

Bank of England

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Chair of the Treasury Committee
House of Commons
London
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Sir Jon Cunliffe
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Bank of England

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Dear Harriett,

I am responding on behalf of the Bank in relation to your request on March 20 for further information on the Bank's approach to CBDC, stablecoins and crypto.

1. Could you please set out the Bank of England's thinking on options for compensation protection for holders of regulated stablecoins?

The Financial Services and Markets Bill will grant the Bank new powers to regulate systemic stablecoin-based payment systems and service providers. In line with this, the Bank is in the process of designing the Financial Market Infrastructure (FMI) regime for systemic stablecoins. The Financial Conduct Authority (FCA) will also be granted new powers to regulate stablecoins. The FCA's regime will apply to all fiat-backed stablecoins, while the Bank's regime will apply to systemically important stablecoins. For those systemic entities that are regulated by both the Bank and FCA, the Bank's regime will focus on prudential regulation pursuant to its financial stability objective, while the FCA's regime will focus on conduct regulation, market integrity and ensuring consumer protection.

The Bank is guided in its approach to regulation of systemic stablecoins by the overarching principle of 'same risk, same regulatory outcome'. This means that systemic stablecoins should be subject to equally robust standards overall as traditional payment systems and existing forms of money (i.e. commercial bank money). The Bank considers that this approach supports innovation and competitiveness and ensures that new forms of money are as safe to use by the public as existing forms of money.



The Bank's regime will aim to deliver the Financial Policy Committee's (FPC) expectations for systemic stablecoins, which set out that stablecoins used as money-like instruments in systemic payment chains should meet equivalent standards to commercial bank money in relation to stability of value, robustness of legal claim and the ability to redeem at par in fiat.

One important protection for commercial bank money is the backstop to compensate depositors up to a limit in the event of a bank failure. This backstop consists of the resolution regime and a deposit guarantee mechanism - the Financial Services Compensation Scheme (FSCS).

Such an arrangement would be challenging to develop for non-bank systemic stablecoins and is likely to take time to implement. It is likely that, at least in the short term, there will be a small number of systemic stablecoins in the market, which could limit the ability to pool risks in a similar guarantee scheme for systemic stablecoins (i.e. the limited number of participants may provide insufficient capacity to cover the costs of compensating customers should one of them fail, and/or the industry levies may be too high to make it a viable solution). Although the risks of stablecoins could be pooled together with those of banks, this may not be appropriate given their different business models. Likewise, a resolution regime, if required, may take a number of years to design and implement. The FPC, however, has judged that it would be possible for non-banks to issue systemic stablecoins, provided they are subject to an appropriate regulatory regime that mitigates the risks to the extent required by the FPC's expectation.

The Bank's regime for non-bank systemic stablecoins will include protections to guard sufficiently against the risks that are addressed by resolution regimes and deposit guarantee schemes in the banking system. As we flagged in our Financial Stability in Focus in March 2021, these may include (but are not limited to):

- Regulatory standards to ensure that the coin in issuance is fully backed at all times. While the decision on backing assets requirements is pending, we consider that stablecoins will likely need to be backed with assets that are liquid and high quality. However, the FPC ruled out a model where a systemic stablecoin is backed by deposits with a commercial bank because it judged that such a model would introduce significant financial stability risks. Capital requirements will also be needed to account for market and operational risk.
- Regulation will also need to ensure that the funds are appropriately safeguarded and that there is a robust legal claim and redemption process to ensure that the funds can be returned rapidly and fully to coinholders. Otherwise, the confidence in the coin as well as the uniformity of money could be undermined.

The upcoming consultation will set out in more detail our expectations for systemic stablecoins. The proposed regime aims to ensure that, despite the lack of resolution regime and/or deposit guarantee scheme, systemic stablecoins deliver equivalent protections as those offered by commercial bank money. This is to ensure that financial stability risks are mitigated.

2. You clarified in the session that neither the Bank of England or Government would have the ability to programme a digital pound or access individuals' data. But there are also privacy concerns around the ability of the private sector wallet providers to programme money and potentially abuse their access to consumers' data. How can the Bank be confident that these risks can be managed effectively?

