LIETUVOS BANKAS
EUROSISTEMA

Payments Market Review

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Contents

Summary

The number and value of payment transactions made via Lithuanian payment service providers (PSPs) increased significantly in 2020. Compared to 2019, the number of such payment transactions increased by more than a quarter and the value by 24%. The number of payment card transactions increased by 32.2% and the value rose by 34%. As e-commerce grew due to lockdown and other restrictions imposed as a result of the pandemic, the number of e-commerce payment transactions and the value of e-commerce payments increased by 2.1 and 2.3 times respectively. In the first half of 2021, the number of card payments for e-commerce increased fivefold compared to the same period last year. In 2020, payment cards were more often used for payments than for cash withdrawals.

The growth in payment transactions is not only due to the increase in non-cash payments as a result of the COVID-19 restrictions, but also due to the relocation of electronic money institutions (EMIs) from the UK to Lithuania as a result of Brexit, which continue to provide services to customers residing in the EU. At the end of 2020, the number of payment accounts opened with Lithuanian PSPs increased by 2.4 times compared to the end of 2019. Furthermore, it also significantly expanded the share of EMIs and payment institutions (PIs) in Lithuania's payments market, which is still dominated by banks. In 2020, the customers of EMIs and PIs performed 27.4% (11.3% in 2019), while bank customers executed 72.4% (88.5% in 2019) of all payment transactions.

As more and more services go digital, the issue of payment service accessibility is becoming more pressing, which has several components and should be addressed in a comprehensive way. Residents have access to basic payment services for a fixed monthly fee, and a large number have taken advantage of it. Some residents may face difficulties if there is no PSP office nearby, or if they are unable to open an account or use services remotely due to a lack of digital literacy or the non-availability of necessary tools. For consumers who struggle to use modern technology or live in areas where non-cash payments are not readily available, a cash withdrawal service is essential. This is one of the main reasons why, on the initiative of the Bank of Lithuania, the main banks operating in the country signed a Memorandum of Understanding and committed to expand the network of cash withdrawal locations. However, non-cash payment options are also important for consumers who use electronic payment instruments.

In some business areas, ample possibilities to make payments using non-cash instruments are available, but there are also areas where such opportunities are often lacking. More than 80% of small and medium-sized enterprises (SMEs) involved in retail trade and food and beverage supply activities allow their customers to pay using payment cards. However, the share of businesses providing a range of services such as customer servicing, rent and medical services that accept payment cards is only about 40–50%. The most common reason given by small businesses for not accepting payment by card is the cost of the service (around 40%). However, taking the whole payment process into account, more frequent non-cash payments at the point of sale would make it more efficient and could lead to the reduction of the need for cash.

Digitalisation trends are prompting the world's central banks to consider issuing a central bank digital currency (CBDC) for the general public. The Eurosystem is also actively exploring the prospects of the digital euro. Technical experiments carried out by the euro area NCBs have shown that there are in principle no technological constraints to the implementation of the digital euro. Perhaps the most challenging issue is to identify and adapt the business model that will enable the digital euro to become a widely available and used means of payment. This is one of the issues that the investigation phase of the Eurosystem's digital euro project will seek to solve. No decision has yet been taken on the issuance of the digital euro.

The Eurosystem and the EC continue to work towards the objectives set out in their retail payments strategies. By the end of 2021, the Eurosystem's TARGET2 Instant Payment Settlement service (TIPS) will ensure full reachability of PSPs providing instant payments in the euro area. The EC is carrying out an in-depth analysis to find out the key factors that would lead to an increased use of instant payments. Based on the findings of the analysis, the EC is expected to propose further action in 2022, which may include regulatory ones. The revision of the Payment Services Directive (PSD2) is awaited as it relates to many elements of the EC's retail payments strategy, namely, consumer protection, security of payment transactions, and the execution of cross-border payments. Meanwhile, the solution being developed by the European Payments Initiative for payments of goods and services at physical locations and online meets all the criteria set out in the Eurosystem's strategy for the development of retail payment instruments with European roots.

The use of the Bank of Lithuania's payment system CENTROlink is increasing rapidly and contributes to the implementation of the Eurosystem's retail payments strategy. Promoting innovation and digitalisation in the European payments ecosystem is an integral part of this strategy. Non-bank PSPs, such as EMIs and PIs, play an important role in this field. Access to the payment system CENTROlink services granted to these institutions through the Bank of Lithuania ensures the reachability of SEPA payment instruments to them. The demand for the CENTROlink services is growing, with 2.3 times more payments and 7 times more instant payments made through the payment system in the first half of 2021, compared with the corresponding period of 2020. Taking into account the expansion of the CENTROlink services and the high interest of EMIs and PIs, the Bank of Lithuania continues to strengthen its control over both new and existing PSPs gaining access through the Bank of Lithuania.

The European Data Protection Board has raised issues related to the protection of personal data in payment transactions, which could best be addressed by a review of EU legislation on the provision of payment services. Since various information, including personal data, is transferred along with the payment, the provision of payment services is also affected by the requirements of the General Data Protection Regulation (GDPR). Such information may fall under special categories of personal data (e.g. on health, political or religious views, etc.). The interpretation of the GDPR requirements shows that such personal data can only be processed in the context of payments on the basis of the public interest, which must be enshrined in law. In order to achieve a harmonised solution across all EU Member States and to ensure proper processing of data in cross-border payments, an EU-level legal instrument would be the most appropriate measure.

1. Payment service accessibility

There are several key elements to ensure payment service accessibility to the public: residents must be able to easily open a payment account and get payment instruments, they should be able to pay freely with electronic payment instruments, and the infrastructure must be in place to enable access to the necessary payment services. For residents who want to open an account and use payment services, it is important to be able to do so easily and affordably. In order to increase the accessibility to and use of non-cash payments, it is not enough to provide payment instruments to residents – they need to be widely used and accepted by a majority of merchants. However, until this is possible everywhere, residents must be able to withdraw cash from their accounts. Accordingly, sufficient infrastructure for cash services is needed.

Residents have access to essential payment services for a fixed monthly fee, and a large number take advantage of them. According to surveys, 89% of adults in Lithuania have a payment account and 96% of them also have a payment card. Since 2017, the regulation of the basic payment account service has led to the spread of payment services package[1] pricing. PSPs offer a wide range of payment services packages to meet a variety of customer needs. Some PSPs offer more non-cash payment options in their packages, while others offer a higher cash withdrawal amount or more cash withdrawal channels (via intermediaries, from other banks' ATMs). The share of residents opting for different payment services packages has been increasing since the launch of the basic payment account service and has remained fairly stable in recent years, at around two-thirds of residents with an account.

Any resident can freely open an account with a selected PSP; however, some residents may face difficulties if there is no PSP office nearby, or if they are unable to open an account or use services remotely due to a lack of digital literacy or the non-availability of necessary tools. The PSPs do not restrict which persons can open an account and, taking into account the prevailing pricing of payment services and the average fee for payment services packages (€1.45/month), one can claim that payment services are affordable. However, another important aspect is resident's digital skills and tools available. To use e-banking, you need a computer and internet connection or a smartphone, as well as login tools such as a code generator, Smart-ID application or mobile signature. Not everyone can purchase a computer, smartphone or internet service. Payment cards can be used at physical points of sale without these tools. In this case, it is important to be able to easily access information on account balance, recent transactions, etc., for example, at an ATM.

Cash is still the dominant method of payment in Lithuania, and cash withdrawals are still widely used by residents. The majority of cash withdrawals are made from ATMs, while alternative methods of withdrawal – via PSP intermediaries or at the point of sale with the purchase (cashback service) – are relatively rare. Not all PSPs offer the same cash withdrawal alternatives. Some PSPs include withdrawals via intermediaries in their payment services package, others charge an additional fee for this service, some PSPs do not charge for cash withdrawals from ATMs of other PSPs, and the cashback service at the point of sale is only provided at some outlets and is not widely available to all PSPs' customers. In some cases, switching PSPs would provide residents with services that are more tailored to their needs, for example, cash withdrawals via an intermediary would be free of charge, or cash withdrawal from the nearest ATM would be included in the new PSP's payment services package. However, usually residents very rarely change their PSP. Population surveys show that just under 5% of residents changed their PSP in the last 12 months.

[1] If you choose a payment services package, you pay a fixed monthly fee for the package of several services including a payment account, a payment card, credit transfers and a cash withdrawal service.

