

EUROPEAN CENTRAL BANK

EUROSYSTEM

The role of central bank money in digital payments and digital finance

Crypto Asset Lab conference organised by the University of Milano-Bicocca



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The transformation of money and payments

A rapid transformation is affecting money, payments and our responsibilities.

Two factors are having a profound effect on our mandate:



Digitalisation

Rapid developments in digital technologies are generating new demands, creating emerging markets and introducing novel risks



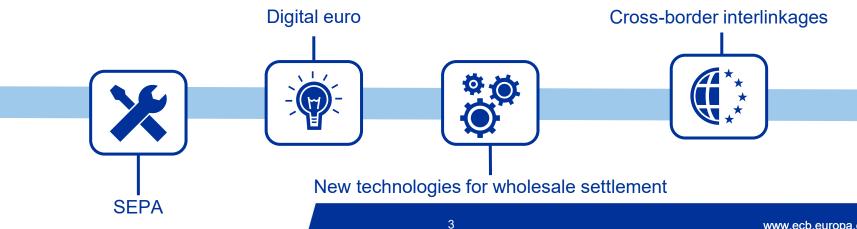
Risk of fragmentation

- Geopolitical challenges
- European retail payment solutions remain at national level and there is no European solution available to compete with international schemes

The European Central Bank's role

Importance of **central bank money** to ensure the stability of the financial system and preserve sovereignty

To address the challenges, the ECB is working in four main areas:



Overview

- 1 The changing retail payment landscape and ECB's response
- 2 Innovation in wholesale and cross-border payments
- 3 Conclusion



The changing payment landscape and the ECB's response

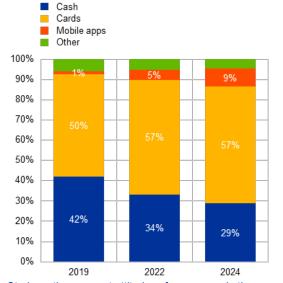
European payment habits are changing

The ECB's latest survey on payment attitudes in the euro area shows that:

- Paying online has become more common (36% of the value of non-recurring day-to-day payments in 2024, up from 18% in 2019)
- Cards account for the largest share of payments in value, both online and in shops
- The share of cash has continued to decline in payments at the point of sale (from 54% in 2016 to 39% in 2024 in value)
- Use of mobile solutions is rising sharply

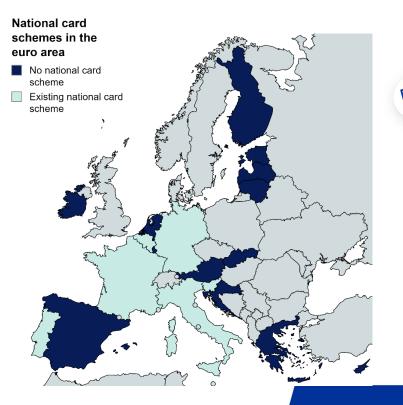
Share of cash in day-to-day payments, in value terms

(% of the value of all non-recurring day-to-day payments)



Source: ECB (2024), Study on the payment attitudes of consumers in the euro area (SPACE).

The lack of a European digital means of payment



There is currently no European digital means of payment covering all euro area countries

13 of the 20 euro area countries do not have a national card scheme and instead rely on international card schemes, which were used to settle 65% of electronically initiated transactions made with cards issued in the euro area

We are lacking European players offering payment solutions at the European level

Implications for our monetary sovereignty



New foreign payment solutions are entering Europe, combined with the existing (and increasing) dominance of international card schemes



Risks to monetary sovereignty in the new geopolitical environment, where stablecoins are gaining further traction

• E.g.: traditional payment solutions that explore stablecoins for online purchases

The Eurosystem's retail payments strategy

SEPA does not offer a digital payment option for our most important daily needs, i.e. in-store, mobile and e-commerce payments.

The Eurosystem's retail payments strategy



Our primary goal is to **foster the development of privately operated**, **pan-European solutions for payments** at the point of interaction, governed at the European level. The **Eurosystem supports market-led initiatives** that meet a set of requirements defined for such a solution.



The full deployment of instant payments is another key priority.



