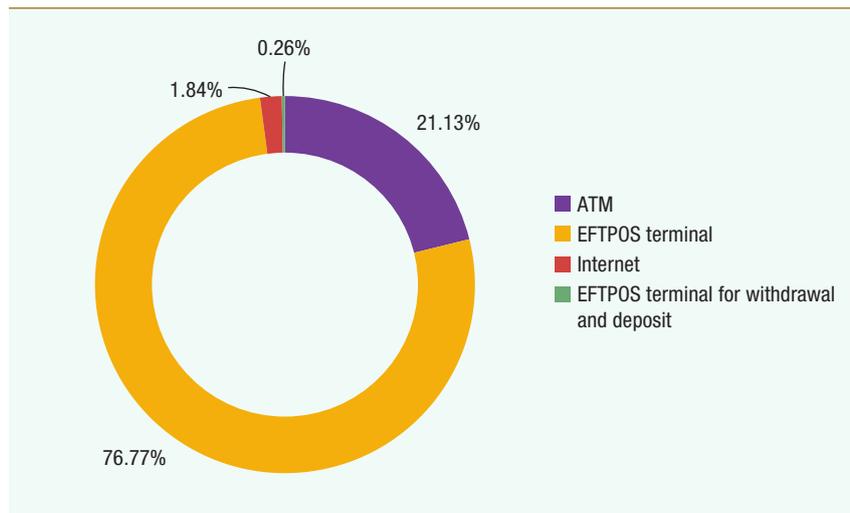
This chapter shows statistical data on the number and value of the transactions of acquiring of payment cards issued outside the RC, i.e. of foreign issuers.

In 2017, 47.05 million transactions of acquiring of payment cards of foreign issuers, worth a total of HRK 28,112.03 million, were executed using payment cards of foreign issuers. In 2017, the total number of acquiring of payment cards of foreign issuers increased by 20.43%, and their value increased by 14.33% from 2016.

In the first three months of 2017, the value of acquiring transactions related to payment cards of foreign issuers on average stood at HRK 569.42 million. An upward trend was noticeable until August, when it reached the level of HRK 7,086.54 million, starting to decline in September. In December 2017, the value of the transactions of acquiring of payment cards of foreign issuers stood at HRK 681.55 million.

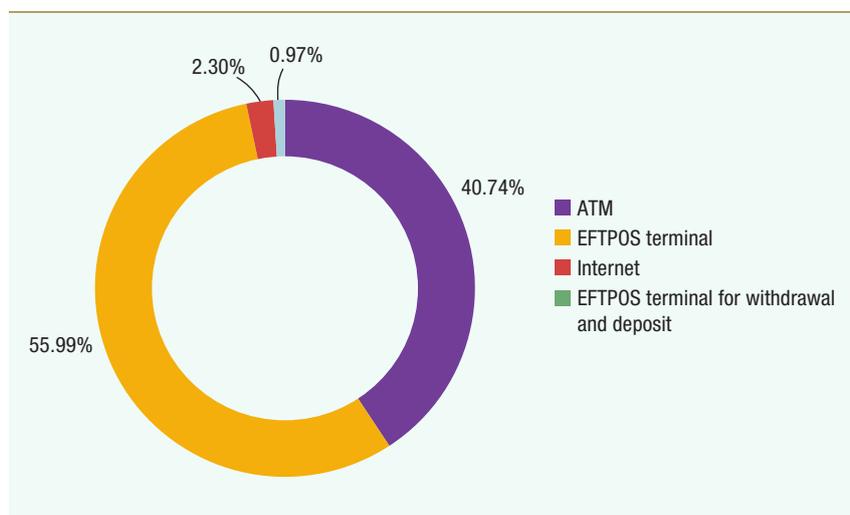
Also, from an overview of the value of acquiring transactions it is evident that the holders of payment cards issued abroad used both ATMs and EFTPOS terminals equally, with the remark that three times as many

Figure 26 Number of transactions of the acquiring of payment cards of foreign issuers by accepting devices for payment cards



Note: Data refer to the total number of transactions of the acquiring of payment cards of foreign issuers in 2017.
Source: CNB.

