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A Digital Euro:

Balancing Innovation, Autonomy and Trust

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Summary

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The digital euro project is a reaction to citizen preferences shifting towards payment via digital means. It addresses the fragmentation of the European payment sector with the aim of highlighting ways to support the single market, strategic autonomy and the monetary sovereignty of the EU. Because the digital euro is a complex project requiring a thorough legal, economic and political assessment, this policy brief looks at three crucial aspects of the proposal.

The brief first presents the essential features of the digital euro project in the context of European law, economics and politics. In contrast to private forms of electronic money that private banks create, the digital euro will be a retail central bank digital currency. As such, it will be a direct liability of the central bank, like cash. With many payments moving online, the digital euro ensures the role of public money in an increasingly digitised economy.

This digital euro legislative framework should ensure trust by guaranteeing privacy, access to cash and financial inclusion. The establishment of a digital euro has the potential to cause structural changes to the banking system. Thus, it will need to have carefully calibrated holding limits and will not be remunerated—that is, like cash, interest rates will not be applied.

Third, the policy brief identifies critical aspects, such as the distribution of competences between the lawmakers and the European Central Bank, that require thorough legal, economic and, ultimately, political assessment. Policymakers face difficult questions that ultimately relate to the European Central Bank's exclusive competence over monetary policy, central bank independence and the relationship of these issues to the structure of the financial system. The brief concludes by offering a series of recommendations for policymakers.

Keywords Digital euro – Economic and Monetary Union – Strategic autonomy – Monetary sovereignty

Introduction

As a central bank digital currency (CBDC), the digital euro is intended to complement euro banknotes and coins in the digital age. On 28 June 2023 the European Commission, based on stakeholder consultations and impact assessments, and taking into consideration the work of the European Central Bank (ECB), proposed a digital euro package. This package consists of two mutually supporting regulations that aim to establish the digital euro as a digital form of the single currency. The package is accompanied by a proposal for a regulation to secure the legal tender status of euro cash in the form of banknotes and coins. In parallel with the legislative work, the ECB has progressed with the work towards issuing the digital euro. On 18 October 2023 the ECB's Governing Council concluded its two-year investigation phase on designing and distributing a digital euro and moved on to a preparation phase for its introduction.

Today, many economic interactions have moved online, and just a few, non-European, payment companies dominate the digital payments sector. New players, mostly Big Tech companies from the US, are also entering the market. Thus, the Commission and the ECB aim (1) to ensure that European citizens have the freedom to pay with a European solution, available across the single market, and (2) to strengthen the EU's strategic autonomy in the ever more challenging international environment in the digital age. So far, many of the EU's attempts to push for a unified solution in the payment sector have failed to produce the desired results. The digital euro is best understood as the newest attempt to address this issue.

While it is up to the ECB to decide when and whether to issue the digital euro, EU legislators have been asked to provide the accompanying legislative architecture. As the representatives of the EU member states and citizens, the Council of the EU and the European Parliament are well placed to articulate and address citizens' concerns and issues, which go beyond the more technical aspects of monetary governance. Against a backdrop of technological innovation in the financial sector, the entrance of new players and the need to ensure the EU's strategic autonomy, the co-legislators appear to be taking an innovation-friendly approach. The project's success will also depend on people's trust in the currency and some financial sector cooperation. Therefore, the co-legislators also need to consider the views of citizens and stakeholders.

The digital euro project: in between cash and a means of payment

Many central banks are exploring CBDCs as a way to ensure the role of central bank money as a public good in a time of accelerating digital transformation. A 2021 Bank for International Settlements (BIS) survey of central banks found that 86% are actively exploring the potential of CBDCs, 60% are experimenting with the technology and 14% are running pilot projects. CBDCs can have different designs, functions and purposes.[1]

Two design features of the digital euro are essential to reflect on in order to understand the currency's purpose. First, it is important to understand that CDBCs are essentially a form of electronic money issued directly by the central bank. Today, most electronic money available to citizens takes the form of private money, that is, money created by private banks, for example, through credit creation. One example of this private electronic money is the money people hold in their bank accounts with private banks. By contrast, the digital euro would be a direct liability of the central bank and thus be a form of public money issued directly by a public institution. This would make it similar to euro banknotes and coins.

Central bank money is of the highest quality because it does not depend on the solvency of a private issuer. It is supported by the government's power of taxation and, in most countries, by legal tender status, ensuring, among other things, its acceptability. Different design options are possible. For example, a digital euro could be designed as a unit of account to settle transactions involving significant amounts only (i.e. wholesale use) or could aim to introduce CBDCs for everyday payments at the point of sale in ordinary shops (i.e. retail use).

