

A New Vision for Electronic Payments in Hungary – the Payments 2030 Strategy*

Vivien Deák – Kristóf Takács

In this feature article, key elements in the development of payments in Hungary are presented and the challenges ahead are highlighted in light of the changes observed over the past 10 years. The recently published new electronic payments strategy of the Magyar Nemzeti Bank and the 18 indicators in the Payments Development Indicator Set, which is based on a wide range of data at the MNB's disposal to monitor the achievement of the targets, are presented. The MNB's main strategic goal for payments by 2030 is to achieve a 60 per cent ratio of electronic transactions in the overall economy, or, with targeted measures, even two thirds.

1. Introduction

On 30 May 2023, the Magyar Nemzeti Bank (MNB, the Central Bank of Hungary) published its new electronic payments strategy entitled Payments 2030 (MNB 2023). Based on the development of domestic electronic payments over the past decade, the MNB found that a new vision was needed in this area to maintain the current growth rate in the ratio of electronic transactions. To this end, it set new, measurable targets and identified areas for improvement, announced the development of 2–3 year action plans based on such, and will continuously measure and evaluate progress in these areas. The objectives for the development of electronic payments are in line with those for the security of cash supply. The MNB aims to provide a user-friendly electronic alternative to cash in all situations and to reduce asymmetric information on payment alternatives, as this will boost the ratio of electronic transactions and thus create a better distribution of payment methods from the aspect of society.

This feature article first reviews the MNB's objectives in the field of electronic payments and its previous payments strategy and then the developments and experiences in the past 10 years, supported by data. This is followed by a presentation of the pillars and objectives of the new payments strategy as well as the Payments Development Indicator Set, which allows the identification of areas

** The papers in this issue contain the views of the authors which are not necessarily the same as the official views of the Magyar Nemzeti Bank.*

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This feature article is based on the publication Payments 2030 – The payments strategy objective of the MNB and the introduction of the Payments Development Indicator Set (PDIS), and summarises its key findings.

for improvement and the measurement of progress towards the targets. Finally, the key findings are summarised in the conclusion.

2. The MNB's motivations in the field of electronic payments

Electronic payments are a priority area for the MNB, as efficient, reliable and widely available electronic payment services are essential for the functioning of the economy. The wider use of electronic payments can support economic growth (Ilyés – Varga 2016), generally leads to higher GDP, trade, consumption and tax revenues (Zhang et al. 2019), and may reduce the social costs associated with payment transactions (Schmiedel et al. 2012; Turján et al. 2012) by reducing the manual processes required for cash payments and the need for face-to-face payment situations. In Hungary, the development of the payments infrastructure and the rapid growth in electronic payments led to a significant reduction in the social cost per transaction between 2009 and 2019 (Deák et al. 2022). In addition, easy-to-use, widely available electronic payment services support digitalisation processes emerging in all areas of life and help reduce tax evasion, thus contributing to increasing the competitiveness of the economy.

The motivation for the publication of the new payments strategy is that the development of electronic payments can only be achieved with the cooperation of stakeholders, and thus it is important that the MNB's development goals are clear to everyone. If they are clear to all stakeholders, they can adapt their own activities accordingly (Figure 1). Hence, the actors of the financial sector can base their own development plans and business objectives on the MNB's development strategy, new market entrants can define their business model accordingly, and public actors can take the payments development strategy into account in their regulatory activities or further public policy measures. These actors can thus actively participate in the design and implementation of the measures needed for development. In the future, the MNB will continue to work closely with these actors to successfully achieve the objectives defined in the strategy. It is also important that household and corporate customers are informed about the planned measures, as their activities may also be affected by the operation, availability and pricing of payment services. For example, a sales process is fundamentally determined by the way in which customers are able to deliver their payments to the companies and with what processing time.