Figure 27 Value of transactions of acquiring payment cards of foreign issuers by accepting devices for payment cards in HRK



Note: Data refer to the total value of transactions of the acquiring of payment cards of foreign issuers in 2017.
Source: CNB.

acquiring transactions were executed through EFTPOS terminals than through ATMs (Figures 26 and 27).

Of all transactions of the acquiring of payment cards of foreign issuers in 2017:

- **through ATMs:** 9.94 million transactions were acquired, worth a total of HRK 11,453.58 million;
- **through EFTPOS terminals:** 36.12 million transactions were acquired, worth a total of HRK 15,740.57 million;
- **through the Internet:** 0.86 million transactions were acquired, worth a total of HRK 645.37 million;
- **through EFTPOS terminals for withdrawal and deposit:** 0.12 million transactions were acquired, worth a total of HRK 272.51 million.

In 2017, relative to 2016, the acquiring of payment cards of foreign issuers recorded the largest growth in transactions executed through the Internet, i.e. in the number of transactions by 38.7% and in the value by 42.5%.

The average value of transactions of the acquiring of payment cards of foreign issuers stood at:

- **through EFTPOS terminals:** HRK 435;
- **through the Internet:** HRK 746;
- **through ATMs:** HRK 1,152; and
- **through EFTPOS terminals for withdrawal and deposit:** HRK 2,212.

In 2017, 36.99 million (79%) transactions of acquiring of payment cards of foreign issuers for the purchases of goods and services were recorded, worth a total of HRK 16,384.82 million (58%), and 10.06 million (21%) transactions of acquiring of payment cards for cash withdrawals, worth a total of HRK 11,727.21 million (42%).

In 2017, acquiring transactions executed with the use of payment cards of foreign issuers were recorded in a total of 186 countries. The acquiring of payment cards issued in the six most represented countries (Germany, Austria, Italy, the United Kingdom, Slovenia and the United States), accounted for 42.5% in the total number of transactions of the acquiring of payment cards of foreign issuers and for 53.5% in the total value of transactions of the acquiring of payment cards of foreign issuers.

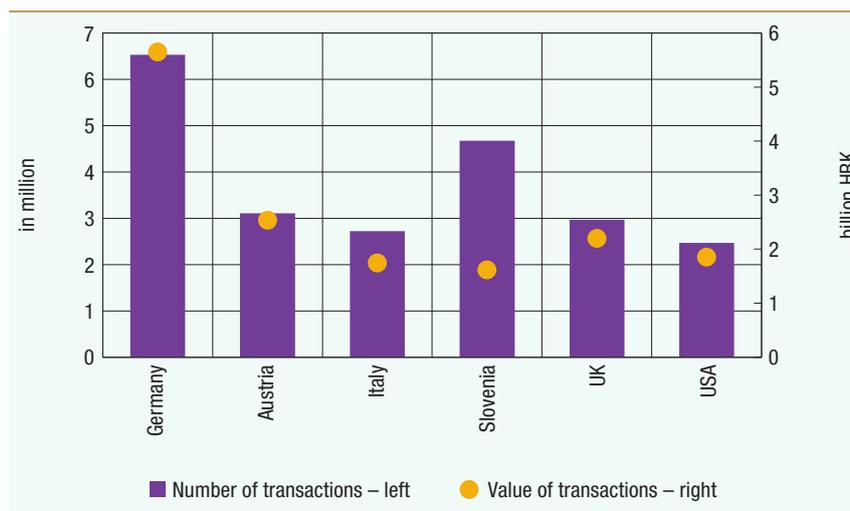
As can be seen, only one of the six countries mentioned is a non-EU country, i.e. the United States. In 2017, the total number of acquiring transactions executed using payment cards issued in the United States, stood at 2.47 million, worth a total of HRK 1,853.1 million. In 2017, of

Table 12 Number and value of transactions of the acquiring of payment cards of foreign issuers by accepting devices for payment cards and cardholders

