

PAYMENT SYSTEMS REPORT

2023



KEY MESSAGES



by 2030

the share of electronic payments in the whole economy could even be two-thirds based on the payments strategy of the MNB



42%

of credit transfers were settled in the instant payment system



1,7 million

cards are registered in mobile wallets



in 27%

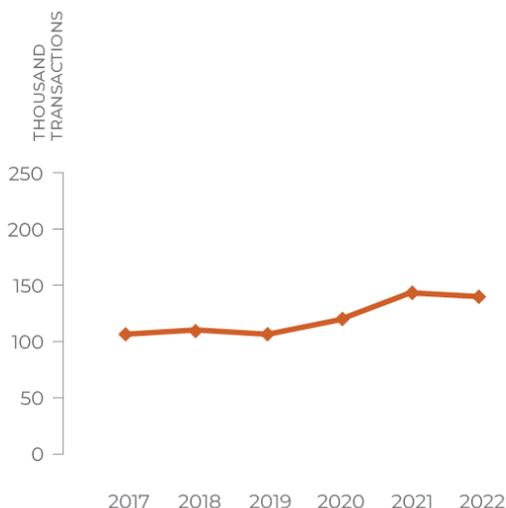
of stores electronic payments exceed 50 per cent

Payment service developments

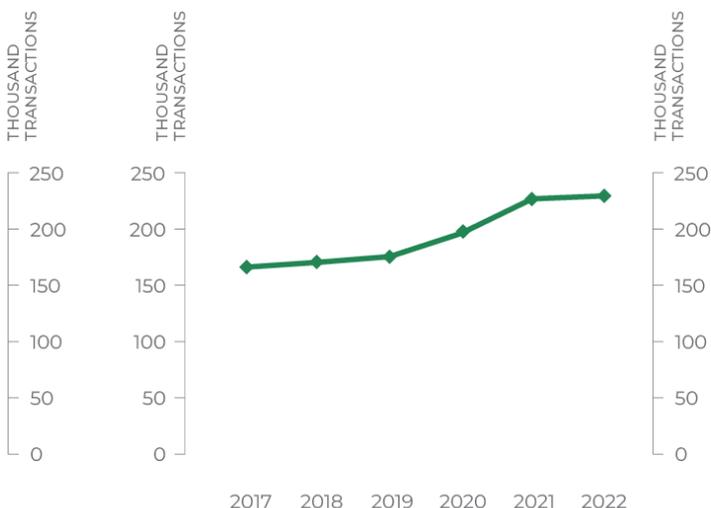
Within the electronic payment infrastructure, the infrastructure elements needed for online commerce and mobile payments expanded considerably in 2022 as well. The number of online virtual merchant outlets continued to increase, by 24 per cent, to 42 thousand. In addition, the number of cards registered in mobile wallets grew by 37 per cent, to 1.7 million, and thus already nearly 18 per cent of the cards are registered in this type of service. Neverthe-

less, the size of the traditional card acquiring infrastructure did not change significantly, the number of acceptance points declined by 2 per cent, while the number of POS terminals was practically stagnant. Electronic payment is still not possible at some stores obliged to use online cash registers, although they account for less than 3 per cent of the transactions in the sector concerned.

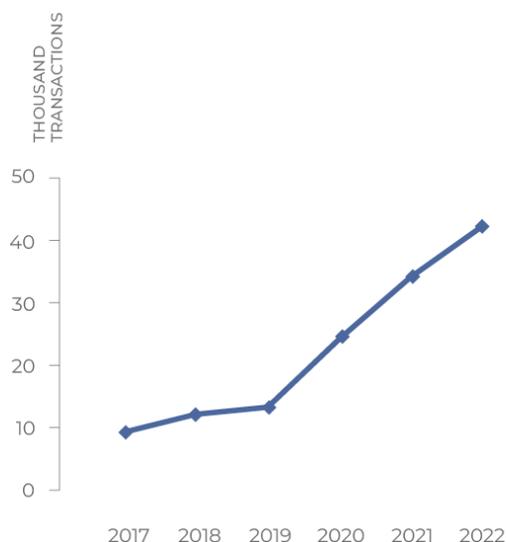
Chart 1: Development of the payment card acceptance network in Hungary