While residents can get better cash services by changing the PSP, a nationwide project has also been initiated to expand the network of cash withdrawal locations. On the initiative of the Bank of Lithuania, the main banks and other PSPs operating in the country signed a Memorandum of Understanding with the Bank of Lithuania[2], committing to increase the number of locations where the cash withdrawal services are available by 100 locations by mid-2022. ATMs will be set up in new locations in the regions and smaller towns.

It will take time to assess the impact of an increased number of cash withdrawal locations on the habits and behaviour of residents, not least because a significant proportion of the population regularly receives income in cash. According to surveys, around 20% of adults regularly receive income in cash. Some of them are affected by the amendment to the Labour Code, which will come into force in 2022 and will require all wages to be paid into the employee's account. It is likely to have an impact on the payment habits of those who previously received their wages in cash. For some people the need for cash withdrawals will emerge or increase, and some will start to use non-cash payments more frequently. This will increase the importance of non-cash payment options. However, for the majority of approximately 200,000 pensioners who have their pensions delivered to their homes in cash, the increase in the number of cash withdrawal locations is unlikely to change their habits and encourage them to switch to receiving their pensions into accounts. The new ATMs installed in the regions will primarily have a social purpose, and by expanding their usage, they could also be adapted to other services, such as payment for services relevant to residents.

In some business areas, ample possibilities to make payments using non-cash instruments are available, but there are also areas where such opportunities are often lacking. Based on the data collected by the Bank of Lithuania, more than 80% of small and medium-sized enterprises (SMEs) involved in retail trade and food and beverage supply activities allow their customers to pay using payment cards. In other sectors, where services and goods are sold at physical locations, fewer entities accept cards. For example, 40–50% of businesses providing various customer services (beauty services, home appliance repairs) or rental services (e.g. rental of cars, leisure and sports equipment, various appliances and equipment) and around 50% of businesses providing medical services accept payment cards. According to the Survey of the habits of Lithuanian residents in using payment services, residents mostly lack the possibility to use payment cards in small trading places such as markets and fairs, beauty salons and public transport.

The cost of the electronic payment acceptance service is a major concern for small businesses and individuals running their own businesses. Small businesses do not provide the possibility of paying by a payment card for a variety of reasons, but the cost of the service has been reported as one of the most important ones. In the survey of small and medium-sized businesses conducted by the Bank of Lithuania, 40% of entities that do not accept payment cards indicated that they are not satisfied with the price of the service. Attractive pricing and the possibility of trying the service free of charge for a certain period of time are often cited among the reasons that could promote the adoption of card payments. A significant proportion (40%) also indicated that they would find it attractive to be able to accept electronic payments using only their existing mobile phone, i.e. without the need for a POS terminal. Half of the respondents are interested in receiving the payment amount immediately in their account.

Increased use of non-cash payments at points of sale would make the payment process more efficient and could lead to the reduction of the need for cash. The majority of people have electronic payment instruments, but it is important that they use them more often. This would shape habits and put more pressure on the demand side to make electronic payment available in places where it does not yet exist. At the same time, the demand for cash services would decrease. The same payment

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[2] https://www.lb.lt/en/access-to-cash-atms-and-equivalent-alternatives

card is usually used for both payments and cash withdrawals, which means that a shift towards more frequent card payments could help avoid several steps in the payment process, thus reducing residents' need for cash to make payments, and decreasing the need of merchants to use cash deposit and cash collection services. Increased use of electronic payments and economies of scale would also lead to a reduction in the average cost of services. At the same time, the availability of payment services would increase.

Box 1. Opening of payment accounts for asylum seekers

When people who have illegally crossed the borders of Lithuania are detained, they can be allowed to fend for themselves until their legal status is established. This has become particularly relevant following the influx of asylum seekers in the summer of 2021. Such situation means that these people need money and some regular income. This could be a state benefit or money transferred by their friends or relatives living in other countries. They can be received in a payment account or paid out in cash via a money remittance. However, the legal framework does not allow asylum seekers to open a payment account, and the requirements for remittance services make it very difficult to receive them.

A payment account for asylum seekers could be opened in accordance with the provisions of the Republic of Lithuania Law on Payments. This law implements EU Directive 2014/92/EU on the comparability of fees related to payment accounts, payment account switching and access to payment accounts with basic features. The Directive provides for the possibility of opening a basic payment account for persons who are not granted temporary or permanent residence in a Member State but cannot be expelled from that Member State in accordance with the law, and for persons seeking asylum under the Geneva Convention of 28 July 1951 relating to the status of refugees, the Protocol thereto of 31 January 1967 and other relevant international treaties. However, such persons do not have the documents required for identification under the Republic of Lithuania Law on the Prevention of Money Laundering and Terrorist Financing (AML/CTF Law). Without identification, the PSP cannot open a payment account for a person.

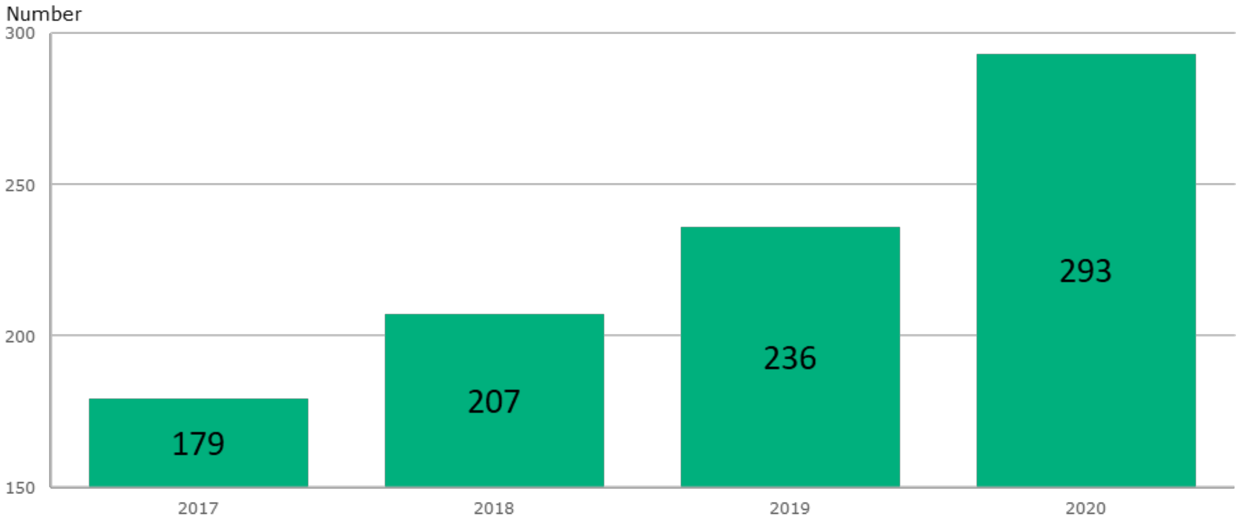
The requirements for anti-money laundering and counter terrorist financing (AML/CTF) would also make it difficult in practice to use a money remittance to pay out cash. The AML/CTF Law provides that the PSPs may pay out up to €600 at a time in the absence of a document suitable for the establishment of a person's identity. Regular cash withdrawals without a person's identification would increase the risk of ML/TF. As persons arriving from third countries without identity documents would be considered as high-risk customers, this risk would be extremely difficult to manage. Therefore, PSPs do not generally provide such services.

Harmonisation of legal provisions would help resolve the issue of opening accounts for asylum seekers. At the same time, it would be appropriate to include measures to minimise the risk of ML/TF.

2. Evolution of payment services and the impact of COVID-19

In 2020, the value of the indicator set by the Bank of Lithuania to measure its strategic objective, i.e. to create a competitive and advanced payments market, was achieved. This indicator is the number of non-cash payment transactions per capita per year. The Bank of Lithuania was aiming for 300. Publicly available data show that there were 293 payment transactions per Lithuanian resident in 2020 via Lithuanian PSPs (see Chart 1). Moreover, adding those payment transactions for which statistics are not published due to statistical confidentiality requirements, the figure would be slightly above 300 in 2020. Compared to 2019, the number of non-cash payments per capita increased by around a quarter over the year. In previous years, the increase was around 15%.

Chart 1. Non-cash payment transactions per capita in Lithuania in 2017–2020



Source: Bank of Lithuania.
Note: Payments made using the services of banks, credit unions, PIs and EMIs. For confidentiality reasons, e-money payments are not included.

