Digital Euro: objectives and challenges

1. The economic and digital contexts that triggered the digital euro project

A Central Bank official noted that, with the ever-growing importance of ecommerce and online platforms, there is an increasing shift towards digital payment. In addition, the expectations that money has to fulfil will change. The emergence of privately issued crypto tokens, such as Bitcoin and Ethereum, marked the beginning of the crypto sector. In order to contain the high volatility of such tokens, the idea of fiat backed tokens, known as stablecoins, emerged. The most prominent example of a stablecoin was a theoretical one: Libra, later called Diem. This prompted Central Banks to accelerate their research on Central Bank digital currencies (CBDCs), as was highlighted in comments by Jerome Powell.

2. ECB vision and objectives for the digital euro project

A Central Bank official reported that the euro system is investigating the digital euro. François Villeroy de Galhau recently summarised the reasons for Central Banks to develop digital currencies: maintaining accessibility and usability of Central Bank money; supporting monetary certainty and limiting the risks specific to external digital assets; supporting the strategic autonomy of the European Union. A retail CBDC could pose risks for the functioning of the current financial system, because CBDC could be used as a substitute for bank deposits. A digital euro could also encourage competition among banks and promote new services and business models. In 2021, the European Central Bank (ECB) governing council launched the investigation phase of the digital euro project.

2.1 Continuing to serve citizens with Central Bank money in the context of reduced reliance on cash

A Central Bank official stated that the digital euro, or any CBDC, aims to continue serving citizens with Central Bank money and to continue the coexistence of Central Bank money and commercial bank money. In the absence of CBDC, extrapolating the trends even in more conservative countries like Germany, there will be less reliance on cash. In five to 10 years, cash payments could even be the minority at the physical point of sale. Ecommerce is already crowded out by electronic payments.

2.2 Central Banks want to retain the commercial bank money and Central Bank money dual system in the digitalisation context

A Central Bank official stated that Central Banks aim to ensure that the convertibility into Central Bank money promise that is at the core of the definition of commercial bank money continues for citizens and firms, not only for banks. It is accepted that societal preferences and technology change over time. CBDC is less of a revolutionary idea than a conservative idea because it will maintain coexistence.

2.3 However, the concrete form of the coexistence of commercial bank and Central Bank moneys will become clearer as digitalisation increases

A Central Bank official noted that there are financial stability implications. If the Central Bank moves into this space, those already in the space will question how aggressive the move will be. Coexistence is easier currently because the habitats of bank notes and electronic payment instruments are not exactly the same. In a fully digital age, where everybody pays digital, there is a movement into the same habitat. There will need to be synergies but also some distinguishability to support the stability of the coexistence. The aim is not to expand the share, or the role of Central Bank money compared to commercial bank money but for a continued coexistence with no crowding out, although it is very difficult to target an exact replication in different countries or points in time. The aim is for the digital euro to be used regularly, in coexistence with commercial bank money.

3. The definition of use cases is complex

3.1 The ECB is halfway through the definition of users' requirements, which are progressing and should be stabilised within one year

A Central Bank official explained that the digital euro is being investigated through the Eurosystem project structure. The current investigation phase will take two years. At the end of the investigation phase, precise documents, such as user requirements and a vision of how to source the preparation, are produced. One year of the two-year phase is already almost gone. Good progress has been made and a lot of parameters have been specified. A lot of questions have arisen that were not anticipated. The governing council is then asked about the next step, which would be the realisation phase. That would start ideally immediately after the investigation phase, or after October 2023. That would typically take two or three further years. Then the ECB would be ready to issue, and the Council could decide whether to issue.

A Central Bank official stated that, as a member of the High-Level Task Force, they could confirm that the digital euro project is reaching the halfway point and there is reason for optimism.

3.2 Banks and payment service providers expect an added value digital euro, featuring payment services supplementing existing ones, such as programmable transactions linked with smart contracts, as well as automated compliance supervision

An industry representative stated that the digital euro must enable banks and payment service providers to build differential services compared to other current payment services. Programmability is one of the most promising opportunities for the private sector. Programmable CBDC could be the backbone for the implementation of smart contracts, allowing delivery versus payment in many transactions. For example, when acquiring a security, it would be possible to provide for the delivery of the asset and for the payment to be done in the same way. These new features could be introduced gradually, as users and authorities gain experience and confidence. For banks, the digital euro represents an opportunity to further develop embedded supervision, for example enabling public authorities to monitor the ledger directly in an automated way. The ECB should be ambitious when designing this digital euro, incorporating advanced features to ensure it is competitive, future proof and drives payment innovation.