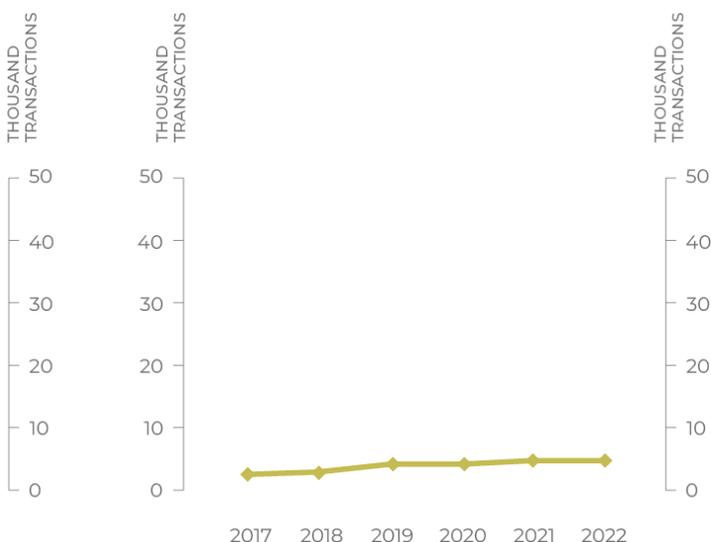
Physical merchant outlets



Number of POS terminals at physical merchant outlets



Online virtual merchant outlets

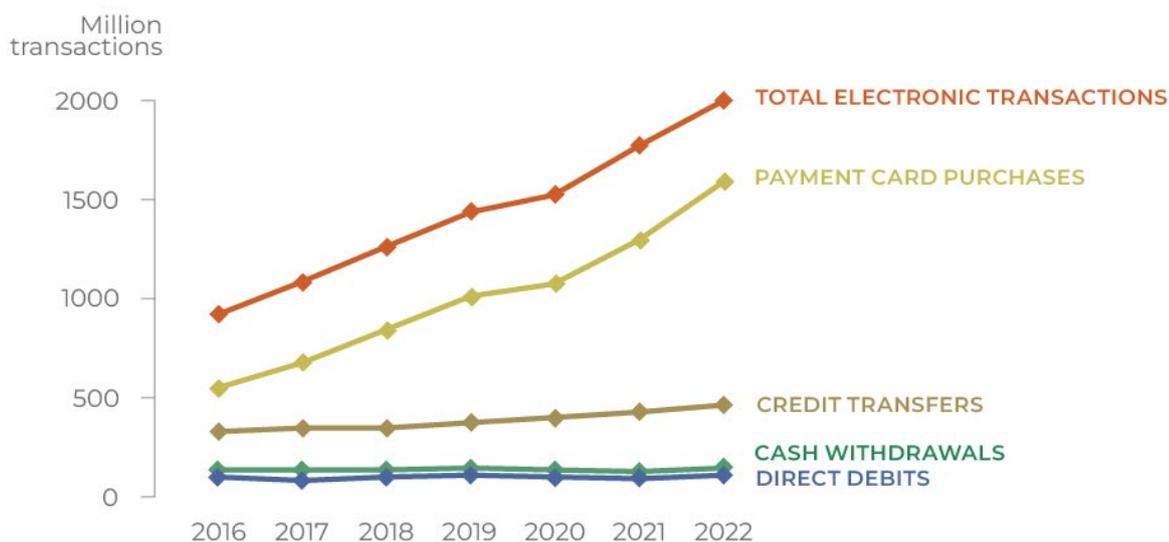


Merchant outlets accessed via mail or telephone

Electronic payments continue to expand considerably; customers use innovative payment solutions more and more frequently. The number of payment card purchases increased by 23 per cent in spite of the previous high base value, and their total value already significantly exceeded the value of all cash withdrawals as well. Both the number and value of mobile wallet purchase transactions doubled in a year. Apparently, customers who try the service also use it frequently, as the turnover expanded faster than the number of cards registered in mobile wallets. The growth rate of online payment card purchase transactions is still high; in terms of

volume, it exceeded 20 per cent in 2022. 42 per cent of credit transfer transactions were carried out in the instant payment system; in 2022, the number of instant transactions grew by 15 per cent, i.e. to a much greater degree than all credit transfers. This major expansion may have been caused, inter alia, by the economic stimulus measures implemented in 2022, as a result of which the amount of disposable income increased in various social groups, as well as by the restructuring of various state subsidy schemes, which may also have added to the transaction turnover.