In 2020, the number of payment transactions conducted via PSPs operating in Lithuania increased by more than a quarter, compared to 2019. In 2020, 817.8 million payment transactions were initiated in Lithuania via PSPs operating in Lithuania, with a value of €352.6 billion (see Table 1). In terms of the number of payment transactions, 78% (91% in 2019) were domestic, i.e. transactions between the payer and the payee, both of whose PSPs are established in Lithuania, while 22% (9% in 2019) were international (see Table 1). Compared to 2019, the number of payment card transactions increased by 32.2% and accounted for 63.5% (60.4% in 2019) of all payment transactions in 2020. The number of credit transfers increased by 16.2%.

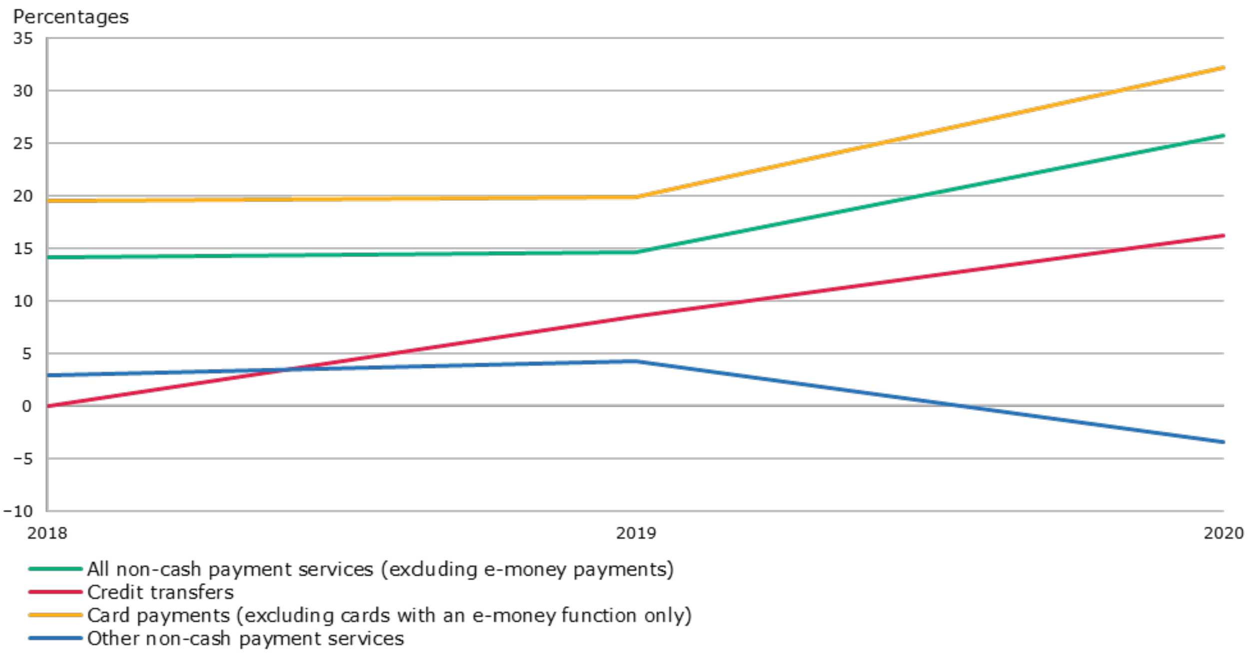
Table 1. Payment services provided by Lithuanian PSPs

Payment services	Number of transactions, millions 2019	Number of transactions, millions 2020	Number of transactions change, %	Value of transactions, EUR billions 2019	Value of transactions, EUR billions 2020	Value of transactions change, %
Total payments made via PSPs	650.8	817.8	25.7	284.4	352.6	24.0
Credit transfers	199.4	231.7	16.2	273.4	338.7	23.9
Card payments	393.2	519.7	32.2	7.8	10.4	34.0
Direct debit	–	10.1	–	–	0.2	–
Other payment services	58.2	56.2	–3.4	3.2	3.15	–1.5

Source: Bank of Lithuania calculations.

The increase in payment transactions is due to more frequent non-cash payments, but the main reason is Brexit. After the end of the transitional period for the provision of financial services, clients of the UK's PSPs residing in the EU "migrated" to become clients of Lithuanian-based EMIs. This is also reflected in the increased change in the number of e-money accounts. At the end of 2020, compared to the end of 2019, the number of e-money accounts increased by 6.4 times, while the total number of payment accounts grew by 2.4 times. In addition, the annual growth rate of payment services increased as well: in 2020, the number of card payments increased by 32% compared to 2019, while the total number of non-cash payment transactions went up by 26%, after a slower growth rate in previous years (see Chart 2).

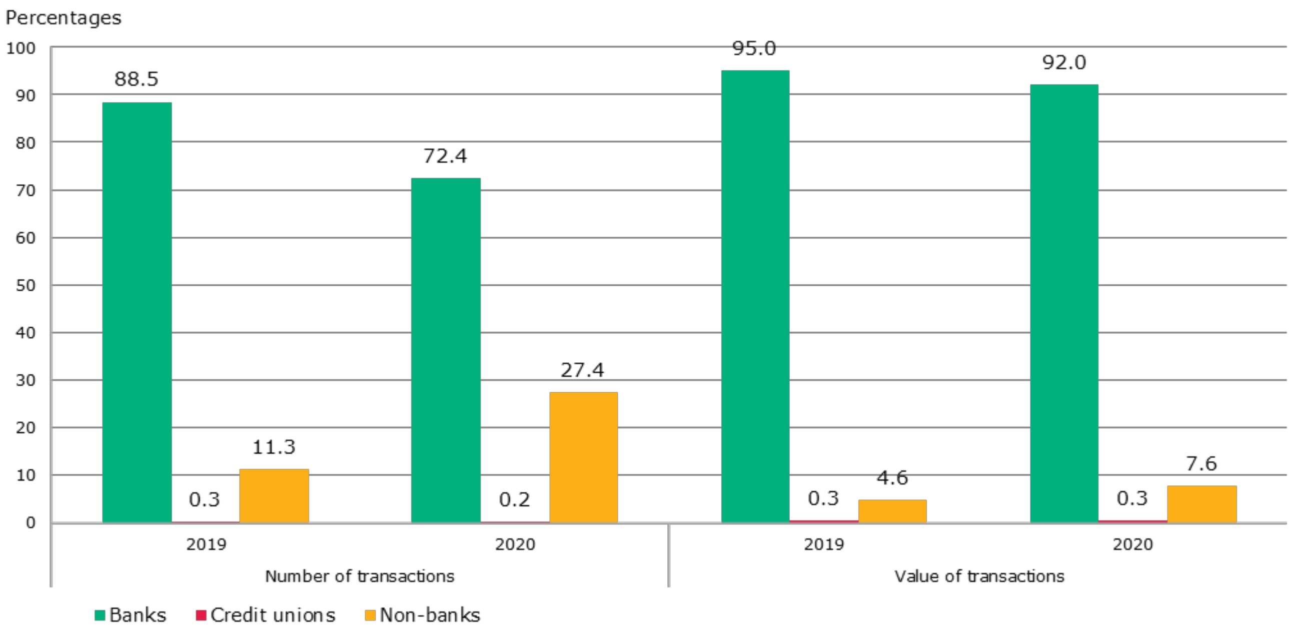
Chart 2. Annual growth rate of payment services in 2018–2020



Source: Bank of Lithuania calculations.

