Analysis

What should be done to improve the autonomy of European retail payments?

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Europe needs its own means of retail payment and more competition. Although national payment solutions have emerged in many European countries, in Finland in-store payments rely almost entirely on international card payments. Both the Eurosystem and the European Commission strongly support the promotion of account-to-account payment methods as alternatives to card payments. The Eurosystem's digital euro project, in turn, represents a different approach to addressing the same challenges.



Geopolitical uncertainty has also increased payment-related concerns

Efficient payments are a prerequisite for economic activity. One of the long-standing stumbling blocks to deepening the European single market has been the fragmented nature of retail payment markets[1]. The sovereignty of payment systems, shaped by changes in geopolitical tensions, technological advances and digitalisation, has become an equally significant issue in recent years.

The concept of payment sovereignty refers to European countries' ability to control their payment systems and reduce dependency on entities located outside Europe. Both the European Central Bank (ECB) and the European Commission have underlined the importance of sovereignty[2].

The sovereignty of payment systems is important for many reasons. First, it improves the operational reliability of the economy by reducing the risk of disruptions caused by external geopolitical tensions or economic sanctions. Second, it strengthens national security by ensuring that sensitive financial data are protected under the jurisdiction of European authorities. Furthermore, it promotes economic activity by providing an opportunity for European countries to adjust payment services to meet the needs of their citizens.

Dependence on non-European payment service providers and the fragmentation of the retail payment markets have exposed vulnerabilities that could undermine the financial stability of the union. Geopolitical tensions have increased concerns over the possibility of securing the uninterrupted operation of financial and payment systems in all circumstances. In response to these challenges, both the EU and the Eurosystem have strived to further strengthen the Single

Euro Payments Area.

Inspiration for retail payment innovations from abroad

Projects aimed at developing retail payment in various parts of the world often focus on making use of an account-based payment infrastructure based on instant credit transfers and on developing Central Bank Digital Currency.

Instant payment refers to real-time account-based payment. In an instant payment, money is transferred from the payer's account immediately and is available in the recipient's bank account within a few seconds. Instant payments are not tied to banking days and function around the clock every day of the year. This means that neither authorisation holds nor preliminary information on upcoming payments are needed. The fact that payments are in real time supports everyday finance management skills also in the context of electronic payment services.

Central Bank Digital Currency (CBDC) typically refers to central bank money in account form which is available to citizens. Central bank money in digital form already exists in the central bank accounts held by banks, but for citizens the only form of central bank money available has so far been cash. The CBDC project of the Eurosystem is referred to as the digital euro.

Every year, the Bank of International Settlements (BIS) publishes a paper summarising the findings of a survey on CBDC and virtual assets. According to the BIS, nearly all the central banks that responded to the survey are studying CBDC[3]. By the end of 2024, however, many Western central banks had announced the suspension of retail CBDC projects for the time being. In addition to China's CBDC pilot project, the Bahamas, Jamaica and Nigeria are so far the only countries that have made CBDC more widely available to the public. In each of these countries, the adoption of the currency has been slow because end-user demand seems to be lacking.

On the other hand, projects based on instant payment infrastructure, for example in Brazil and India, have turned out to be successful. The PIX instant payment system launched by Banco Central do Brasil has become the most popular means of payment among Brazilians[4]. In India, the UPI instant payment system is gaining popularity.

There are examples of successful payment systems based on instant credit transfers also in Europe. In Spain, 53% of all SEPA credit transfers are carried out as instant payments. The Bizum system accounts for nearly 95%[5] of Spain's instant payment transactions. The Swedish company Swish has around 8.6 million private customers[6], which corresponds to around 80% of Sweden's population. According to a consumer survey, Swish is the second-most-popular means of

payment[7] in Sweden. Although Swish is mostly used for payments from person to person, it is also increasingly being used for e-commerce payments. According to a study by Sveriges Riksbank, 43% of e-commerce purchases were done with Swish in 2023[8].

Instant payment is also promoted in Europe through regulation

The Euro Retail Payments Board (ERPB)[9] is tasked with fostering the integration, innovation and competitiveness of euro-denominated retail payments in the European Union. Since its launch, this high-level body has produced several initiatives related to harmonisation, one of which is the SEPA Instant Credit Transfer rulebook, published in 2017.