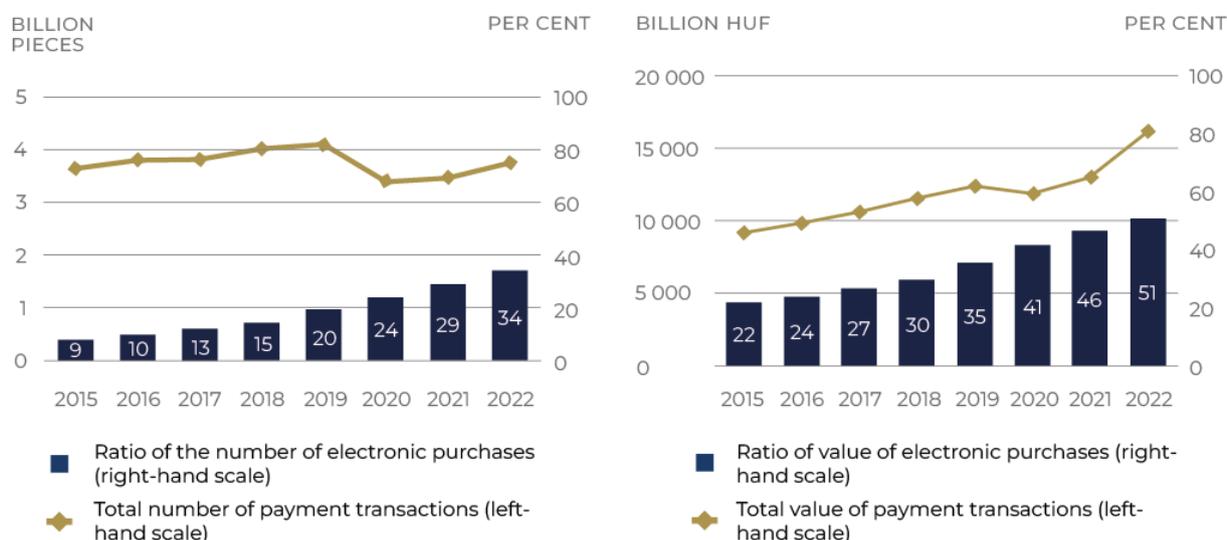
Chart 2: Changes in the number of the main payment methods related to payment accounts



In the sectors that use online cash registers, more than one third of the number and more than half of the value of transactions are carried out electronically. Similarly to previous years, the ratio of the number of electronic transactions was 5 percentage points up, reaching 34 per cent in 2022. 78 per cent of the transactions were below HUF 5000, where the use of cash is still more frequent. However, already more than half of the transactions are paid by

customers electronically above HUF 5000. It is an important development that within stores providing electronic payment options, the number of stores where the ratio of electronic transactions is below 20 per cent declined significantly, while the ratio of those with electronic transactions above 20 per cent was up, and the ratio of stores where electronic payments exceed 50 per cent increased by 7 percentage points to 27 per cent.

