

**Croatian National Bank**  
**Payment Operations Area**  
**Payment Operations Supervision Department**

## **PAYMENT STATISTICS**

# **REPORT ON CASHLESS PAYMENT TRANSACTIONS IN THE REPUBLIC OF CROATIA FOR 2016**

June 2017

## OVERVIEW OF BASIC DEFINITIONS

'**Direct debit**' means a payment service for debiting a payer's payment account, where a payment transaction is initiated by a payee on the basis of the payer's consent given to the payer's own payment service provider, to the payee, or to the payee's 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 transfer**' means a payment service for crediting a payee's payment account with a payment transaction or a series of payment transactions debiting a payer's payment account by the payment service provider which holds the payer's payment account, based on an instruction given by the payer.

'**International payment transaction**' means a payment transaction the execution of which involves two payment service providers of which one payment service provider operates in the Republic of Croatia, and the other payment service provider operates outside the Republic of Croatia.

'**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, which operate in the Republic of Croatia.

'**Debits from the accounts by simple book entry**' means a transaction initiated and executed by a credit institution, by a transfer from the payment account of its payment service user on the basis of a contract with the user, without a specific payment order (interests, fees for individual payment services, such as, for example, account management fee).

'**Standing order**' means an instruction issued by the payer to a payment service provider, which holds the payer's payment account, for the execution of credit transfers at regular intervals or on dates set in advance (e.g. the payment of the annuity or credit instalment, etc.).

'**Bill-paying service**' means a payment transaction in which a credit institution, on the basis of a contract with the payee, collects funds from the payer and makes the collected amount available to the payee within time cycles determined by a contract (e.g. electricity, water, gas and other bills), pursuant to the provisions of the Payment System Act, which defines the deadlines for the execution of payments.

## Introduction

Cashless payment transactions recorded a significant increase in almost all EU member states over the past few years. In the Republic of Croatia (hereinafter referred to as 'RC'), the increase particularly referred to the number of national card-based payment transactions which, according to Croatian National Bank data, almost doubled in the period from 2006 to 2016. An average Croatian citizen has at least two payment cards in his/her wallet, which places the RC on the very top of the European Union. At the same time, almost 30% of consumers and 47% of business entities in the RC have contracted internet banking service, the service that allows its users the initiation of electronic payment orders 24 hours a day at lower fees relative to the fees for the initiation of paper-based payment orders. For this reason, the data on the average annual increase in the total number of credit transfer transactions by 5% in the period from 2006 to 2016 comes as no surprise. The increase in the total number of national cashless payment transactions is also attributable to the services such as mobile banking, from which a lot is expected in the future.

If the structure of the number of national cashless payment transactions in the RC is analysed at the level of 2016, it can be concluded that credit transfer transactions account for the largest share (40%) of the total number of national cashless payment transactions. They are followed by card-based transactions, with a share of 33% and transactions of debits from the accounts by simple book entry, with a share of 20%. Bill-paying service transactions and direct debit services account for shares slightly above 3%, while cheque transactions ranked the lowest, with a negligible share of 0.001%.

At the same time, payment card-based transactions accounted for 85%, or the largest share, of the number of international cashless payment transactions, followed by transactions executed using the credit transfer service with a total share of 15%.

By contrast, transactions executed using the credit transfer service account for a very dominant share of the total value of cashless payment transactions. Transactions executed using the credit transfer service accounted for over 96% of the total value of all executed national and international cashless payment transactions in 2016.

Such a high share of credit transfers in the total value of all cashless payment transactions is the result of the fact that it is precisely credit transfers that are most frequently used in larger-value transactions. Thus, credit transfers are the usual manner for the execution of payments between corporations, corporations and banks, payments between natural persons, the payment of wages, salaries and pensions, etc. This is also evident from the

average value of an individual credit transfer transaction<sup>1</sup>, which is much higher than, for example, the average value of a card transaction<sup>2</sup>, which is primarily used for the purchase of goods and services in retail.

Table 1 shows the total number and value of executed cashless payment transactions in the RC in 2016. The data shown in the Report have been collected based on the Decision on the obligation to submit data on the payment system and electronic money (hereinafter referred to as 'Decision'). 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, manner and deadlines of the reporting.

The payment service providers, whose data were used in the preparation of the Report include:

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

The Report is divided into national (item **A** of the Report) and international payment transactions (item **B** of the Report).

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<sup>1</sup> The average value of one national credit transfer stood at HRK 6,265.

<sup>2</sup> The average value of one national transaction using payment cards issued in the RC stood at HRK 194.

**Table 1 Report on cashless payment transactions in the Republic of Croatia in 2016**

Executed payment transactions (1)	Number of transactions	%	Value of transactions in kuna	%
<b>A) NATIONAL PAYMENT TRANSACTIONS</b>				
<b>1 Sent credit transfers (2)</b>	<b>297,884,088</b>	<b>39.65%</b>	<b>1,795,673,296,922</b>	<b>96.02%</b>
1.1 Credit transfers	277,234,713	93.07%	1,736,785,606,080	96.72%
1.2 Standing orders	20,649,375	6.93%	58,887,690,843	3.28%
<b>2 Bill-paying service</b>	<b>26,438,070</b>	<b>3.52%</b>	<b>5,822,302,225</b>	<b>0.31%</b>
<b>3 Direct debits</b>	<b>24,553,159</b>	<b>3.27%</b>	<b>16,699,330,099</b>	<b>0.89%</b>
<b>4 Debits from the accounts by simple book entry (3)</b>	<b>151,404,125</b>	<b>20.15%</b>	<b>3,323,989,991</b>	<b>0.18%</b>
<b>5 Transactions using payment cards issued in the RC (4)</b>	<b>251,063,018</b>	<b>33.41%</b>	<b>48,540,908,818</b>	<b>2.60%</b>
5.1 Debit payment cards	165,442,546	65.90%	27,823,948,160	57.32%
5.2 Credit payment cards	85,620,472	34.10%	20,716,960,658	42.68%
<b>6 Transactions using cheques issued in the RC (5)</b>	<b>11,059</b>	<b>0.001%</b>	<b>5,325,537</b>	<b>0.0003%</b>
<b>TOTAL NATIONAL PAYMENT TRANSACTIONS (1 – 6)</b>	<b>751,353,499</b>	<b>100%</b>	<b>1,870,065,153,591</b>	<b>100%</b>
<b>B) INTERNATIONAL PAYMENT TRANSACTIONS</b>				
<b>7 Sent credit transfers (6)</b>	<b>3,323,803</b>	<b>5.82%</b>	<b>213,098,491,508</b>	<b>47.77%</b>
<b>8 Received credit transfers (7)</b>	<b>5,207,524</b>	<b>9.11%</b>	<b>212,391,839,018</b>	<b>47.61%</b>
<b>9 Transactions using payment cards issued in the RC (8)</b>	<b>18,925,669</b>	<b>33.13%</b>	<b>6,970,709,381</b>	<b>1.56%</b>
<b>10 Transactions of acquiring payment cards issued outside the RC (9)</b>	<b>29,676,313</b>	<b>51.94%</b>	<b>13,640,858,618</b>	<b>3.06%</b>
<b>TOTAL INTERNATIONAL PAYMENT TRANSACTIONS (7 – 10)</b>	<b>57,133,309</b>	<b>100.00%</b>	<b>446,101,898,525</b>	<b>100.00%</b>
<b>TOTAL (A+B)</b>	<b>808,486,808</b>		<b>2,316,167,052,116</b>	

(1) Executed payment transactions include executed cashless payment transactions in all currencies, converted in kuna at CNB's midpoint exchange rate on the last day of each month.

(2) Sent credit transfers include all national credit transfers executed by debiting the payment accounts of consumers, business entities and credit institutions.

(3) Debits from the accounts by simple book entry include debits from the accounts by simple book entry on the accounts of consumers and business entities (interests and fees for individual payment services, e.g. account management fee). The transactions of debits from the accounts by simple book entry do not include the transactions of the transfer of the amount of the instalment/annuity of a credit from the payment account of a payment service user to the account of the credit institution if such a transfer is agreed under a credit agreement.

(4) Transactions using payment cards issued in the RC include only national card-based payment transactions for the purchase of goods and services and contractual debits (including the transactions of the purchase of goods and services through repayment in instalments and consumer credits). The transactions of withdrawal and depositing of cash using a payment card, as well as the transactions of fees, interests, membership fees, etc. collected by the issuer through the payment card, are not included.

(5) Transactions using cheques issued in the RC include only the transactions of purchase using the cheque.

(6) Sent credit transfers include all international credit transfers executed by debiting the payment accounts of consumers, business entities and credit institutions.

(7) Received credit transfers include all international credit transfers crediting the payment accounts of consumers, business entities and credit institutions.