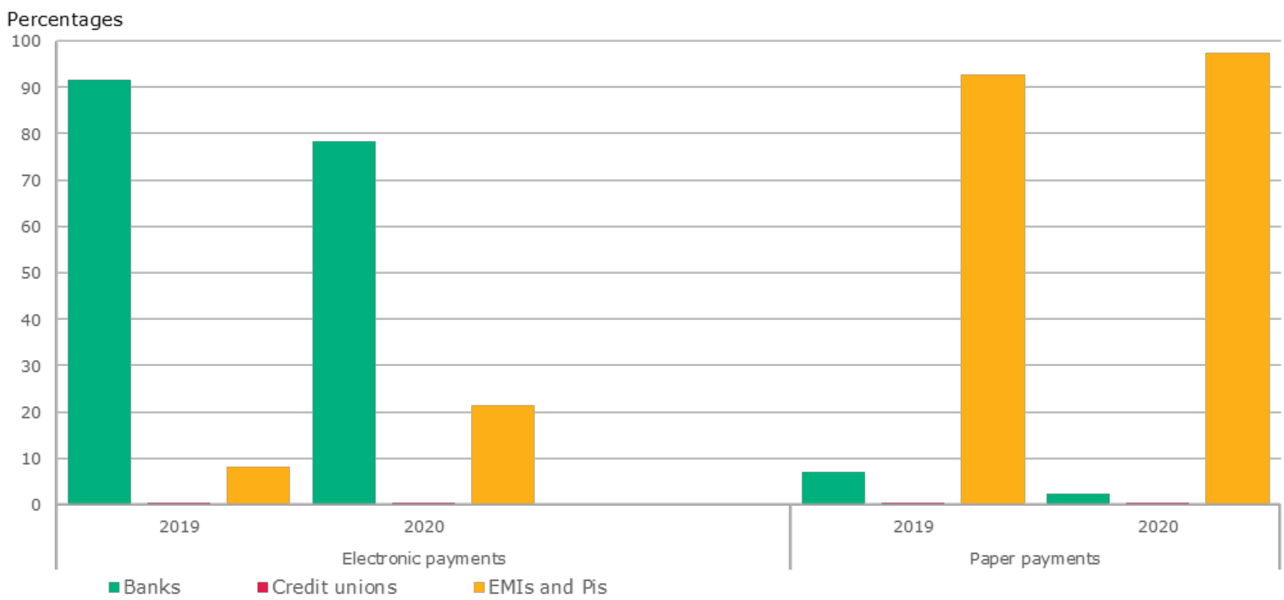
In 2020, the share of PIs and EMIs grew significantly in the Lithuanian payments market, but it is still dominated by banks. In 2020, banks' customers accounted for 72.4% (88.5% in 2019), customers of EMIs and PIs made up 27.4% (11.3% in 2019), and customers of credit unions accounted for 0.3% of all payment transactions carried out via Lithuanian PSPs (see Chart 3). Transactions initiated in banks account for 92% of the total value of all the payment transactions performed via Lithuanian PSPs. In 2020, 78% (92% in 2019) of the total number of e-transfers were made through banks, while 21% of all e-transfers were made via EMIs and PIs. Paper transfers (credit transfers initiated at branches by filling in a paper form and cash payments for services) made at the customer service points of EMIs and PIs accounted for 97% and 2% of the total transfers in banks (see Chart 4). Credit unions accounted for the rest.

Chart 3. Structure of Lithuanian payments intermediated by PSPs by number and value of transactions



Source: Bank of Lithuania.

Chart 4. Market share for electronic payments and paper payments held by PSPs

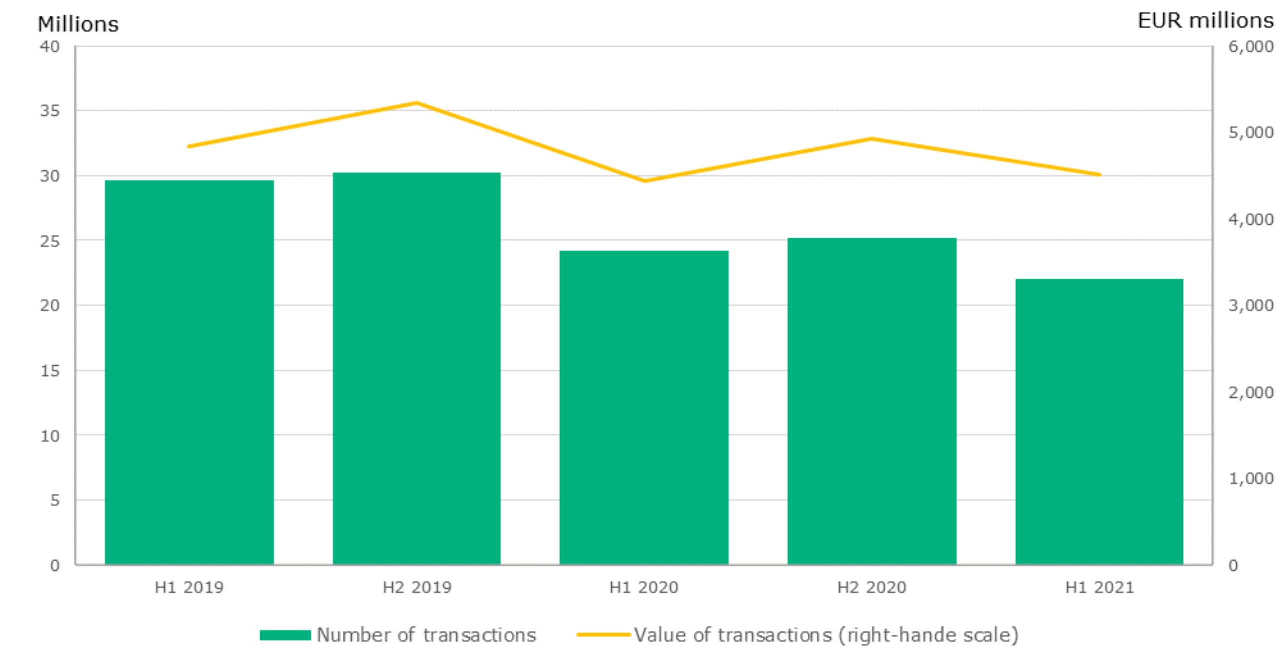


Source: Bank of Lithuania.
Note: Paper payments are defined as payments where the customer physically submits a payment order to the PSP in paper form.

As the world faced the COVID-19 pandemic in 2020 and beyond, changes in payment habits in 2021 did not bypass Lithuania. Lockdown requirements and other restrictions have accelerated the transition to digital banking services, the wider use of non-cash payments, and the uptake of contactless and mobile payment technologies. The faster development of e-commerce is reflected in the volume of related e-payments. The demand for cash for settlement purposes has decreased, while the amount of cash put into circulation has increased.

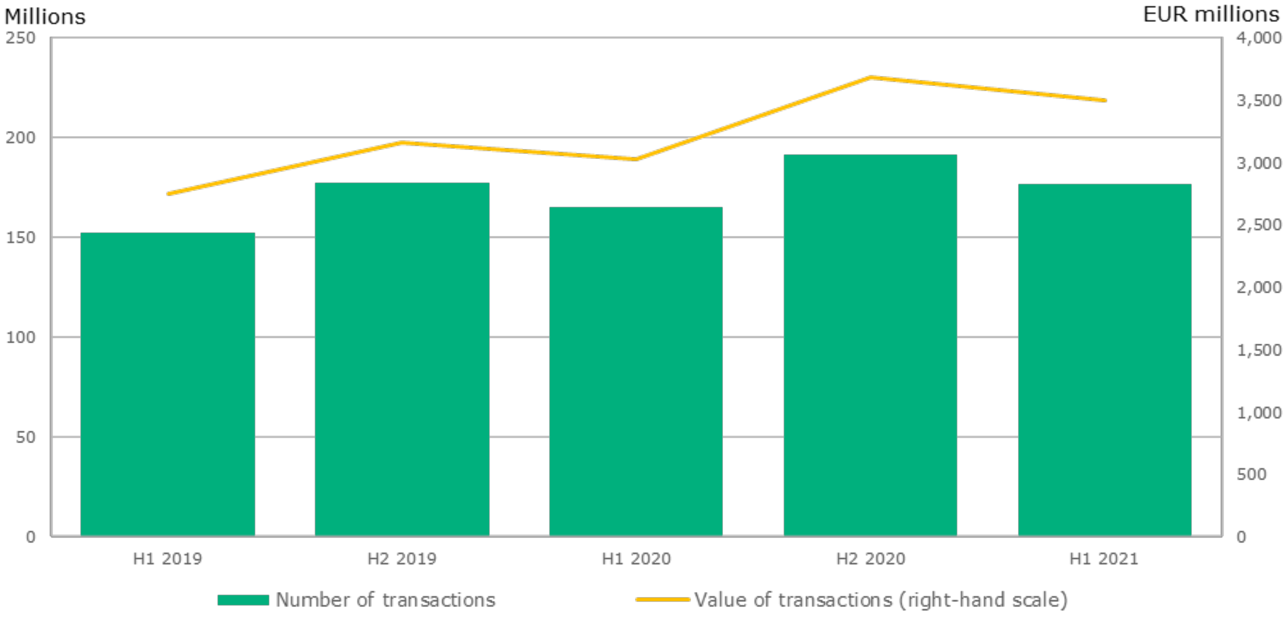
Changes in cardholder behaviour were observed when paying by card at points of sale and when withdrawing cash from ATMs, with a decrease in cash withdrawals and an increase in the average amount withdrawn and paid by card. Given the decline in the demand for cash, the number of cash withdrawals from ATMs of the Lithuanian PSPs decreased by 17% in 2020 compared to 2019, while the value of transactions decreased by 8% (see Chart 5). Although cardholders used ATMs less frequently, the average amount of cash withdrawn increased. The average value of a cash withdrawal transaction increased by 12% in the first half of 2021 compared to the first half of 2020, while the average value of a card payment transaction using a card reader also increased by around 8% (see Chart 7). The number of card transactions increased by 7% and the value rose by 16% over the period (see Chart 6).