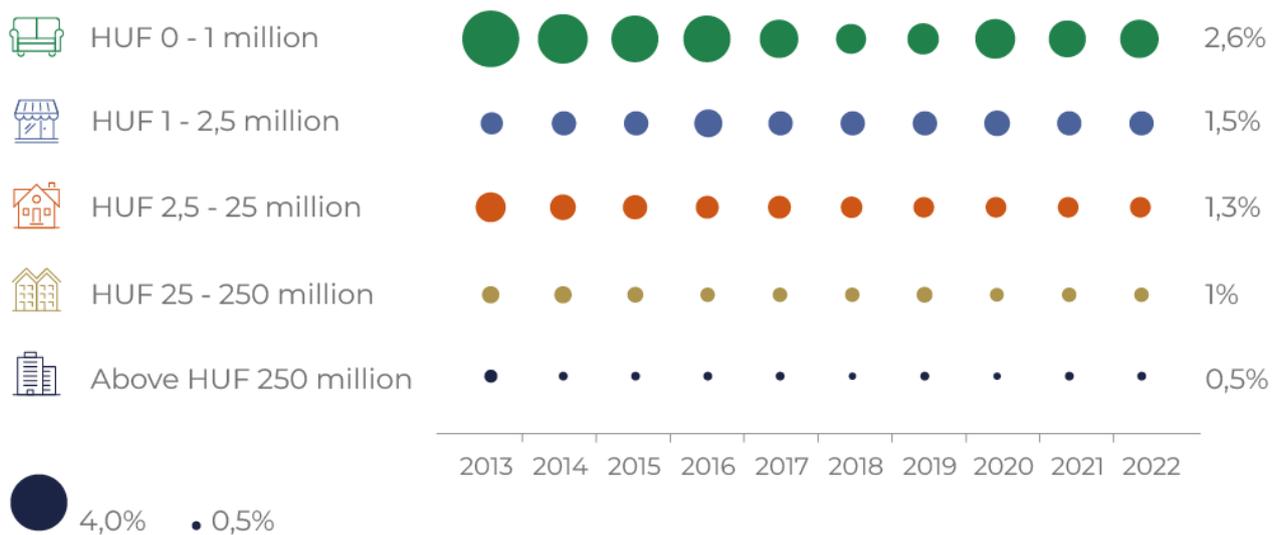
Chart 3: The number and value of transactions and the ratio of electronic transactions in the sectors with online cash registers



As a result of a dynamic expansion in the turnover of electronic payment methods, domestic actors' revenues from payment services increased considerably in 2022 compared to the previous year. The HUF 749 billion revenue of payment service providers in Hungary exceeds the previous year's value by 20 per cent. Retail customers' payment costs also increased with the rise in revenues. As many customers pay higher fees than other customers with similar payment habits, in the future special emphasis will have to be put on providing information to customers regarding the fees of account packages and services as well as switching between them. In parallel with that, revenues from payment card acquiring increased by more than 40 per cent, i.e. by HUF 25 billion. Card acceptance costs of merchants with the lowest card turnover remained practically unchanged, but the nearly 2.7

per cent cost as a percentage of turnover is still expressly high compared to merchants with higher turnover. According to the payment inspections conducted in 2022, the operation of the payment service providers under review was satisfactory in general. Nevertheless, deficiencies were also found by the majority of the inspections. During 6 payment inspections, the MNB found 72 infringements, one quarter and one third of which were related to breaches of the Payment Services Act and the MNB Decree on the execution of payment transactions, respectively. The main infringements concerned the rules regarding the immediate crediting of incoming amounts, the content requirement of the framework contract, the preliminary provision of information, the interface related to open banking as well as the adequacy of the statement of fees.

Chart 4: Merchants' card acceptance costs as a percentage of turnover according to quarterly card turnover categories



Financial market infrastructures

The overseen domestic systems are very secure, and they supported the performance of the increased number of transactions in the economy without problems. Financial market infrastructures operated in a reliable and efficient manner, in line with international standards. They adequately addressed the challen-

ges of the pandemic in 2022 as well, and the switching to hybrid work schedule as well as the remote operation did not result in operational problems. Compared to previous years, the availability of the overseen systems deteriorated slightly. In 2022, the turnover of the overseen domestic systems expanded by 15 per cent and 4 per cent in terms of value and the number of transactions, respectively, with the elevated volatility due to the coronavirus pandemic still remaining in place (Table 1).