(8) Transactions using payment cards issued in the RC include all types of international payment transactions using cards issued in the RC, i.e. the transactions of the purchase of goods and services and the transactions of cash withdrawal using a payment card.

(9) Transactions of acquiring payment cards issued outside the RC include the transactions of acquiring payment cards issued outside the RC for the purchase of goods and services through acquiring terminals. Transactions of purchase using e-money are included in the Report.

Source: CNB.

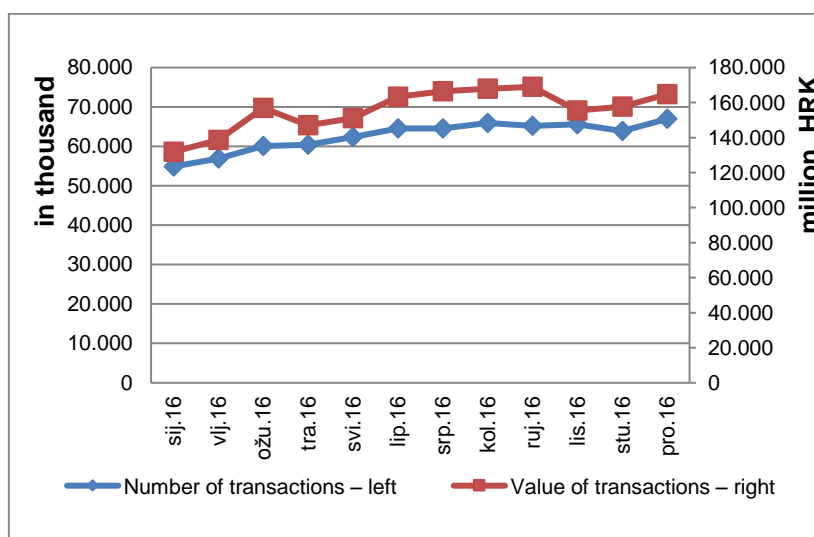
## A) NATIONAL CASHLESS PAYMENT TRANSACTIONS

National cashless payment transactions are payment transactions the execution of which involves a payer's payment service provider and a payee's payment service provider, or only one payment service provider, which operate in the Republic of Croatia. Data on national cashless payment transactions in the Report are grouped into six categories:

- Sent credit transfers,
- Bill-paying service,
- Direct debits,
- Debits from the accounts by simple book entry,
- Transactions using payment cards issued in the RC, and
- Transactions using cheques issued in the RC.

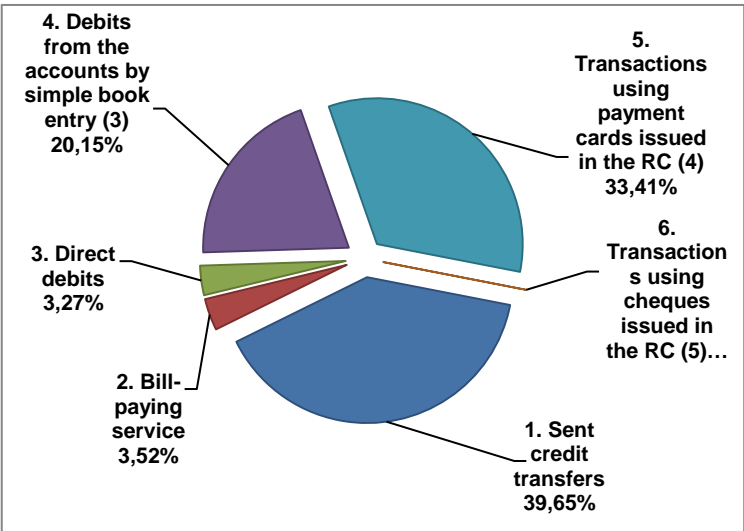
According to data submitted by reporting entities, a total of 751.4m of national cashless payment transactions were executed in 2016, worth a total of HRK 1,870,065.1m. If compared with the total number and value of national cashless payment transactions in 2015, the total number of transactions rose by 5% and the total value of transactions fell by 1%. On average, 62.6 million national cashless payment transactions were executed monthly, with the average monthly value of HRK 155.838.7m (Figure 1). The average value of one national cashless payment transaction in 2016 stood at HRK 2,489.

**Figure 1 Number and value of national cashless payment transactions**



Source: CNB.

**Figure 2 Structure of national cashless payment transactions by the number of executed payment transactions**

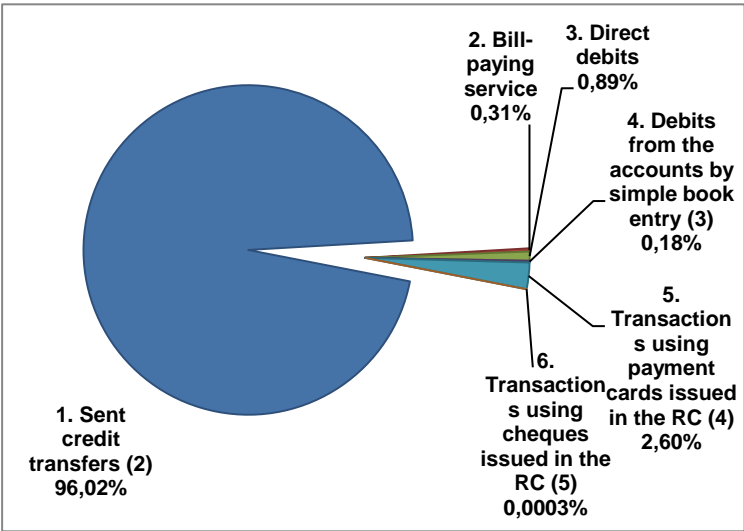


Source: CNB.

Based on the structure of national cashless payment transactions by the number of payment transactions executed in 2016 it was established that the largest share (39.65%) referred to the transactions of sent credit transfers. They were followed by transactions using payment cards issued in the RC, with a share of 33.41% and transactions of debits from the accounts by simple book entry, with a share of 20.15%. Transactions executed using the bill-paying service and direct debit service accounted for 3.52% and 3.27% of the total respectively. Transactions using cheques issued in the RC ranked the last with a share of 0.001% (Figure 2).

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**Figure 3 Structure of national cashless payment transactions by the value of executed payment transactions**



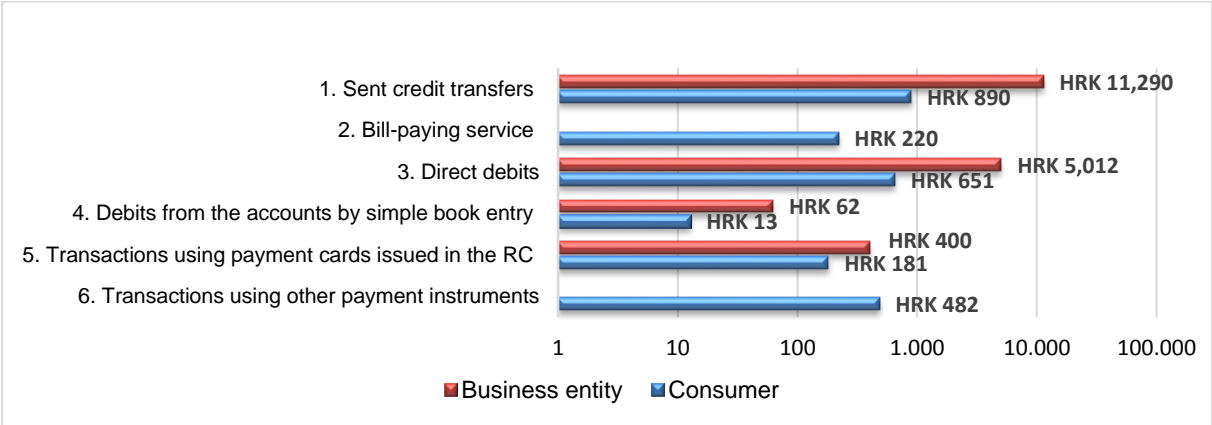
Source: CNB.

Sent credit transfers account for a very dominant share of national cashless payment transactions in terms of value of executed payment transactions in 2016. They account for over 96% of the total value of all the executed national cashless payment transactions (Figure 3). The high share of credit transfers in the total value of national cashless payment transactions is the result of the fact that it is precisely credit transfers that are most frequently used in larger-value transactions. Thus, credit transfers are the usual manner for the execution of payments between corporations, corporations and banks, natural persons, the payment of wages, salaries and pensions, etc. This is also evident from the average value of the national credit transfer transaction, which is much higher than, for example, the average

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value of a card transaction, which is primarily used for the purchase of goods and services in retail. The amount of the average value for each of the categories of national cashless payment transactions is shown separately for the consumer and the business entity in Figure 4.

**Figure 4 The average value of one national cashless payment transaction**



Source: CNB.

Note: Transactions using the bill-paying service and other payment instruments (transactions through cheques) in the RC in 2016 could be initiated by consumers only.