User	Payment transaction	ATM	EFTPOS terminal	Internet	EFTPOS terminal for withdrawal and deposit	Total
Consumer	Number of transactions	Purchases of goods and services	11,535	34,309,583	819,199	35,140,317
		Cash withdrawals	9,827,656	3,885	119,673	9,951,214
	Value of transactions	Purchases of goods and services	927,693	14,709,848,812	572,198,453	15,282,974,958
		Cash withdrawals	11,301,384,669	2,052,950	260,998,166	11,564,435,785
Non-consumer	Number of transactions	Purchases of goods and services	266	1,807,364	45,246	1,852,876
		Cash withdrawals	101,728	55	3,512	105,295
	Value of transactions	Purchases of goods and services	29,883	1,028,641,225	73,174,623	1,101,845,731
		Cash withdrawals	151,239,300	29,500	11,510,036	162,778,836
Total number of transactions	Purchases of goods and services	11,801	36,116,947	864,445	0	36,993,193
	Cash withdrawals	9,929,384	3,940	0	123,185	10,056,509
	Total	11,473,463,915	15,812,814,261	647,101,966	272,754,572	47,049,702
Total value of transactions	Purchases of goods and services	957,576	15,738,490,037	645,373,076	0	16,384,820,689
	Cash withdrawals	11,452,623,969	2,082,450	0	272,508,202	11,727,214,621
	Total	11,453,581,545	15,740,572,487	645,373,076	272,508,202	28,112,035,310

Note: Data refer to the total number and value of transactions of the acquiring of payment cards of foreign issuers in 2017.
Source: CNB.

Figure 28 Number and value of transactions of the acquiring of payment cards of foreign issuers by the country of issuer – the six most represented countries



Note: Data refer to the total number and value of the acquiring of payment cards of foreign issuers in the RC.
Source: CNB.

the six countries, the largest value of transactions of the acquiring of payment cards was executed by payment cards issued in Germany, standing at HRK 5,649.77 million. In consequence, the largest average value by card transaction in the amount of HRK 865 was generated using German issuers' cards, and the smallest using Slovenian issuers' cards (Figure 28).

5.2 Comparison of the use of payment cards and of cash

It can be seen from the data shown that the obligors of fiscalisation¹⁰ issued a total of 2,345.13 million invoices in 2017, worth a total of HRK 170,474.70 million. In addition, of the total number of issued invoices, 86.1% of them were paid in cash, 12.5% by payment cards and 1.4% by other means (through transaction accounts, cheques, etc.). Of the total value of issued invoices, 56.1% refers to cash payments, 37.2% to payment by payment cards and 6.7% to payment by other means.

In 2017, the total number and value of issued invoices increased by 0.33% and 7.43% from 2016 respectively.

Figures 29 and 30 give a comparative presentation of the number and value of issued invoices paid in cash in the RC and the number and value of card-based payment transactions of the purchase of

Figure 29 Comparison of use of different payment instruments – number

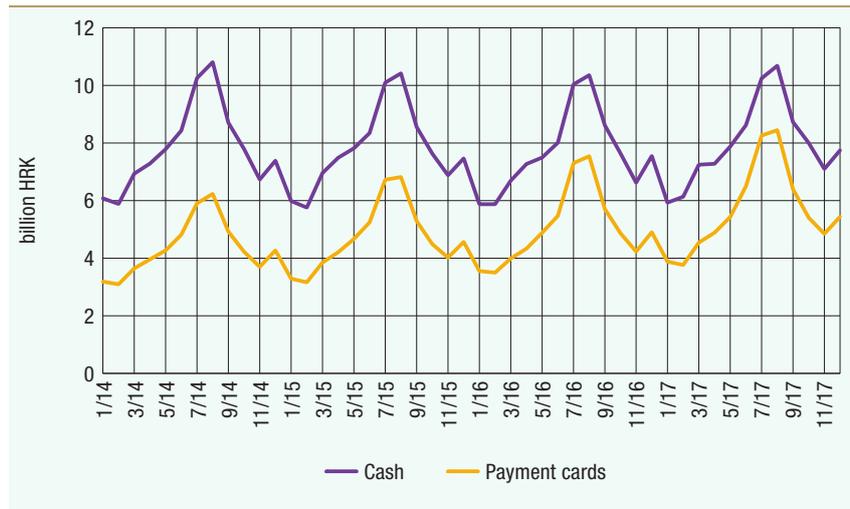


Notes: Data refer to the total number during a single reporting period. Data for cash refer to the total number of issued invoices paid in cash. Data for payment cards refer to the total number of card-based payment transactions of the purchase of goods or services using Croatian and foreign cards.

