University of East London | Centre of FinTech

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The Bank of England
Digital Pound Consultation
CBDC Unit
Bank of England Threadneedle Street London
EC2R 8AH

Submitted via Email: **Digitalpoundconsultation2023@bankofengland.co.uk**

TO WHOM IT MAY CONCERN

Response to the Bank of England and HM Treasury Consultation Questions on The Digital Pound

This response is submitted for the University of East London, Centre of FinTech by Dr Iwa Salami, Reader (Associate Professor) in Financial Law and Regulation and Director of The Centre of FinTech. The Centre is a research and practice-based Centre primarily focused on FinTech research, FinTech education and engagement with industry. This response is based on the Centre's ongoing research on digital assets regulation and Central Bank Digital Currencies, led by Dr Iwa Salami.

The Centre of FinTech welcomes the opportunity to comment on the Bank of England's and HM Treasury's Consultation on the Digital Pound. The Centre of FinTech would like to thank both institutions for the in-depth and comprehensive analysis that has been undertaken in drafting the Consultation Paper, as well as the opportunity to provide our comments.

At the Centre of FinTech, we believe that a strong policy and regulatory environment is needed for the advancement of the future of money including the new forms of privately issued digital money. Also, with the ongoing drive to tokenise all forms of assets including those in physical form (such as land), and the risks these may present, it is vital that the Central Banks, charged with maintaining monetary and financial stability, respond. Central Banks have decided to explore developing their own CBDCs and, according to the consultative paper, "…68% considering it likely that they will issue a retail CBDC in the short or medium term." As such, as part of its keenness to assess public perception of the Digital Pound and as part of its public engagement remit, the Centre hosted a public debate on the Digital Pound on 25 April 2023 and invited experts to make the case for and against the Digital Pound. What was profound was that at the end of the debate, significantly more people voted for the Digital Pound than against it. This was telling as it showed that the lack of information and the absence of a balanced perspective on the subject is likely to lead to a lot of misconceptions about the Digital Pound and, indeed, any other central bank digital currency (CBDCs). As such, governments and policy makers should note the usefulness of publicly debating CBDCs and should endeavour to build this into their explorative phase.

The Centre of FinTech also believes that global coordination at some level would be essential to buildout interoperability between CBDCs in order to effectively facilitate cross-border payment. The Bank for International Settlements project trials so far, indicate that built-in interoperability in the use of DLT to facilitate retail and wholesale cross-border payments can work.

The Centre is fully in support of the exploration of the Digital Pound and the benefit it may bring to the UK economy but we are also cognisant of the risks around its operation and, therefore, appreciate the opportunity to provide our perspective on the subject. We would welcome the opportunity for further engagement with the Bank of England and HM Treasury on this Consultation.

Sincerely,

Dr Iwa Salami
Reader (Associate Professor) in Financial Law and Regulation
Director, Centre of FinTech, University of East London

Royal Docks School of Business and Law
University of East London
University Square Stratford Campus
1 Salway Road
London E15 1NF

Email: i.salami@uel.ac.uk

Response to Consultation Questions on the Digital Pound

1. Do you have comments on how trends in payments may evolve and the opportunities and risks that they may entail?

The emergence of distributed ledger technology like blockchain technology, moved the developments in the payments space to a new dimension. Perhaps one significant contribution is the potential the technology holds to facilitate the exchange of value globally and on a peer to peer basis – making payments smoother, cheaper and more efficient. This technology has also led to the rise of new forms of private digital money such as stablecoins, denominated in other currencies and issued by private firms. Also, through this technology, it is likely that the transfer of value through the tokenisation of all forms of assets and debt would rise.

Stablecoins, including algorithmic, fiat-backed or crypto-backed types, have associated risks, as seen in the collapse of the algorithmic stablecoin, TerraUSD (UST). Fiat and crypto-backed stablecoins also have associated risks linked to the types of asset backing them (fiat-backed) and the volatility of assets backing them (crypto-backed). This, as such, highlights that there is the need to have digital currencies that can serve as the anchor for all digital asset and currencies. It is, as such, necessary that Central Banks are able to play a key role in preventing any monetary and financial stability risks arising from the use of these new forms of money and assets. Hence, this Bank of England Consultation Working Paper on the Digital Pound is very significant.

The added benefit, of course, of CBDCs is that they maintain the monetary sovereignty of the issuing country by ensuring that Central Banks retain sovereignty over monetary policy and that alternative currencies do not dominate the domestic market. CBDCs can also promote financial inclusion as they increase access to financial services for the unbanked and facilitate peer-to-peer payments, by enabling much lower-cost services than can be provided by traditional financial institutions. CBDC systems would also enhance payment infrastructures by increasing the efficiency and speed of payments, while reducing costs. CBDC design and infrastructure can also foster further financial innovation through the use of smart contracts and programmable money, which would be key features of new financial services.