The analysis of each of the categories of national cashless payment transactions is given below.



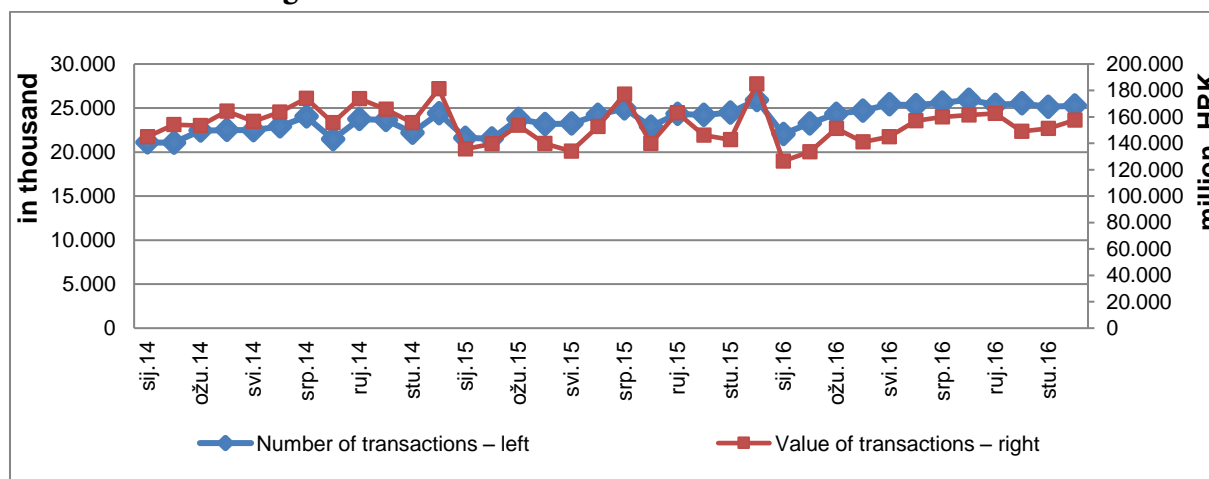
## 1 Sent credit transfers

‘Credit transfer’ means a payment service by which the payer's payment account is debited and the payee's payment account is credited on the basis of an order initiated by the payer. The transaction itself must not be identified with the term of "credit" in the sense of a loan; rather, it originates from the term "credit transfer", which implies that it is used to initiate the transfer to credit the payee's payment account at the payer's initiative. As at 31 December 2016, 27 credit institutions provided credit transfer services in the RC.

Sent credit transfers are a dominant payment service in the RC and they include all national credit transfers executed by debiting the payment accounts of consumers, business entities and credit institutions in the RC. Sent credit transfers also include the standing order service.

In 2016, in the RC, 297.9 million transactions of sent credit transfers were executed in a total value of HRK 1,795,673.3m. At a monthly level, on average 24.8 million sent credit transfers were executed with the average value of HRK 149,639.4m per month. The average value of one sent credit transfer stood at HRK 6,028. If compared with the total number and value of sent credit transfers in the last three years, the total number of transactions rose by 5% and the total value of transactions fell by 4%. Figure 5 shows the movement of the total number and value of sent credit transfers in the past three years.

**Figure 5 Number and value of sent credit transfers**

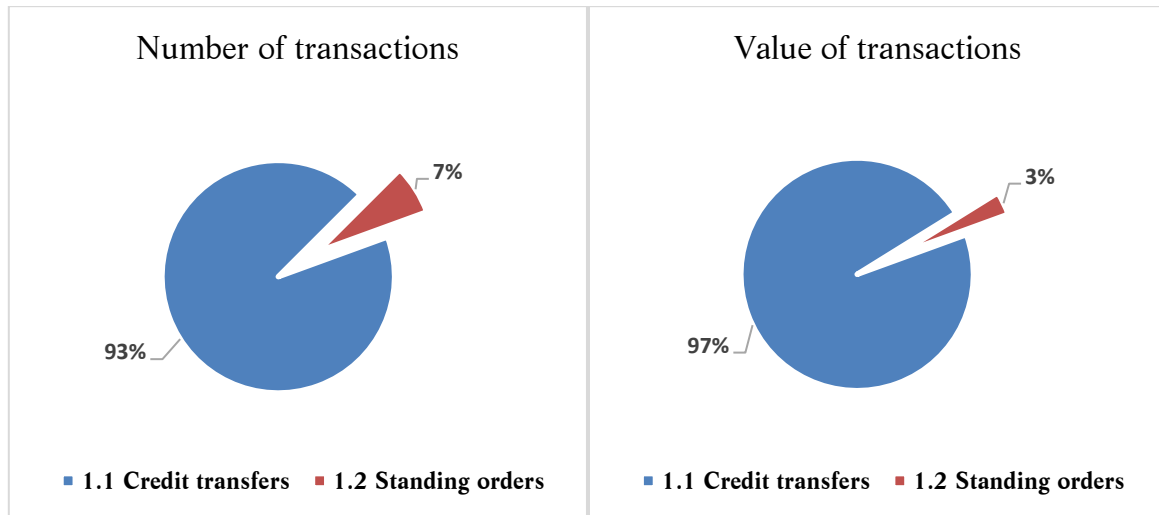


Source: CNB.

With the intention to show standing orders, i.e. national cashless credit transfers executed at regular intervals or on dates set in advance (e.g. the payment of annuities or instalments of a credit, etc.) separately, the category of sent credit transfers in the Report is divided into two subcategories, i.e. credit transfers (Subcategory 1.1) and standing orders

(Subcategory 1.2). The share of each of the subcategories in the total number and value of sent credit transfers in 2016 is shown in Figure 6.

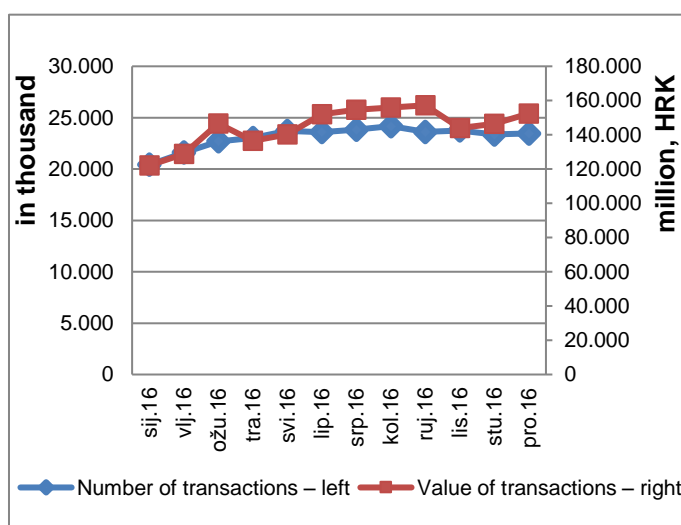
**Figure 6 The share of credit transfers and standing orders in the total number and value of sent credit transfers in 2016**



Source: CNB.

In accordance with the shown in Figure 6, credit transfers (Subcategory 1.1) have a significant share relative to standing orders in the total number and value of sent credit transfers. More precisely, in 2016, their share accounted for 93% of the total number and 97% of the total value of sent credit transfer transactions. A total of 277.2 million transactions of national credit transfers, worth a total of HRK 1,736,785.6m, were executed in 2016. At a monthly level, 23.1 million national credit transfers were executed on average, with their average value of HRK 144,732.1m per month (Figure 7).

**Figure 7 Credit transfers (Subcategory 1.1)**



Source: CNB.

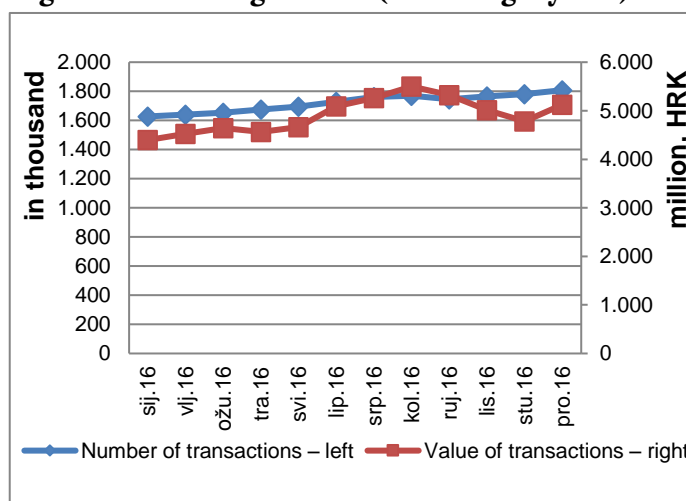
Of the total number of executed national credit transfer transactions, 47% were executed debiting the payment account of consumers, 49% debiting the payment account of business entities and 4% debiting the payment account of credit institutions in the RC. At the same time, of the total value of executed national credit transfer transactions, as many as 86% were executed debiting the payment account of business entities, and 7% were executed debiting the payment account of the consumer and the payment account

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of credit institutions in the RC. The average value of one executed credit transfer debiting the payment account of a consumer stood at HRK 927, debiting the payment account of a business entity it stood at HRK 11,004, and debiting the payment account of a credit institution at HRK 11,747.