Sources: Ministry of Finance of the RC – Tax Administration and CNB.

¹⁰ According to the data of the Ministry of Finance of the RC – Tax Administration, collected based on the Cash Transaction Fiscalisation Act (Official Gazette 133/2012).

Figure 30 Comparison of use of different payment instruments – value in HRK



Notes: Data refer to the total value during a single reporting period. Data for cash refer to the total value of issued invoices paid in cash in HRK. Data for payment cards refer to the total value of card-based payment transactions of the purchase of goods or services using Croatian and foreign cards.

Sources: Ministry of Finance of the RC – Tax Administration and CNB.

goods or services executed using the payment cards of Croatian and foreign issuers. The presentation shows that cash is also considerably more represented than payment cards in the number and value of transactions in 2017. However, in 2017, relative to 2016, the number of issued invoices paid in cash declined by 1.31%, while the value of issued invoices paid in cash fell by 3.87%. In addition, in 2017, relative to 2016, the value and number of card-based payment transactions of the purchase of goods or services executed using the payment cards of Croatian and foreign issuers increased by 12.48% and 12.45% respectively.

The average value of a cash payment transaction in 2017 stood at HRK 47, and the average value of a national card-based payment transaction stood at HRK 225.

6 Glossary

- **‘Charge card’** means a payment card in which at the moment a payment transaction is initiated, coverage in the payment account is not ensured, payment transactions most often being executed up to an approved credit line (limit). The user settles the expenses incurred by using a card with a charge function within a specified time interval in full at the end of a specified period, most frequently by a credit transfer.
- **‘Card payment scheme’** means a set of functions, procedures, rules and devices enabling the holder of a payment card to effect a payment and/or cash withdrawal transaction with a payment service provider.
- **‘Card-based payment transaction’** means a service based on a payment card’s acquiring infrastructure and card scheme business rules to make a payment transaction by means of a debit or a credit card.
- **‘Credit card’** means a payment card in which coverage on the payment account is not ensured, the user being approved a credit line (a limit) for the execution of the payment transaction. The payment card user can execute payments up to the amount of the approved credit line (the limit). The amount of each transaction executed with the use of a payment card with a credit function within a specified time interval is automatically divided into the agreed number of repayment instalments according to the agreed model.
- **‘Debit card’** means a payment card issued to payment account holders. The expenses incurred by this card are charged by debiting the payment account, most frequently immediately.
- **‘Delayed debit card’** means the payment card that is most frequently issued to payment account holders. At the moment a payment transaction is initiated, the coverage on the payment account is not ensured, and payment transactions can most often be executed up to an authorised limit. The total expenses incurred with the use of a payment card with a delayed debit function within a specified time interval are settled in full at the end of the specified time interval with the service of direct debit from the payment account.
- **‘International payment transaction’** means a payment transaction the execution of which involves two payment service providers one of which (of either the payer or the payee) operates in the RC, while the other payment service provider (of either the payer or the payee) operates pursuant to the regulations of a third country or another member state.

- **‘Member state’** means a contracting party to the Agreement on the European Economic Area.
- **‘National payment transaction’** means a payment transaction the execution of which involves a payer’s payment service provider and a payee’s payment service provider, or only one payment service provider, operating in the RC.
- **‘Payment card’** means a payment instrument enabling its holder to make payments for goods and services either through an accepting device for payment cards or remotely, and/or to withdraw cash and/or use other services at an ATM or another self-service device.
- **‘Payment instrument’** means any personalised device and/or set of procedures agreed between a payment service user and a payment service provider and used by the payment service user in order to initiate a payment order.
- **‘Payment service provider’** means the institution defined by Article 5 of the PSA.
- **‘Payment service provider – acquirer’** means the institution that ensures the acquiring of the payment card.
- **‘Payment service provider – issuer’** means the institution that has issued the payment card.
- **‘Revolving card’** means a payment card in which at the moment a payment transaction is initiated the coverage on the payment account is not ensured, and the user is most often granted a revolving credit line (limit) for the execution of the payment transaction. The user pays the amount of expenses incurred by using the card with a revolving function within a specified time interval partially in a determined percentage of the specific spending.
- **‘Third country’** means any foreign country that is not a member state.

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