Overall the Centre of FinTech welcomes the Digital Pound as a necessary part of the future money which can potentially serve as the anchor of all new forms of money and assets.

2. Do you have comments on our proposition for the roles and responsibilities of private sector digital wallets as set out in the platform model? Do you agree that private sector digital wallet providers should not hold end users' funds directly on their balance sheets?

We agree that the platform model of a CBDC is the most appropriate. It would balance out operational requirements between the public and private sector and would ensure private sector involvement. As private sector have the experience of onboarding clients in traditional commercial bank on boarding settings, they would be better placed to do this and also to efficiently manage the KYC procedure with potential users. This is also ensure that the Bank of England is not preoccupied with managing the day to day wallet provider or users of retail CBDCs and that it can focus on its mandate of delivering effective monetary and financial stability. Nonetheless, the proposed platform model provides the Bank of England the opportunity of oversight and the Bank would likely impose principles for operation for Payment Interface Providers (PIPs) and External Service Interface Providers (ESIPs), including technical standards, alongside regulatory requirements.

By providing a public infrastructure on which private sector firms can innovate, the Bank of England can promote innovation in a way that boosts competition and maintains overall system safety and soundness.

We agree that the digital wallet should be the primary access point to the Digital Pound system, given it will be the consumer on- and off-ramp. We also agree that as part of the differentiation between a digital wallet (that holds value as a Digital Pound) and a bank app (that holds value as a commercial bank deposit), digital wallets should not hold customer funds directly on their balance sheets. As funds held in the digital wallet would be a direct liability of the Central bank and not on wallet providers it appears ideal for end users' funds not to be held on directly on their balance sheet.

Nonetheless, this would call for close operational cooperation between public and private sector to limit the impact on disintermediation of financial services by private sector providers. However, the wallet approach may have the potential of inhibiting innovation – if the programmability benefits of issuing a CBDC is inhibited at a wallet level this runs the risk of restraining innovation.

3. Do you agree that the Bank should not have access to users' personal data, but instead see anonymised transaction data and aggregated system-wide data for the running of the core ledger? What views do you have on a privacy-enhancing digital pound?

The debate hosted by the Centre in April 2023, revealed that trust is a key factor that would determine the success of any CBDC including the Digital Pound. The fear of the infringement of data privacy was a fundamental factor in oppositions towards the Digital Pound.

So, we agree that the Bank of England should not have access to users' personal data. CBDCs, in general, should not be designed to give public institutions access to all consumer data. Nonetheless, though, the Central Bank can use technology to ensure that privacy is built into the design of its CBDC; as such a carefully thought out design can empower the state to be able to check the system operates smoothly and without facilitating financial crime.

Also, if the idea is to replicate the current fiat money which anyone can use privately it is so important that this is maintained particularly for widespread adoption to be attained. We therefore propose that the Digital Pound is at least as private as current forms of digital money, like the money in a commercial bank account or e-money. Digital Pound users should be able to make choices about the way their data is used. What is so clear is the fear of the public on the data privacy infringement, as highlighted by the Centre of FinTech public debate on the Digital Pound in April 2023.

4. What are your views on the provision and utility of tiered access to the digital pound that is linked to user identity information?

This is very important and could be useful to get all on board with accessing the digital pound. There may be UK residents who, for some reason or another, may not be able to fulfil the identity required for full use of the system and who may, as such, be totally excluded if a tiered mechanism is not in place. However, tiering could paradoxically, lead to further exclusion.

5. What views do you have on the embedding of privacy-enhancing techniques to give users more control of the level of privacy that they can ascribe to their personal transactions data?

Embedding privacy-enhancing techniques to give users more control of the level of privacy they can ascribe to their transaction is a good thing. The challenge would be convincing users that this degree of privacy enhancing techniques are robust enough and cannot be circumvented and that there is no backdoor access to user data which users may not be aware of as recently occurred in the case of Ledger. In the Ledger case, the process to introduce a private key recovery mechanisms, revealed that third parties could in fact access the private key of users although they had been assured that no one but them could have access to their private key.

Nonetheless, any measures to give users more control over their privacy, or the level of privacy that they can ascribe to their personal transactions data, is likely to drive up adoption. However, it is vital that the Bank of England and related regulatory authorities can access the necessary anonymised or aggregated data to ensure safety and soundness of the operation of the Digital Pound, and to provide oversight against financial crime or other illicit activity.

6. Do you have comments on our proposal that in-store, online and person-to-person payments should be highest priority payments in scope? Are any other payments in scope which need further work?

It is agreed that in-store, online add person-to person payment should be prioritised since the idea is for the Digital Pound to be used for retail payments and these are predominantly points of retail sale/payment. The question for users would be the ease with which it can be used – accessibility for all categories of users so that, despite one of its rationales being to facilitate financial inclusion, it does not facilitate digital exclusion. It would be redundant if its use is more complex than existing forms of in-store, online and person-to-person payment. Also, although fundamentally different from crypto-assets (since those are privately issued) one big criticism about using crypto-assets within blockchain-based environments is their complexity. This is more so as it requires on-ramping to transact and off-ramping to cash out to real fiat currency, which is found by many to be complex.