In 2016, 20.6 million standing orders (Subcategory 1.2) totalling HRK 58,887.7m were executed by debiting the payment accounts of consumers and business entities. The above amounts account for a 7% of the total number and a 3% of the total value of sent credit transfers (Figure 6). At a monthly level, 1.7 million standing orders were executed on average, totalling on average HRK 4,907.3m per month (Figure 8).

**Figure 8 Standing orders (Subcategory 1.2)**



Source: CNB.

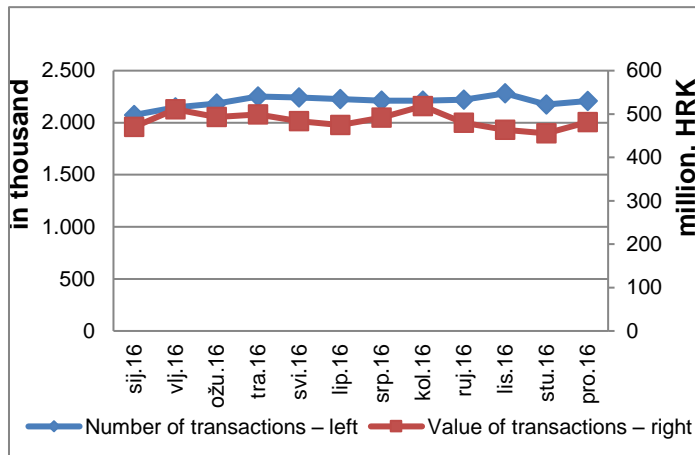
Of the total number of executed standing order transactions, 97% were executed by debiting the payment account of consumers and 3% by debiting the payment account of business entities. However, if the total value of executed standing order transactions is analysed, 22% were executed by debiting the payment account of consumers and 78% were executed by debiting the payment

account of business entities. The average value of one standing order executed by debiting the payment account of consumers stood at HRK 647 while the average value of one standing order executed by debiting the payment account of business entities stood at HRK 70,821.

## 2 Bill-paying service

The bill-paying service includes all payment transactions in which a credit institution, on the basis of a contract with the payee, collects funds from the payer, and makes the collected amount available to the payee within time cycles determined by a contract (e.g. electricity, water, gas and other bills). The credit institution receives payment orders on its own or through third parties (FINA, Hrvatska pošta, retail chains). The bill-paying service is provided in the RC by 14 credit institutions. The total number of payment transactions executed by the bill-paying service in 2016 stood at 26.4 million with a total value of HRK 5,822.3m.

**Figure 9 Bill-paying service**



Source: CNB.

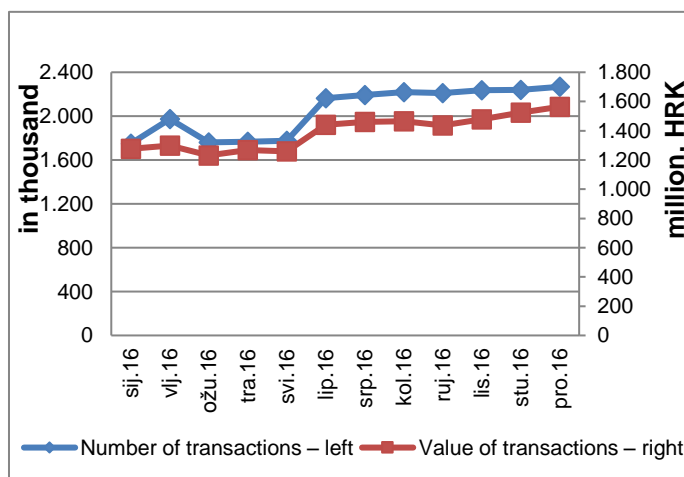
As shown in Figure 9, on average 2.2 million transactions were executed monthly using the bill-paying service with the average value standing at HRK 485.2m per month. The average value of one transaction executed using the bill-paying service stood at HRK 220.

### 3 Direct debits

'Direct debit' means a payment service for debiting a payer's payment account, where a payment transaction is initiated by a payee on the basis of the payer's consent given to the payer's own payment service provider, to the payee, or to the payee's payment service provider. Transactions in the Report include all direct debits on the basis of which the payment accounts of payers in the territory of the RC were debited in 2016 (e.g. the payment of liabilities for utility services, collection of expenses on the card with a delayed debit function).

In 2016, the direct debit service in the RC was provided by 23 credit institutions and a total of 24.5 million transactions of direct debits debiting the payment accounts of payers in the total value of HRK 16,699.3m were executed. Of the total number of direct debit transactions, as many as 99.3% were executed by debiting the payment accounts of consumers worth a total of HRK 24.4m (95.1%).

**Figure 10 Direct debits**



Source: CNB.

The movement of the total monthly number and value of direct debit transactions in 2016 is shown in Figure 10. The average monthly number of direct debits based on which payment accounts of payers in the territory of the RC were debited in 2016 stood at 2 million transactions with the average value of HRK 1,391.6m per month. The average value of one

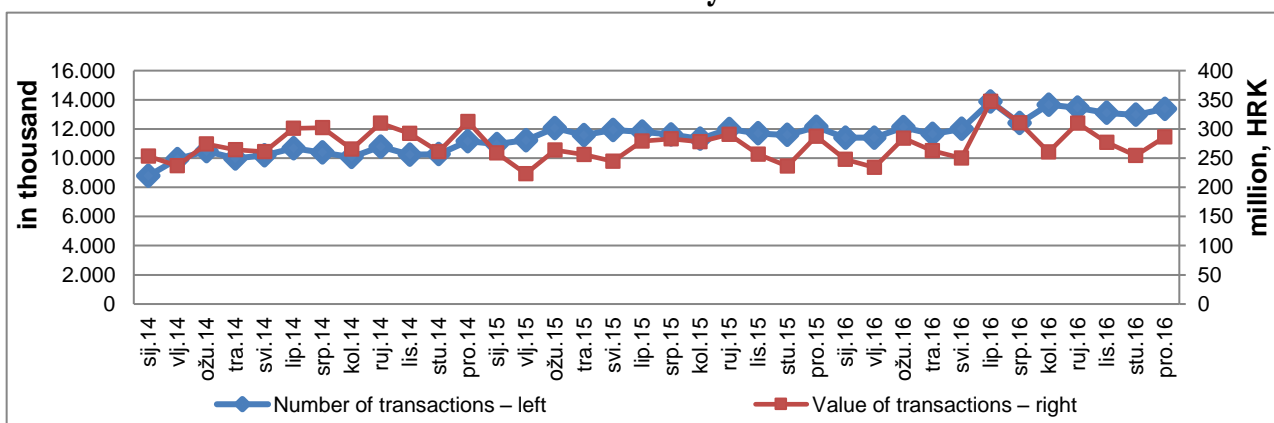
direct debit transaction executed by debiting the payment account of consumers stood at HRK 651 while the average value of one direct debit transaction executed by debiting the payment account of business entities stood at HRK 5,012.

#### 4 Debits from the accounts by simple book entry

Debits from the accounts by simple book entry include the total number and value of transactions initiated and executed by a credit institution, by transfer from the payment account of its payment service user on the basis of a contract with the user, without a specific payment order (interests, fees for individual payment services, such as, for example, account management fee). For the purposes of this Report, the transactions of debits from the accounts by simple book entry do not include the transactions of the transfer of the amount of the instalment/annuity of a credit from the payment account of a payment service user to the account of the credit institution if such a transfer is agreed by the credit agreement.

In line with the above, 151.4 million transactions of debits from the accounts by simple book entry worth a total of HRK 3,324.0m on interests and fees were executed in the RC in 2016. The total number of transactions of debits from the accounts by simple book entry increased by 8% and their total value by 5% relative to 2015. The movement of the total monthly number and value of debits from the accounts by simple book entry transactions in the past three years is shown in Figure 11.

**Figure 11 Number and value of transactions of debits from the accounts by simple book entry**



Source: CNB.

In 2016, at a monthly level, an average of 12.6 million transactions of debits from the accounts by simple book entry were executed with the average value of HRK 277.0m per

month. The average value of one transaction of debit from the accounts by simple book entry executed by the transfer from payment accounts of consumers stood at HRK 13 and executed by the transfer from payment accounts of business entities stood at HRK 62.

