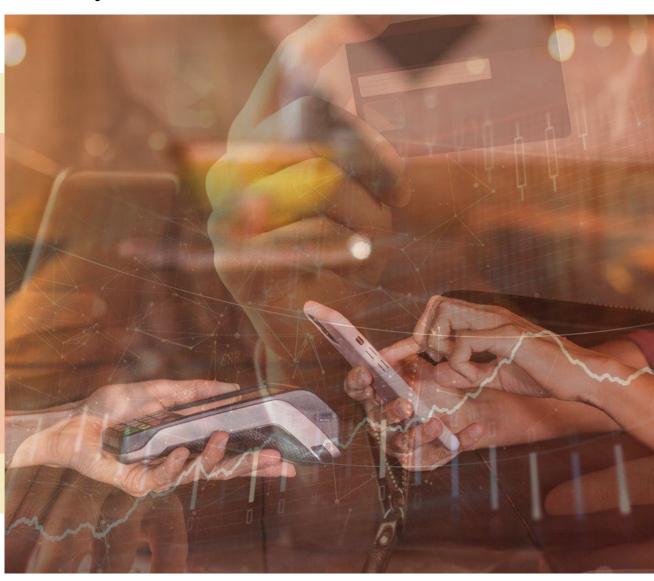


# Cashless Payment Transactions

Payment Statistics

2022

Year IV · July 2023



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## 1 Introduction

The increase in both the number and the value of cashless payment transactions continued over the past few years. The increase in cashless payment transactions has been strongly driven by advances in internet and mobile banking as well as in card payments. 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, increased by 64%, while their value increased by 62% in the past five years. An average Croatian citizen today has 2.11 payment cards in his/her wallet.

At the same time, 39% of consumers and 50% of business entities in the RC have internet banking agreements, and 53% of consumers and 35% of business entities have mobile banking agreements, allowing them to initiate electronic payment orders 24 hours a day.

If the above data are compared with the data for 2021, the number of consumers using a mobile banking service increased by 10% and the number of consumers using an internet banking service increased by 7% in 2022.

The rise in the number of mobile banking users was accompanied by an increase in both the number and the value of payment transactions initiated through this channel, with the result that in 2022, relative to 2021, the number and the value of consumer transactions increased by 17% and 29%, while the number and the value of transactions initiated by business entities increased by 25% and 43%, respectively. These figures and the fact that an increasing number of consumers have mobile banking agreements confirm that the mobile phone is growingly becoming the first choice in the selection of a device with which to initiate electronic transactions.

It can be concluded from the share of the structure of the number of national cashless payment transactions in 2022 that card-based payment transactions (45%) and credit transfer transactions (35%) accounted for the largest share of the total number of national cashless payment transactions. The rise in the number and value of transactions executed using payment cards issued in the RC relative to 2021 is described in more detail in item 5 of the publication (Transactions using payment cards issued in the RC). They are followed by transactions of debits from the accounts by simple book entry with the share of 18%. Bill-paying service transactions account for a share of approximately 1%, while direct debit service transactions account for a 2% share.

<sup>1</sup> In 2022, consumers in the RC initiated 18.3 million transactions using the internet banking service, totalling HRK 25.1bn and 125.3 million transactions using the mobile banking service, totalling HRK 107bn.

At the same time, card-based payment transactions accounted for 91%, 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 9%.

By contrast, transactions executed using the credit transfer service still account for a very dominant share of the total value of cashless payment transactions. In 2022, they accounted for approximately 94% of the total value of all national and international cashless payment transactions executed.

Such a high share of credit transfers in the total value of all cashless payment transactions is the result of credit transfers being the most frequently used in larger-value transactions. Thus, credit transfers are commonly used for the execution of payments between corporations, corporations and banks, payments between natural persons, the payment of wages and pensions, etc. This is also evident from the average value of individual credit transfer transactions<sup>2</sup>, which is much higher than, for example, the average value of card transactions<sup>3</sup>, 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 2022 in all currencies expressed in kuna. 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') about payment system and electronic money data, as well as about the content, manner and deadlines of the reporting.

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

- credit institutions (banks) that have obtained authorisation from the CNB, which includes the authorisation to provide the payment services of acquiring payment transactions;
- electronic money institutions that have obtained authorisation from the CNB
  to provide the payment services of issuing payment instruments and acquiring
  payment transactions executed by payment instruments; and
- payment institutions that have obtained authorisation from the CNB to provide the payment services of acquiring payment transactions executed by payment instruments.

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

<sup>2</sup> The average value of national credit transfers stood at HRK 7,273 (excluding standing orders).