Both the Eurosystem and the European Commission strongly support the growth of instant payment and the creation of a common European means of payment for both physical points of sale and e-commerce. The promotion of instant payment forms part of the retail payment strategies of the Eurosystem and the European Commission.[10, 11]

The European Commission also promotes the adoption of instant payment through regulation. To secure the adoption of instant euro-denominated credit transfers throughout the European Union, a Regulation stipulating that all operators offering euro-denominated credit transfers must also offer instant credit transfers was adopted in March 2024. Customers must be able to send as well as receive SEPA instant credit transfers. The Regulation also sets a price cap on instant payments, which corresponds to the fee charged for traditional SEPA transfers. In Finland, Parliament has implemented in legislation the changes required by the Regulation[12].

The Commission analysed the benefits provided by instant credit transfers to society before issuing its Instant Payments Regulation[13]. Instant credit transfers were deemed to be beneficial for consumers, businesses, public administration and payment service providers alike. The fact that payments are in real time provides the parties sending and receiving a payment with certainty regarding the execution of the payment. The fact that payments are not tied to banking days makes business transactions possible also during weekends. Instant payments are expected to contribute to economic growth by freeing up funds locked in the financial system by making them immediately available to citizens and businesses.

By promoting instant payment, the aim is to bring more options to payments, especially at points of sale, as a third alternative alongside card and cash. The Instant Payments Regulation alone does not yet guarantee that this objective will be met, but it is a step in the right direction.

Infrastructure for instant payments creates a foundation for new solutions

The Single Euro Payments Area (SEPA) was introduced in 2008 for credit transfers and was fully implemented in the euro area in 2014. The Single Euro Payments Area allows cross-border euro-denominated payments to be implemented under uniform terms and as safely and efficiently as domestic payments.

A result of long-term development by the SEPA, the established common payment infrastructure provides an excellent foundation for developing alternative solutions. With the EU Instant Payments Regulation, banks are already required to receive SEPA instant credit transfers in their customer accounts, and later this year the requirement will be extended to include sending payments.

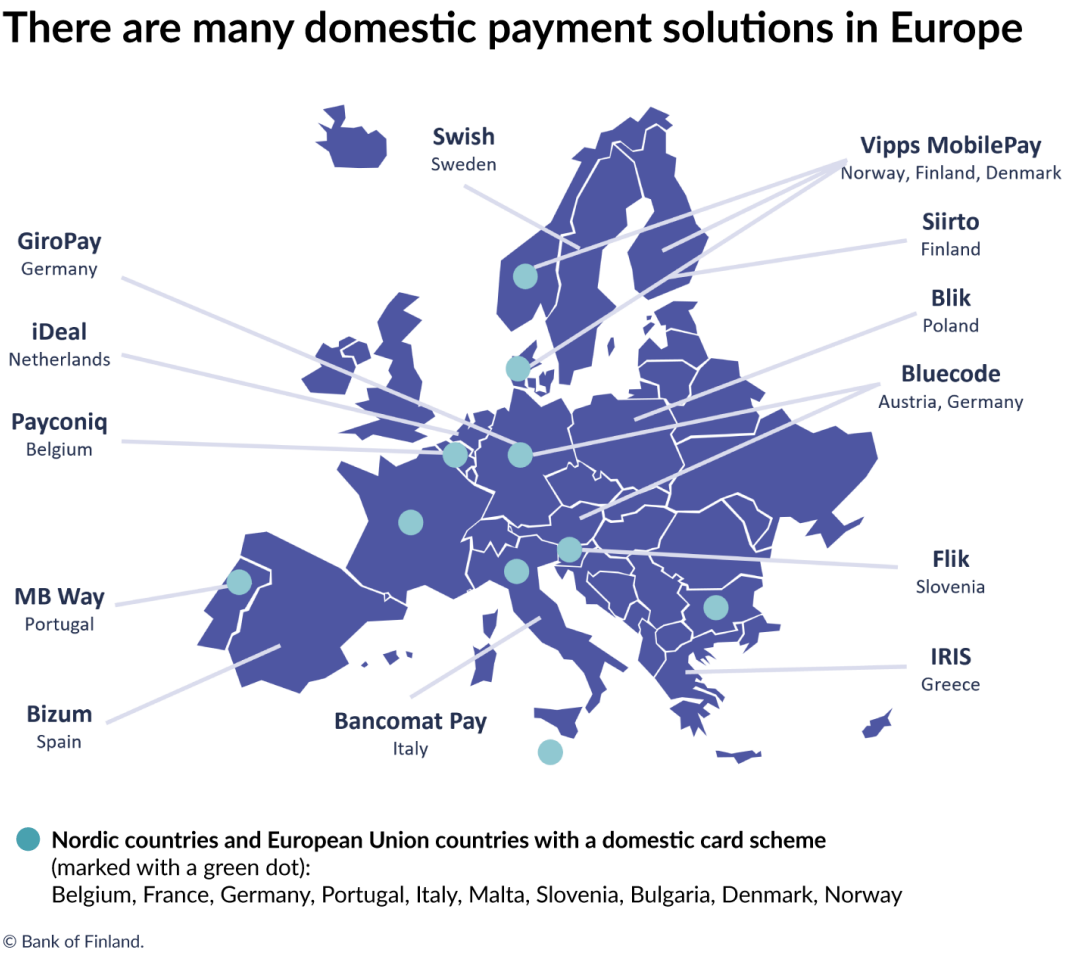
The Eurosystem provides a platform for the settlement of instant payments (TARGET Instant Payment Settlement, TIPS), in which instant payments are instantly settled in central bank money. Introduced in 2018, use of TIPS has not reached the expected level, but its importance has grown. Sveriges Riksbank adopted the platform last year, and Denmark followed suit in 2025.[14] In addition, private instant payment systems are in use in Europe, including the RT1 system maintained by EBA Clearing, which is used by many Finnish banks.