## **5 Transactions using payment cards issued in the RC**

Transactions using payment cards issued in the RC shown in item 5 of the Report include national card-based payment transactions executed using payment cards issued by issuing payment service providers in the RC. Payment service providers – issuers<sup>3</sup> in the RC include:

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

For the purposes of this Report, national card transactions<sup>4</sup> include exclusively the following:

- payment transactions of the purchase of goods and services using a payment card, and
- standing orders and direct debits collected through a payment card.

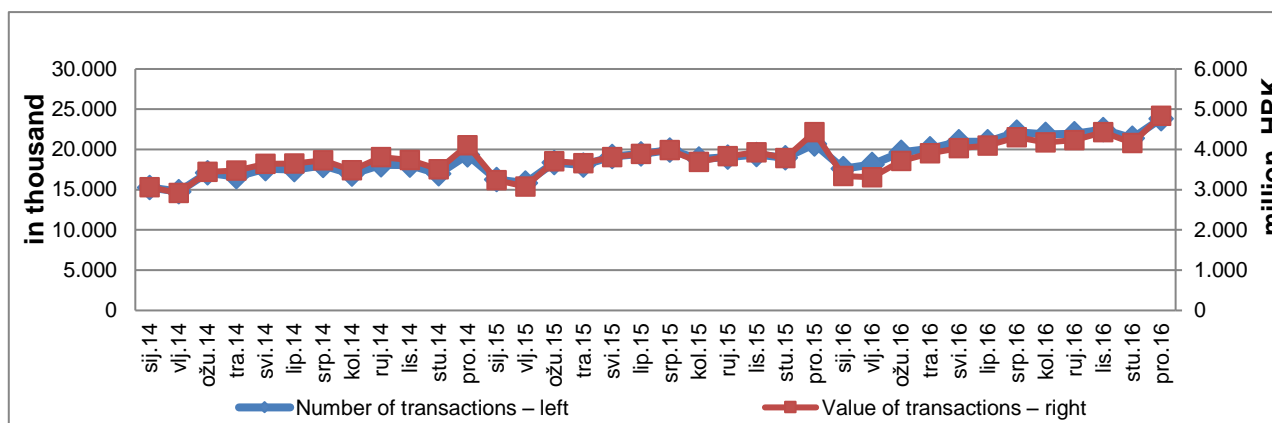
A total of 251.0 million such national card-based transactions using payment cards issued in the RC worth a total of HRK 48,540.9m were executed in 2016. If these data are compared with the data from 2014 and 2015, the total number of national transactions using payment cards issued in the RC at an annual level on average increased by 10%, and the total value by 7% annually. The movement of the total number and value of national transactions using payment cards issued in the RC in the last three years is shown in Figure 12.

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<sup>3</sup> Payment cards issued in the RC, which were used to execute national card transactions in 2016, were issued by 26 credit institutions and two electronic money institutions.

<sup>4</sup> In this Report, the transactions of withdrawal and depositing of cash using a payment card, as well as the transactions of fees, interests, membership fees, etc. collected by the issuer through the payment card, are not included in national card transactions.

**Figure 12 Transactions using payment cards issued in the RC**



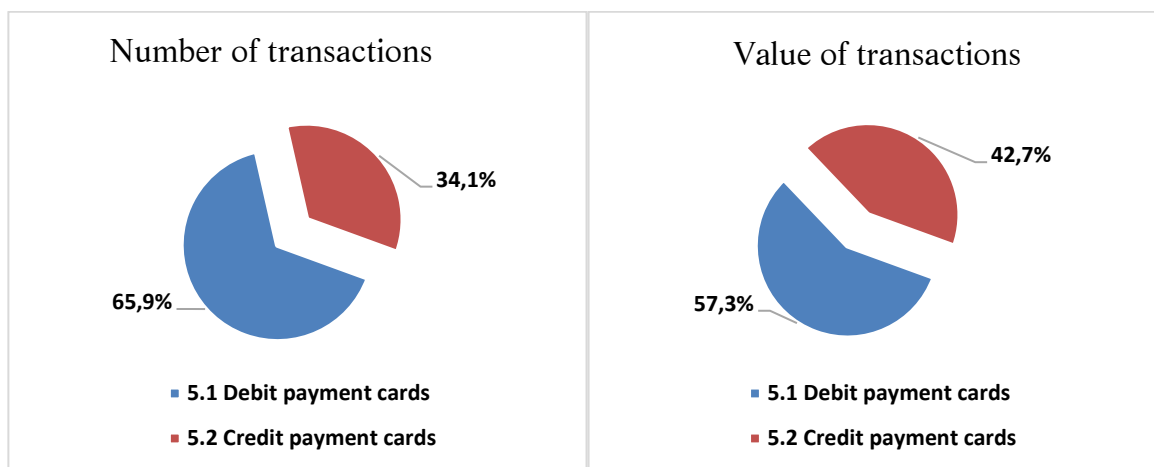
Source: CNB.

In the Report, national transactions using payment cards issued in the RC are divided into two subcategories: 5.1 Debit payment cards and 5.2 Credit payment cards. Debit payment cards include debit cards exclusively, while credit payment cards include credit, charge, revolving, delayed debit and membership cards.

As at 31 December 2016, of the total number<sup>5</sup> of payment cards issued in the RC, 6,944,246 (79%) were debit payment cards and 1,878,574 (21%) were credit payment cards. Debit cards were used to execute 165.4 million transactions (65.9%), worth a total of HRK 27,823.9m (57.3%). The rest of the total number of national transactions using payment cards issued in the RC was executed using credit cards (85.6 million transactions or 34.1%, worth a total of HRK 20,716.9m or 42.7%). The shares of debit and credit payment cards in the total number and value of transactions executed using payment cards issued in the RC are shown in Figure 13.

<sup>5</sup> As at 31 December 2016, in all 8,822,820 issued payment cards were recorded in the RC. Of the total number of issued payment cards, 95% were issued to consumers and 5% to business entities.

**Figure 13 The share of debit and credit payment cards in the total number and value of transactions executed using payment cards issued in the RC**



Source: CNB.

The average value of one national transaction executed using a debit card issued in the RC in 2016 stood at HRK 168, and of one national transaction executed using a credit card issued in the RC stood at HRK 242.

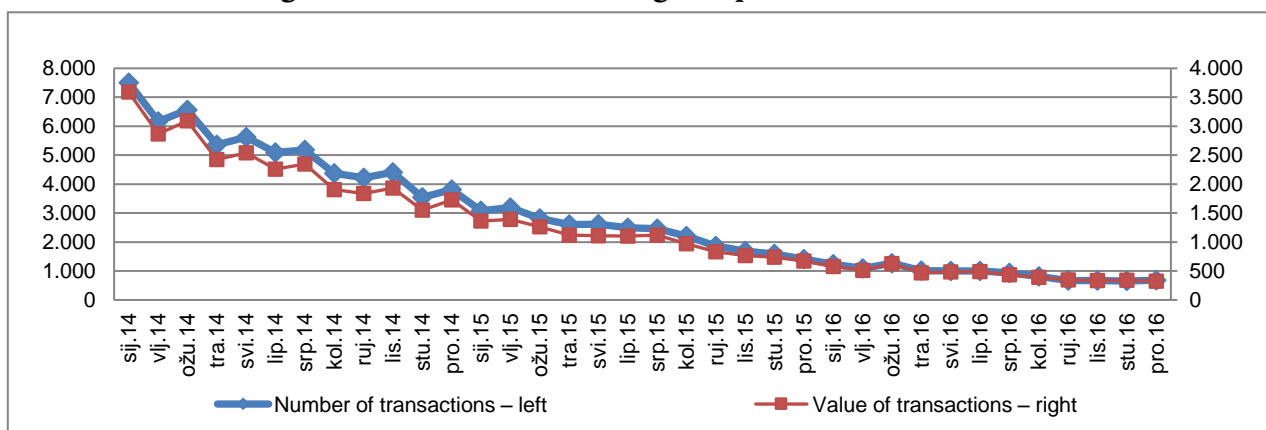


## 6 Transactions using cheques issued in the RC

Transactions using cheques issued in the RC include exclusively national payment transactions of purchase using the cheque.

A total of 11,039 transactions of purchase using the cheque worth a total of HRK 5.3m were executed in the RC in 2016. The average value of one transaction of purchase using a cheque stood at HRK 482. The movement of the total monthly number and value of transactions of purchase using a cheque in the RC in the past three years is shown in Figure 14.

Figure 14 Transactions using cheques issued in the RC



Source: CNB.

Data shown in Figure 14 point to a downward trend in the use of the cheque as payment instrument and its negligible share in the total number and value of all national cashless payment transactions.