The design of a CBDC ultimately depends on how closely it is intended to resemble other forms of money available to the public and which functions it is supposed to fulfil. Money serves different purposes. For example, it can be used as a storage of value or as a means of payment. If the CBDC is to resemble other forms of public money available to the public, such as euro banknotes and coins,

[1] A. Kosse and I. Matte, *Gaining Momentum – Results of the 2021 BIS Survey on Central Bank Digital Currencies*, BIS Papers no. 125 (2022).

it will not bear interest and could be a storage of value without holding limits. If it is primarily a means of payment, no storage function is necessary.

In the very early stages of exploration of the digital euro, many different design options were explored.[2] Yet, as the project has moved forward, the ECB has clarified many design features, and the Commission's legislative proposal has defined the essential aspects of the accompanying legislative architecture.[3] The digital euro is intended to be a retail CBDC and should be generally available to citizens as a digital equivalent to cash. For this reason, payment service providers (PSPs), that is, the institutions that already offer citizens access to financial services such as bank accounts, will be involved in setting up the infrastructure for the digital euro.

This similarity with cash is also indicated by the Commission's legislative proposal that the digital euro will not bear any interest.[4] However, unlike cash, the digital euro will not initially be designed to have a storage function. Holding limits for individual digital euro users will apply,[5] and commercial entities will not be able to hold digital euros on their accounts.[6] Thus, the digital euro is intended to sit between money in the form of cash, which can be stored, and a means of payment.[7]

Preparation of the digital euro and the legislative process

The ECB will have the final say on the issuing of the digital euro. However, two EU institutions, the Commission and the ECB, played a significant role in the initial phase of development. In September 2020, the Commission published a strategy[8] to support the digital transformation of finance in the coming years while also regulating the risks associated with such a transformation. The legislative process is best understood in the context of the EU's broader digital finance

[2] ECB, *Report on a Digital Euro* (October 2020).

[3] European Commission, Proposal for a Regulation on the establishment of the digital euro, COM (2023) 369 final (28 June 2023).

[4] Ibid., art. 16(8).

[5] Ibid.

[6] ECB, *Progress on the Investigation Phase of a Digital Euro – Third Report* (2023).

[7] S. Grünewald, *A Legal Framework for the Digital Euro. An Assessment of the ECB's First Three Progress Reports* (2023).

[8] European Commission, *Digital Finance Strategy for the EU*, Communication, COM (2020) 591 final (2020).

strategy,[9] which featured the digital euro as part of its retail payments strategy.[10] One month later, in October 2020, the ECB published its report[11] on the potential creation of a digital euro as the first step towards gathering views on a possible design.

After the Commission conducted stakeholder consultations and its staff produced an impact assessment of a potential digital euro,[12] on 23 June 2023 it put forward a legislative package to establish a framework for the digital euro. The package comprises two proposals for EU regulations subject to the ordinary legislative procedure. Based on Article 133 of the Treaty on the Functioning of the European Union (TFEU), the first regulation[13] aims to establish the digital euro as a new digital form of the common currency, complementing euro banknotes and coins, and to define its status as a legal tender. The second regulation,[14] based on Article 114 TFEU, aims to establish rules for PSPs in member states whose currency is not the euro to enable them to use the digital euro. A proposal for a third regulation accompanies the package,[15] also based on Article 133 TFEU, that would ensure the legal tender status of euro banknotes and coins and address issues such as access to cash.

In their initial assessment of the package, the co-legislators in the ordinary legislative procedure, the European Parliament and the Council of the EU, favoured the establishment of the digital euro but also made some critical remarks. The Parliament welcomed the ECB's preparations but stressed the need to ensure the continued ability to use cash as a means of payment, to protect privacy and to maintain the security and accessibility of the euro, as well as the importance of ensuring the availability of payments across the single market.[16] The Council addressed the digital euro mainly in the context of its Eurogroup meetings. In general

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[9] Ibid.

[10] European Commission, *Retail Payments Strategy for the EU*, Communication, COM (2020) 592 final (24 September 2020).

[11] ECB, *Report on a Digital Euro* (October 2020).

[12] European Commission, Impact Assessment Report accompanying the Proposal for a Regulation on the establishment of the digital euro, Staff Working Document 233 final (28 June 2023).

[13] European Commission, Proposal for a Regulation on the establishment of the digital euro.

[14] European Commission, Proposal for a Regulation on the provision of digital euro services by payment services providers incorporated in Member States whose currency is not the euro, COM (2023) 368 final (28 June 2023).

[15] European Commission, Proposal for a Regulation on the legal tender of euro banknotes and coins, COM (2023) 364 final (28 June 2023).