<sup>3</sup> The average value of national transactions using payment cards issued in the RC stood at HRK 191.

Table 1 Report on cashless payment transactions in the Republic of Croatia in 2022

Executed payment transactions (1)	Number of transactions	%	Value of transactions in kuna	%
A) NATIONAL PAYMENT TRANSACTIONS				
1 Sent credit transfers (2)	398,224,003	35.05%	2,791,293,239,544	95.90%
1.1 Credit transfers	373,666,787	93.83%	2,717,844,884,631	97.37%
1.2 Standing orders	24,557,216	6.17%	73,448,354,913	2.63%
2 Bill-paying service	12,052,246	1.06%	4,460,333,163	0.15%
3 Direct debits	20,709,541	1.82%	14,949,929,797	0.52%
4 Debits from the accounts by simple book entry (3)	199,014,005	17.52%	3,341,408,056	0.11%
5 Transactions using payment cards issued in the RC (4)	506,116,177	44.55%	96,547,296,037	3.32%
5.1 Debit payment cards	414,362,007	81.87%	73,186,334,667	75.80%
5.2 Credit payment cards	91,754,170	18.13%	23,360,961,370	24.20%
TOTAL NATIONAL PAYMENT TRANSACTIONS (1 - 5)	1,136,115,972	100,00%	2,910,592,206,597	100,00%
B) INTERNATIONAL PAYMENT TRANSACTIONS				
6 Sent credit transfers (5)	4,959,223	3.02%	439,688,778,283	47.51%
7 Received credit transfers (6)	9,255,472	5.63%	433,213,572,033	46.81%
8 Transactions using payment cards issued in the RC (7)	56,881,867	34.60%	20,396,668,235	2.20%
9 Transactions of acquiring payment cards issued outside the RC (8)	93,283,441	56.75%	32,174,950,976	3.48%
TOTAL INTERNATIONAL PAYMENT TRANSACTIONS (6 – 9)	164,380,003	100.00%	925,473,969,527	100.00%
TOTAL (A+B)	1,300,495,975		3,836,066,176,124	

Note: Including the payment transactions of consumers, business entities, credit institutions and the Financial Agency, executed in all currencies and converted into kuna.

- (1) Executed payment transactions include executed cashless payment transactions in all currencies, converted into kuna at the 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 national card-based payment transactions for the purchase of goods and services and contractual debits (including 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) Sent credit transfers include all international credit transfers executed by debiting the payment accounts of consumers, business entities and credit institutions.
- (6) Received credit transfers include all international credit transfers crediting the payment accounts of consumers, business entities and credit institutions.
- (7) Transactions using payment cards issued in the RC include international payment transactions using payment 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.
- (8) Transactions of acquiring payment cards issued outside the RC include the transactions of acquiring payment instruments executed by payment instruments 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.

# 2 National cashless payment transactions

National cashless payment transactions are 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, operating in the Republic of Croatia. Data on national cashless payment transactions in the Report are grouped into five categories:

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

According to data submitted by reporting entities, a total of 1,136.1 million national cashless payment transactions were executed in 2022, worth a total of HRK 2,910.6m. Compared with the total number and value of national cashless payment transactions in 2021, the total number of transactions rose by 8% and the total value of transactions by 20%. On average 94.7 million national cashless payment transactions were executed monthly, with an average monthly value of HRK 242.6 million (Figure 1). The average value of national cashless payment transactions in 2022 increased by 20% from 2021 and stood at HRK 2,562.

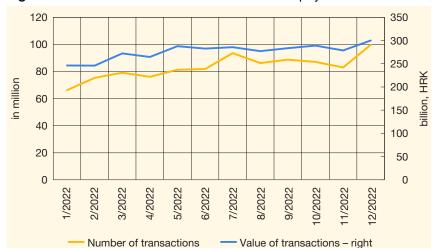
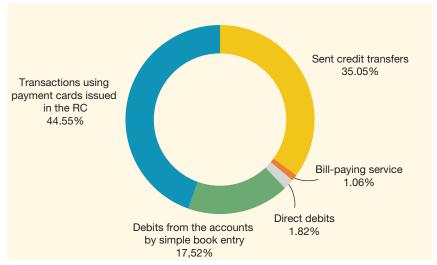


Figure 1 Number and value of national cashless payment transactions

Note: National cashless payment transactions include cashless payment transactions executed in all currencies and converted into kuna. Source: CNB.