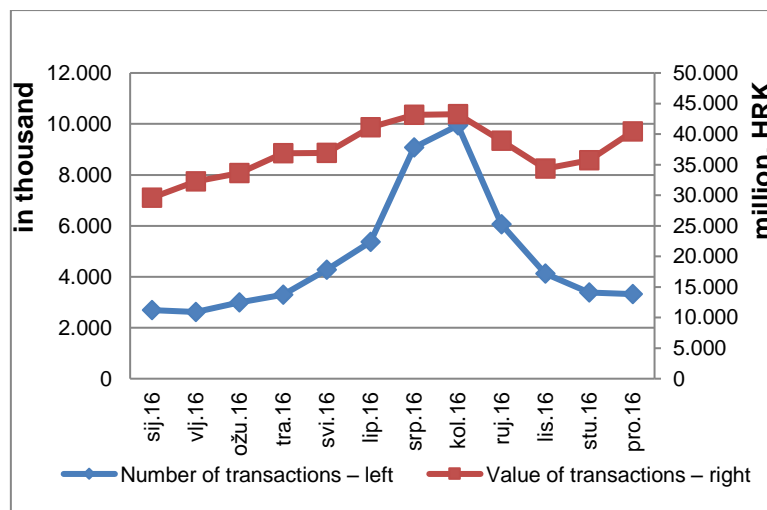
## B) INTERNATIONAL CASHLESS PAYMENT TRANSACTIONS

International cashless payment transaction means a payment transaction the execution of which involves two payment service providers of which one payment service provider operates in the RC, whereas the other payment service provider operates outside the RC. Data on international cashless payment transactions in the Report are grouped into four categories:

- Sent credit transfers,
- Received credit transfers,
- Transactions using payment cards issued in the RC, and
- Transactions of acquiring payment cards issued outside the RC.

A total of 57.1 million international cashless payment transactions worth a total of HRK 446,101.9m were executed in the RC in 2016. If compared with the total number and value of international cashless payment transactions in 2015, the total number of transactions rose by 18.3% and their total value decreased by 0.5%. The average value of one international cashless payment transaction in 2016 stood at HRK 7,808. The movement of the total monthly number and value of international cashless payment transactions is shown in Figure 15.

**Figure 15 Number and value of international cashless payment transactions**

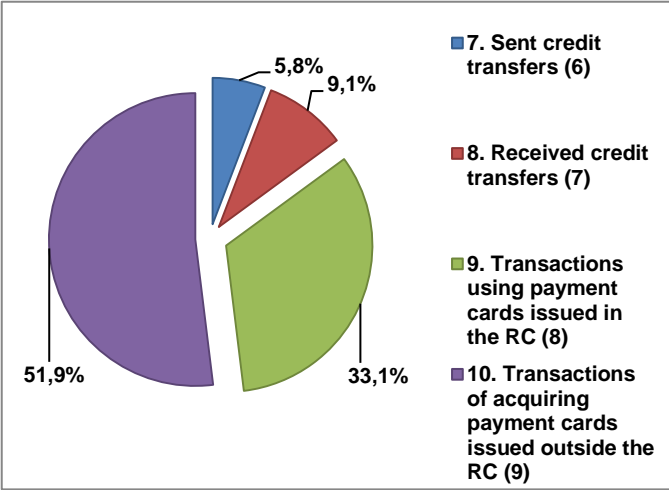


Source: CNB.

In 2016, on average 4.7 million international cashless payment transactions were executed monthly, worth on average HRK 37,175.2m per month. The exponential growth in the number of international cashless payment transactions in the period from April to August

2016 is explained in the part related to the transactions of acquiring payment cards issued outside the RC.

**Figure 16 Structure of international cashless payment transactions by the number of executed payment transactions**

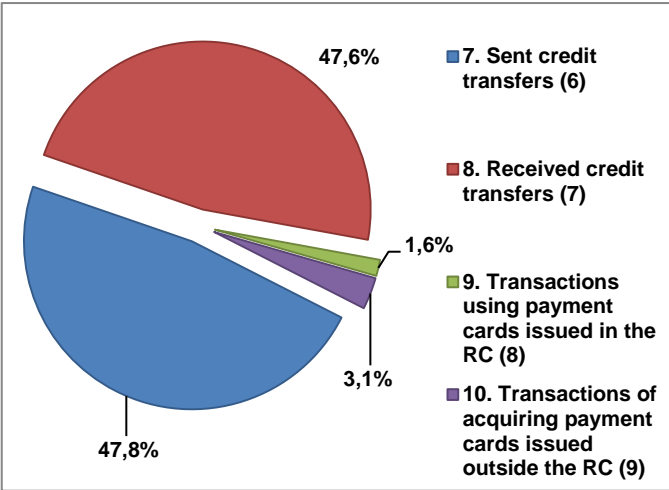


The transactions of acquiring payment cards issued outside the RC and international transactions using payment cards issued in the RC accounted for the largest shares of the total number of international cashless payment transactions in 2016, with a 52.0% and 33.1/% share respectively (Figure 16). They were followed by international credit transfer transactions crediting payment

Source: CNB.

accounts in the RC with a share of 9.1%, while sent credit transfers ranked the last with a 5.8% share.

**Figure 17 Structure of international cashless payment transactions by the value of executed payment transactions**



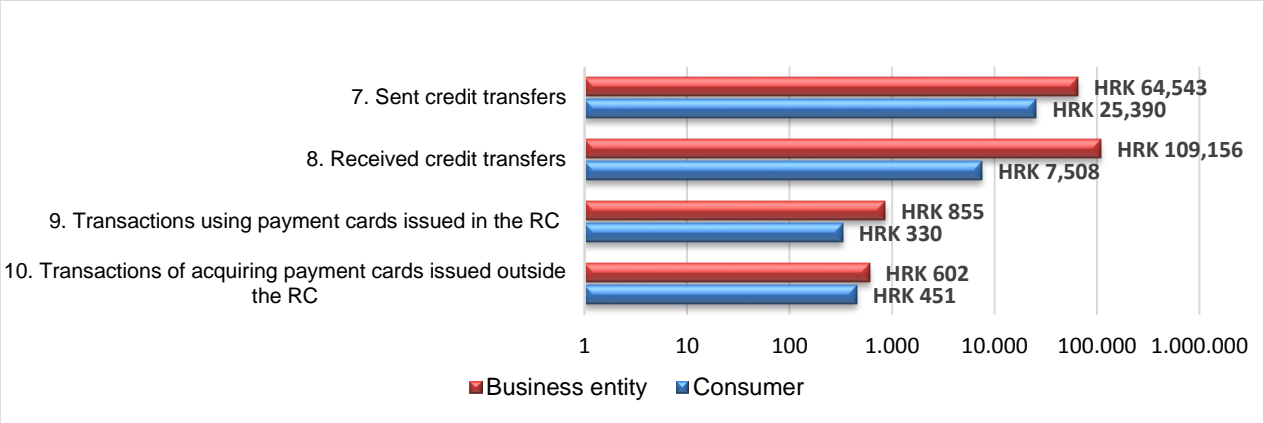
As shown by the structure of the value of international cashless payment transactions (Figure 17), the share of international credit transfers accounts for over 95% of the total value, i.e. of the total value of international cashless payment transactions, 47.8% of the value of international cashless payment transactions refers to international credit transfers executed by debiting payment accounts in the

Source: CNB.

RC, and 47.6% to international credit transfers executed by crediting payment accounts in the RC. The transactions of acquiring payment cards issued outside the RC and international transactions using payment cards issued in the RC account for 3.1% and 1.5% of the total value of international cashless payment transactions respectively.

The high share of credit transfers in the total value of international cashless payment transactions (similarly as in the case of national) is the result of the fact that it is precisely credit transfers that are most frequently used in larger-value transactions. This can also be seen in the average value of one international cashless payment transaction, which for the international credit transfer is rather higher than the average value of an international transaction executed using a payment card. The average values of one international cashless payment transaction for a consumer and a business entity are shown in Figure 18.

**Figure 18 Average value of one international cashless payment transaction**



Source: CNB.

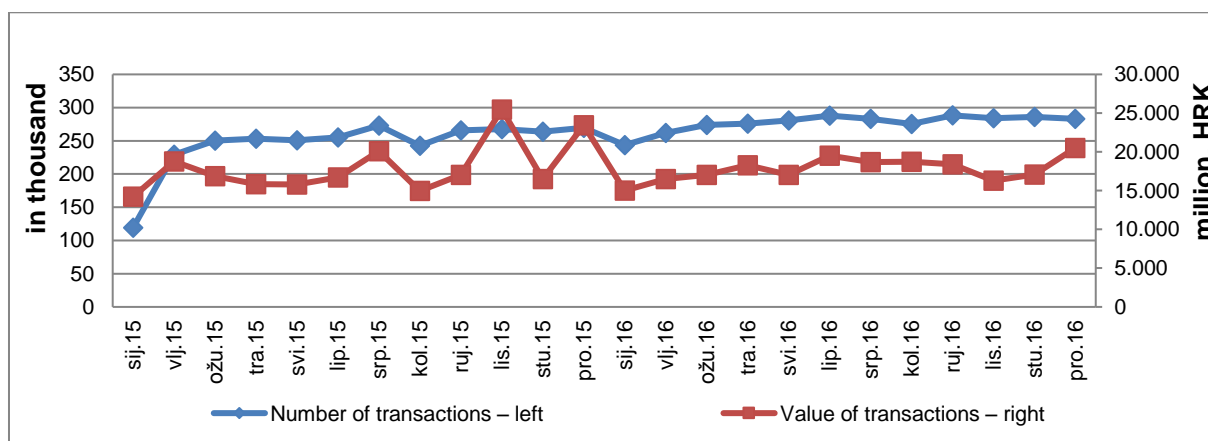
The analysis of each of the categories of international cashless payment transactions is given below.