[16] European Parliament, *European Central Bank – Annual Report 2020,* 2020/2123(INI) (10 February 2021). The Parliament's other concerns related to the possible impact on the banking sector, which should be properly studied before the launch of the digital euro.

terms, the Eurogroup was affirmative and underlined the positive role the digital euro could play in an increasingly digitalised economy and in the strengthening of the EU's open strategic autonomy. However, it also stressed the importance of cash and ease of use and access, and the need for a high level of privacy.[17]

On 18 October 2023 the ECB decided to move the digital euro project from the investigation to the preparation phase. The Eurogroup published a statement welcoming this decision. However, it also underlined the need to explore and test the design aspects and functionalities of the digital euro. It further stressed that the move to the preparation phase was not a pre-emption of any future decision on the possible issuance of a digital euro, 'which would only come at a later stage and would necessarily depend on the EU legislative developments'.[18] On 9 February 2024 Stefan Berger, rapporteur for the digital euro package in the European Parliament, tabled a draft report in the European Parliament, for which amendments were tabled on 21 February. No vote on the report was scheduled for the ninth legislative term due to the 2024 elections, so discussions will proceed in the tenth term after the new Parliament has been constituted.

The digital euro in European politics

In the ongoing debate about the digital euro, many voices have promoted the introduction of a digital euro while others remain more sceptical. The first camp typically highlights the need to keep up with technological innovation in retail payments, to address the fragmentation of the European payment system and to ensure the EU's open strategic autonomy in the digital age. Concerns are raised in terms of public fears over privacy and individual freedoms. In the latter group, others doubt the usefulness of CBDCs and worry about their potentially adverse side effects and risks, notably bank disintermediation.[19] The following section therefore reflects first on the rationale for establishing a digital euro and second on the critical aspects of its design, by examining the key legal provisions of the legislative proposal that address the sceptics' concerns.

17 Council of the European Union, 'Eurogroup Statement on the Digital Euro Project' (16 January 2023).

18 Council of the European Union, 'Statement by the Eurogroup on the Decision of the ECB's Governing Council to Launch the Next Phase of the Digital Euro Project' (18 October 2023).

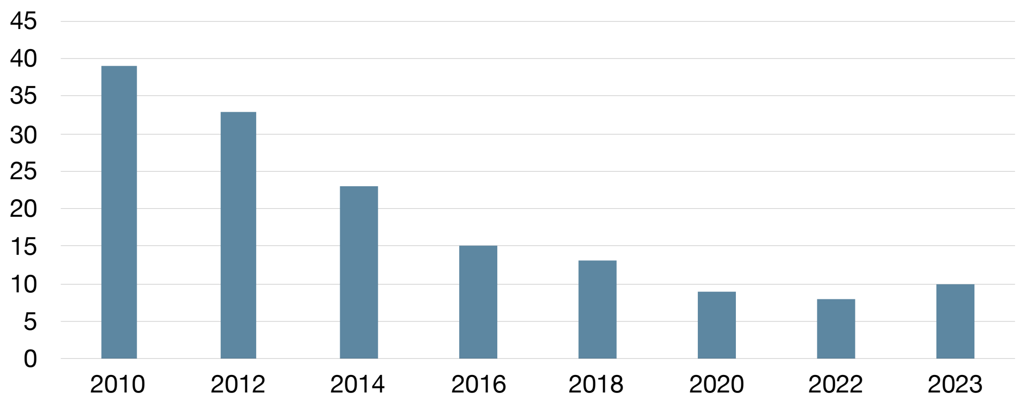
19 E.g. P. Bofinger and T. Haas, *The Digital Euro (CBDC) as a Monetary Anchor of the Financial System*, SUERF Policy Note 309 (2023); T. Tenner, A. Wallraf and M. Jessen, *Position Paper on a Digital Euro – The Next Step in the Evolution of Money*, Bankenverband (2023); C. J. Waller, 'CBDC – A Solution in Search of a Problem?', speech made at the American Enterprise Institute, Washington, DC, 5 August 2021.

Rationale for establishing a digital euro

Financial innovation

One frequent argument for establishing a digital euro is that the Monetary Union should respond to evolving payment trends. This argument relates to citizens' preferences, which are increasingly moving towards digital payments. This trend accelerated due to the Covid pandemic. A 2022 World Bank Report found that two-thirds of adults worldwide make or receive digital payments.[20] In some states, such as Sweden, the use of cash has disappeared, with only 1 in 10 customers paying with cash for their last in-store purchase.[21] In the euro area, the use of cash is also in steady decline.[22] In 2016, 79% of all transactions at points of sale, meaning in shops and restaurants, were made in cash. By 2022 this figure had fallen to 59% (see Figures 1 and 2). Furthermore, according to the Commission, keeping up with technological innovation is necessary because cash is not available for payment in a growing part of the economy, mainly e-commerce, and cannot meet future needs such as machine-to-machine payments and conditional payments.[23]

Figure 1 Percentage of Swedish people who paid cash for their last in-store purchase



Source: Own presentation based on data from Swedish Riksbank, *Payments Report 2024* (2024).