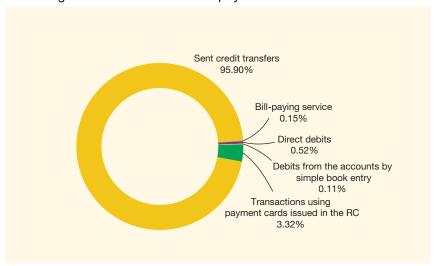
From the structure of national cashless payment transactions according to the number of payment transactions executed in 2022 it was established that the largest share (44.55%) related to transactions using payment cards issued in the RC. They were followed by transactions of sent credit transfers, with a share of 35.05% and the transactions of debits from the accounts by simple book entry, with a share of 17.52%. Transactions executed using the bill-paying service and direct debit service accounted for 1.06% and 1.82%, respectively (Figure 2).

Figure 2 Structure of national cashless payment transactions according to the number of executed payment transactions



Source: CNB.

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



Note: National cashless payment transactions include cashless payment transactions executed in all currencies and converted into kuna.

Source: CNB.

Sent credit transfers accounted for a predominant share of national cashless payment transactions in terms of value of executed payment transactions in 2022. They accounted for 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 because it is credit transfers that are most frequently used in larger-value transactions. Thus, credit transfers are commonly used for the execution of payments between corporations, corporations and banks, payments between natural persons, the payment of wages and pensions, etc. This is also evident from the average value of the national credit transfer transactions, which is much higher than, for example, the average value of card transactions, which are 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 consumers and business entities in Figure 4.

1.103 Sent credit transfers 14,279 370 Bill-paying service 667 Direct debits 8.170 Debits from the accounts 9 by simple book entry 58 Transactions using payment 177 cards issued in the RC 501

Figure 4 Average values of national cashless payment transactions

Notes: National cashless payment transactions include cashless payment transactions executed in all currencies and converted into kuna.

Payment transactions executed using the bill-paying service in the RC in 2022 could be initiated by consumers only.

Source: CNB.

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

100

Average value – consumerAverage value – business entity

1,000

10,000 100,000

### 2.1 Sent credit transfers

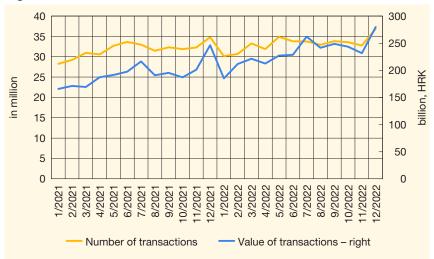
Credit transfer means a payment service by which the payer's payment account is debited and the payee's payment account is credited on the basis of an order initiated by the payer. The transaction itself should not be identified with the term of "credit" in the sense of a loan; rather, it originates 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 2022, 21 credit institutions provided credit transfer payment services in the RC.

Sent credit transfers constitute the dominant payment service in the RC; 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 standing orders.

In 2022, in the RC, 398.2 million transactions of sent credit transfers were executed in a total value of HRK 2,791,293.2m. At a monthly level, on average 33.2 million sent credit transfers were executed with the average value of HRK 232,607.8m per month. In 2022, the average value of sent credit transfers increased by 20% from 2021 and stood at HRK 7,009.

If compared with the total number and value of sent credit transfers in 2021, the total number of transactions in 2022 rose by 4.6% and the total value of transactions by 20.5%. Figure 5 shows the movement of the total number and value of sent credit transfers in the past two years.

Figure 5 Number and value of sent credit transfers

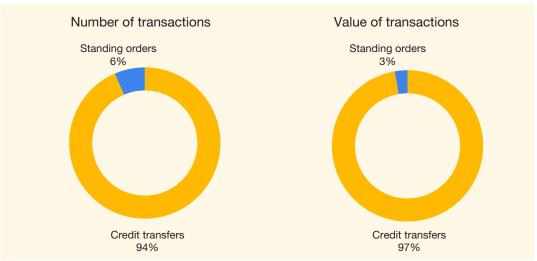


Note: Data refer to the payment transactions of sent national credit transfers executed in all currencies and converted into kuna.

Source: CNB

With the intention of showing 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 loan) 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 2022 is shown in Figure 6.

**Figure 6** Share of credit transfers and standing orders in the total number and value of sent credit transfers in 2022



Note: Data refer to sent national credit transfers executed in all currencies and converted into kuna. Source: CNB.

As shown in Figure 6, credit transfers (Subcategory 1.1) have a much more significant share than standing orders in the total number and in the value of sent credit transfers. In 2022, their share accounted for 94% of the total number and 97% of the total value of sent credit transfer transactions. A total of 373.7 million transactions of national credit transfers, worth a total of HRK 2,717.8m, were executed in 2022. At a monthly level, 31.1 million national credit transfers were executed on average, with an average value of HRK 226,487.1m per month (Figure 7).