To deliver on our mission and fulfil our responsibilities, we need to bring retail central bank money into the digital age by providing **a digital equivalent to cash**.

A digital euro would empower Europe in three ways:



Support the digital transition

A digital euro would ensure that money remains a public good for everyone

Offer greater daily convenience

It would be available to everyone and accepted everywhere in the euro area

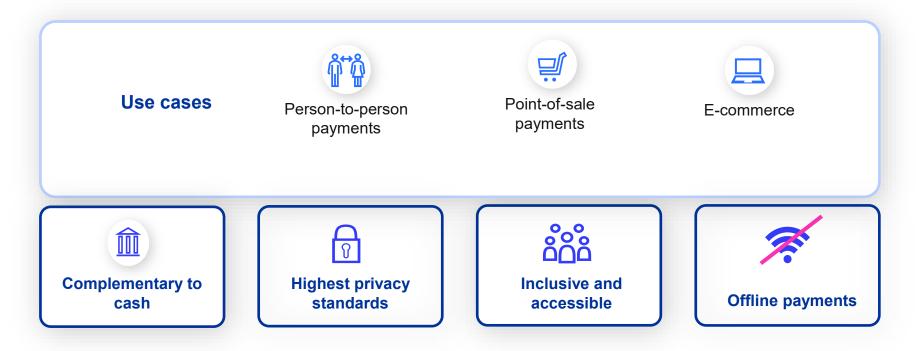


Enhance Europe's strategic autonomy

A digital euro would be built with European technology and infrastructure

We are currently laying the technical foundations for the potential issuance of a digital euro.





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Digital euro Preparing our currency for the future

Investigation phase

October 2021 to October 2023

Concept definition, technical exploration and design proposal

Preparation phase November 2023 to October 2025

Main expected next steps:

- Finalise scheme rulebook
- Select service providers
- Learn through experimentation
- **Dive deeper** into technical aspects, including further research into offline functions and developing a testing and roll-out plan for the future

Next phase From November 2025

Potentially developing and rolling out digital euro use cases

A decision to issue a digital euro will only be considered by the ECB once the European Union's legislative process has been completed



Innovation in wholesale and crossborder payments

Exploring new technologies for settling wholesale transactions

There has been a significant increase in the adoption of financial technology, particularly distributed ledger technology (DLT) and tokens.

Compared with the current ecosystem, a shared DLT platform could:



enhance efficiency, with trading, settlement and custody on the same platform; 24/7/365 operating hours; instantaneous settlement facilitating T+0; smart contracts to automate and speed up processes between issuers and investors



lower barriers to entry, enabling small and medium-sized enterprises to access capital markets.

To address strong market demand, the Eurosystem has conducted exploratory work to test DLT for settling wholesale transactions in central bank money.

Tokenisation and DLT could revolutionise market infrastructures and address the technological barriers to establishing a **digital savings and investments union**.



The ECB has recently decided to launch initiatives to help improve cross-border payments inside and outside the EU, in line with G20 objectives.



Multi-currency settlement

This will leverage the multi-currency feature of the Eurosystem's instant payments settlement service (TIPS) to settle funds end-to-end instantly in central bank money in multiple currencies.



Global cross-border payments

The ECB is committed to improving cross-border payments globally, including by interlinking with fast payment systems outside Europe.



One-leg out instant payment scheme

We will explore how TIPS can support the use of the SEPA one-leg out instant payment scheme with selected partners, to enable instant payments to payees outside the euro area.



Conclusion

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Conclusion

Payments are becoming increasingly digital

Europe is lagging behind in digitalisation and cannot scale up



We increasingly **depend on non-Europeans companies** for the circulation of **"our" money** throughout the euro area, and for supporting **people's everyday payment needs**

Geopolitical context has changed, with dependencies turning into vulnerabilities

Central bank money helps preserve the role of the euro as a currency

Conclusion

The ECB is addressing new challenges by:

- Supporting the creation of pan-European payment solutions and the improvement of instant payments
- Preparing the potential issuance of a digital euro a digital version of cash
- Exploring new technologies for settling wholesale transactions such as DLT
- Improving cross-border payments inside and outside the EU

Thank you

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