Figure 1**Actors involved in the MNB's payments development strategy**

With the strategic objectives in payments guidance can be provided to

- Already operational market participants
- Government institutions
- Market participants planning a market entry
- Corporate and household customers

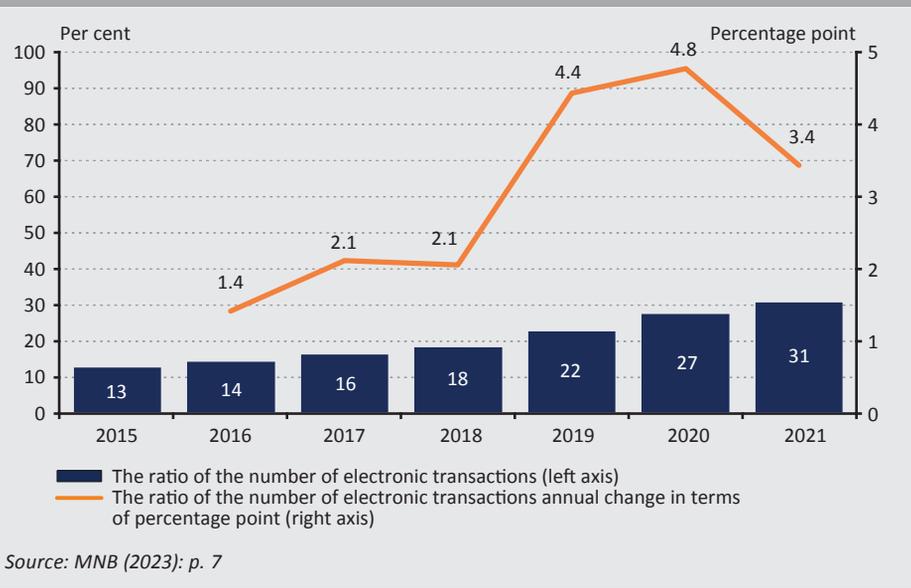
They can form in accordance with the strategy their

- Development plans
- Regulatory activity
- Operational processes
- Information activity

3. The previous payments strategy of the MNB and the development of payments in Hungary over the last 10 years

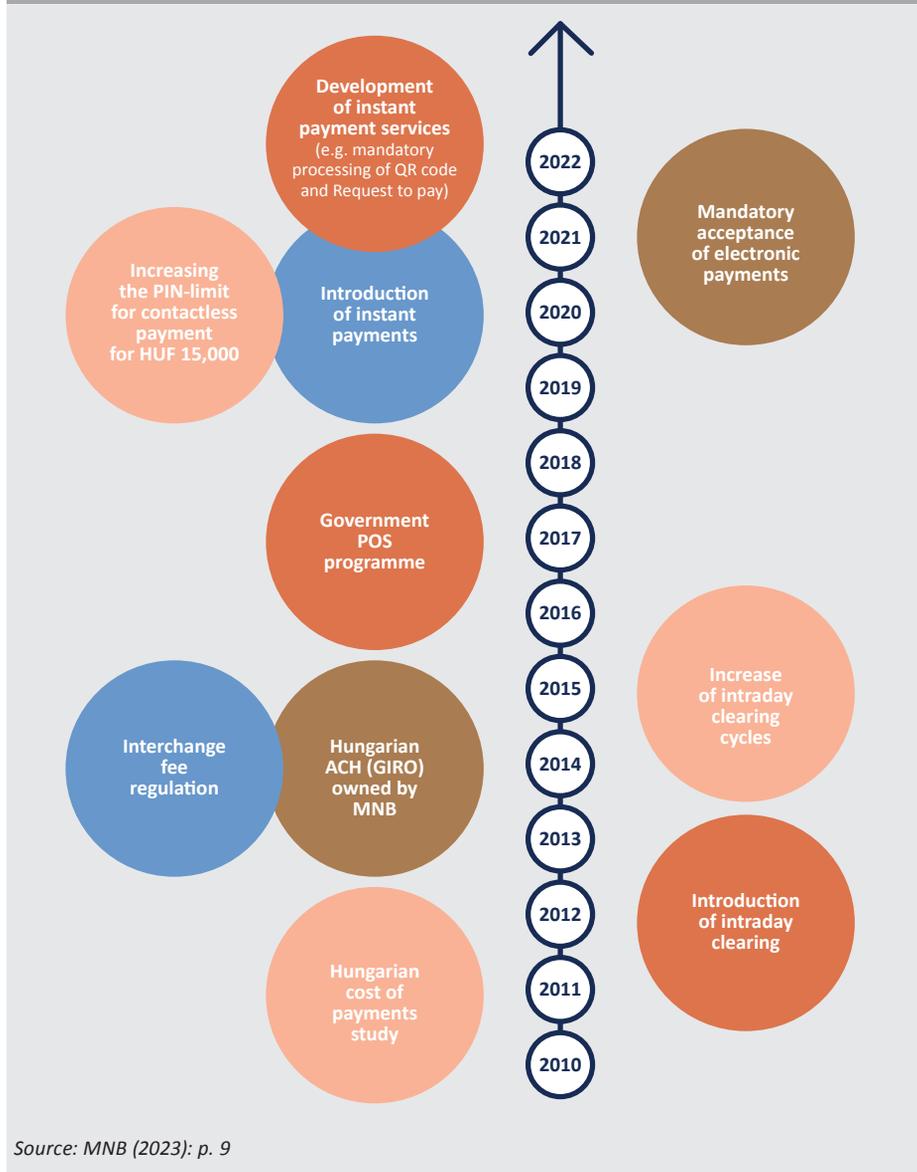
In order to increase the ratio of electronic transactions, the MNB had two objectives over the past decade: to enable electronic payment in all situations and to encourage the use of electronic payment solutions. This previous strategy resulted in a significant improvement in the payments infrastructure, and thus the first objective was met. Within this, the card acceptance network has seen a major expansion, both in shops and in online commerce, and the payment card contactless technology became widely used. By the end of 2021, 93 per cent of cards and 99 per cent of terminals were able to handle this solution. The processing of credit transfers accelerated significantly, and instead of the next working day, the transferred amount now reaches its destination within five seconds. Furthermore, additional functions related to instant payment, such as the service of request to pay, the management of secondary identifiers or the QR code payment option, ensure that the credit transfer service can be used in many new situations beyond the cases traditionally paid by credit transfer. It is now possible to pay electronically in addition to cash in virtually all payment situations, and electronic payment solutions, similarly to cash, are continuously available, allow instant processing and in many cases offer the added benefit of allowing payments to be made without the need for a personal presence. Significant progress was also made towards the target of usage stimulation, with a wide range of customers now using electronic payment services at least occasionally, with 80 per cent of the population using at least one of these solutions in 2020 (Deák et al. 2021b). As a result, the ratio of electronic transactions in the overall economy increased significantly, rising by 3–5 percentage points annually since 2019 to reach 31 per cent in 2021 (see Figure 2).