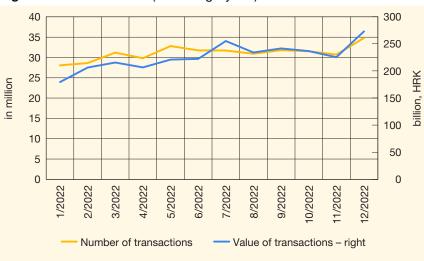


Figure 7 Credit transfers (Subcategory 1.1)

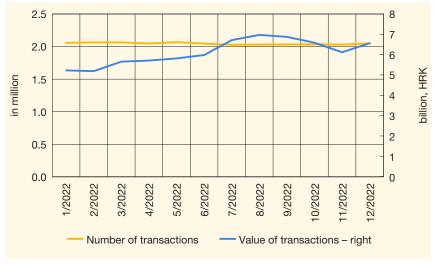
Note: Data refer to the transactions of sent national credit transfers executed in all currencies and converted into kuna. Source: CNB.

Of the total number of executed national credit transfer transactions, 54.3% were executed debiting the payment accounts of consumers, 42.67% debiting the payment accounts of business entities and 3.03% debiting the payment accounts of credit institutions in the RC. At the same time, of the total value of executed national credit transfer transactions, as much as 82.1% was accounted for by debits of the payment accounts of business entities, 8.6% by debiting the payment accounts of consumers and 9.3% debiting the payment accounts of credit institutions in the RC. The average value of executed credit transfers debiting the payment accounts of consumers, business entities and credit institutions came to HRK 1,152, HRK 13,989, and HRK 22,408, respectively.

In 2022, 24.6 million standing orders (Subcategory 1.2) totalling HRK 73,448.4m were executed by debiting the payment accounts of consumers and business entities. The above amounts account for 6.2% of the total number and 2.6% of the total value of sent credit transfers (Figure 6). On average, at a monthly level, two million standing orders were executed, totalling an average of HRK 6,120.7m per month (Figure 8).

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

Figure 8 Standing orders (Subcategory 1.2)



Note: Data refer to standing order transactions executed in all currencies and converted into kuna.

Source: CNB.

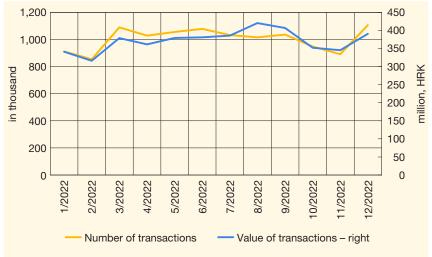
payment accounts of business entities. The average value of standing orders executed by debiting the payment accounts of consumers was HRK 680 and the average value of standing orders executed by debiting the payment accounts of

## 2.2 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, Croatian Post, retail chains). As at 31 December 2022, in the RC, the bill-paying service was provided by 12 credit institutions and one electronic money

Figure 9 Bill-paying service

business entities HRK 73,545.



Note: Data refer to the payment transactions executed using the bill-paying service in kuna. Source: CNB.

institution. The total number of payment transactions executed by the bill-paying service in 2022 came to 12.1 million with a total value of HRK 4,460.3m.

As shown in Figure 9, on average one million transactions were executed monthly using the bill-paying service with the average value amounting to HRK 371.7m per month. The average value of transactions executed using the bill-paying service was HRK 370.

#### 2.3 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 2022 (e.g. the payment of liabilities for utility services, collection of expenses on the card with a delayed debit function, etc.).

As at 31 December 2022, a direct debit service in the RC was provided by 18 credit institutions and a total of 20.1 million transactions of direct debits debiting the payment accounts of payers in the total value of HRK 14,949.9m 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 13,703.6m (91.7% of the total value of all such transactions).

The movement of the total monthly number and value of direct debit transactions in 2022 is shown in Figure 10. The average monthly number of direct debits according to which payment accounts of payers in the territory of the RC were debited in 2022 stood at 1.7 million transactions with an average monthly value

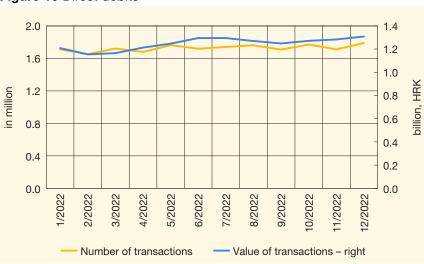


Figure 10 Direct debits

Note: Data refer to direct debit transactions executed in all currencies and converted into kuna.