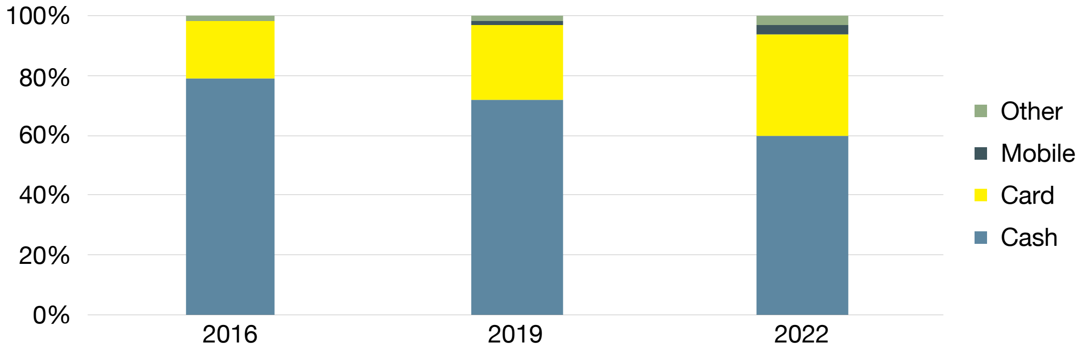
[20] A. Demirguc-Kunt et al., *The Global Findex Database 2021. Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19* World Bank Group (Washington, DC, 2022).

[21] Swedish Riksbank, *Payments Report 2024* (2024).

[22] ECB, *Study on the Payment Attitudes of Consumers in the Euro Area (SPACE)* (2022).

[23] European Commission, Proposal for a Regulation on the establishment of the digital euro, 8.

Figure 2 Percentage of each payment type used at point of sale in the euro area



Source: Own presentation based on data from ECB, *Study on the Payment Attitudes of Consumers in the Euro Area (SPACE)* (2022).

Related to the financial innovation argument is also the concern that the economy is losing public money (in the form of banknotes and coins), as it is increasingly being substituted with private (electronic) money (such as that in private bank accounts). The substitution of public money for private is not, per se, a problem as the latter primarily functions by being ultimately convertible into public money, ensured by the central bank. However, the factors determining perceived safety in a purely privatised monetary environment are unknown. One fear is that bank runs could become more frequent, and this would mean that it is essential to have digital public money available as an alternative to foreign or cryptocurrencies.[24]

Where there is technological innovation, the argument frequently arises that it is necessary to improve what is often called financial inclusion. Access to the digital euro could also serve the needs of those without access to essential financial services such as bank accounts. For example, digital euro accounts would be available through apps on mobile phones. The Commission's proposal includes requirements for ensuring easy access and that essential services are free of charge.[25] Ensuring financial inclusion with regard to the digital euro is vital to ensure citizens' trust in the currency. Design features will ensure the currency is suitable for use by older citizens, people with disabilities, and users with limited financial or digital skills. The issue of financial inclusion was also raised during government responses to the Covid-19 pandemic. Many governments handed out money to citizens to keep the economy going. Given the

[24] Ibid.

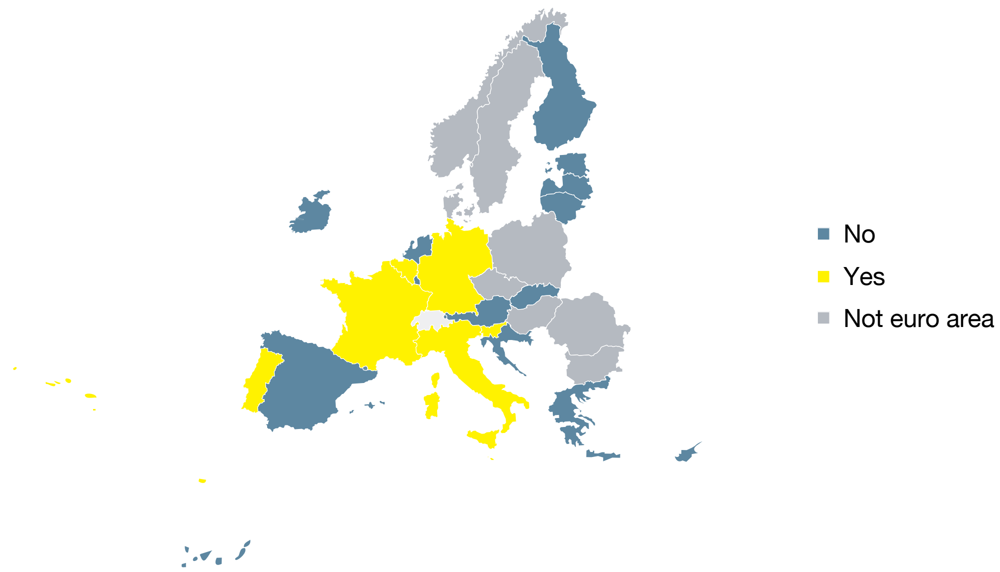
[25] Ibid., art. 17.