Figure 2
Ratio of the number of electronic transactions, and its annual change in percentage points in the total economy



The achievement of these objectives was supported by a number of measures, in the design and implementation of which the MNB actively participated in several of its roles (Figure 3). In the area of payment card infrastructure, these included for example the regulation on interchange fees (Kajdi – Kiss 2021), resulting in a reduction of costs for merchants, programmes supporting the installation of POS terminals and the amendment of the Act on Commerce, which required shops that are obliged to use online cash registers to provide the possibility of electronic payment from 2021. With regard to credit transfers, the introduction of intraday settlement in 2012 and instant payment in 2020 led to major improvement and increased usage possibilities. The MNB initiated developments in a number of cases and supported their successful implementation by facilitating coordination among stakeholders. It was also directly involved in the development of the credit transfer infrastructure as the owner of GIRO Zrt. In its regulatory role, the MNB developed and made recommendations to other regulatory actors to formulate legal regulations that support the uptake of electronic payments. It is important to highlight that the adoption of electronic payments was significantly influenced by the coronavirus pandemic and the changing shopping habits both internationally (Tut 2023; Jonker et al. 2022; ECB 2020) and in Hungary (Deák et al. 2021a), due to the general digitalisation trends.

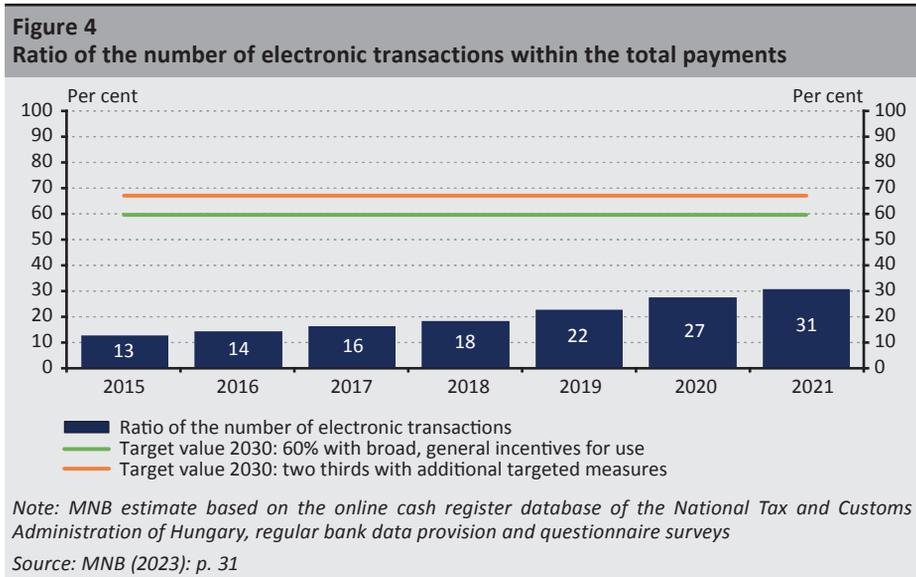
Figure 3
Key steps in the development of payments in Hungary in the last decade



Source: MNB (2023): p. 9

3. The MNB’s main payments strategy objective for 2030 and the areas of intervention identified to achieve it

By 2030, the MNB aims to achieve a ratio of electronic transactions of at least 60 per cent in the entire economy, in the case of an extensive, general usage stimulation and a ratio of at least two thirds with further targeted measures (Figure 4). Despite the progress in the last decade, there are still factors in some groups or payment situations that hinder the widespread use of electronic payment solutions. As a consequence, there are significant differences in the use of electronic payments: for example, while the ratio of electronic transactions for bill payments was 71 per cent in 2021, the ratio in shops using online cash registers was only 29 per cent. To remove the various hindering factors, new targets for electronic payments needed to be set, with a focus in the coming period on improving the awareness and knowledge of customers using the services and on stimulating their usage. In this area, it is possible, as in the past, to carry out expansive general usage stimulation activities targeting a wide range of payment situations and customers. In addition to these, there is also a need for usage stimulation activities that target specific areas of payments, aiming at specific payment situations or small groups of customers. It is important to note that the indicator measuring the achievement of the main strategic objective takes into account the total number of transactions in the economy as a whole, i.e. the number of purchases in shops and online, bill payments and transactions within and between different sectors (households, enterprises and public actors).



In order to achieve the main strategic goal, the MNB has identified seven areas where intervention is needed in the coming years, and further measurable targets have been set in the Payments 2030 strategy. Within these, areas that contribute directly or indirectly to development can be distinguished (see Figure 5). Those areas where interventions contribute indirectly to the achievement of the objective tend to promote the widespread use of electronic payment methods more slowly, over the medium term, and their impact is broad and may affect several areas. In addition, there are areas that have a direct and shorter-term effect on the achievement of the main objective.

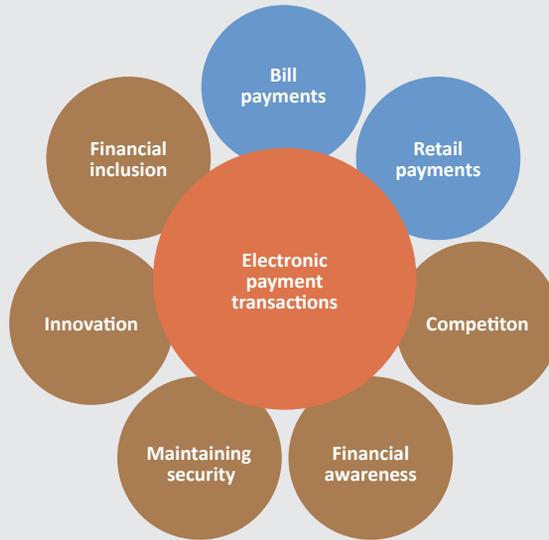
Areas that contribute indirectly to development:

- *Targeted improvements in financial inclusion*, both to further increase the number of potential users of electronic payment methods among the unbanked and to increase the activity of those who already have access.
- *Strengthening payments innovation* to accelerate the uptake of innovative payment methods and thereby encourage further improvements in payment services provided by market operators.
- *Strengthening competition*, which can both support innovation in the market and have an impact on the ability of customers to use modern payment solutions at lower costs.
- *Improving financial awareness*, which can improve access to services and increase the intensity of use as well as contribute to reducing consumer costs.
- *Maintaining security*, which is essential to maintain trust in electronic payment services and thus achieve widespread use.