To reap the full benefits from an infrastructure based on instant credit transfers, a new Europe-wide means of payment based on credit transfers that is comparable to card payment and works in both physical points of sale and e-commerce is needed. For instant payment solutions to emerge, all parties in the payments value chain will have to work closely together.

Fragmented markets slowing reform

Despite the SEPA, an electronic in-store means of retail payment that covers the entire euro area has not been achieved. As electronic payment becomes more prevalent, European countries have created solutions that suit their own domestic needs (Chart). In some other countries, domestic card schemes are also in use. For the time being, however, the means of retail payment that works equally everywhere in the euro area is euro coins and banknotes and, to a large extent, international payment cards.

Chart 1.



The chart shows popular mobile payment applications in the area of the European Union and in the Nordic countries

The fragmentation of the European payment market reduces the efficiency of payment systems and increases the complexity of payment for both consumers and businesses. Fragmented systems are more prone to misuse because fragmentation can contribute to poor coordination and security.

The Eurosystem has also announced that it supports initiatives aimed at a harmonised European means of payment at points of sale and that comply with the five key objectives listed by it[15]. The European Payments Initiative (EPI), which has developed the mobile wallet Wero, currently involving 16 European banks, has made the most progress in achieving this goal. Another entity developing a harmonised European means of payment is the EuroPA Initiative, which promotes the interoperability of means of payment in different countries. Currently, payment service

providers from three countries are on board. Both initiatives are still a long way from achieving accessibility throughout the euro area.

Heightened need for alternative means of payment in Finland

Although domestic payment solutions have been created in many European countries, the situation is different in Finland. The Finnish retail payment market leans heavily on card payments, and there has not been a feasible alternative for international cards since banks abandoned the domestic debit card in the early 2010s. This means that nearly all card payments in Finland take place in the systems of two entities governed outside Europe. Around 90% of respondents to the Bank of Finland's consumer survey indicated a means of payment other than cash as the most common means of payment in daily purchases in 2024[16]. From the perspective of national security of supply and benefits brought by competition on market terms, it would be better if an alternative domestic or European means of payment existed in addition to these international payment cards.

Both the Eurosystem and the European Commission strongly support the promotion of account-based means of payment as alternatives to card payments. In Finland, the Payments Council[17] – the national body for furthering the development of retail payments – started a long-term effort to bring instant credit transfers to Finnish payments in 2019. A working group set up by the Payments Council first examined the challenges and obstacles to the introduction of payments in the Finnish payments market[18]. One of the most obvious obstacles was the lack of coordination. Nevertheless, a means of payment based on instant payment was expected to be generated on market terms. This has not happened, however. Under the leadership of the Payments Council, the matter was actively promoted in a coordinated manner. As a joint output of the market, a rulebook on instant payment in Finland and a supporting governance model were completed in autumn 2024, which will enable instant payment compatible with European standards to be introduced in the Finnish market[19].