many administrative burdens of making direct payments to individual citizens, CBDC mobile accounts were one solution proposed to facilitate such policy instruments.[26]

Fragmentation of the EU's payment sector

Another line of argumentation refers to the absence of a European payment solution that covers all euro area countries. The issue is becoming increasingly critical because of the growing share of card payments, which now account for most retail payment transactions in terms of value.[27] However, the card payment sector is strongly divided along national lines, which results in reliance on only a few international card companies. Only 7 of the 20 euro area countries have national card schemes, such as the German girocard system. It is the umbrella brand of the German banking industry for card payments at the point of sale and the German ATM system. However, since national payment systems such as girocard can only be used to a very limited extent abroad, they are co-branded with international companies such as Mastercard or Visa to enable cardholders to use them in other European countries.[28] Other European countries rely exclusively on international solutions (see Figure 3).

Figure 3 National payment systems in the euro area



Source: Author's own rendering, based on data from P. Cipollone, 'Digital Euro: The Future of Money', presentation at a meeting with the Italian Banking Association on 17 April 2024.

[26] J. Lipsky and J. P. Schnapper-Casteras, 'How Janet Yellen Can Help Deliver the Digital Dollar', *New Atlanticist*, 19 February 2021.

[27] ECB, *Study on the Payment Attitudes of Consumers in the Euro Area*.

[28] P. Cipollone, 'Digital Euro: The Future of Money', presentation at a meeting with the Italian Banking Association on 17 April 2024.

This, in turn, has negative consequences for citizens as they face potentially higher costs due to the absence of substantial competition. According to a recent study by the European Commission, the average net merchant service charges applied by card schemes in the EU almost doubled between 2018 and 2022, resulting in significant additional costs for merchants.[29] As these fees act as a tax on transactions, the question is whether they should benefit foreign companies or European citizens. Some of the benefits of digitalisation and market integration are thus at risk of not reaching European consumers, instead growing the profits of non-European players.

This fragmentation of the payment sector may also have potentially adverse effects on the single market. Small companies considering expanding their business across borders or online may be more reluctant to do so, given the need to rely on expensive international solutions. The issue is well known and has been frequently discussed, at least since the introduction of the single currency.[30] However, despite numerous efforts to integrate the euro retail payments market,[31] European payment solutions remain nationally fragmented and require international companies such as Visa and Mastercard to enable payments in other countries or online. Because national actors are vulnerable to path dependency dynamics, they have often retained the legacy of previous investments in payments infrastructure. Against this backdrop, the digital euro is presented as a public attempt to close that gap and reduce the fragmentation of the European payment sector. It would provide a means of European digital payment that is accessible and accepted in all euro area countries. Allowing more competition in the payments market would also be likely to benefit European users and customers.

Strategic autonomy and monetary sovereignty

The dependency of the European payment sector on foreign infrastructure and a few foreign private companies is also considered problematic. In a period of growing international tensions, this situation could endanger the EU's strategic autonomy

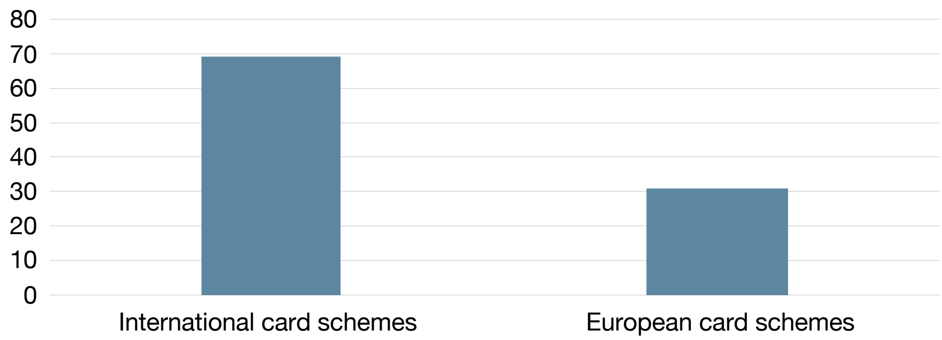
[29] European Commission, *Study on New Developments in Card-Based Payment Markets, Including as Regards Application of the Relevant Aspects of the Interchange Fee Regulation*, Final Report (February 2024).

[30] Giovannini Group, *Cross-Border Clearing and Settlement Arrangements in the European Union* (Brussels, November 2001).

