## **KEY MESSAGES**

In 2016, the steady increase in the use of electronic payment methods continued, and contactless card purchases proved to be one of the most dynamically growing areas.

Gradually gravitating toward the European Union average, the efficiency of the Hungarian payment system has improved considerably in recent years. Contactless purchases were boosted by developments in the payment infrastructure, where both the number of contactless cards and the number of compatible payment terminals grew significantly. The number of payment cards remained unchanged throughout the year, while the number of payment accounts rose by 2 per cent. In accordance with the relevant European regulation, payment accounts with basic features have been introduced; moreover, the development of a social basic payment account scheme is currently in progress which, combined with the basic payment account, will facilitate easier and cheaper access to electronic payment methods for disadvantaged groups with no previous access to payment accounts. In the turnover of electronic payment methods, payment card purchases showed the most prominent growth, but even credit transfers and direct debits increased their turnover by almost 3 per cent. In addition to contactless purchases, payment card turnover was also boosted by online (primarily e-commerce), card-notpresent transactions, although they still comprise only a small part of total card transactions.

Year after year, the turnover of electronic payments increases continuously in most payment situations, as does the share of electronic payments in total Thanks to the payments. payment system developments of recent years, at present, the ratio of credit transfers to GDP scarcely lags behind the benchmark European Union average. Owing to the dynamic increase in card transactions, the value of electronic purchases relative to household consumption nearly doubled over the past four years. Similarly, as a result of recent developments, significant progress was achieved in the electronic payment of utility bills and other service charges. The share of electronic bill payments grew to 40 per cent from 25 per cent in the span of two years, primarily owing to

new developments completed by the Hungarian Post Office.

The Hungarian payment card system is extremely safe even by international standards and, thanks to a consumerfriendly regulatory background, only a small percentage of fraud losses is borne by cardholders.

The use of electronic payment methods becomes increasingly inexpensive for consumers. Although payment card fraud increased slightly in 2016, the number of fraud events and fraud-related losses both remained extremely low relative to the total payment card turnover. The hike in payment card fraud can be largely attributed to the dynamic growth observed in payment card turnover in recent years. Nevertheless, due to consumer-oriented consumer protection regulations, less than 10 per cent of all fraud losses are borne by cardholders; the rest is mainly passed on to card issuers and acquirer payment service providers. Fraud cases were primarily linked to online purchases and the turnover generated by postal and over-the-phone orders; as regards the direction of the transactions, they mostly affected cross-border purchases.

In annual terms, financial institutions collected more than HUF 472 billion in revenues from the provision of payment services. This 0.2 per cent annual increase, however, falls significantly short of the 12 per cent acceleration in electronic payment turnover. Revenues from fees charged in proportion to the number and value of transactions have declined accordingly relative to total turnover; consequently, the costs associated with the use of contemporary electronic payment methods are decreasing. Similarly, revenues from card issuance have also declined compared to the total number of domestically issued cards; in other words, the use of payment cards becomes increasingly inexpensive for consumers. The national regulation of interchange fees was intended to facilitate the expansion of the Hungarian payment card acceptance network, the actual effect of which - i.e. the decline in merchants' costs – is being continuously monitored by the MNB. Initial analyses indicate that the unit costs of merchants with a smaller payment card turnover are higher and decreased to a lesser degree after the regulatory changes of recent years compared to their

high-turnover competitors. If this trend persists, the MNB and other authorities may need to take further steps to address this unfavourable situation.

The operation of the overseen financial market infrastructures was highly reliable in 2016, supporting the safe and efficient execution of an increased number of transactions and hence, the functioning of money and capital markets.

Thanks to the quick and adequate adjustment of participants to the changing monetary policy instruments of the MNB, there was sufficient liquidity for the execution of payment The number of payment transactions executed in the overseen financial market infrastructures rose by 1.5 per cent, while the value of total transactions was down 3 per cent on average compared to the previous year. In 2016, the ICS and KELER saw an increase in turnover, while the number and value of capital market transactions cleared by KELER CCP remained largely unchanged. In VIBER, however, turnover value declined slightly despite the increasing number of transactions. This can be attributed to the decreasing value of interbank transactions, the phase-out of the two-week deposit and the reduced stock of overnight deposits held at the MNB. The availability of VIBER, KELER and KELER CCP improved compared to the previous year, but deteriorated slightly in the case of the ICS. Operational risk decreased, overall, in the overseen systems, mainly as a result of a decline in the number and duration of incidents. As a result of operating hour extensions, system operational interdependency risk increased slightly in 2016 compared to the previous year, but owing to the robust operation of the systems, it remained at low levels throughout the year. In respect of transactions processed in the payment systems, the clearing and settlement execution time shortened further in 2016. Similar to the domestic systems, the CLS and T2S financial market infrastructures – which are overseen cooperatively with the participation of the MNB - operated safely and efficiently.

In VIBER, the liquidity of participants was shaped by numerous events in 2016, including the reduction of the frequency of three-month deposit tenders, the quantitative limit imposed subsequently on the main policy instrument and the reduction of the required reserve ratio from 2 per cent to 1 per cent as of 1 December. Securities holdings available as collateral transactions both at the systemic level and on an individual bank basis. Consequently, clearing and settlement risk did not increase in any of the payment systems.

