ECB Consultation on a Digital Euro
Positive Money Europe's response

1. How would you rank, in order of importance, the features that a digital euro should offer?

- I want to be able to use it throughout the euro area (5)
- I want my payments to remain a private matter (2)
- I want to be able to use it with my smartphone and at payment terminals (8)
- I want to be able to pay even when there is no internet or power connection (4)
- I want it to be easy to use (1)
- I want to use a digital euro without having to pay additional costs (3)
- I want it to take the form of a dedicated physical device (7)
- I want it to be a secure means of payment (6)
- I want my transactions to be completed instantaneously (9)

2. Do you have any further comments about the ranking that you have indicated above?

The digital euro represents an opportunity to run the payment system as a truly public service. For citizens to support this system and use the digital euro for retail transactions, the cost of moving to a digital euro should be minimal. This implies that a digital euro should be easy to use and should not involve additional financial costs. Negative interest rates on digital euros (essentially paying money for the mere fact of holding digital euros) would be detrimental to its uptake and seriously harm the trust put into the ECB and the Euro.

3. Do you envisage any challenges associated with a digital euro that would prevent you or others from using it? If so, what are they?

A big challenge to using a digital euro is a (perceived) lack of it having any function not already well provided by other types of money and payment methods. Commercial bank accounts already come with a wide range of services, and online payments are almost frictionless and instantaneous. A digital euro which is not clearly demarcated from these would likely cause citizens to stick with the status quo and not use digital euros.

The unique advantage of a digital euro could come from it affording citizens with better privacy protection and allowing people who previously did not have access to a commercial bank account (4% in Europe) to use digital payment services.

Most importantly, a digital euro provides citizens with a store of value that is safer than bank deposits because bank deposits are only partly guaranteed with deposit insurance schemes whereas digital euro holdings are directly backed by the central bank. If existing deposit insurance schemes are not down-scaled upon the issuance of the digital euro, there is a risk that this intrinsic difference between central bank money and commercial bank deposits would obscure a key advantage of using the digital euro.

A further challenge is the increasing probability of the occurrence and severity of natural disasters, which could pose dangers to the electricity-based systems behind a digital euro. If a digital euro could not be usable offline, an adverse event might have disastrous consequences for citizens' ability to make payments. This also underlines the importance of the continued provision of access to physical cash alongside a digital euro.

4. What user features should be considered to ensure a digital euro is accessible for people of all ages, including those who do not have a bank account or have disabilities?

In principle, a digital euro should be as user-friendly as cash and be designed to ensure maximum financial inclusion. In particular, it should help to reduce the rate of unbanked citizens, which was not achieved by the European Commission's directive on basic payment account services.

To maximise financial inclusion, citizens should not be completely dependent on commercial banks to access a digital euro. They should also have the option of opening a digital euro account through a publicly-owned and not profit-seeking provider of banking and payment services, or directly at the national central bank if they wish so.

To design a digital euro in a user-friendly way, it should not involve additional cost, be usable offline, be interoperable with other payment systems, and should come with a physical payment device. Such physical payment devices should securely store money, allow money to be transferred, and operate for long periods on a local power source. Digital euro accounts should be accessible through conventional browsers and mobile devices that already include accessibility features such as allowing voice commands.

5. Which of the following do you find most appealing?

- A digital euro focused on privacy and the protection of personal data, which can be used offline
- A digital euro with broader potential for additional services, allowing innovative features and other benefits for citizens and businesses
- A combination of both

6. Do you have any further comments regarding your answer to the question above?

Privacy and offline usage are fundamental concerns for people who want to make payments, and hence it should also be the priority of the ECB to ensure that these are adequately reflected in the design of a digital euro.

Additional services linked to people's access to digital euro can increase the convenience of using a digital euro and hence can be beneficial. Yet, their benefits for citizens would probably be smaller than the benefits stemming from privacy protection and offline usage. Hence, the possibility of additional digital euro services should not weigh strongly on the ECB's design of a digital euro.

7. What role do you see for banks, payment institutions and other commercial entities in providing a digital euro to end users?

Firstly, we agree with the ECB that it is imperative that a digital euro is a direct claim on the central bank, and not a claim on a private intermediary – as this would reinforce the obstacle identified in Q2 of this questionnaire.