[31] See, for example, European Parliament and Council Directive 2007/64/EC on payment services in the internal market (13 November 2007), and European Parliament and Council Directive 2015/2366 on payment services in the internal market (25 November 2015).

in a critical area.[32] EU actors acknowledge that openness to global competition can be beneficial in fostering innovation. Still, an overreliance on non-European providers makes payments and the financial system more vulnerable to external disruptions. The SWIFT network allows for international bank transfers, whereas international card systems are utilised when paying at the cash register or on the Internet. According to recent data,[33] international card schemes account for nearly two-thirds of all electronically initiated card transactions in the euro area (see Figure 4). Neither SWIFT nor international card payment systems are subject to purely European control, and therefore either could theoretically be weaponised in geopolitical conflicts. This is presented as an unfavourable dependency in the absence of alternatives.

Figure 4 Transactions settled by national and international card schemes in the EU (%)



Source: Author's own rendering, based on data from P. Cipollone, 'Innovation, Integration and Independence: Taking the Single Euro Payments Area to the Next Level', speech made at the ECB conference 'An Innovative and Integrated European Retail Payments Market', Frankfurt, 24 April 2024.

Furthermore, new private money issuers might impact the payment sector more strongly. In particular, the entrance of the Big Tech sector is considered a concern. Many of these companies' technological structures and business model–driven incentives thrive on network effects, which can lead to the concentration of significant market power in payments. They also create economic incentives to

[32] The European Council adopted conclusions on European strategic autonomy at the summit of 2 October 2020 (see European Council, *Special Meeting of the European Council (1 and 2 October 2020) – Conclusions* (2020)).

[33] P. Cipollone, 'Innovation, Integration and Independence: Taking the Single Euro Payments Area to the Next Level', speech made at the ECB conference 'An Innovative and Integrated European Retail Payments Market', Frankfurt, 24 April 2024.

create a closed system and erect technical barriers.[34] Thus, if these companies rapidly build up a stablecoin that is used across their services, for example, there is a perceived fear that this will weaken the public monetary system.

Central banks thus perceive a need to ensure that the monetary system will continue to work in the public interest in a digital future. For example, a 2022 report by the BIS[35] underlines the role of the public sector in enabling and sustaining a monetary system that can function in the public interest. According to the BIS, this encompasses maintaining a competitive structure in payment services, ensuring high-quality governance structures, and guaranteeing fundamental rights such as data protection, informational self-determination and universal access to central bank money. Thus, central banks seek to provide a credible and viable public anchor for money for strategic reasons. The digital euro should ensure monetary sovereignty and strategic autonomy in the digital age.

Selected critical aspects of the digital euro package

Overall, it seems that the arguments voiced in favour of developing CBDCs are mainly based on strategic considerations, that is, to act as a public-sector counterbalance to Big Tech's current and potential future market power; as an instrument to increase competitive pressure on banks and credit card firms to reduce fragmentation and achieve cheaper payment services; and as an instrument to improve financial inclusion. Nevertheless, to succeed, the digital euro must ensure citizens' trust and address potential adverse side effects (i.e. bank disintermediation). The following section will thus focus on critical elements related to citizens' concerns (privacy, access to cash, financial inclusion), essential elements that may affect the banking sector and the role of EU institutions in the digital euro's legal architecture.

34 For instance, Apple's significant market power in smart mobile devices and its dominant position in mobile wallet markets on the iOS operating system have raised concerns about anti-competitive behaviour (see e.g. European Commission, 'Antitrust: Commission Sends Statement of Objections to Apple Over Practices Regarding Apple Pay', Press Release (2 May 2022)).

35 BIS, *Annual Economic Report 2022* (2022).

Ensuring trust: privacy, access to cash and inclusion

EU legislators need to ensure the European people's trust. According to the Charter of Fundamental Rights, which became legally binding with the entry into force of the Lisbon Treaty in 2009, the protection of one's personal data is a fundamental right in the EU. It is essential for citizens as well. Survey data show that citizens' primary concern regarding the digital euro is privacy.[36] Today, to respect EU data protection laws such as the General Data Protection Regulation, PSPs holding payment data can only commercialise these data after explicit user consent is given. This principle would apply to the digital euro as well. However, as a public good, the digital euro would not be used for commercial purposes. However, fully anonymous payments, like those associated with some cryptocurrencies, bear the risk of supporting illegal activities such as money laundering and terrorist financing. Thus, the right to privacy must be balanced with the principles of the EU's Anti Money Laundering and Counter-Terrorist Financing frameworks, which exclude complete anonymity.[37]