Table 1: Turnover of domestic financial market infrastructures

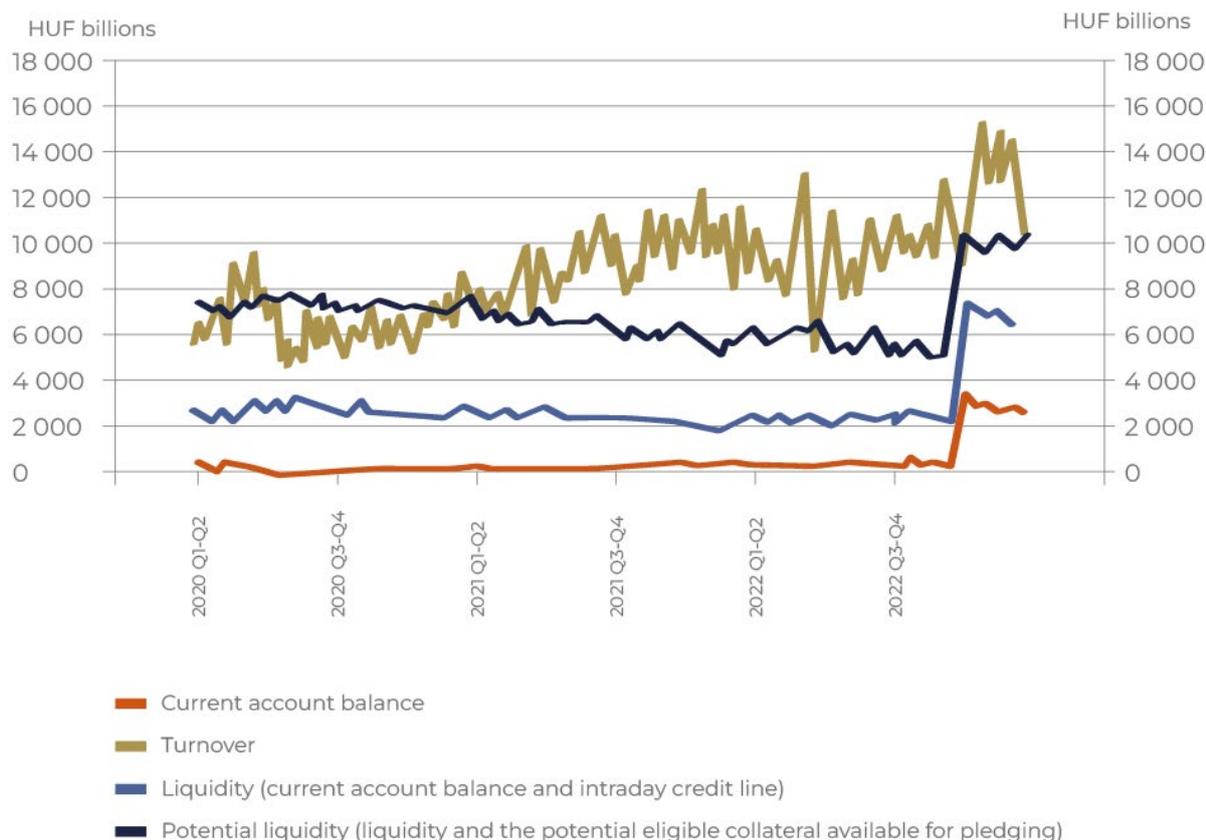
OVERSEEN SYSTEMS		VOLUME (THOUSAND PIECES)			VALUE (HUF THOUSAND BILLION)		
		2020	2021	2022	2020	2021	2022
VIBER		1 844	1 845	2 083	1 678	2 338	2 640
ICS	OVERNIGHT CLEARING	96 121	97 353	93 777	9	10	5
	INTRADAY CLEARING	154 179	138 021	156 590	113	130	178
	INSTANT CLEARING	93 660	135 583	153 352	14	22	28
KELER		490	545	610	173	203	250
KELER CCP*		2 718	2 002	2 518	9	7	9

* Data refer to the capital market.