Chart 5. Cash withdrawals from ATMs and card readers installed in Lithuania



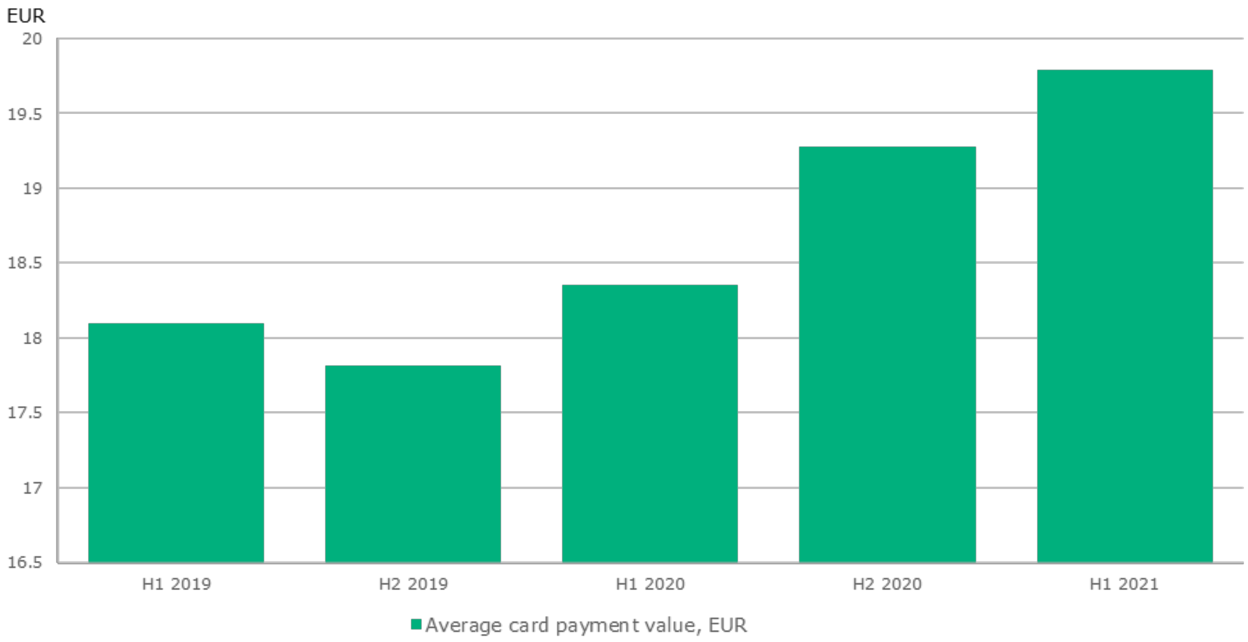
Source: Bank of Lithuania.

Chart 6. Card payments with card readers installed in Lithuania



Source: Bank of Lithuania calculations.

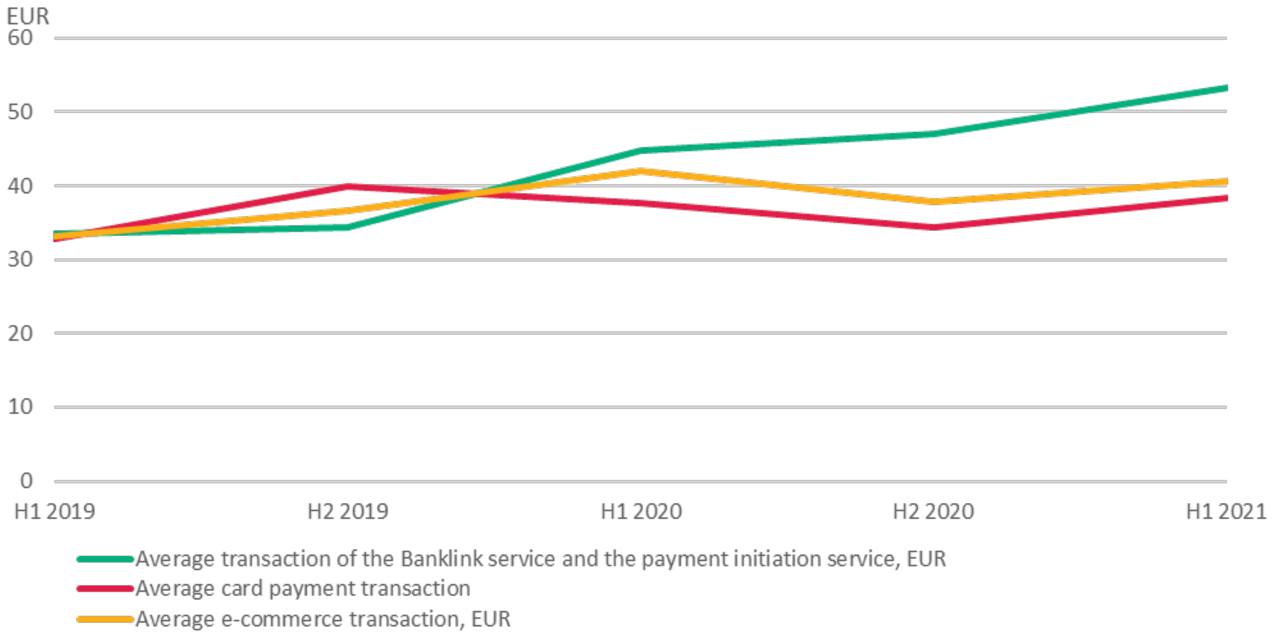
Chart 7. Average transaction value of card payments with card readers installed in Lithuania



Source: Bank of Lithuania calculations.

The lockdown imposed after the first wave of the pandemic forced the majority of physical stores selling consumer goods to close down or restrict their activities, making e-commerce very important. The number and value of e-commerce settlement transactions have increased accordingly. In 2020, the number of payment transactions mainly used to settle e-commerce transactions (Bank link service, payment initiation service, online card payment) increased by 2.1 times and the value grew by 2.3 times compared to the previous year. In the first half of 2021, the average value of e-commerce payments made by e-shops operating in Lithuania increased by 19% compared to the first half of 2020. Customers have increasingly used payment cards for online payments not only in foreign online shops but also in Lithuanian ones. The number of online card transactions in the first half of 2021 increased by 4.5 times compared to the same period of the previous year, while the average transaction amount increased by 56% (see Chart 8).