The digital pound would be subject to rigorous standards of privacy and data protection. This is fundamental to trust and confidence in money. Research by the Information Commissioner's Office (ICO) shows that the public continues to be concerned about issues relating to the storage and use of their personal data. Those issues have become more important as the UK economy has become more digital.

The topic of personal privacy is an HM Treasury-led topic, and the proposed policies around privacy are all open to consultation.

We noted in the Consultation Paper (CP) that one possible feature of a digital pound is the ability to program it. This would require user consent. This could allow users to pay for something automatically, for example paying rent on the 1st day of every month. HM Treasury (HMT) and the Bank will not pursue government or central bank-initiated programmable functions. Instead, it would be up to the users how and whether to use programmability. Users would control how they spend their digital pounds, and it would be the user's choice how and whether they programmed their money. User consent would be required in each programmability decision.

Regarding wallets' access to consumer data, in our proposal for the digital pound, Payment Interface Providers (PIPs) would have a direct commercial relationship with users, and would control and process user data in wallets, just like existing bank accounts do today. Like banks, PIPs would be subject to existing data protection laws, and the preservation of users' privacy rights.

Beyond these standards, our model also foresees further user control of personal data through privacy-enhancing techniques provided by wallets. These could enable users to shield their personal transaction data from other entities in the payments system beyond what is legally required. Subject to consent, the data which digital pound users decide not to shield could be used by PIPs for commercial purposes.

3. Can you summarise how you envisage private sector wallet providers being regulated? Wouldn't the extent of regulation required make it commercially unviable for companies other than tech giants or large banks to be able to provide these services, thereby hindering innovation and competition?

We envisage that the digital pound would encourage participation from firms with a wide range of business models and commercial propositions, and foster competition and innovation.

All wallet providers would be expected to observe appropriate regulatory requirements. Currently responsibilities in the UK regulation of the payment sector is divided between several authorities: the FCA, the Payments Systems Regulator (PSR) and the Bank of England. There

is ongoing work by HMT, FCA, PSR and the Bank in order to ensure the regulatory regime for payments keeps pace with innovation.

All wallet providers would be regulated to standards appropriate to the structure and design of the digital pound. The specific regulatory treatment of private sector participants in the digital pound system is subject to further work by the Bank of England and other relevant authorities.

Given specific characteristics of the digital pound, it is possible that a new regulatory framework may be appropriate for the digital pound wallet providers. The digital pound would be a direct claim on the central bank, and balances would be held in custody on the central bank ledger at all times. Because of this, the digital pound would be financially risk-free and at all times safeguarded at the Bank of England, and wallet providers need only act as simple payment initiation and messaging services between the end-users and the central ledger and need not undertake any complex financial activity. As a result, wallet providers are unlikely to need extensive prudential regulation and therefore the digital pound might offer an opportunity for payments innovators to mobilise their businesses in a simple and safe framework with proportionate barriers to entry.

Commercial viability of the digital pound for a diverse range of entrants is the subject of ongoing work by the Bank during the design phase, and will inform the Bank's assessment overall of whether to move to build phase.

4. During the session you stated that a Central Bank Digital Currency (CBDC) has financial stability benefits, in terms of resilience, because it provides another payment system. But how much additional resilience does a CBDC provide if it relies on internet access and power? What might happen if, for example, a particular region of the UK lost power and/or internet access for 48 hours and cash wasn't available as the backup?

The digital pound could improve resilience as an additional payment system alongside other options. In the event that another payment system, such as one of the card networks, is suffering an idiosyncratic disruption, consumers could use the digital pound as an alternative way to continue to make payments.

Like other digital payments systems, such as card networks, the digital pound would be exposed to risks of electricity and internet outages. In such scenarios where the disruption is generalised, the digital pound would face similar challenges to payment systems that exist today. This challenge is present today for many important services in society at a whole, not just payments. The Bank and other UK authorities would need to ensure the digital pound had the highest standards of resilience against such risks, in a similar way to existing payment systems which are already regulated and supervised to ensure a high level of resilience.