The liquidity of VIBER participants increased considerably by the last quarter of the year, which is attributable to amendments to the central bank toolkit. Liquidity was sufficient for the increased and more volatile payment turnover during the whole year. The level of liquidity in VIBER was relatively stable in the first three quarters of 2022, but as of end-September the account balance and intraday credit line of VIBER participants started to increase drastically,

resulting in a threefold rise in liquidity compared to the previous value. This magnitude of the rise in liquidity was attributable to amendments to the central bank toolkit, while the increase in the minimum reserve ratio resulted in a growth of the payment account balance held in VIBER, and the intraday credit line was up considerably with the expansion of the range of eligible collateral.

Chart 5: VIBER liquidity and turnover



The composition of the pledged collateral behind the intraday credit line also changed in 2022. While the share of government bonds declined gradually by 10 percentage points in the last quarter of 2022, the share of corporate loans expanded considerably, accounting for

more than 10 per cent of the collateral by end-2022. Securities holdings on participants' balance sheets that may be optionally pledged still account for a sufficient portion (40 per cent) of VIBER participants' potential liquidity.

As a result of the ample liquidity in the system, still only very few of the VIBER transactions are queued due to shortage of funding. Their number declined by 45 per cent compared to the previous year, and the average time spent in the queue also decreased significantly compared to 2021. It is interesting that as a result of the amendment to the central bank toolkit, the distribution of VIBER turnover over time changed considerably, which did not increase the clearing and settlement risk. The deposit quick tender with an interest rate of 18 per cent was launched as of 14 October, with high-value deposits typically starting after 17 hours. As a result, instead of the previous level of 85–90 per cent, a mere 60 per cent of the VIBER turnover took place before 17 hours following the introduction of the quick tender.

The increased use of FinTech technologies is already reflected in some provisions of law, including, inter alia, the DLTR, based on which trading market infrastructures and central securities depositories could apply for exemption from certain provisions of law if they experiment with e.g. a securities settlement system based on distributed ledger technology (DLT). Prior to the DLTR, it was not possible or was difficult to apply EU financial service legislation to DLT-based infrastructures. Although the DLTR is already effective, there is not yet any central securities depository providing services in a DLT-based securities settlement system as well in practice.

The major energy market volatility and record-high energy prices had a significant impact on market participants and post-trading infrastructures. The record-level price rises observed last year resulted in unusual liquidity difficulties for market players as well as in major risks for market infrastructures, primarily for central counterparties dealing with the clearing of energy products. The liquidity funds raised for financing the increased collateral approximated the limits of market participants' solvency, and therefore the European Union tried to protect itself from extreme price moves and in order to ease the liquidity pressure by amendments to legislation and by the introduction of a price cap mechanism.

Current issues of payments and financial market infrastructures

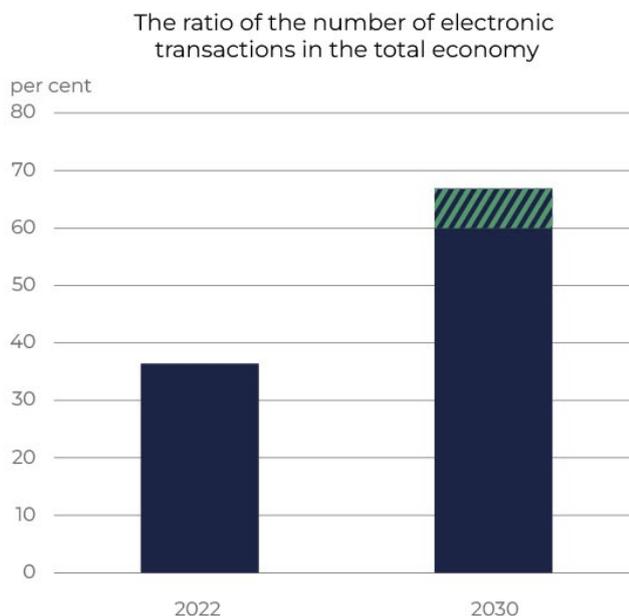
In 2023, the MNB renewed its payments strategy, and thus, following the two-pillar strategy comprising infrastructure development and incentives to usage applied before, now the emphasis will be on the incentives to usage. The main objective of the payments strategy is that by 2030 the share of electronic transactions in the economy as a whole reach at least 60 per cent in the case of an extensive and general usage stimulation, and at least two-thirds in the case of further targeted measures. As a result of the improvement of infrastructure implemented within the framework of the MNB's payments strategy to date, electronic payment has become possible practically in any situation. In parallel with that, in view of the general stimulation of usage concerning a wide range of payment situations and customers, the ratio of use of electronic payment solutions also increased considerably. Based on that, targeted measures are needed in the period to come. On the one hand, they allow an increase in the share of electronic payments even in those social groups and payment situations where it is below average for some reason at present. On the other hand, they can improve households' knowledge and awareness of payments, which is essential for them to be able to make well-informed choices between payment options. The MNB created the Payments Development Indicator Set (PDIS) in order to evaluate the situation of payments in Hungary, measure the achievement of the targets set and monitor the implementation of the relevant measures.