We are skeptical of the ECB's preference to rely exclusively on commercial banks and other private institutions to provide front-end payment services. This approach would undermine financial inclusion and reduce the potential of the digital euro as a tool to increase competition in the current oligopolistic market of banks.

In our view, the primary role of private entities should be the provision of added services for end-users as well as the identification and onboarding of users (involving Know Your Customer rules and due diligence). Yet, citizens should not be forced to depend on for-profit institutions to access a digital euro and related basic services. Therefore, citizens must have the option to open a digital euro account through a publicly-owned institution.

8. A digital euro may allow banks and other entities to offer additional services, on top of simple payments, which could benefit citizens and businesses. What services, functionalities or use cases do you think are feasible and should be considered when developing a digital euro?

Additional digital euro services could be similar to the services that commercial bank deposits currently offer, such as instantaneous and periodic payments to other accounts, debit orders, or user-defined maximums for different types of transfers.

9. What requirements (licensing or other) should intermediaries fulfil in order to provide digital euro services to households and businesses? Please base your answer on the current regulatory regime in the European Union.

Supply of digital euro services should not be restricted to only licenced banks, as this would provide further competitive advantage to a highly oligopolistic market. In our view, private organisations should be permitted to develop digital euro services which would constitute an addition to the basic payment services provided primarily through a public institution.

10. Which solutions are best suited to avoiding counterfeiting and technical mistakes, including by possible intermediaries, to ensure that the amount of digital euro held by users in their digital wallets matches the amount that has been issued by the central bank?

As previously argued, we think that private intermediaries should not be the only providers of settlement services for the digital euro. Minimising their systemic importance would also mitigate the potential consequences of them incurring a technical mistake.
Counterfeiting could be tackled by using digital signatures that are generated by trusted execution environments (TEEs) which are available on most smartphones and tablets. Furthermore, appropriate cryptographic protocols should be employed, and the physical payment devices should be tamper-resistant.

11. What technical solutions (back-end infrastructure and/or at device level) could best facilitate cash-like features (e.g. privacy, offline use and usability for vulnerable groups)?

Physical payment devices - such as smart cards where the value is stored locally, and which could be pre-funded with an amount of digital euros - would enable cash-like features. It would (1) allow for offline use, (2) enable greater privacy than purely account-based solutions, and (3) be robust against network-level attacks or natural disasters.

12. What should be done to ensure an appropriate degree of privacy and protection of personal data in the use of a digital euro, taking into account anti-money laundering requirements, and combating the financing of terrorism and tax evasion?

A physical payment device where the value is stored locally should be available to ensure privacy and the protection of personal data. It might additionally be combined with a readily available validation service.

Furthermore, restricted functionalities for non-resident users would help to avoid the facilitation of international criminal activities.

13. The central bank could use several instruments to manage the quantity of digital euro in circulation (such as quantity limits or tiered remuneration), ensuring that the transmission of monetary policy would not be affected by shifts of large amounts of commercial bank money to holdings of digital euro. What is your assessment of these and other alternatives from an economic perspective?

A digital euro is not just another payment system, but an opportunity to improve how the banking system works, making it more efficient, fair and resilient.

Indeed, the introduction of a digital euro would improve competition in the payments market by setting a universal minimum standard of service for the payments sector. Citizens in the eurozone would not be forced to exchange cash holdings for commercial bank deposits to access digital payment methods. Having a greater share of digital transactions completed with risk-free central bank money would greatly reduce the risk of financial instability in the eurozone.

The fear that a digital euro would outcompete bank deposits in that masses of citizens will convert their money from bank deposits into digital euro holdings is overblown. Even if this
scenario was encountered, the ECB could always continue to refinance commercial banks by issuing more reserves, thereby moderating or eliminating the potential liquidity shortfall of banks (see Brunnermeier and Niepelt, 2019).

Not only would restricting digital euro convertibility for example through quantity limits or tiered remuneration be unnecessary, it would also be undesirable. Quantity limits, and especially fees or negative interest rates for holdings of digital euros would make a digital euro starkly dissimilar from cash. All of this would negatively affect the uptake of a digital euro and the trust of citizens in the ECB and the Euro. In the end, it might contribute to a situation where citizens do not make use of a digital euro at all.

Furthermore, restricting digital euro convertibility would be undesirable because it would diminish the stabilising effects of a digital euro. For example, one stabilising effect is that an attractive digital euro crowds out shadow money - types of private debt that have been at the core of past financial crises.