Areas that contribute directly to development:

- *Development of retail payments* enabling a significant volume of cash transactions – up to several billions per year – to be replaced by electronic transactions both in-store and online.
- *Strengthening electronic bill payments*, through which operational efficiency can be further improved and the costs for service providers can be reduced, especially in the utilities sector.

Figure 5
Areas that support the achievement of strategic objectives

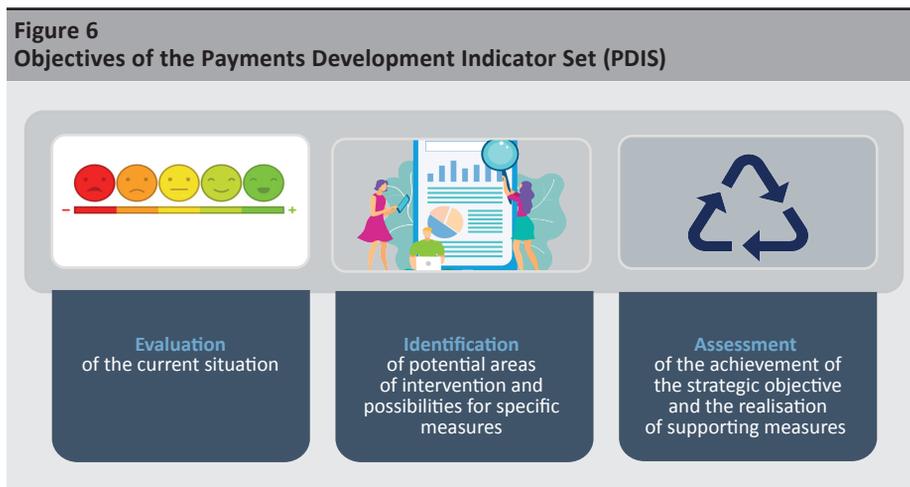


Note: In the figure, areas that may have a direct impact on the ratio of electronic transactions are shown in blue, and areas that may have an indirect impact are shown in brown.