Source: CNB.

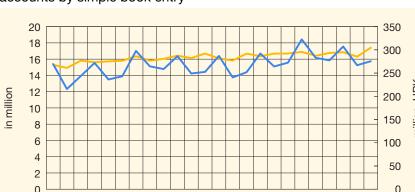
of HRK 1,245.8m. The average value of direct debit transactions executed by debiting the payment account of consumers stood at HRK 667 while the average value of direct debit transactions executed by debiting the payment account of business entities came to HRK 8,170.

## 2.4 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 (e.g. interest payments, 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, 199 million transactions of debits from the accounts by simple book entry worth a total of HRK 3,341.4m arising out of interest and fees were executed in the RC in 2022. The total number of transactions of debits from the accounts by simple book entry increased by 4.4% and their total value decreased by 8.1% from 2021. The movement of the total monthly number and value of debits from the accounts by simple book entry transactions in the past two years is shown in Figure 11.

In 2022, at a monthly level, on average 16.6 million transactions of debits from the accounts by simple book entry were executed with an average value of HRK 278.4m per month. The average value of transactions of debits from the



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

Note: Data refer to the transactions of debits from the accounts by simple book entry executed in all currencies and converted into kuna.

Source: CNB.

Value of transactions – right

0/2021 1/2021 2/2021

9/2021

8/2021

Number of transactions

accounts by simple book entry executed by the transfer from payment accounts of consumers stood at HRK 9 and that executed by the transfer from payment accounts of business entities came to HRK 58.

## 2.5 Transactions using payment cards issued in the RC

Transactions using payment cards issued in the RC shown in item 5 in Table 1 (Report on cashless payment transactions in the Republic of Croatia in 2022) include national card-based payment transactions executed using payment cards issued by issuing payment service providers in the RC. Payment service providers – issuers<sup>4</sup> in the RC include:

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

For the purposes of this Report, national card transactions<sup>5</sup> include only the following:

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

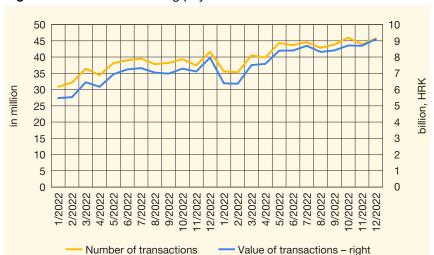


Figure 12 Transactions using payment cards issued in the RC

Note: Data refer to national transactions using payment cards issued in the RC, which include payment transactions of the purchase of goods and services using a payment card and direct debits collected through a payment card executed in kuna. Source: CNB.

<sup>4</sup> Payment cards issued in the RC used to execute national card transactions on 31 December 2022 were issued by 21 credit institutions and three electronic money institutions.

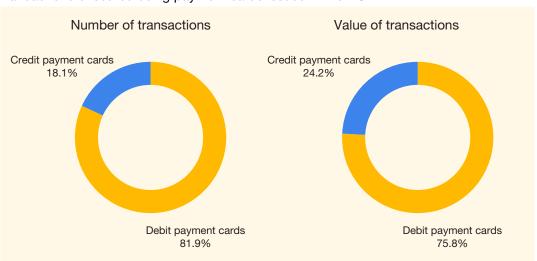
<sup>5</sup> In this Report, the transactions of the withdrawal and deposit of cash using a payment card, and the transactions of fees, interests, membership fees, etc., collected by the issuer through the payment card, are not included in national card transactions.

In all, 506.1 million such national card transactions using payment cards issued in the RC worth a total of HRK 96,547.3m were executed in 2022. If these data are compared with the data from 2021, it can be seen that the total number of national transactions using payment cards issued in the RC increased by 13.8%, and their total value rose by 18.4%. The movement in the total number and value of national transactions using payment cards issued in the RC in the last two years is shown in Figure 12.

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 only debit cards, while credit payment cards include credit, charge, revolving, delayed debit and membership cards.

As at 31 December 2022, of the total number<sup>6</sup> of payment cards issued in the RC, 6,926,859 (80%) were debit cards and 1,735,712 (20%) were credit cards. Debit cards were used to execute 414.4 million transactions (82%), worth a total of HRK 73,186.3m (76%). The rest of the total number of national transactions using payment cards issued in the RC was executed using credit cards (91.8 million transactions or 18%, worth a total of HRK 23,361m or 24%). 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.

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



Note: Data refer to transactions using payment cards issued in the RC executed in kuna. Source: CNB.

The average value of national transactions executed using a debit card issued in the RC in 2022 increased by 5.4% from 2021 and stood at HRK 177, and that of national transactions executed using a credit card issued in the RC increased by 4.1% and stood at HRK 255.