In 2016, the risk management framework of KELER CCP efficiently managed and averted the spillover of the defaults – that rose both in number and value during the year – to the rest of the market participants, without the need to use emergency measures.

On 6 February 2017, KELER Central Securities Depository successfully joined the TARGET2-Securities panwere raised by VIBER participants continuously throughout the year; the most significant growth affected the group of government securities. The liquidity available in the payment system rose by around HUF 6–800 billion in total. Although the maximum utilisation of credit lines decreased on an annual basis due to the increase in payment system liquidity, participants used their credit lines more actively and for longer periods in their liquidity management compared to previous year for the execution of payment transactions. After the 1percentage-point reduction of the required reserve ratio, the current account balance decreased in case of nearly a third of VIBER participants; consequently, the usage of credit line rose by 1 hour on average.

In 2016, defaults showed the highest values since 2012 both in terms of number and aggregate value. Most capital market defaults were securities leg defaults, primarily linked to the EuroMTS market - a segment intended to ensure trading in government bonds – and to the spot market equity segment of the Budapest Stock Exchange. The increased clearing and settlement risks arising in these trading venues in 2016 were successfully neutralised by KELER CCP. In most cases, it was the defaults of the non-clearing members and OTC clients of clearing members that ultimately led to the delay of clearing members. A number of financial defaults arose in the futures and spot energy markets, in relation to which the clearing membership of the affected participants was suspended and additional financial collateral was imposed for risk management purposes. KELER CCP imposed additional financial collateral mainly on energy market participants in 2016, primarily due to their failure to comply with the required reporting obligations.

Following years of preparations, KELER joined the T2S securities settlement platform – one of the most significant infrastructural initiatives of the European integration – in the fourth wave of the migration of

European securities settlement platform, which gave way to an upswing in the demand side of the Hungarian securities market and to the expansion of the European securities supply available in Hungary.

In 2016, there was a more than six-fold increase in the value of FX transactions involving the forint that were settled through the CLS system with the elimination of foreign exchange settlement risk, which supported the stability of the banking sector significantly.

Regulatory changes affecting domestic payment transactions and financial infrastructures increased the MNB's payment inspection competences further. participating central securities depositories. Launched in the summer of 2015, the infrastructure was designed to support the safe and efficient settlement of crossborder securities transactions as a uniform information technology system, and to remove the legal and technical obstacles to the establishment of a single European capital market. KELER's accession opened up the possibility of broader access to Hungarian securities, and the resulting demand growth is expected to reduce the financing costs of Hungarian companies over the long term.

The Hungarian forint has been available in the Continuous Linked Settlement (CLS) as a settlement currency since 16 November 2015. The first year of CLS membership generated a steep rise in forint turnover settled via the CLS system and the number of international institutions using the service more than doubled. FX transactions involving the forint can be settled in CLS free from foreign exchange settlement risk; in other words, trading partners are protected from the risks arising from the other party's default. In 2016, the daily gross forint turnover surged from HUF 80 billion to HUF 490 billion, and the netting effect available through the system rose from 68 per cent to 83 per cent. As a result of the latter factor, the net daily liquidity required for the settlement of the nearly HUF 500 billion gross turnover was only HUF 120 billion. An increasing number of Hungarian banks take recourse to the CLS system and participate in the provision of related services, which improves the sector's risk perception among investors.

In accordance with the Interchange Fee Regulation included in the regulatory inspection programme of 2016, from 2017 the MNB's inspection competence will be extended further to verify compliance with specific provisions of the regulations on access to payment accounts with basic features and on account switching. Both government decrees are intended to ease and facilitate households' access to banking services and to encourage competition among banks in the area of payment services.

According to the regulatory inspections conducted in 2016, financial institutions were most likely to violate regulations pertaining to the notification of clients and to the immediate crediting of payment transactions.

On the developments completed in relation to euro payments, from November 2016 Hungarian payment service providers and their customers joined the Single Euro Payments Area.

Following consultations with affected market participants, on 13 December 2016 the Financial Stability Board of the MNB accepted the rules applicable to instant payment services. In general, the payment inspections conducted in 2016 found that, despite being essentially compliant, all inspected credit institutions had committed violations to various degrees. The inspections conducted at 19 institutions found violations of legal regulations in 94 cases. Key violations involved failure to provide information, inadequate rectification of payment transactions and inappropriate liability and loss allocation. Once again, the inspections were particularly focused on the immediate crediting of payment transactions to the clients' accounts.

From that date, credit transfers and direct debits in euro must be executed in accordance with the common standards and technical requirements of the regulation commonly referred to as the "SEPA End Date Regulation". As a result, the customers of payment service providers can now execute euro payment transactions in Europe with the safety, speed and efficiency of domestic payments. The MNB continuously monitored the progress of SEPA preparations to ensure timely migration.