A digital euro would be a form of digital cash

The Eurosystem's digital euro project represents an alternative approach to the challenges of European retail payments. The starting point of instant credit transfer-based payment initiatives is instant credit transfers between banks, with the aim of creating a smooth method for retail payments, whereas the digital euro project aims to create a completely new payments infrastructure. At its core is the concept of digital cash – central bank-issued accounts available to citizens for initiating payments. Merchants would be required to accept this form of legal tender,

thereby creating a new infrastructure for both payment initiation and acceptance.

Of the objectives of a digital euro, the focus has recently been on strategic autonomy and independence from non-European card schemes. A digital euro could enhance conditions for competition in the euro area, which would improve services and lower costs for consumers and retailers. Some euro area countries, however, already have domestic card payment systems or instant credit transfer applications. In the worst case, a digital euro would compete with these solutions and not with global payment card companies. So far, national solutions have not succeeded in spreading extensively across borders. The outcome of the planning of a digital euro should thus be a harmonised European means of payment that nevertheless leaves space for the development of other alternative means of payment.

For the users, a digital euro could well function in the same way as the other instant payment solutions. Money could be sent to a friend via, for example, a mobile application, and paying at retail checkouts (POS) and online would be convenient throughout the euro area. Money would be transferred from the payer account to the payee account within seconds. The only difference would be that a digital euro account would be separate from an account in a commercial bank and located in the central bank's system. A digital euro would thus be a form of central bank money like physical cash, i.e. a holder's claim on the central bank.

Open questions remain on a digital euro

The preparations for a digital euro are proceeding as planned, but there are still some challenges to be solved. The concerns about a digital euro relate to, in particular, the digital euro's own account and settlement system. For consumers, a digital euro account would, in practice, be a central bank account, i.e. consumers would open an account with the central bank. The opening, administration and other actions related to an account would, however, be the responsibility of private payment service providers and banks. Commercial banks have expressed concerns that a digital euro could, once implemented, weaken the role of commercial banks in the intermediation of finance. Banks' deposits will decrease if people transfer large amounts of money from their bank accounts to digital euros. This could threaten the stability of the financial system, at least in theory. A core principle of a digital euro is, however, the promise that this will not happen. In the preparation phase, the objective is thus to set a limit for the amount of digital euros that a person or company could hold so that it would have a minor impact on commercial banks.

A group of consumers has expressed concerns about risks to the protection of privacy, as the digital euro accounts of all the users of a digital euro would be held by the central bank. As a central bank, the Eurosystem, however, has no need to keep or even see the account information of private individuals. It is technically possible to encrypt the account holder information included

in the ledger, but it is disputable whether all citizens consider this level of privacy sufficient. This could be compared to a situation in which the central bank offered citizens safe-deposit boxes. But since the central bank does not want to have customer service staff or see who visits which deposit box, the customer would always have to ask the customer service official of his or her commercial bank for permission to access the deposit box.

An account and settlement system can also be considered to increase unnecessary complexity if it includes the planned waterfall mechanism. A waterfall mechanism means that if the customer does not have sufficient funds on the digital euro account at the time of payment, the surplus of the holding limit will first be transferred from the customer's commercial bank account to the digital euro account, from which the amount will be transferred instantly to the payee's digital euro account. If the payee is a retailer, the money is transferred further to the retailer's commercial bank account. If this complex arrangement is needed often, it will increase delays in payment transactions and susceptibility to errors and will inevitably weaken the customer experience and create inefficiency.

Is a boost from the public sector needed?

Over the years, popular payment methods have been launched in Europe that utilise credit transfer-based instant payment, but in order to achieve the strategic objectives, a solution should be pan-European, with a consumer experience similar to the card payments that are currently dominating payments. Market fragmentation and lack of standards independent of card schemes is a significant hindrance to positive trends in Europe. It might therefore be necessary for the public sector to take an even larger role in the development of retail payments.