<sup>6</sup> As at 31 December 2022, in all, 8,662,571 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.

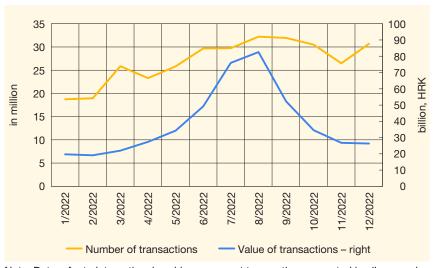
# 3 International cashless payment transactions

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 164.4 million international cashless payment transactions worth a total of HRK 925,474m were executed in the RC in 2022. Compared with the figures for 2021, the total number of these transactions increased significantly by 48% and their total value by 36%. The average value of international cashless payment transactions in 2022 stood at HRK 5,630. The movement of the total monthly number and value of international cashless payment transactions in 2022 is shown in Figure 14.

**Figure 14** Number and value of international cashless payment transactions



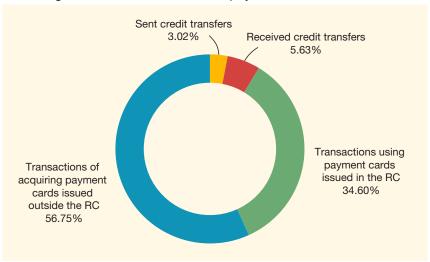
Note: Data refer to international cashless payment transactions executed in all currencies and converted into kuna.

Source: CNB.

In 2022, on average 13.7 million international cashless payment transactions were executed monthly, worth on average HRK 77,122.8m per month. The exponential growth in the number of international cashless payment transactions in the period from May to September 2022 is explained in more detail in the part related to the transactions of acquiring payment cards issued outside the RC.

The transactions of acquiring payment cards issued outside the RC and international transactions using payment cards issued in the RC accounted

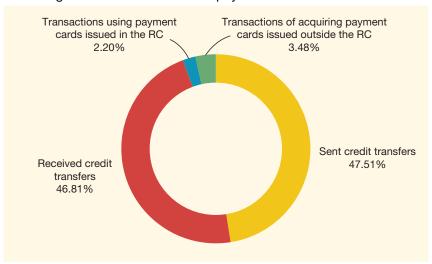
**Figure 15** Structure of international cashless payment transactions according to the number of executed payment transactions



Source: CNB.

for the largest shares of the total number of international cashless payment transactions in 2022, with 56.75% and 34.6% shares respectively (Figure 15). They were followed by international credit transfer transactions crediting payment accounts in the RC with a share of 5.63%, while sent credit transfers ranked last with a 3.02% share.

**Figure 16** Structure of international cashless payment transactions according to the value of executed payment transactions



Note: Data refer to the value of international cashless payment transactions executed in all currencies and converted into kuna. Source: CNB.

As shown by the structure of the value of international cashless payment transactions (Figure 16), international credit transfers account for 94% of the total value of transactions. Of the total value of international cashless payment transactions, 46.81% relates to international credit transfers executed by crediting payment accounts in the RC and 47.51% relates to international credit transfers executed by debiting 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 3.48% and 2.2%, respectively, of the total value of international cashless payment transactions.

The high share of credit transfers in the total value of international (as in national) cashless payment transactions results from credit transfers being the most frequently used in larger-value transactions. This can also be seen in the average value of international cashless payment transactions, which is notably higher in the case of international credit transfers than the average value of international transactions executed using a payment card. The average values of international cashless payment transactions for consumers and business entities are shown in Figure 17.



Figure 17 Average value of international cashless payment transactions

Note: International cashless payment transactions include cashless payment transactions executed in all currencies and converted into kuna.

Source: CNB.

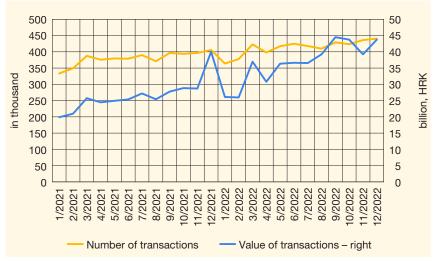
An analysis of each of the categories of international cashless payment transactions is given below.

#### 3.1 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 executed credit transfers debiting the payment accounts of credit institutions in the RC do not include transactions that 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).