Source: MNB (2023): p. 20

4. Payments Development Indicator Set

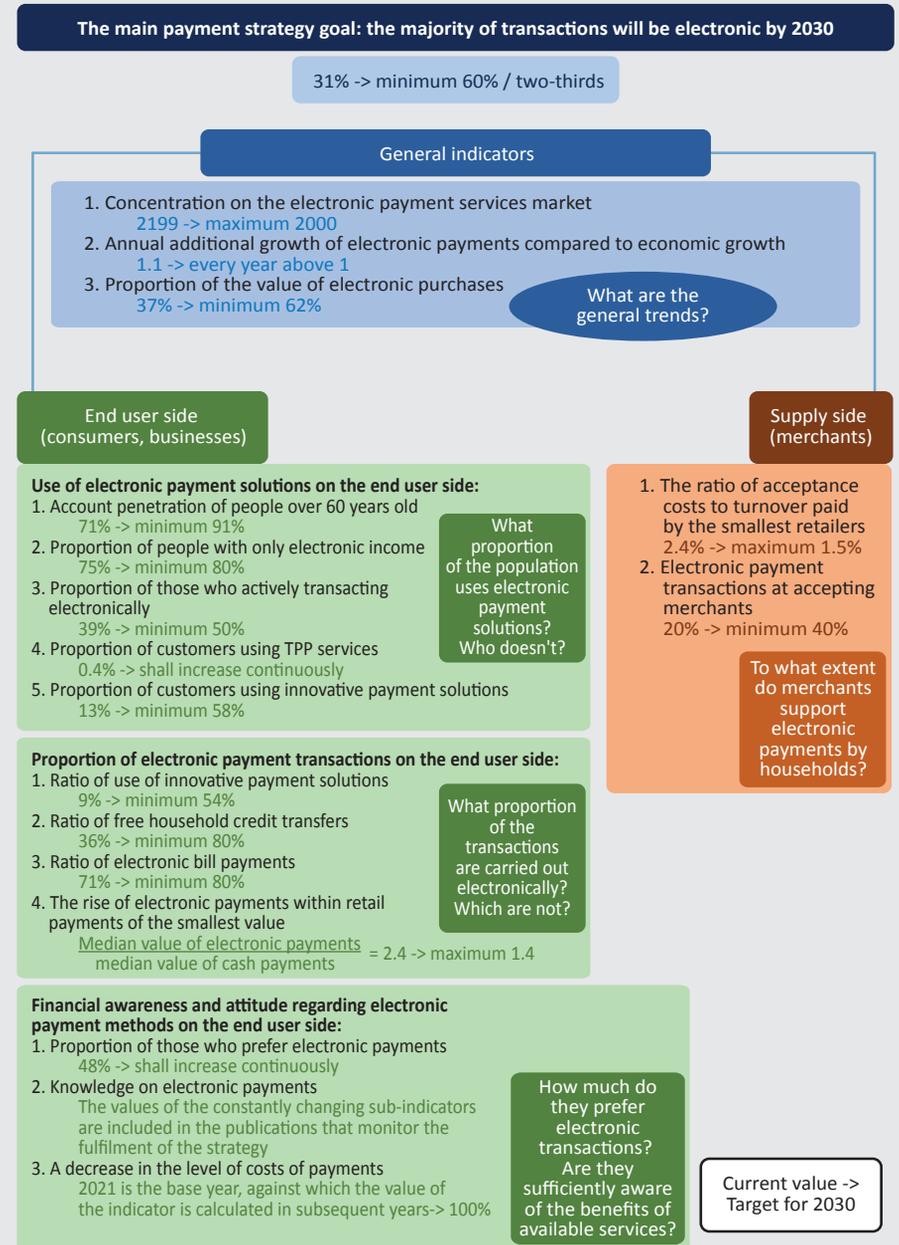
One key element of the Payments 2030 strategy is the Payments Development Indicator Set (PDIS), the main objective of which is to use the available data to evaluate the current situation of the Hungarian payments, identify potential areas of intervention and possibilities for specific measures, and assess the achievement of the strategic objective and the realisation of supporting measures (Figure 6). In order to set up the PDIS, data from payment service providers, which are regularly collected for the MNB’s central bank tasks, the online cash register database of the National Tax and Customs Administration and other ad-hoc surveys of the MNB were also used. In developing the indicator set, the MNB first assessed the current situation of domestic payments by examining the data in as much detail as possible. Building on this, the potential areas of intervention and specific options for measures were then identified more precisely. In addition, it is important to measure the achievement of the strategic objective and implementation of the supporting measures, and the indicator set will facilitate this on an annual basis, and, if necessary, new targeted measures will be formulated.



The indicator set consists of 3 indicator groups and 18 indicators. It includes general, end user and supply side indicators (Figure 7). The general indicators monitor overall trends and broader development of payments. The end user side indicators track the usage ratios of services available to consumers and businesses, ratios by transaction type and different attitudes and levels of financial awareness, while the supply side indicators measure the utilisation and costs of the acceptance network.

The MNB developed indicators that track the areas where improvement is needed, and thus a target is set for each of these areas, alongside the current value. In the assessment of the current situation, the final indicators were developed by selecting the areas for improvement, i.e. the areas where no intervention is needed on the basis of current information, such as the wide acceptance network for card payments or the retail account and cardholder coverage, are not taken into account. For most of the indicators, the MNB used the most recent full-year data available at the time of publication as the current situation, which in most cases means 2021 and for some indicators 2020. In addition, where available, the publication includes historical values of the indicator to give readers a clear picture of the trends in the area. In most cases, international comparisons of indicators are not possible, because much of the data required is not publicly available for other countries, and in some cases data sources similar to the domestic data are not even available.

Figure 7
Indicators of the Payments Development Indicator Set (PDIS)



Note: The figure shows the general indicators in blue, the end user side indicators in green and the supply side indicators in brown.