According to the rules, from the second half of 2019 payments under HUF 10 million must reach the recipient within 5 seconds, and the amount sent must be made available for any payment transaction. The new payment service will be available 24/7 every day of the year, and payment service providers must execute all credit transfers under this limit within the instant payment system. The implementation of the instant enables the application of payment system contemporary IT and communications solutions in payments. It will be possible to initiate payments via mobile phone numbers and email addresses and to connect to the system additional, payment-related supports services. This innovation, stimulates competition among the participants of the payment

market and facilitates the market entry of new players.

The establishment of the central infrastructure of the instant payment service commences in the spring of 2017.

The MNB expects payment service providers to ensure that clients using the service are not charged perceivably higher fees for the use of the instant payment service and the simultaneous improvement in the service level. The real-time processing system of instant payments will be set up by mid-2019. The central system fosters payment system innovation, the market entry of new service providers and the interoperability of payment services by allowing new payment service providers and fintech firms to rely on a shared basic infrastructure for the operation of modern services. Moreover, besides transaction data, the system will be able to transmit the messages of additional services connected to payments and the information required for initiating payments.

It is the MNB's requirement that the transaction fees of the central infrastructure are not raised as a result of the introduction of the instant payment system. Accordingly, payment service providers will have access to far more advanced clearing services at the existing fee level. At the same time, the MNB also expects payment service providers to ensure that the transaction fees of their clients are not raised perceivably. In pricing the service it should be considered that the investment and operational costs of the new payment system should be primarily offset by the increased revenues associated with the higher number of transactions. Payment service providers should view the implementation of the system as an investment in future; indeed, without the system they would be at a significant disadvantage when competing with the new providers, which may jeopardise their market position. In order to ensure that the use of the instant payment service grows at a faster pace than the currently used electronic payment methods, market participants must actively contribute to developing the services built on the new system.

The appearance of fintech companies pressures banks to change tack.

Through the promotion of innovative services, the inevitable appearance of fintech firms and the digitisation of payment transactions induce numerous favourable changes in the execution of payments. At the same time, the change also involves risks, which should be addressed. The appearance of new service providers should not exacerbate market fragmentation or jeopardise the safety of payment transactions. With the market entry of innovative fintech companies, banks face intensive competition as the new player may challenge their market position and hence, threaten their revenues from payment services. In order to preserve their market position, banks are forced to complete significant changes; they need to develop their systems and the financial infrastructures that secure clearing and settlement to continuously provide their customers with instant payment services at the expected quality. More major development costs may be offset by the increased turnover resulting from the higher level of service which, owing to the shift from cash payments to electronic payments, may well be significant.

The regulatory changes implemented in the new Payment Services Directive (PSD2) encourage the market entry of new, innovative players and increase competition in the market of payment services. On 13 January 2018, the European Union's new payment services directive comes into force, which is intended to support financial technology innovation and boost competition between payments market participants by establishing legal certainty and the neutrality of competition among payment service providers. It also prescribes security requirements for payment services to increase confidence in electronic payments. Owing to technological changes, the effect of innovations, the change in client requirements and the appearance of fintech firms (e.g. enterprises providing payment initiation services or account information services), the former legal regulation has been subject to significant changes. The new Payment Services Directive extends its scope to the services provided by these new types of firms and permits the provision of such services by authorised and supervised payment service providers. Pursuant to the authorisation granted under the new Payment Services Directive, in its regulatory technical standards the European Banking Authority (EBA) defined detailed security requirements for payment services. The subsequent modification of Hungarian regulations from

2018 will enable enterprises offering innovative payment services to enter the market in the context of a regulated framework, and the obligation to apply – and supervisory control over – the prescribed security requirements will become unavoidable.

The MNB joined the research activity of a European working group set up with a view to assessing the applicability of the procedures that provide the technological background for virtual money.

While the long-term benefits of the potential of distributed ledger technologies cannot be gauged precisely at present, their application in payment processes and in the renewal of financial infrastructures must be continuously monitored. Within payment developments most of the market participants are already involved in examining the applicability of blockchain and distributed ledger technologies, primarily in the hope of creating an independent, cheap, fast and safe financial system through their use. New technological solutions can only be applied in the area of financial infrastructures when, in addition to their innovative and efficiency boosting features, they offer adequately mature, well thoughtout solutions that ensure the safe, reliable and smooth operation of the system to help maintain confidence in the financial system. European central banks including the MNB – have set up a joint working group for examining the application method of the distributed ledger technology in financial infrastructures, for ensuring the technical interoperability of new developments in the existing payment systems and for monitoring new market improvements.

Since addressing cyber risks is an important goal for the MNB, it joined the working group set up by the European Central Bank to assess the IT security awareness of financial infrastructures.

Cyber risk poses an increasing threat to financial infrastructures as well, and ultimately it may threaten financial stability. The ECB has set up a central bank working group with a view to reviewing the risk management practice of European financial structures and their resilience to cyber risk. IT security awareness of individual financial infrastructures will be analysed in the context of a survey conducted by national central banks with the coordination of the ECB. Another objective of the working group is to create a forum where all main participants of the financial sector (financial infrastructures, credit institutions, authorities, regulators) are given an opportunity to improve IT security awareness by sharing their latest experiences on cyber risk.