In all, five million transactions of sent international credit transfers worth a total of HRK 439.7m (executed in all currencies and converted into kuna) were executed in 2022. The above data show that the total number of sent international credit transfers rose by 8.8% and their total value by 37.8% on an annual basis from 2021. At a monthly level, on average 413.3 thousand sent international credit transfers worth on average HRK 36,640.7m were executed in 2022. The movement in the total number and value of sent international credit transfers in 2021 and 2022 is shown in Figure 18.

Figure 18 Sent international credit transfers



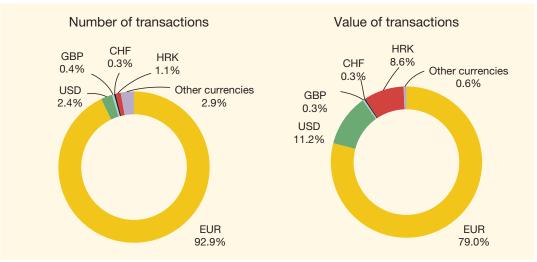
Note: Data refer to sent international credit transfers executed in all currencies and converted into kuna.

Source: CNB.

Of the total number of sent international credit transfers in 2022, 86.6%, worth a total of HRK 418,086.9m, were executed by debiting the payment accounts of business entities in the RC. Of the total number of sent international credit transfers, 13.2%, worth a total of HRK 14,072.6m, 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 7,529.3m.

The average value of an international credit transfer debiting the payment account of a business entity in the RC stood at HRK 97,340, that debiting the payment account of a consumer in the RC stood at HRK 21,489, and that debiting the payment account of a credit institution in the RC stood at HRK 815,032.

Figure 19 Structure of sent international credit transfers by currency



Notes: Data refer to sent international credit transfers by currency. The value of transactions per individual currencies is converted into kuna.

Source: CNB.

It can be concluded from the analysis of the structure of sent international credit transfers in terms of currency that in 2022 the largest number (92.9%) and the largest value (79%) of sent international credit transfers were executed in euro. The shares of the currencies in the structure of sent international credit transfers in terms of currency are shown in Figure 19.

### 3.2 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, 9.3 million transactions of received international credit transfers worth a total of HRK 433,213.6m (executed in all currencies and converted into kuna) were executed in 2022. If these data are compared with the figures for 2021, the total number of received international credit transfers can be seen to have increased by 14.4% and the total value of transactions by 33.7%. At a monthly level, on average 771.3 thousand received international credit transfers worth on average HRK 36,101.1m a month were executed in 2022 (Figure 20).

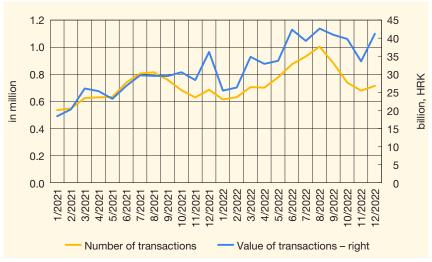


Figure 20 Received international credit transfers

Note: Data refer to received international credit transfers executed in all currencies and converted into kuna.

Source: CNB.

Of the total number of received international credit transfers in 2022, 67.18%, worth a total of HRK 56,745.4m were executed by crediting the payment accounts of consumers in the RC. Of the total number of received international credit transfers, 32.38%, worth a total of HRK 360,091.7m were executed by crediting the payment accounts of business entities in the RC. The remaining 0.44% worth a total of HRK 16,376.3m related to the share in the number of received international credit transfers executed by crediting the payment accounts of credit institutions in the RC.

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 2022, the average value of international credit transfers executed by crediting the payment account of business entities in the RC stood at HRK 120,166, that executed by crediting the payment account of consumers in the RC stood at HRK 9,126, and that by crediting the payment account of credit institutions in the RC stood at HRK 397,910.

It was established from the structure of received international credit transfers in 2022 by currency that the largest share of transactions (87.6% in the number and 78.85% 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 1.99% in the total number and 9.69% in the total value of received international credit transfers by currency. The shares of the currencies in the structure of received international credit transfers by currency are shown in Figure 21.

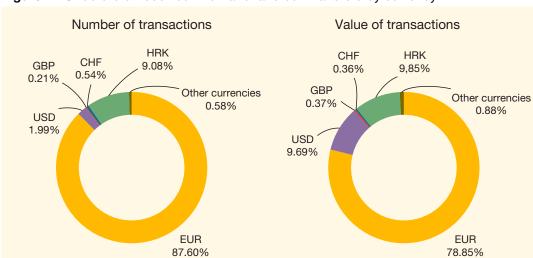


Figure 21 Structure of received international credit transfers by currency

Notes: Data refer to received international credit transfers by currency. The value of transactions per individual currencies is converted into kuna.

Source: CNB.