Chart 8. Average e-commerce transaction amount



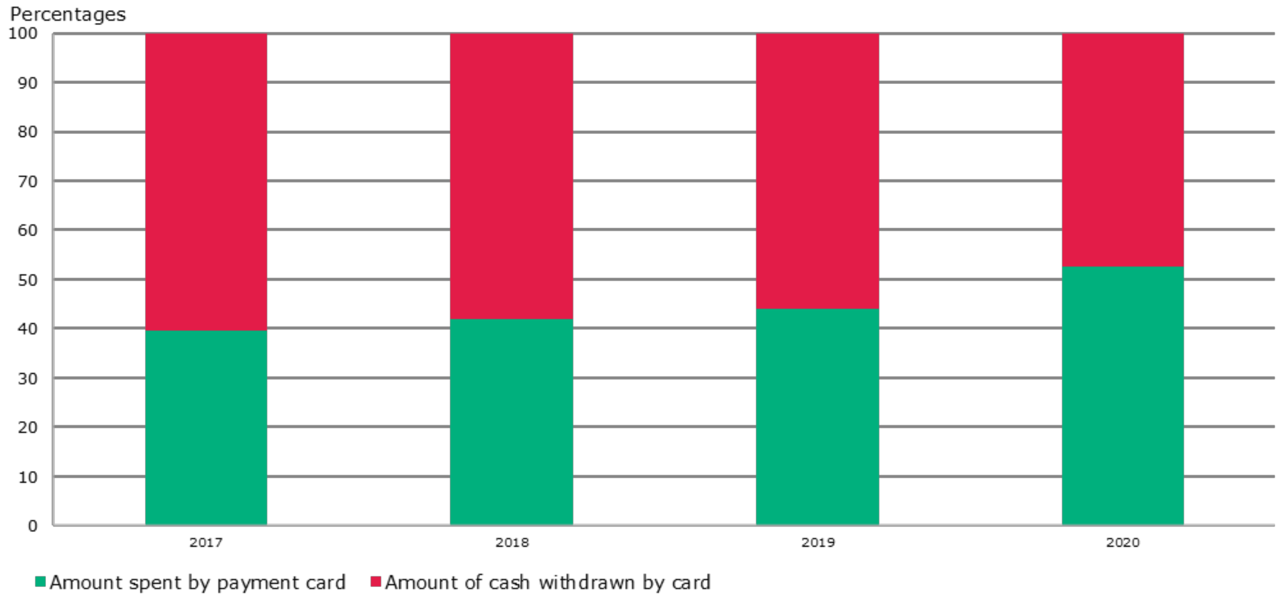
Source: Bank of Lithuania calculations.

In addition to changes in e-commerce and increased volumes, more consumer habits have changed. Information from PSPs shows that people are increasingly turning to digital means of managing their accounts and paying their bills. The number of mobile app users increased by 13% during the pandemic[3].

The structure of the amount spent by payment card and the amount of cash withdrawn using the card in 2017–2020 reveals that the trends in the use of payment cards shifted in 2020. Payment cards started to be used more for payments than for cash withdrawals. The share of card payments has increased year on year, rising by 9 percentage points to 53% in 2020 compared to 2019 (see Chart 9).

[3] https://www.seb.lt/naujienos/2021-06-08/pandemijos-itaka-kaip-pasikeite-gyventoju-pirkimo-ir-atsiskaitymo-iprociai-.

Chart 9. Structure of the amount spent by payment card and the amount of cash withdrawn by card in 2017–2020



Source: Bank of Lithuania.

3. CBDC and the digital euro

The Central Bank Digital Currency (CBDC) has become one of the most topical issues among central banks when considering the evolving payments infrastructure and its prospects. The share of central banks interested in the CBDC is growing year on year: it has increased by a third since 2017, and in 2020, 86% of the central banks surveyed by the BIS had analysed the CBDC[4]. The year 2020 also marks a breakthrough with the release of the first central bank digital money: the Central Bank of the Bahama issued a digital version of the Bahamian dollar[5], the Central Bank of Cambodia enabled payments in digital Cambodian riel, and China is continuing to pilot the digital yuan in major cities (by the end of June 2021, more than 24 million e-wallets were opened in China and more than 70 million payments were processed[6]). The Eurosystem also added to the CBDC range by launching a two-year investigation phase of the Digital Euro Project. There is a trend for central banks to move from deepening national competences to international formats to assess the international aspects of the CBDC, namely, the interaction between the CBDC in different countries, the efficiency of international payments, the inclusion of different social groups, etc.[7] Central banks are actively experimenting in order to keep pace with technological breakthroughs and to shape payments policy accordingly. The role of central bank money is evolving in the intensively developing payments market, especially as technology and innovation drive private digital currency initiatives and the choice of advanced payment instruments grows, and consumers are increasingly inclined to try out innovations.

The Eurosystem is actively examining the prospects for the digital euro. In October 2020, the Eurosystem published its first report on the digital euro[8]. It outlines the key aspects of issuing the CBDC, including the various scenarios that would lead to the issue of the digital euro, potential risks, legal issues, functional and technical design options. In addition, the ECB organised a public consultation in all euro area countries, during which respondents indicated privacy, security and the ability to make payments across the euro area as the most important features of the digital euro[9]. Some euro area NCBs have carried out technological experiments to assess various aspects and technological possibilities of the digital euro design. Finally, the Governing Council of the ECB decided to examine in detail the issues necessary for the implementation of the digital euro, and to this end it initiated the investigation phase of the digital euro project, which will last two years, addressing the need for, functionality and legal issues of the digital euro, and defining the business model. The investigation phase is intended to provide a comprehensive analysis, following which the Governing Council will decide whether to issue the digital euro for consumer and business payments.

Technical experiments carried out by the euro area NCBs between 2020 and 2021 have shown that there are in principle no technological constraints to the implementation of the digital euro. Since September 2020, a high-level CBDC working group of euro area central banks has been exploring the potential of the digital euro in four areas: the execution of payment transactions using different technologies; ways to implement privacy and anti-money laundering measures; the management of the circulation of the digital euro and end-user access. The Bank of Lithuania contributed to an experiment on the execution of payment transactions to test the interoperability of centralised and

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[4] https://www.bis.org/publ/bppdf/bispap114.pdf.

[5] https://www.sanddollar.bs/.

[6] http://www.pbc.gov.cn/en/3688110/3688172/4157443/4293696/2021071614584691871.pdf.

[7] The BIS Innovation Centres in Hong Kong, Singapore and Switzerland focus on international CBDC prototypes: https://www.bis.org/topic/fintech/hub/programme.htm.

[8] https://www.lb.lt/lt/naujienos/netrukus-ant-diskusiju-stalo-skaitmeninis-euras.

[9] See more at: https://www.lb.lt/lt/naujienos/visuomene-ir-specialistai-skaitmenini-eura-labiausiai-vertintu-del-privatumo.

decentralised payment systems[10] and the adaptability of the two-tier model[11] to the digital euro payment infrastructure. The Bank of Lithuania successfully conducted digital euro payments from the modified LBCOIN[12] system to the digital euro pilot systems of other euro area central banks participating in the experiment and demonstrated that the two-tier model could be applied to digital euro payments. The study showed that a variety of payment system types could increase the technical resilience and availability of the overall infrastructure, and that third-party service providers could conveniently connect to any of the digital euro systems with a single access point. This opens up the possibility of providing a range of services related to the digital euro, such as the use at points of sale (like payment cards), the creation of the so-called smart payments, and greater accessibility for consumers by integrating different payment systems into a single infrastructure.

The digital euro, like any CBDC, will inevitably become a competitor to cash and payment instruments (e.g. payment cards) provided by private entities. In many payment markets, there is an established ratio between cash and non-cash payments using different payment instruments. It is mainly driven by the interrelated elements such as user habits, market size, private incentives, regulation and available infrastructure. The number of payments in an economy depends on its size and economic activity. New payment instruments do not increase the number of payments but compete with and replace some or all other payment instruments. Therefore, if the CBDC were to be widely used as a complement to cash and private payment instruments, it would inevitably take over part of the payment flows of other payment instruments.

For the digital euro to become a widely available means of payment, it must be issued with an inclusive business model. The digital euro will be compared with payment solutions provided by private entities (payment cards, mobile payments, digital wallets, etc.). The use of digital payment instruments is based on the fact that businesses prepare to accept such instruments for payment, use the PSPs providing these services and pay a commission to the PSPs. Payers are also customers of the PSPs issuing these payment instruments, they are willing and able to use them, and pay their PSPs for their services. When issuing the digital euro, the Eurosystem will need to take into account the existing business models of PSPs, the commission fee rates charged for the acquiring of private payment instruments, in order to make it in the interest of businesses to accept the digital euro and thus ensure its availability. At the same time, it will be important not to distort the conditions of competition. There is also an expectation that payers should not have to pay for basic digital euro payment services. The need to reconcile the public good aspects of the digital euro with fair competition is one of the key questions to be answered during the investigation phase of the digital euro project.

[10] Integration between the centrally managed payment system (TIPS) and systems based on distributed ledger technology (NEM, Hyperledger Besu and Fabric,Tezos) was tested.

[11] In this experiment, the two-tier model means that the digital euro is issued in a centrally managed system and is further distributed to other payment systems where it is used for settlement by users.

[12] https://www.lb.lt/en/digital-collector-coin-lbcoin.