3.3 Identifying customers' and businesses' needs is difficult and represents an essential challenge

An industry representative commented that how to best foster the adoption of the digital euro by customers is an important consideration. Interestingly, potential users do not fully understand the difference between the digital euro and the money that they already have in their bank accounts and use for their daily payments. Many of the use cases that today are being considered, such as P2P payments and point of sale payments, are already covered by other private payment solutions. For example, in Spain a P2P payment solution called Bizum is used by around 50% of the adult population.

A Central Bank official commented that customers and businesses must clearly express their expectations of the digital euro and needs. This is an important dimension of the current investigation phase. The Eurosystem has commissioned qualitative market research to that end, including through focus groups.

A Central Bank official commented that their institution and Banque de France were in alignment in this area. Data protection and privacy issues are another area of consideration.

3.4 The legibility of the respective added value of both existing payment means, and digital euro is an essential issue that will be settled only over time

A Central Bank official noted that a balance would need to be struck between a digital euro that is too successful and crowds out private solutions and one that is unsuccessful and does not generate sufficient demand.

A Central Bank official agreed that it is possible to be too successful. There are parameters available that would make it possible to be extremely successful in the means of payment area if there is legal tender status and a business model that strongly incentivises merchants to onboard. If merchants are attracted to the digital euro scheme, there will be possibilities, but coexistence is also needed. The aim is not to crowd out. Innovations such as programmability have been raised, but the fact that this use case has not been covered by commercial bank money suggests it may be premature. The project limited resources. It is not possible to solve all payment problems or have a payment instrument that is absolutely comprehensive. Focus on the core use cases will lead to the kinds of scale effects that money relies on. If the focus was on marginal use cases, the project would not be successful.

4. Beyond the priorities specific to the financial world expressed, fostering innovation capabilities in the EU, and being potentially leveraged by non-eurozone European Union countries are essential ambitions for the digital euro

A public representative stated that the digital euro is needed to foster the environment for innovation in digital finance in Europe. The ECB frequently reports back to the Committee on Economic and Monetary Affairs on the stage of the preparation of the digital euro. The digital euro could put the eurozone at the forefront of innovation. The digital euro has potential to assist even non-eurozone European Union countries to overcome currency issues. It is crucial that the key success factors for wide acceptance of the digital euro are clearly defined. There is the potential to create a new ecosystem for financial services innovators, whether from the fintech area or traditional financial services providers. Privacy and cybersecurity issues are a top priority. Assurance must be provided by ECB, the EU institutions, and politicians that the digital euro will be safe, will be secure, will guarantee the privacy concerns, will allow for further innovation and will solve some of the issues, including the issues of European payment infrastructure, in terms of sovereignty.

5. Although CBDCs counter big techs' digital currency initiatives, big techs may eventually be their first beneficiaries, at the expense, notably, of the EU strategic autonomy objective

An industry representative commented that it had already been noted that Libra was the key reason for the increased research into CBDC. The concern is that a big tech platform rolls out a non euro denominated stablecoin globally, which, in a very adverse scenario, could push the euro out of business and make monetary policy lose traction, impacting monetary sovereignty. The response to Facebook was clear. A global stablecoin is not going to happen and Central Banks embarked on

research into CBDCs. Stablecoins got a bad reputation overall, which is unfortunate, because the area of stablecoins is very diverse. After Libra, there have been number of unregulated stablecoins. Spectacular crashes of stablecoin earlier this year contributed to their bad reputation. Well regulated stablecoins that are full reserve, so fully backed by Central Bank money, can be issued by big techs, banks or other companies.

The backlash against Libra fits into a broader trend of backlash against big techs, for example the Digital Markets Act. The main concern regarding big techs is that a digital euro could end up strengthening them. It is not a stablecoin or a currency that gives big tech their lock-in power. Instead, it is big techs' ability to create a seamless payment experience, to integrate payments in their app and enable their users to pay for things, whatever the currency or method in the background, that locks in users. Big techs would immediately adopt a digital euro and ensure it was available throughout the EU, and perhaps outside the EU, for seamless payments. They would probably be able to do this faster and better than financial institutions.

A public representative stated that the key factors will be design and implementation. As previously noted, there is a risk that the adoption by non-EU global players will be faster than by some of the EU players. Therefore so much emphasis should be put on the innovation potential. Web3 and all the future applications that are to come should be part of the future vision for the digital euro.

6. Parallel infrastructure decisions are essential in the EU, if the digital euro is to contribute to the EU's goal of strategic autonomy, to backup existing payment means and to support smart contracts

An industry representative commented that the digital euro resides in the currency layer, not the infrastructure layer, which sits on top. Many of the goals of the digital euro should be realised at the infrastructure layer, not the currency layer. Reducing dependence on card schemes that are run by non-EU entities has been a longstanding goal, but those card schemes operate at the infrastructure layer. Adding a digital euro would not change that. In fact, the card schemes would likely be first to add the digital euro to their product offering. If the aim is to bolster strategic autonomy, a European payment scheme must be devised. Smart features, for example smart contracts, do not belong to the currency layer because a euro should be fungible. Smart contracts, programmability and conditionality belong on the infrastructure layer, not the currency layer. The infrastructure layer could apply to CBDC, but it could also incorporate existing forms of money. A goal that has not yet been mentioned in the current discussion is that a CBDC could be a backup to existing payment means. The backup should be to the infrastructure, not to the currency.