# 3.3 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 purchases of goods and services using a payment card; and
- payment transactions of cash withdrawal using a payment card.

According to the data submitted, 56.9 million international transactions using payment cards issued in the RC worth a total of HRK 20,396.7m were executed in 2022. The transactions were executed in 138 currencies and 216 different countries. The total number of executed international transactions using payment cards issued in the RC increased by 36% and their total value by 40.2% from 2021.

On a monthly level, in 2022, 4.7 million international transactions using payment cards issued in the RC were executed on average, worth an average of HRK 1,699.7m monthly. The movement of the total monthly number and value of international transactions using payment cards issued in the RC in 2021 and 2022 is shown in Figure 22.

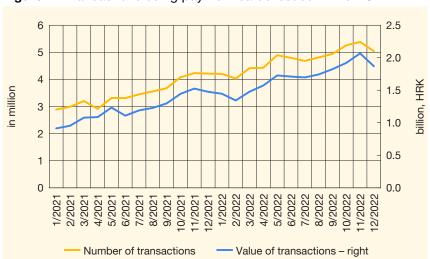


Figure 22 Transactions using payment cards issued in the RC

Note: Data refer to international transactions using payment cards issued in the RC, which include payment transactions of the purchase of goods and services using a payment card and payment transactions of cash withdrawal using a payment card executed in all currencies and converted into kuna.

Source: CNB.

In 2022, of the total number and value of international transactions using payment cards issued in the RC, 95.8% of the number and 88.5% of the value of international payment card transactions were executed using consumer cards, while 4.2% of the number and 11.5% of the value of international payment card transactions were executed using the cards of business entities.

The average value of international transactions using a payment card issued to a consumer in the RC was HRK 331 and that of international transactions using a payment card issued to a business entity in the RC was HRK 978.

# 3.4 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'), including e-money purchase transactions. The service of acquiring payment cards was provided by acquiring payment service providers, i.e.:

- 1. credit institutions (banks) that have obtained authorisation from the CNB, which includes the authorisation to provide the payment service of acquiring payment transactions executed by payment instruments;
- electronic money institutions that have obtained authorisation from the CNB to provide the payment services of acquiring payment transactions executed by payment instruments; and
- payment institutions that have obtained authorisation from the CNB to provide the payment services of acquiring payment transactions executed by payment instruments.

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

In all, 93.3 million transactions of acquiring payment cards of foreign issuers, worth a total of HRK 32,175m, were executed in 2022. As compared with the total number and value of the acquiring transactions of payment cards of foreign issuers in 2021, the total number of transactions rose by 65% and their total value by 55%.

The movement of the total monthly number and value of transactions of acquiring payment cards issued outside the RC in the last eight years is best shown in Figure 23, according to which, on an annual basis, until 2022, the total number and the total value of transactions on average rose by 28% and 24% respectively (with the exception for 2020 when the effect of the COVID-19 pandemic was observed).

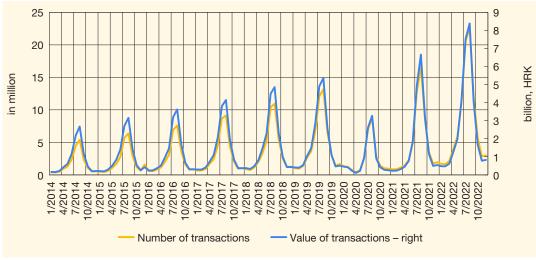


Figure 23 Transactions of acquiring payment cards issued outside the RC

Note: Data refer to the transactions of acquiring payment cards issued outside the RC, which include the transactions of acquiring for the purchase of goods and services executed through EFTPOS terminals and online at the point of sale through a payment card; executed in kuna. Source: CNB.

The data shown in Figure 23 also suggest an upward trend in the total number and value of monthly transactions of acquiring payment cards of foreign issuers for the purchase of goods and services in the period from May to September.

After September and the summer tourist season, the number and value of monthly transactions usually falls to the level of the beginning of the year. In 2022, the average value of transactions of acquiring payment cards issued by foreign issuers for the purchase of goods and services stood at HRK 345, or down by 6.25% from 2021.

## 4 Overview of basic definitions

**'Bill-paying service'** means a service in which a credit institution, on the basis of a contract with the payee, collects funds from the payer, irrespective of the manner of collection, 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.

'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.

'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).

'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.

'International/cross-border 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 in another member state or a third country (hereinafter referred to as 'international payment transaction').

'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 Republic of Croatia.

**'Standing order'** means an instruction issued by the payer to the provider of payment services, 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 an annuity or credit instalment, etc.).