Chart 6: Results of the MNB’s previous payments strategy and its current strategic objective

FORMER TWO-PILLAR STRATEGY



STRATEGY FOR 2030

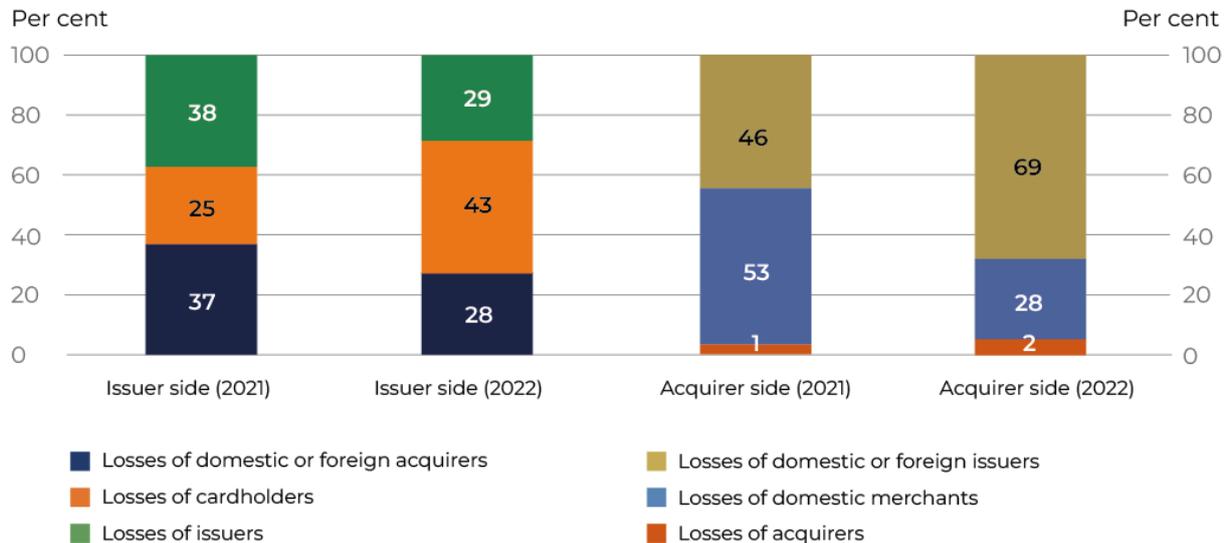


Note: for determining the ratio of electronic transactions, all the payment transactions carried out in the whole economy, i.e. the number of purchases in shops and on the Internet as well as bill payments and also of transactions within various sectors (households, corporates and government) and between sectors are taken into account.

Although it is still insignificant compared to the total turnover, the proportion of frauds observed in electronic payments increased, primarily through cases related to psychological manipulation. Although the mandatory strong customer authentication introduced for transactions within the European Economic Area mitigated the problems in the case of certain types of fraud, it was unable to permanently cut the increase in frauds; it only changed their distribution. It is disadvantageous that an increasing portion of losses caused by payment

card frauds is shifted onto bank customers. The MNB elaborated a three-pillar action plan to address the above issues. Accordingly, the MNB will publish a recommendation for payment service providers, and it will contain the MNB's expectations concerning the detection, prevention, hindrance and handling of fraud. In addition, the MNB is working together with GIRO to set up a Central Fraud Detection System, which can support the early recognition and efficient identification of fraud patterns by analysis based on artificial intelligence.