Academic evidence suggests that citizens prefer a middle ground in terms of privacy protection, meaning that payments are anonymous but illegal activities can be prevented.[38] In line with citizens' preferences, the digital euro proposal distinguishes between the online and offline uses of the digital euro. In this context, Article 37 of the proposed Regulation would require offline digital euro payment transactions to have a higher level of privacy than online payments. No public entity would gain access to personal transaction data when making offline digital euro payments. However, PSPs would have access to funding and defunding data, similar to the data available when users withdraw cash. Only when users are suspected of money laundering or terrorist financing would the financial intelligence units be able to access these data upon request. In its first report on the preparation phase, the ECB noted that it has successfully ensured that the technical means are available to make online and offline digital payments as similar as possible to cash transactions.[39]

Linked to the right to privacy with regard to how the money is spent, is the right of citizens to spend the digital euro freely. Because digital payment solutions can, in principle, be programmed to limit the scope of payments, ensuring the euro's

36 ECB, *Eurosystem Report on the Public Consultation on a Digital Euro* (April 2021).

37 European Parliament and Council Regulation (EU) 2024/1624 of 31 May 2024 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, OJ L (19 June 2024).

38 Kantar Group, *Study on New Digital Payment Methods* (March 2022).

39 ECB, *First Progress Report on Digital Euro Preparation Phase* (24 June 2024).

non-programmability is a public concern. Thus, this is enshrined in Article 24(2) of the Commission proposal.

The digital euro package aims to complement the physical form of central bank money with a digital option. Given that most Europeans wish to have cash as a payment option,[40] it is crucial for its democratic acceptance that the digital euro package ensures access to and usage of banknotes and coins. Legislators have addressed this through the proposal for a regulation to ensure the role of cash that accompanies the digital euro package. This should contribute to the acceptance of the digital euro, as the option to pay with cash is ensured in line with citizens' demands.

The digital euro will be distributed through private PSPs. According to the Commission's proposal, credit institutions already active in retail business services will be required to distribute the currency, while providing such services would be optional for electronic money institutions, payment institutions or post office giro institutions entitled under national law to provide payment services. PSPs would provide free basic services including funding and defunding functionalities. They would also be able to implement additional innovative services that they offer for comparable means of payment.[41] PSPs would manage digital euro accounts and provide the funds to satisfy demand. There would be no contractual relationship between the digital euro user and the central banks.

Private PSPs would be performing public tasks by taking on the central role in distributing the digital euro. This would include maintaining the necessary infrastructure, such as the front-end services offered to citizens. This legal obligation of private institutions to carry out public tasks requires a well-designed compensation model. It needs to reflect the fundamental principles proposed by the euro system, such as the digital euro being free of charge for essential everyday use. This would ensure that the user experience is comparable to using banknotes and coins and would ensure trust in the project among the broader public. Furthermore, PSPs should be prevented from charging retailers, such as local stores, excessive fees. Thus, the Commission's proposal provides mechanisms to ensure that intermediaries continue to be compensated for their services, just as with other digital payments.

In addition, the distribution of the digital euro needs to ensure the principles of financial inclusion. This refers to easy and free access. Thus, citizens who do not

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40 ECB, *Study on the Payment Attitudes of Consumers in the Euro Area*.

41 European Commission, Proposal for a Regulation on the establishment of the digital euro, Annex II.

have a bank account should be able to use the digital euro. The proposal provides for this issue in Article 22, which outlines that the digital euro must be simple and easy to handle, including for people with disabilities, functional limitations or limited digital skills, and older people. In this context, applying interest to the digital euro is also an issue. While potential interest rates applied to digital euro holdings may have adverse effects on financial stability (see below), remuneration of holdings (i.e. earning of interest on deposits in digital euros) may render the digital euro also unnecessarily complex. Banknotes do not earn interest and are simple and easy to use.

Financial stability, intermediation and supranational competences

When establishing the digital euro, policymakers must consider the effects on the banking system. This is particularly important in bank-based systems such as that of the EU. Unlike money in bank accounts, the digital euro will be a liability of the ECB. Thus, the attractiveness of holding safe central bank money could lead to banks losing deposits as a source of refinancing in the long term. This could produce substitution effects if citizens transfer private money from their traditional bank accounts to holdings in central bank money in the form of the digital euro, potentially putting a strain on lending to companies and private households. If substantial quantities of central bank money were to be withdrawn from the banking system, it could restrict the ability of commercial banks to refinance against customer deposits.[42]

The proposal for a digital euro is designed to address such issues of disintermediation. In particular, the combination of a holding limit, zero remuneration (i.e. no interest on deposits in digital euros will be applied) and the 'reverse waterfall' are essential elements. Low holding limits and zero interest rates would substantially reduce the incentive to transfer amounts held in ordinary bank accounts to digital euro holdings, while the reverse waterfall option would ensure that payments in digital euros are possible using funds in connected traditional bank accounts. The ECB also aims to disallow merchants (and other firms) from storing digital euros, instead requiring them to instantly transfer any digital euro holdings to their bank account, which would help to protect the corporate deposit base of the banking system.[43]