A comparison of digital euro and instant payment initiatives shows that strategic objectives, for example increasing the autonomy and competition of payments as well as the choices for consumers, can be achieved with a model that is based on the instant credit transfer infrastructure, without a new settlement system. In this case, what remains to be done is, in particular, the creation of a payment network that enables a new means of payment between consumers and retailers.

A digital euro, with its central bank accounts, could in the future be a form of money that complements euro cash. However, if the future needs of retail payments can be addressed with two different models, it may be justified to start with the alternative, which, in this current increasingly uncertain geopolitical environment, offers the quickest response to the challenges of Europe's strategic autonomy.

One of the common denominators of the recent successful retail payments initiatives around the

world is the role of public entities in promoting and managing the initiatives. Previous private European initiatives have not succeeded in achieving sufficient coverage across the European Union or the euro area. To enhance the sovereignty of European retail payments, it may be necessary for public entities to learn from successful development projects, which would mean taking a more active role in the development of the basic infrastructure of payments. As private innovations have not achieved a sufficient level of success or demand, public entities could provide a stable and reliable market infrastructure, i.e. a foundation on which new means of payment can be constructed. This could include promoting account-to-account means of payment and supporting initiatives that are similar to a digital euro and provide a secure and efficient alternative to international card payments. This would ensure that Europe remains competitive and independent in the global payments ecosystem. However, the current market environment calls for swift action, as such initiatives are inherently large-scale and long-term in nature.

Notes

1. Bank of Finland's strategic priorities 2025–2027: 1) Stable and competitive Europe, https://www.suomenpankki.fi/en/bank-of-finland/our-strategy/?epslanguage=en. ↑
2. See https://www.ecb.europa.eu/pub/pdf/other/ecb.eurosystemretailpaymentsstrategy~5a74eb9ac1.en.pdf, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52020DC0592. ↑
3. See https://www.bis.org/publ/bppdf/bispap147.htm. ↑
4. See https://www.economist.com/the-americas/2025/04/03/brazils-government-run-payments-system-has-become-dominant. ↑
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6. See https://www.swish.nu/about-swish. ↑
7. See https://www.riksbank.se/en-gb/payments--cash/payments-in-sweden/payments-report--2024/trends-in-the-payments-market/payment-habits-in-sweden/the-mobile-phone-is-becoming-more-important-for-all-types-of-payments-/. ↑
8. See https://www.riksbank.se/en-gb/payments--cash/payments-in-sweden/payments-report--2024/trends-in-the-payments-market/payment-habits-in-sweden/swish-on-the-rise-in-e-commerce/. ↑
9. See https://www.ecb.europa.eu/paym/groups/erpb/html/index.en.html. ↑
10. See https://www.ecb.europa.eu/paym/integration/retail/retail_payments_strategy/html/index.en.html. ↑
11. See https://eur-lex.europa.eu/legal-content/FI/TXT/PDF/?uri=CELEX:52020DC0592. ↑
12. See https://www.eduskunta.fi/FI/vaski/EduskunnanVastaus/Sivut/EV_10+2025.aspx (in Finnish). ↑
13. See https://op.europa.eu/en/publication-detail/-/publication/735d5b9d-0c5e-11ec- ↑

adb1-01aa75ed71a1/language-en/format-PDF/source-228471178.

14. See https://www.eurojatalous.fi/fi/2024/artikkelit/tipsista-tulossa-euroalueen-ja-pohjoismaiden-johtava-maksamisen-selvitysalusta/ (in Finnish). ↑
15. See https://www.ecb.europa.eu/pub/pdf/other/ecb.eurosystemretailpaymentsstrategy~5a74eb9ac1.en.pdf. ↑
16. See https://www.suomenpankki.fi/en/statistics/dashboards/cash-statistics/kuluttajakysely/?epslanguage=en. ↑
17. See https://www.suomenpankki.fi/en/money-and-payments/payment/payments-council/?epslanguage=en. ↑
18. See https://www.suomenpankki.fi/globalassets/bof/en//money-and-payments/the-bank-of-finland-as-catalyst-payments-council/payments_going_real-time_in_finland_report_en.pdf. ↑
19. See https://www.suomenpankki.fi/en/money-and-payments/pikamaksamisen-edistaminen-suomessa/. ↑

Keywords

digital euro, digital euro, instant payments , retail payment, strategic autonomy