Chart 7: Losses incurred by participants of payments in connection with frauds with bank card transactions



As a third step, at end-2022 an information programme called Cyber Shield and based on wide-ranging cooperation was launched by the MNB, the Hungarian Banking Association, the National Media and Infocommunications Authority, the Special Service for National Security – National Cybersecurity Centre as well as the National Police Headquarters, and the number of participating institutions is growing steadily. The campaign of the Cyber Shield project uses

the examples of average people to call attention to risks, and provides information on the basic patterns and forms of conduct to be noticed in order to avoid frauds. Accordingly, it calls attention, inter alia, to the secure handling of identifiers and passwords, the careful interpretation of various messages and the consideration of offers that seem to be suspiciously favourable.

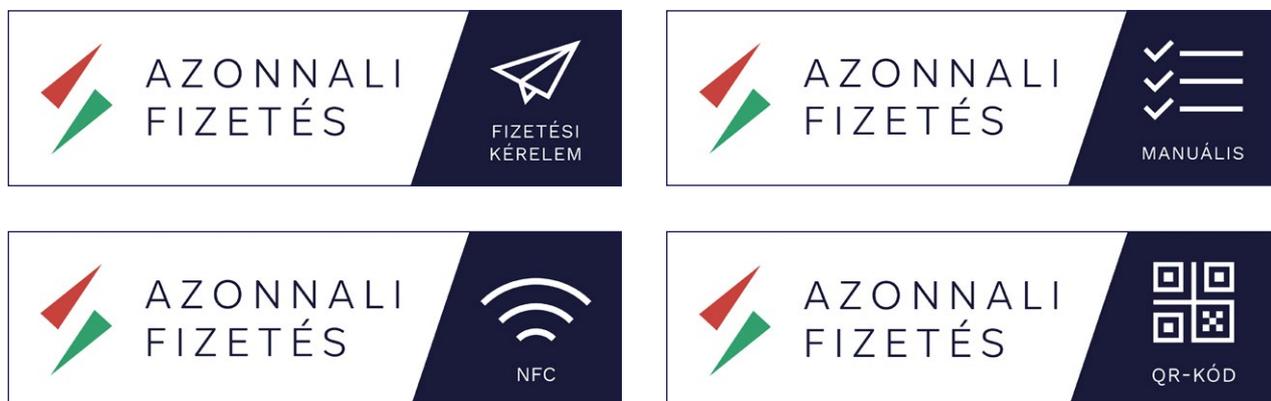
Chart 8: Information providing elements of the Cyber Shield



Following the model that has already been working in Hungary since 2020, the European Commission intends to regulate and make it mandatory for payment service providers to provide instant payment service for euro payments. However, while the European regulation determines a schedule for the complete access to the instant payment basic service, the MNB's latest regulatory amendments already determine requirements in connection with the development of ancillary services. At end-2022, the MNB regulated in a decree that transacti-

on initiation based on QR code and request to pay should mandatorily be made available for payers. In addition, it contains the introduction of various customer information and notification rules, and in the case of the QR code it requires the placement of an authentication element for the most secure use of this payment solution. It also increased the value limit of transactions that are mandatory to be performed in the instant payment system from HUF 10 million to HUF 20 million.

Chart 9: Identity elements of instant payment



Starting from 1 July 2023, the maximum of the monthly fee of the basic account will decline to one third, i.e. to HUF 1000. As a result of the lower monthly fees and the fact that the transactions initiated with a QR code or request to pay have been mandatorily free of charge since the beginning of this year, the basic account is becoming an account package that can be widely used with favourable conditions, allowing,

according to our estimations, some 4 million customers to reduce their banking costs. In addition, the basic account can be an expressly good choice for the 1.4 million customers to whose account at present an amount corresponding to not more than the minimum wage arrives, and who are thus not eligible for the preferential account packages.