42 E.g. Tenner, Wallraf and Jessen, *Position Paper on a Digital Euro*.

43 ECB, *Progress on the Investigation Phase of a Digital Euro*.

In this context, the role of paper money in the economy, another source of the total central bank money in distribution, should be acknowledged. Cash is the primary source of central bank money in distribution and serves as a public anchor for the monetary system. Citizens have direct access to cash and can thus hold direct amounts of central bank money, which creates trust in the system and reduces the dependence on private money exclusively created by commercial companies. The digital euro is designed to resemble cash in many respects. Both would serve as a public anchor in the monetary system and, thus, as a precondition for effective monetary policy implementation. However, banknotes and coins, and likely the digital euro, should legally be considered neutral with regard to such policy.[44] Thus, like cash, the digital euro would not be remunerated or used as an instrument of monetary policy. The digital euro is designed to compensate for the shrinking role of banknotes and coins as cash use declines.

Among the most controversial and intellectually tricky aspects for policymakers to discuss is whether aspects such as the design of holding limits and the prohibition of remuneration should be addressed in secondary legislation. In its legal opinion on the legislative proposal,[45] the ECB argues that such restrictions in secondary law run against its monetary policy competences. Furthermore, the application of interest rates may be required in exceptional scenarios, for example, in environments where negative interest rates are applied to bank accounts. The ECB thus opposes these measures being enshrined in secondary legislation. Nevertheless, lawmakers might defend such measures based on the potential structural impact of applying remuneration and placing holding limits on the financial system. In addition, remuneration could make administering the digital euro more complex, while banknotes are simple and easy to use. While the decision requires thorough legal and economic analyses, the final evaluation might ultimately require a political assessment as well.

44 Grünewald, *A Legal Framework for the Digital Euro*.

45 ECB, 'Opinion on the Digital Euro', CON/2023/34 (31 October 2023).

Conclusion: the importance of innovation and trust in the digital age

This report has discussed the digital euro as a novel project that is accompanying technological innovation in line with the shift in citizen payment preferences towards digital means. It aims to address the European payment sector's fragmentation and ensure the EU's strategic autonomy. Different from the private forms of electronic money that private banks create, the digital euro will be a retail CBDC. As such, it will be a direct liability of the central bank, like cash. As many payments move online, the digital euro would ensure the role of public money in an increasingly digitalised economy.

Private moves towards pan-European payment solutions have failed in the past, and as a result the EU's payment sector remains fragmented. The digital euro could provide the public infrastructure needed to address the lack of integration in this sector and support the European single market. Thus, in a period of growing international tensions, and considering the dependence of most European states on foreign companies for their payments, the digital euro could contribute to the EU's strategic autonomy. Given the many Big Tech companies entering the market for financial services and payments and their business model, which generates network and lock-in effects, introducing a digital euro could support the EU's monetary sovereignty by defending the role of the euro as a public good against potential international and private challenges.

The ECB will decide on the issuance of the digital euro, while EU legislators have been tasked with setting up the accompanying legislative framework. It is argued that EU legislators must secure trust by ensuring privacy, access to cash and financial inclusion. However, establishing the digital euro may also have potential structural effects on the banking system. Thus, the current legislative proposal provides that holding limits are carefully calibrated and that the digital euro will not be remunerated. Like cash, it will come with a zero interest rate.

Policymakers are required to balance the ECB's exclusive competence over monetary policy, central bank independence and the relationship of these areas to the structure of the financial system. The Commission's proposal appears to take a middle ground between respecting the ECB's monetary policy competence and the power of lawmakers to address structural issues in the financial sector. While the ECB's competences must be respected, the effects on the structure of the banking system and ensuring citizens' trust also require political considerations.

Based on the discussion of three crucial aspects of the proposal to establish a digital euro, this policy brief recommends that policymakers consider the following points:

- Policymakers should take seriously issues such as the trend towards digital payments, the fragmentation of the EU's payment sector and the need to defend the EU's strategic autonomy and monetary sovereignty.
- Because a digital euro would require trust among the citizens, continued access to cash and free and easy use of the digital euro should be ensured.
- As the right to privacy is both an EU fundamental right and a key citizen concern, policymakers need to ensure the highest level of privacy and allow exemptions only to prevent illegal activities.
- The distribution and maintenance of the digital euro require private actors to perform public tasks, so a fair compensation structure is needed to balance the demands of all stakeholders and users.
- Because the digital euro may have adverse effects on the financial system, policymakers should ensure that the ECB retains the powers to support and maintain financial and price stability.

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