6.1 Disruption to the financial intermediaries' role and the introduction of unintended obstacles to the monetary policy are among the risks borne in mind when designing the digital euro

A Central Bank official commented that the digital euro could prevent a payment landscape that is dominated by the big techs from developing. However, a digital euro in itself, if badly designed, could work counter to the objective. That would be a major issue for Central Banks, which have financial and monetary stability in their mandate. There are two types of risk: the creation of disruptive effects for financial intermediaries and the creation of impediments in the conduct of monetary policy. The latter risk has been downplayed by the changing monetary stance and environment in recent times, because the risk was to conduct monetary policy in a context of negative interest rates. These risks are well understood by the Eurosystem and the analysis of them is part of the current investigation phase. There are three critical features that could mitigate these risks: holding limits, the remuneration framework and the distribution of roles between the Eurosystem and the financial intermediaries. An organisation to seek input from the market is being set up and contributions to this dialogue are invited.

A Central Bank official commented that parameter values do not need to be set during the current investigation phase stage. The only requirement is to identify the technical specification, so that it can be programmed in the next phase. In principle, both aspects should be included now. Allowance should be made for limits being imposed by making that part of the user requirements now. The ability to remunerate is also important because it provides some flexibility to policymakers. There could maybe be an area where there is flexibility on amounts but no attractive remuneration. Both aspects should be included in the requirements. Fabio Panetta has indicated to the Parliament an overall number of €1-1.5 trillion as a total volume that would be compatible with financial stability. That could then be insured through limits or other means. This provides an order of magnitude but there is no need to specify the parameters further at the present time.

6.2 The existing financial intermediary regulatory framework (prudential, AML) is an essential asset

An industry representative suggested that there is broad consensus that access to the digital euro should be provided through authorised intermediaries. The current two-tier model has proven successful. The private sector is best placed to manage its relationship with customers and to provide added value services. Banks are in a unique position to provide secure intermediation services, as they are already part of the Eurosystem payment systems, are supervised by the ECB and have the necessary expertise in know your client (KYC), anti-money laundering (AML) and consumer protection. The digital euro should be integrated into the existing banking apps and payment routes.

It has been argued that, in a digital economy, citizens should have access to public money, to avoid the risk of allowing them to only pay with private money. However, a commercial bank is fundamentally different from other

forms of private money and should be considered as more of a public-private partnership. The deposit guarantee schemes, resolution funds and prudential requirements are regulatory tools that are intended to protect customers. The digital euro should not be proposed as a safer form of money than commercial deposits, because that might pose a risk to financial intermediation. A digital euro would also not make sense if the objective was to provide a means of payment and not savings or investments.

6.3 The optimal distribution of operational roles will result from a partnership between Central Banks and financial intermediaries, with the aim of achieving a simple and cost effective user experience that is accessible across the whole euro area, in synergy with private sector projects

A Central Bank official stated that a partnership should be built with financial intermediaries, starting with banks, which are major players in the payments market. The current core payment system is built on cooperation and complementarity between Central Bank and commercial banks, or payment service providers, and between commercial bank money and Central Bank money. This should be central to the design of the digital euro. This should imply distribution of operational roles between the Central Banks and the private sector. A significant number of functions should be performed by the private sector intermediaries to ensure three objectives: a simple and economic user experience, distribution across the whole euro area and synergies with private projects, for example the European Payments Initiative (EPI).

7. Private digital money ecosystems and Central Bank digital currencies should coexist. MiCA is an essential regulatory contribution to this end

A public representative stated that, although stablecoins have a bad reputation, because they were not that stable, they may appear again. There are many projects that are able to drive further innovation in providing alternative financial services. The introduction of the public digital currency will complete the landscape. There is no competition between them because they are different by design, features and possibilities. These were some of the considerations when discussing and negotiating the upcoming crypto assets framework, known as the Markets in Crypto-Assets (MiCA) regulation. The rules on stablecoins are sometimes too strict. An ecosystem of private money should be able to coexist with other forms. Ideally, both private and public initiatives would work together to help the financial services in the digital area to grow.

A Central Bank official commented that MiCA is a good starting point for regulation. There will be ongoing monitoring and developments in that field of regulation. Discussion of the digital euro will remain relevant at Eurofi events for a number of years, until it is introduced.