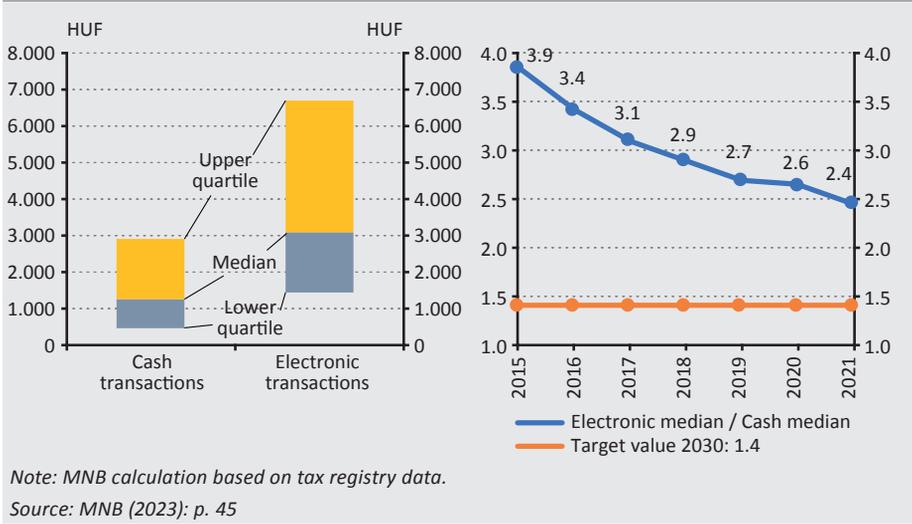
Source: Compiled based on the data in the figure on p. 28 and in the table on p. 53 in MNB (2023)

For each indicator, in addition to defining the current and target values, the content of the indicator, how it is calculated and why progress in the area is important from a public policy perspective are described in detail, along with its impact on the main objective of the payments strategy. The indicators have also been designed to be future-proof, so that future technological and business changes can be properly handled by the calculation method and the area can be well analysed in time series. Accordingly, in most cases, the indicators are independent of the payment solutions currently in use and aggregate the information, in order to be able to evaluate the use of emerging services in the future. In addition, for each indicator, a precise description of the data and the calculation methodology is provided to ensure that the indicator and associated targets are clearly understood, and this is supported by the graphs showing current values and target values.

As an illustrative indicator, it is worth taking a look, for example, at the indicator “The rise of electronic payments within retail payments of the smallest value”. We see that higher value purchases have a higher ratio of electronic payments, and the highest cash ratio is therefore found for the smallest purchases with a value of less than HUF 5,000.¹ Moreover, it is these low-value transactions that dominate, with more than 80 per cent of all transactions falling into this category in 2021. This is why it is important to monitor and develop this area, as the more frequent use of electronic solutions for low-value payments can significantly increase the ratio of electronic transactions in the overall economy. Given the need for an indicator that is appropriate even several years from now to filter out the impact of inflation, the ratio of the median value of electronic transactions to the median value of cash transactions can be used to measure the rise of electronic payments within retail payments of the smallest value (*Figure 8, left panel*). In 2021, the value of this indicator was 2.4, and *the right panel of Figure 8* shows that over the years customers have started to use electronic payments more and more for low-value payments, as the value of the indicator was only 3.9 in 2015. In this indicator, the electronic and cash transactions in the online cash register database performed mostly in physical payment situations, are examined.

¹ The latest information on this can be found in the Payment System Report 2023: <https://www.mnb.hu/letoltes/mnb-payment-systems-report-2023-final.pdf>

Figure 8
Top quartiles of cash and electronic transactions in 2021 and median ratio of electronic and cash payments from 2015 to 2021



5. Conclusion

The development of domestic electronic payments over the last decade has led to the need for a new vision for electronic payments, which the Magyar Nemzeti Bank summarised in the document “Payments 2030”. It also forms the basis for specific measures to be defined later. The MNB’s main strategic goal for payments is to achieve a 60 per cent share of electronic transactions in the economy as a whole by 2030, if widespread, general usage is encouraged, and up to two thirds if further targeted measures are taken. The MNB also created the Payments Development Indicator Set, in order to evaluate the current situation of Hungarian payments, identify potential areas of intervention and possibilities for specific measures, define strategic objectives and evaluate the implementation of the necessary measures to achieve the objectives.

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