Resilience by design is important to manage such risks. The digital pound Technology Working Paper² notes resilience as a core design consideration. Current RTGS and CHAPS services have a target uptime of at least 99.95%, and that would constitute a minimum expectation for

² [The digital pound: Technology Working Paper | Bank of England](#)

Bank-managed digital pound infrastructure. However, we will explore whether an uptime target of closer to 100% would be appropriate and deliverable (in particular 99.999%). Approaches to achieving high levels of resilience include: making the system proficient at anticipating and detecting disruption, maintaining operation of business critical services even when other parts of the system are disrupted, being able to recover in a timely manner after disruption, and being able to adapt and evolve the system to learn from disruption.

Offline digital pound payments are being explored and could act as another contingency option. Offline payments occur when both parties involved in a payment do not have access to the digital pound network, usually due to the lack of an internet connection. This may offer additional resilience in the event of power or internet disruption. However, offline digital pound payments carry risk around double spend and would introduce complexity to the system, so there remain trade-offs when considering their inclusion in the design of the digital pound.

Cash remains, and is always likely to be needed as, a back-up in the event of internet access and power disruption. Cash, as a physical form of money, has an important role to play in managing short term disruption, given it can still be exchanged even without internet access and power. This is one of, but not the only, reason that the Bank and UK authorities are committed to sustaining access to cash and meeting cash demand. The digital pound would be designed to complement, rather than replace, cash. For example, as an outcome of HMT's access to cash consultation, the FCA will be established as the lead regulator for retail cash access and be given appropriate powers for ensuring that designated firms continue to provide deposit and withdrawal facilities across the UK, while the Bank of England will be given market oversight powers over the UK wholesale cash distribution infrastructure.

There are limits to how much even cash can act as a back-up in the event of prolonged loss of internet access and power. The average person in the UK has £44 in cash immediately available to them, which could act as a contingency solution. This is limited, in terms of the payments cash can be used for, and the duration for which this cash could provide cover. Beyond money already held and readily available by consumers, further contingency from cash relies on the availability of power to enable, for example, ATMs to continue to function effectively and to enable continued distribution of cash to consumers.

Internet access and power are important for society generally, and must themselves be designed and maintained to the highest standards of resilience. While contingency options as described above exist – in particular the holding of cash reserves – internet access and power are necessary for the smooth and sustainable running of the digital pound, other payment systems, and many other important services in society.

5. Could you provide an estimate of the financial cost of implementing and running a digital pound? I recognise that the costs would depend on the final design and will be uncertain at this point in time, but I would be grateful if you could provide at least an order of magnitude estimate (or range) of the potential costs.

The Bank of England and HM Government have not yet made a decision on whether to introduce a digital pound. The CP set out our assessment that it is likely to be needed in the future. Therefore, we are stepping up our development work and moving into a 'design phase',

which will last around two to three years. By equipping us with the requisite knowledge and capabilities, this phase will reduce the lead time if we decide at the end of it to introduce a digital pound.

As noted in the CP, a digital pound would be major national infrastructure and building it would require significant investment. Cost will be an important element of any future decision, and so estimating the financial costs of building and running a digital pound will be an important component of the design phase. But it is not possible to provide the Committee with any useful estimate of this at the moment.

In the design phase, we will produce a detailed, technical blueprint for construction of a digital pound. This will be supported by experimentation and proofs of concept in collaboration with the private sector. The blueprint will provide the basis for estimating the costs both of building and running a digital pound system, both to the public sector and to the private sector wallet and other service providers. These financial costs will be one important part of the thorough evaluation of benefits and costs that will support a decision by HM Government and the Bank of England at the end of the design phase on whether or not to build a digital pound.

As in the research and exploration phase, which the CP concluded, the costs to the Bank of England associated with the design phase will be funded by the Cash Ratio Deposit (CRD) scheme, which is used to fund the Bank's policy work, and thereafter by the new Bank of England Levy, which will replace the CRD scheme in future. The funding arrangement for any future build phase is still to be decided.

Expenditure during the design phase will deliver benefits for the UK even if we do not build a digital pound. Digital currency technologies will be significant in shaping the future of finance, and technologies for a digital pound are also relevant to privately-issued digital money, such as stablecoins. By partnering with the private sector on proofs of concept and experiments during the design phase, the Bank and HMT seek to catalyse private innovation in digital currency technologies, encourage innovative digital money business models, and support knowledge sharing across the UK fintech sector.

Yours sincerely,



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