## 7 Sent credit transfers

Sent credit transfers include all international credit transfers executed by debiting the payment accounts of consumers, business entities and credit institutions in the RC. Data that refer to the executed credit transfers debiting the payment accounts of credit institutions in the RC do not include transactions, which credit institutions in the RC carried out in their name and for their account in the financial market (e.g. payments in foreign exchange and/or capital market).

A total of 3.3 million transactions of sent international credit transfers worth a total of HRK 213,098.5m were executed in 2016. The above data show an annual increase in the total number of sent international credit transfers by 13% and a decrease in the total value by 1% from 2015. At a monthly level, on average 261.0 thousand sent international credit transfers worth on average HRK 17,867.2m a month were executed in 2015 and 2016. The movement of the total number and value of sent international credit transfers is shown in Figure 19.

**Figure 19 Sent international credit transfers**



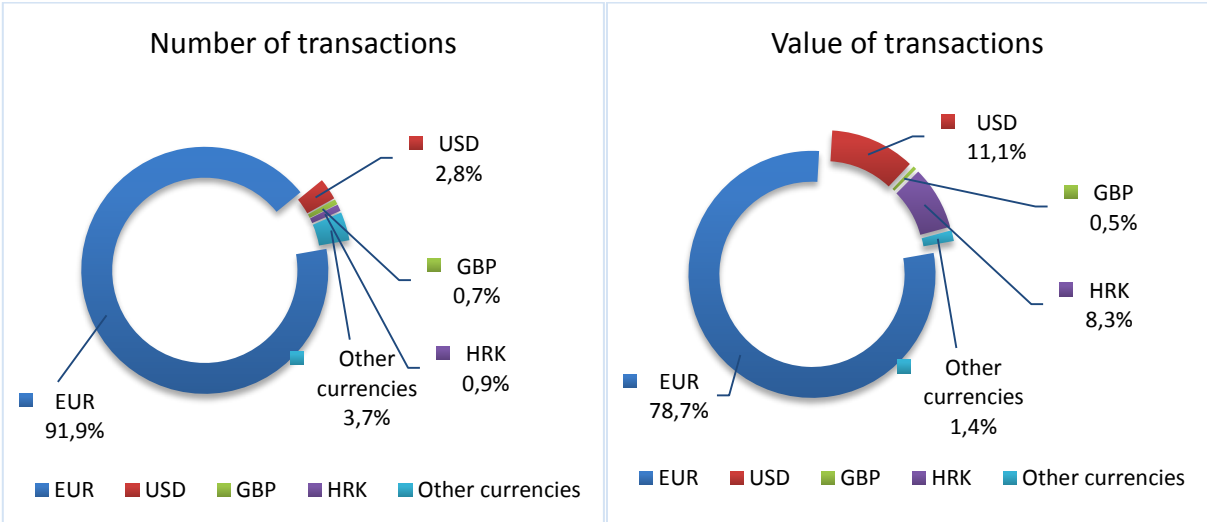
Source: CNB.

Of the total number of sent international credit transfers in 2016, 94.1% were executed by debiting the payment accounts of business entities in the RC worth a total of HRK 201,906.3m. A 5.7% of the total number of sent international credit transfers, worth a total of HRK 4,779.0m were executed by debiting the payment accounts of consumers in the RC. The remaining 0.2% of the share referred to the share in the number of sent international credit transfers executed by debiting the payment accounts of credit institutions in the RC, worth a total of HRK 6,413.2m.

The average value of one international credit transfer debiting the payment account of a business entity in the RC stood at HRK 64,543, that debiting the payment account of a consumer in the RC stood at HRK 25,390, and that debiting the payment account of a credit institution in the RC stood at HRK 872,660.

It can be concluded from the analysis of the structure of sent international credit transfers according to the currency that in 2016 the largest number (91.9%) and the largest value (78.7%) of sent international credit transfers were executed in euro. The share of the most significant currencies in the structure of sent international credit transfers according to currency is shown in Figure 20.

**Figure 20 Structure of sent international credit transfers according to currency**



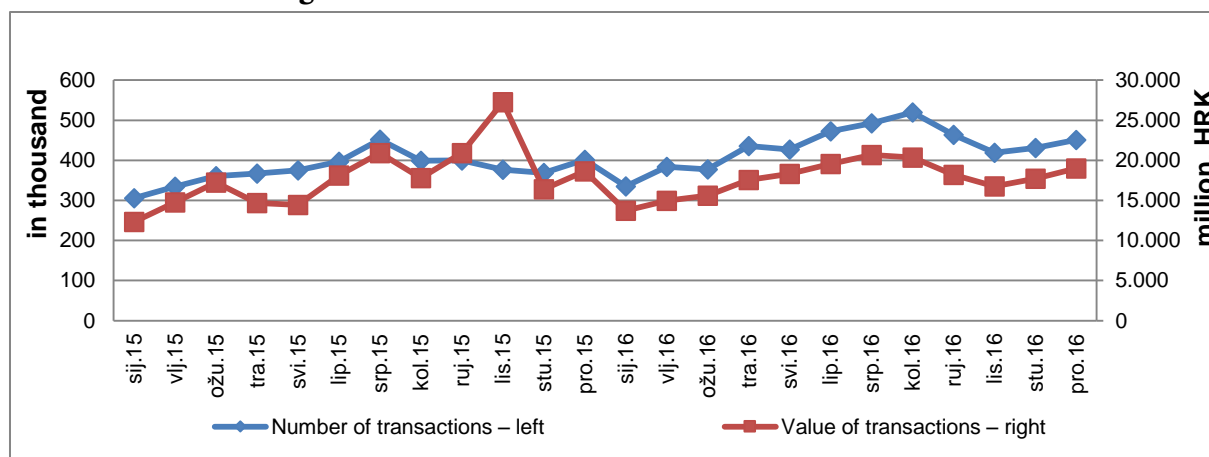
Source: CNB.

## 8 Received credit transfers

Received credit transfers include all international credit transfers executed by crediting the payment accounts of consumers, business entities and credit institutions in the RC.

According to data submitted by credit institutions, a total of 5.2 million transactions of received international credit transfers worth a total of HRK 212,391.8m were executed in 2016. If the same data are compared with 2015, the total number of received international credit transfers increased by 14.8% and the total value of transactions decreased by 0.5%. At a monthly level, on average 406 thousand received international credit transfers worth on average HRK 17,740.7m a month were executed in 2015 and 2016 (Figure 21).

**Figure 21 Received international credit transfers**



Source: CNB.

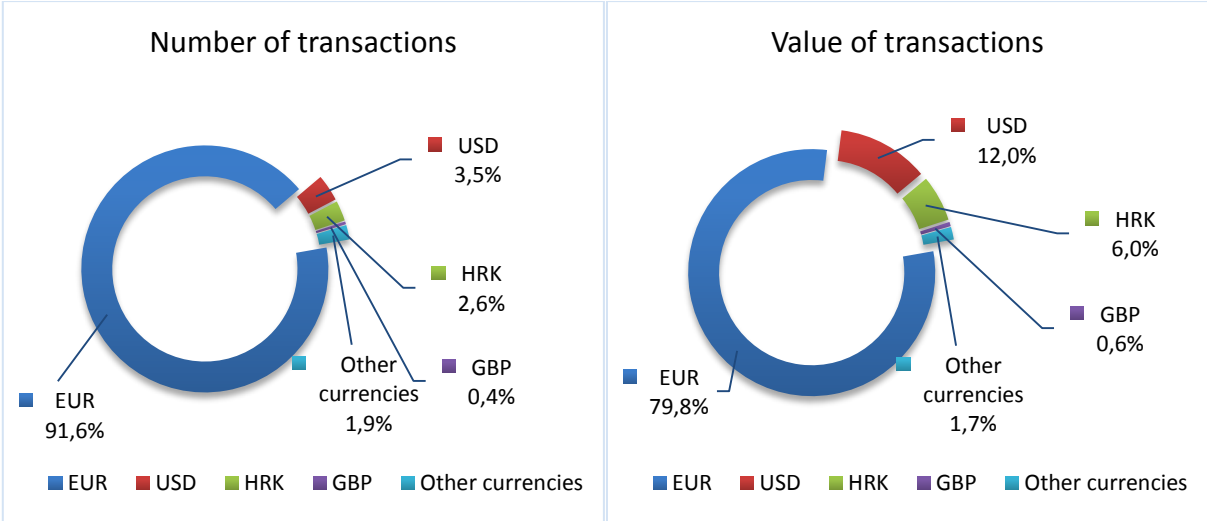
Of the total number of received international credit transfers in 2016, 69.5%, worth a total of HRK 27,186.9m were executed by crediting the payment accounts of consumers in the RC. Of the total number of received international credit transfers, 29.8%, worth a total of HRK 169,470.1m were executed by crediting the payment accounts of business entities in the RC. The remaining 0.7% referred to the share in the number of received international credit transfers executed by crediting the payment accounts of credit institutions in the RC, worth a total of HRK 15,734.8m.