4. Strategic objectives of the EU institutions in the area of payments

The criteria for a retail payment instrument with European roots, as set out in the Eurosystem's retail payments strategy, are broadly met by the European Payments Initiative established by major EU banks. The ECB has published a paper outlining the Eurosystem's previously communicated strategic objectives for retail payments[13]. One of the key objectives is the emergence of a European payment instrument to be used by residents to pay for goods and services at physical locations and online (point of interaction, POI), for person-to-person payments and cash withdrawals. It should be an instrument offered by market participants, used across the EU to provide a uniform experience for consumers, convenient and affordable, safe and efficient, with a European brand and governance, and, in the long term, accepted globally. The payment solutions to be proposed by the European Payments Initiative (EPI) is considered to meet all these Eurosystem's objectives.

The Eurosystem is also working towards the universal implementation of instant payments in the EU, starting with the development of its payment infrastructure. By the end of 2021, the Eurosystem's TARGET2 Instant Payment Settlement service (TIPS) will ensure full reachability of PSPs providing instant payments in the euro area. A customer of each PSP providing instant payments in euro will be able to make an instant payment to a customer of another PSP providing such a service. This is one of the grounds for making instant payments the new norm, but it requires action by market participants, the EU and national authorities.

The EC has devoted a lot of attention on the development of instant payments since the publication of its Communication on a Retail Payments Strategy for the EU in 2020. In order to find out the key factors that would lead to a wider use of instant payments for payments in different use cases (person-to-person, at points of sale, business-to-business, etc.), the EC carried out two consultations in 2021, namely, a targeted consultation and a public consultation. A targeted consultation was held with PSPs and providers of technical services related to instant payments. The material gathered during the consultations and meetings with stakeholders is being analysed and will be used as a basis for the EC to propose further actions, which may include regulatory initiatives as well. The EU-wide introduction of instant payments is seen as a means to achieve open strategic autonomy.

The Payment Services Directive (PSD2) is linked to many elements of the EC's retail payments strategy and its comprehensive review should be a priority. PSD2 is perhaps the key legal act that defines the conditions for the provision of payment services in the EU. Therefore, in order to review consumer protection measures, to increase the security of payment transactions and to improve the execution of cross-border payments, firstly, it is appropriate not to postpone the debate on PSD2. Moreover, these discussions would be timely in addressing the merger of the E-Money Directive[14] with PSD2 and the harmonisation of the provisions relevant to the provision of payment services in the negotiated MiCA[15] and DORA[16] proposals. Of all the possible instruments in the implementation of a retail payments strategy, legal initiatives may be the most effective.

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[13] https://www.ecb.europa.eu/pub/pdf/other/ecb.eurosystemretailpaymentsstrategy~5a74eb9ac1.en.pdf?819e76c55e01ed236dac589f980189a2.

[14] Directive 2009/110/EC of the European Parliament and of the Council of 16 September 2020 on the taking up, pursuit and prudential supervision of the business of electronic money institutions amending Directives 2005/60/EC and 2006/48/EC and repealing Directive 2000/46/EC.

[15] Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets amending Directive (EU) 2019/1937: https://eur-lex.europa.eu/legal-content/LT/TXT/HTML/?uri=CELEX:52020PC0593&from=EN.

[16] Proposal for a Regulation of the European Parliament and of the Council on digital operational resilience for the financial sector and amending Regulations (EC) No 1060/2009, (EU) No 648/2012, (EU) No 600/2014 and (EU) No 909/2014: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020PC0595.

The EC has also published proposals regarding other areas relevant to the implementation of the EC retail payments strategy. Digital identification of individuals is essential for the development of digitalisation, ensuring secure provision of services remotely. The EC has put forward proposals for a European Digital Identification Framework[17], improving the procedure for electronic identification set out in the eIDAS[18] Regulation. The new framework should increase the possibilities for using digital identity to access services in other EU Member States. Another EU initiative is to harmonise as far as possible the requirements for the prevention of ML/TF[19] between the EU Member States. This can ensure harmonisation of KYC requirements between Member States, so that the same information can be used in all EU Member States when onboarding for financial services. This would increase the opportunities to provide payment services in other EU Member States.

Box 2. Jurisdictional decisions

On 11 November 2021, the Court of Justice of the European Union (CJEU) ruled that the near field communication (NFC) function installed in the payment card, which is used for contactless payments, is a payment instrument in itself. In essence, the question was whether the use of the NFC function could be considered as non-personalised procedure within the meaning of Article 4(14) of the PSD2, and thus as a means of payment for the purposes of this Directive. In answering this question, the CJEU concluded that Article 4(14) of PSD2 must be interpreted as meaning that a payment instrument within the meaning of that provision is a payment instrument which is equipped with the NFC function on a multi-functional personalised payment card, enabling low-value payments to be made by debiting a payment account linked to that card. The CJEU also clarified the meaning of anonymous use of a payment instrument in the context of the NFC function. The CJEU noted that the use of the NFC function for the payment of small amounts constitutes anonymous use within the meaning of Article 63(1)(b) of the Directive, even if the card with this function is linked to the payment account of a particular customer, since the PSP cannot verify who has actually used the payment card. According to the CJEU, in the light of the rules laid down in PSD2, it is consistent that a customer who chooses to use a simplified means of payment without the need for identification for low-value payments such as the NFC function must be deemed to have accepted the possible contractual limitations on the liability of the PSPs allowed by that provision[20].

Furthermore, the CJEU stated that a PSP cannot avoid its liability for unauthorised low-value transactions by its general terms and conditions by simply stating that it would be technically impossible to block payments using the NFC function. In this case, the CJEU also held that Article 3(1)(a) of PSD2 must be interpreted as meaning that the PSP which intends to rely on the exemption included in that provision cannot limit itself to claiming that it is impossible to block the payment instrument concerned or to prevent its further use, even though, in the light of the objective level of available technical knowledge, such impossibility cannot be proved.

On 26 January 2021, the CJEU ruled in joined cases C-422/19 and C-423/19 that a euro area Member State may oblige a public administration entity to accept cash payments but may also restrict the possibility of such payments for public reasons. Such a restriction may be justified, for example, where a very large number of users of the service means that cash payments may lead to unreasonable costs for the public administration entity. Furthermore, the CJEU pointed out that the concept of a payment instrument denominated in a currency unit as a “legal payment instrument” means that it is not possible, in general, to refuse to accept this payment instrument for the settlement of a debt denominated in the

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17 https://ec.europa.eu/commission/presscorner/detail/en/ip_21_2663.

18 Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC.

19 https://ec.europa.eu/info/publications/210720-anti-money-laundering-countering-financing-terrorism_en.

20 https://www.lat.lt/data/public/uploads/2020/12/estt_2020_lapkritis.pdf.

same currency unit. It should be noted that the EC working group is examining the status of cash as a legal payment instrument.

On 2 September 2021, the CJEU passed its judgment in Case C-377/20, which involves fundamental questions of preliminary rulings on the interpretation and application of Articles 58 and 60 of Directive 2007/64 (the equivalent of Articles 71 and 73 of the current PSD2). The referring court sought, in essence, to determine whether Articles 58 and 60(1) of Directive 2007/64 must be interpreted as meaning that, in the case of unauthorised or incorrectly executed payment transactions, it provides for a system of exclusive liability of the service provider under which, in respect of the same facts, no action may be brought on the basis of the common law on the ground that the service provider has failed to comply with the obligations laid down by national law, in particular where, within thirteen months of the debit of the amount, the payment service user did not inform the payment provider of the unauthorised or incorrect execution of the payment transaction. In its judgment, the CJEU held that Articles 58 and 60(1) must be interpreted as precluding a payment service user from invoking the liability of the payment service provider under a liability scheme other than that provided for in those provisions, where the payment service user has failed to comply with the obligation to notify under the aforementioned Article 58. It is noted that the liability regime for payment service providers provided for in Article 60(1) of Directive 2007/64 and in Articles 58 and 59 of that Directive was fully harmonised and that Member States may not apply a parallel liability regime in respect of the same event[21].

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[21] https://curia.europa.eu/juris/document/document.jsf?text=&docid=245540&pageIndex=0&doclang=EN&mode=req&dir=&occ=first&part=1&cid=40594035.

5. Operation of the payment system CENTROlink

With the CENTROlink payment system, the Bank of Lithuania contributes to the implementation of the Eurosystem's retail payments strategy[22]. Promoting innovation and digitalisation in the European payments ecosystem is an integral part of this strategy. Non-bank PSPs, such as EMIs and PIs, play an important role in this field. Access to the payment system CENTROlink through the Bank of Lithuania ensures the reachability of SEPA payment instruments to these institutions. When granting access to the payment system, the Bank of Lithuania is guided by the principle of neutrality – access is granted to all institutions meeting the established criteria from any EEA country and on equal terms. In addition to PSPs licensed in Lithuania, at the end of the first half of 2021, there were PSPs from 16 EEA countries operating via CENTROlink. In the first half of 2021, 61% of all payments executed in CENTROlink were made by PSPs licensed in Lithuania and providing services outside Lithuania as well, and 39% were made by PSPs licensed in other EEA countries, which were connected to the CENTROlink payment system.