Instead of denying the fact that a digital euro will inherently diminish the existing implicit subsidies to banks, the ECB should embrace the opportunity that it represents for improving how the banking system works. With the competition of digital euro accounts, banks would have to look for other sources of revenues beyond credit-generation for speculative activities. To secure stable funding sources, banks would have to look for private capital, or offer better conditions to attract deposits.

Noteworthily, the supply of safe digital euro deposits would also render deposit guarantee schemes redundant, which would in turn break the doom-loop between banks and sovereigns. In this respect, the digital euro may result in decreasing the overall level of unproductive speculative activity and increase market discipline for banks, as the removal of deposit insurance schemes would remove the current implicit fiscal backup from reckless too big to fail banks.

14. What is the best way to ensure that tiered remuneration does not negatively affect the usability of a digital euro, including the possibility of using it offline?

If tiered remuneration is applied to the digital euro, it should not have the effect of overly restricting digital euro convertibility into other forms of money. The proposal for tiered remuneration currently on the table by ECB economist Bindseil (2020) is to distinguish between a tier of digital euro holdings that fulfills a payment function and a second tier of digital euro holdings that fulfills a store of value function. For households, everything above 3000€ would be counted as the second tier, and for that tier there would be lower interest rates than for the first tier. With this approach, the ECB wants to enable the possibility of imposing negative interest rates on the second tier of digital euro holdings.

However, we think that negative interest rates for digital euro holdings as low as 3001€ would be a serious disincentive for households to acquire digital euros. This could threaten the general uptake of a digital euro as well as trust people put in the ECB. As such, from the perspective of introducing a digital euro to enhance monetary policy transmission, it would be a self-defeating move. A better way of improving the transmission of monetary policy would be to institute direct monetary transfers onto digital euro accounts.

15. If a digital euro were subject to holding balance limits, what would be the best way to allow incoming payments above that limit to be shifted automatically into the user's private money account (for example, a commercial bank account) without affecting the ease of making and receiving payments?

As pointed out before, such a limit is not necessary and if there should be one, it should be high.

16. What would be the best way to integrate a digital euro into existing banking and payment solutions/products (e.g. online and mobile banking, merchant systems)? What potential challenges need to be considered in the design of the technology and standards for the digital euro?

17. What features should the digital euro have to facilitate cross-currency payments?

The ECB should cooperate with non-Eurozone central banks to work towards a multilateral CBDC system used for cross-border payments. In the meantime, a digital euro could be made accessible and usable for residents outside the Eurozone. However, specific conditions may need to be applied to limit access and usability for residents outside the Eurozone. Such measures could reduce the risk of international spillover effects such as complicating monetary policy in those jurisdictions.

18. Should the use of the digital euro outside the euro area be limited and, if so, how?

The use of the digital euro outside the euro area should be limited because it (1) risks currency substitution, (2) could have undesirable consequences for capital flows and the euro exchange rate, and (3) is likely a technical necessity for future use of monetary policy measures such as direct monetary transfers (to which non-residents should not be eligible counterparties).

19. Which software and hardware solutions (e.g. mobile phones, computers, smartcards, wearables) could be adapted for a digital euro?

The ECB should adopt a hybrid solution so that both online access through computers and mobile phone applications as well as offline access through smartcards and wearables are possible. However, there may be increased security concerns for accessing the digital euro using a physical device, hence the ECB should prioritise security and stability over usability for these devices.

20. What role can you or your organisation play in facilitating the appropriate design and uptake of a digital euro as an effective means of payment?

Our organisation has been championing digital cash (see https://bit.ly/3bwBEKF) and can contribute to informing citizens about the advantages of a digital euro compared to bank deposits, thereby increasing its uptake. However we would condition this on a digital euro being designed in line with the priorities we partly set out in the above answers.

To summarize:

1. A digital euro should be as similar to cash as possible. It should be easy to use, be usable without facing additional costs, protect citizens' privacy, allow for offline payments, and be universally accessible, in particular for unbanked citizens.
2. A digital euro should be attractive enough to crowd out unstable shadow money and challenge the business model of banks in a way that ultimately leads to more financial stability.
3. A digital euro should be designed to enhance innovative monetary policies, such as direct monetary transfers (aka helicopter money).