Accordingly, it can be concluded that the largest share of the value of received international credit transfers was executed by crediting the payment accounts of business entities in the RC, while the largest share of the number of received international credit transfers was executed by crediting the payment accounts of consumers in the RC.

In 2016, the average value of one international credit transfer executed by crediting the payment account of a business entity in the RC stood at HRK 109,156, that executed by crediting the payment account of a consumer in the RC stood at HRK 7,508, and that by crediting the payment account of a credit institution in the RC stood at HRK 462,667.

It was established from the structure of received international credit transfers in 2016 according to currency that the largest share of transactions (91.6% in the number and 79.8% in the value) referred to transactions in euro. They were followed by the transactions of received international credit transfers in US dollars with a share of 3.5% in the total number and 12% in the total value of received international credit transfers according to currency. The shares of the most significant currencies in the structure of received international credit transfers according to currency is shown in Figure 22.

**Figure 22 Structure of received international credit transfers according to currency**



Source: CNB.



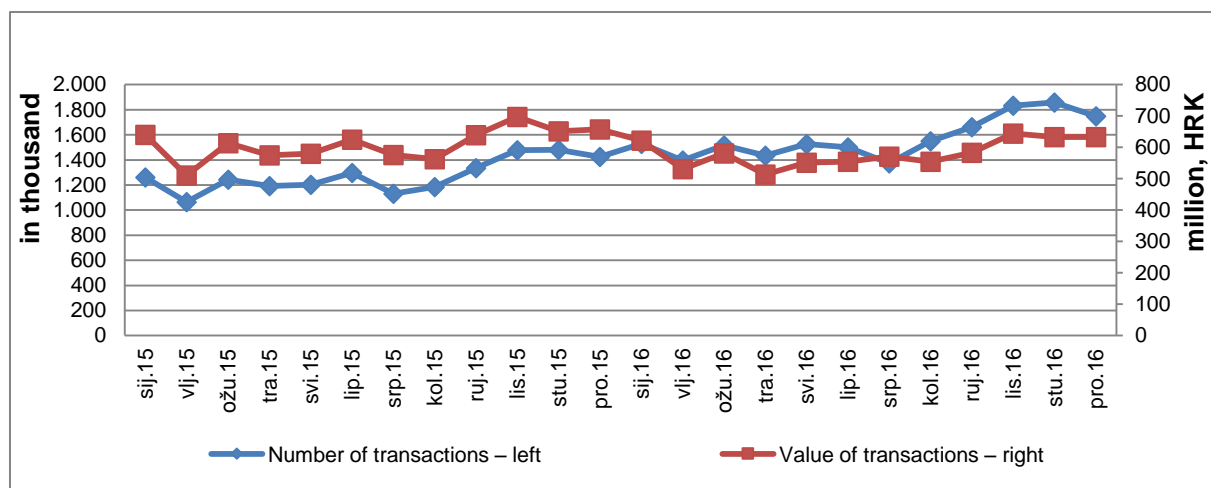
## 9 Transactions using payment cards issued in the RC

Transactions using payment cards issued in the RC include all international transactions using payment cards issued by payment service providers in the RC, i.e.

- payment transactions of the purchase of goods and services using a payment card, and
- payment transactions of cash withdrawal using a payment card.

According to the submitted data, a total of 18.9 million international transactions using payment cards issued in the RC worth a total of HRK 6,970.7m were executed in 2016. The transactions were executed in 139 different currencies and 218 different countries. The total number of executed international transactions using payment cards issued in the RC increased by 23.8%, while their total value decreased by 4.9% from 2015. On a monthly level, on average 1.5 million international transactions using payment cards issued in the RC were executed, worth on average HRK 580.9m monthly. The movement of the total monthly number and value of international transactions using payment cards issued in the RC in 2015 and 2016 is shown in Figure 23.

**Figure 23 Transactions using payment cards issued in the RC**



Source: CNB.

In 2016, of the total number and value of international transactions using payment cards issued in the RC, 93% of the number and 83% of the value of international payment card transactions were executed using consumer cards, while 7% of the number and 17% of the value of international payment card transactions were executed using the cards of business entities. The average value of one international transaction using a payment card issued to a consumer in the RC stood at HRK 330 and one international transaction using a payment card issued to a business entity in the RC stood at HRK 855.

## 10 Transactions of acquiring payment cards issued outside the RC

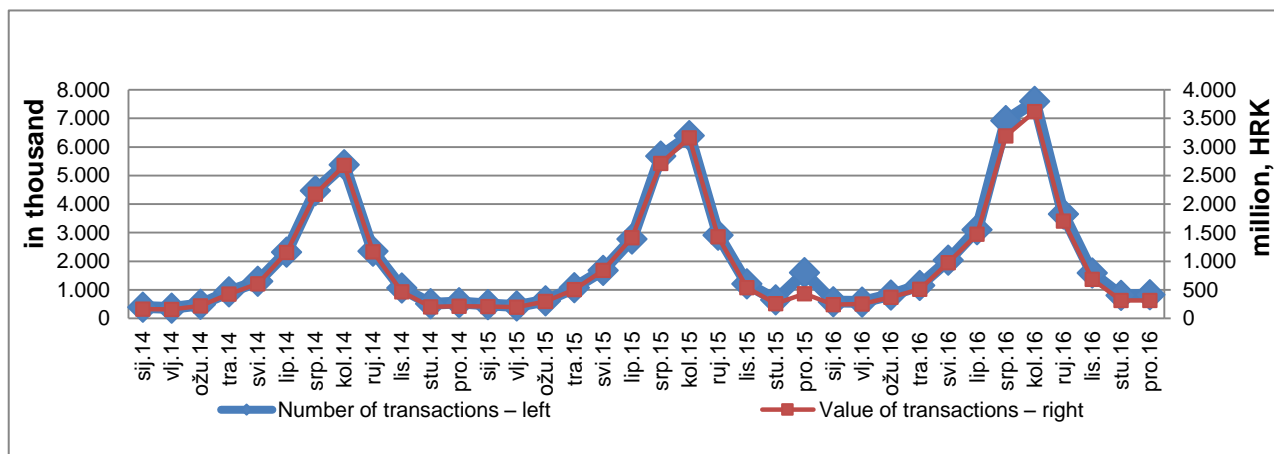
The transactions of acquiring payment cards issued outside the RC include data on the transactions of acquiring payment cards issued by payment service providers outside the RC (hereinafter referred to as 'foreign issuer'). The service of acquiring payment cards was provided by acquiring payment service providers, i.e.:

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

For the purposes of this Report, the transactions presented herein include exclusively the transactions of acquiring payment cards for the purchase of goods and services executed through the EFTPOS terminals and online at the point of sale through a payment card.

A total of 29.7 million transactions of acquiring payment cards of foreign issuers, worth a total of HRK 13,640.9m were executed in 2016. If compared with the total number and value of the acquiring transactions of payment cards of foreign issuers in 2015, the total number of transactions rose by 16% and their total value by 14%. The movement of the total monthly number and value of transactions of acquiring payment cards issued outside the RC in the last three years is shown in Figure 24.

**Figure 24 Transactions of acquiring payment cards issued outside the RC**



Source: CNB.

The data shown in Figure 24 indicate an upward trend in the total monthly value of the transactions of acquiring payment cards of foreign issuers for the purchase of goods and services in the period from April to August. After August and the summer tourist season, the monthly value of the transactions of acquiring payment cards of foreign issuers for

the purchase of goods and services declined to early 2016 levels. If data at the level of the year are compared in the observed period, the total number of transactions of acquiring of payment cards issued by foreign issuers on average increased by 21% and total value by 19% annually.

In 2016, the average value of one transaction of acquiring payment cards issued by foreign issuers for the purchase of goods and services stood at HRK 460.