The CENTROlink payment system supports the pace of instant payments development in the country and beyond. PSPs that are properly prepared receive access to make and receive payments under the SEPA Instant Credit Transfer scheme[23]. At the end of June 2021, 31 (10 in the previous year) PSPs using CENTROlink were making instant payments. In the first half of 2021, the number of instant payments executed through CENTROlink was 27 million, which is about 7 times more than in the corresponding period of 2020. The share of instant payments in the total number of credit transfers executed in the CENTROlink payment system under SEPA schemes was around 23% in July 2020[24], reaching 40% by the end of the same year. The share of instant payments exceeded 40% in almost all months of 2021, reaching almost half of all credit transfers made by CENTROlink in September. The instant payment rate is also similar among PSPs operating in the country[25]. In 2020, the share of instant payments compared to the total SEPA credit transfers increased from 30% (in July) to 37% (in December), while in January–September 2021 it ranged between 42% and 46%.

Taking into account the expansion of CENTROlink services and the high interest of EMIs and PIs, the Bank of Lithuania continues to strengthen its control over both new and existing PSPs gaining access through the Bank of Lithuania. The performance of these institutions, the reputation of their shareholders and managers, and the cases where sanctions are imposed on institutions or managers are subject to stricter scrutiny. Although a significant number of new PSPs join CENTROlink each year, a part of applications is rejected after the risk assessment. In the first half of 2021, 7 requests from payment institutions to join the CENTROlink payment system were refused. The number of PSPs using the payment system had increased by 11 since the start of 2021 and stood at 147 at the end of June (compared to 120 a year ago). The activities and payments of institutions which already have access to the system and provide payment services are closely monitored, and if there are doubts about the adequacy of operational and money laundering risk management measures, services may be suspended or terminated altogether. For these and other reasons, 12 institutions have lost access to the system since 2016, of which 2 were disconnected in the first half of 2021.

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[22] https://www.ecb.europa.eu/pub/pdf/other/ecb.eurosystemretailpaymentsstrategy~5a74eb9ac1.en.pdf?819e76c55e01ed236dac589f980189a2.

[23] A scheme managed by the European Payments Council (SEPA Instant Credit Transfer Scheme).

[24] This share is calculated by dividing the number of instant payments executed under the SEPA Instant Credit Transfer Scheme by the sum of the number of payments executed under this scheme and the regular SEPA Credit Transfer Scheme. Credit transfers in euro within the SEPA area can be carried out under any of these schemes, so the calculation of this part shows the extent to which regular SEPA credit transfers are replaced by SEPA instant credit transfers.

[25] The main banks operating in Lithuania execute SEPA regular and instant credit transfers via the pan-European payment systems STEP2-T and RT1 without using CENTROlink.

The use of the services of the Bank of Lithuania's payment system CENTROlink and the payment-related proxy lookup service[26] (PLS) provided by the Bank of Lithuania is increasing significantly. In the first half of 2021, 85.1 million payments were made through CENTROlink, or 2.3 times more than in the corresponding period of 2020 (37.8 million). In the first half of the year, the total value of payments made increased by 2.5 times compared to the same period in 2020, reaching €153.4 billion this year (€60.3 billion the year before). In mid-2021, the number of phone number links to IBAN account numbers stored in the PLS database was around 350,000, and the number of PSP customer queries per day to the PLS increased from 20,000 (at the beginning of 2021) to 40,000 (at the end of the first half of the year). At the time, it was used by customers of the country's two largest banks.

[26] The service is designed to simplify the initiation of payment instructions (SEPA credit transfers and SEPA instant credit transfers) when PSP customers use the information stored in the contact book of their mobile devices. The essence of the service is to provide the payee's account number (in IBAN format) in the payment order, based on the payee's mobile phone number known to the initiator of the payment.

6. Impact of the interpretation of the General Data Protection Regulation on payments

Various information, including personal data, is transferred along with the payment, therefore the provision of payment services is also affected by the requirements of the General Data Protection Regulation (GDPR). The European Data Protection Board has issued guidelines on the application of the GDPR to payments, which lead to the need to assess certain payment processes from the perspective of the processing of personal data. The guidelines are set forth in two directions. One concerns the processing of special categories of personal data (such as those revealing information about a person's health, political or religious views, etc.), and the other addresses the processing of data in the context of the provision of the account information service and other related services.

Special categories of personal data may only be processed if there is an adequate basis for such processing. Under the GDPR, special categories of personal data may only be collected with the consent of the individual or in the public interest as enshrined in national or the EU law. PSPs do not purposefully collect special categories of personal data; the receiving and processing of such data depends only on the information provided by the payer or the payee, who is making the payment and to whom, and what information is automatically provided about the counterparty. For example, if a person pays a political party membership fee or a donation to a religious community, the named recipient may imply their political or religious views, even though the payment order only contains the usual information, i.e. the name of the recipient. The Guidelines point out that, in the context of payment services, getting the consent of the individual is not possible (as not only the customer's data is obtained, but also that of the counterparty), therefore processing on the basis of the public interest should be enshrined.

The processing of special categories of data on grounds of the public interest should be addressed at the EU level. There is currently no publicly available clarification at the EU level on what measures should be taken in the light of the interpretation of the guidelines regarding the public interest. This can be expected to be addressed with the revision of the Payment Services Directive (PSD2). In the absence of an agreed solution, it is up to Member States to decide how to implement it. However, non-harmonised solutions in individual Member States will not solve the issue of personal data in cross-border payments and may have negative consequences.

The Guidelines indicate that the transfer of personal data to other service providers should be limited as much as possible, especially in the case of silent party[27] data. In the provision of payment services, the transmission of information contained in the payment order throughout the payments chain is crucial. This allows one to identify the payment transaction, also the payment order and the information it contains may be needed to resolve legal disputes or to make a claim for unauthorised payments. For services associated with an account information service (e.g. credit scoring), payment data may be transferred to a third party providing the service that is not a PSP. The Republic of Lithuania Law on Payments provides for an account information service and, in providing it, PSPs are entitled to process the personal data necessary to provide the service. However, the provision of other related services is not regulated and must therefore be provided in accordance with the GDPR. The person requesting the service may consent to the analysis of their account statement data and to their receipt of the service. However, the personal data of silent parties must not be transferred to such service providers, as it is not possible to obtain consent for the processing of the personal data from those individuals. Their data should therefore be anonymised, for example by encrypting it or aggregating information from several individuals.

[27] A "silent party" is a counterparty of a PSP's client with whom the PSP has no contractual relationship but receives its data. For example, the PSP of the payee processes the data of its customer and of the payer, who is not a customer of that PSP.

The requirements on the processing of data of silent parties could fundamentally change the concept of open banking and the provision of other SIP-based services. The requirement to anonymise the data of silent parties means that account access processes must be reviewed. These services use the same open communication interfaces developed in accordance with the requirements of the Republic of Lithuania Law on Payments. When a service provider connects to a consumer's account, account servicing PSP does not know the specific purpose of the connection, for example, whether it is to provide the consumer with an account statement in a form that is convenient for them or to use that information to assess their creditworthiness. Accordingly, account servicing PSP cannot control the amount of data transmitted. Thus, the process of providing these services needs to be evaluated against the GDPR requirements, technical changes to processes may be required, and changes to legislation may also be necessary. It is also important to assess the impact such restrictions would have on the quality of services.

Abbreviations

GDPR	General Data Protection Regulation
CBDC	central bank digital currency
ECB	European Central Bank
EEA	European Economic Area
EC	European Commission
EPI	European Payments Initiative
EMI	electronic money institution
EU	European Union
CJEU	Court of Justice of the European Union
PI	payment institution
PSP	payment service provider
NCB	national central bank
NFC	near field communication
PLS	proxy lookup service
ML/TF	money laundering and/or terrorist financing
PSD2	Payment Services Directive
SEPA	Single Euro Payments Area
AIS	account information service
BIS	Bank for International Settlements

Gedimino pr. 6, LT-01103 Vilnius

www.lb.lt

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