It is, however, worthy to mention that as one of the projects for the operationalisations of retails CBDCs has been the Bank for International Settlements Project Rosalind[1] which explored how central banks could address the need for a universal and extensible application programming interface (API) for retail CBDC. The design and functionalities of the APIs were tested and validated through more than 30 use cases identified and explored by public and private sector collaborators. This project revealed that the API could work with different central bank ledger designs to facilitate retail payments. The APIs can also support offline payments in CBDC. This project reveals that when CBDCs like the Digital Pound do become available, payment innovations solution already exist to make their day to day use for in-store, online and person-to-person payments an easier experience for users.

7. What do you consider to be the appropriate level of limits on individual's holdings in transition? Do you agree with our proposed limits within the £10,000–£20,000 range? Do you have views on the benefits and risks of a lower limit, such as £5,000?

The introduction of these limits can help gradually transition bank customers into using CBDCs without necessarily having a dire impact on the risk of disintermediation of the banking sector; and the crowding out of private money such as different types of stablecoins. So, these limits make sense as a temporary measure to ensure the smooth introduction of the Digital Pound. It is, however, worthy to note that imposing lower limits on the use of a CBDC in any jurisdiction to prevent disintermediation may prevent widespread adoption particularly among businesses.

[1] BIS Project Rosalind: developing prototypes for an application programming interface to distribute retail CBDC available at https://www.bis.org/about/bisih/topics/cbdc/rosalind.htm accessed 29 June 2022.

8. ***Considering our proposal for limits on individual holdings, what views do you have on how corporates' use of digital pounds should be managed in transition? Should all corporates be able to hold digital pounds, or should some corporates be restricted?***

Since the idea is to create digital forms of the pound and to engender widespread use across the board by all individuals and all corporates, it is significant that the need to differentiate limits between companies is careful managed. This need, understandably to prevent disintermediation that could arise due to move of larger firms use of the Digital Pound, can be potentially discriminatory if higher limits are placed on some than others. This could also have competition implications as, should the Digital Pound become widespread and easily interoperable with existing forms of payment, this may crowd of firms with lower limits. This would have a negative impact on confidence in the Digital Pound and its operation.

9. Do you have comments on our proposal that non-UK residents should have access to the digital pound, on the same basis as UK residents?

Again, if the idea is for it to function as the digital form of fiat money which is accessible to all depending on their wealth both in their national and foreign currency, then the Digital Pound should also be accessible to all, including non-UK residents on the same basis as UK residence. It is hoped that as other countries embrace CBDCs the profound significance of accessibility of UK Digital Pound to foreign citizens, and indeed of other foreign CBDCs to UK non-residents, would be useful for ease of retail cross-border transactions or retail online transactions. Again, like in the BIS Project Rosalind mentioned above, this is achievable. The Bank for International Settlements (BIS) have explored this possibility through Project Icebreaker.[2] This project, involving the central banks of Israel, Norway and Sweden tested the technical feasibility of conducting cross-border and cross-currency transactions between different experimental retail CBDC systems. For central banks contemplating the implementation of retail CBDCs, the outcome of Project Icebreaker provides deeper understanding of the technologies that can be used and the technical and policy choices available. The project presupposes very minimum technical requirements so as to be able to integrate domestic systems running on different technologies (as was the case with the proofs-of-concept used by the three central banks), thus promoting scalability, interoperability and simplicity.

10.Given our primary motivations, does our proposed design for the digital pound meet its objectives?

The proposed design meets the objectives as laid out in the two primary motivations which are:

[2] BIS Project Icebreaker: Project Icebreaker concludes experiment for a new architecture for cross-border retail CBDCs, available at https://www.bis.org/about/bisih/topics/cbdc/icebreaker.htm accessed 29 June 2022.

1. To sustain access to UK central bank money – ensuring its role as an anchor for confidence and safety in our monetary system, and to underpin monetary and financial stability and sovereignty; and
2. To promote innovation, choice, and efficiency in domestic payments as our lifestyles and economy become ever more digital.

In addition, to meeting the first objective of "ensuring its role as an anchor for confidence and safety in our monetary system," it is essential that the proposed design is also able to support and interact with existing payment systems and other private blockchain payment network and is interoperable with them. In practical terms, this would require public – private partnerships between the Bank of England Digital Pound design and other private blockchain-based networks. Despite the advantages of the platform model which offers a solid user claim on the Bank, and supports a diverse, innovative, and competitive Payment Interface Provider (PIP) and External Service Interface Provider (ESIP) ecosystem, there are potential drawbacks. It provides a single infrastructure to support extensibility, offering common APIs for participants to connect to and build upon, as well as managing changes and updates in a single place. As there is a possible single point of failure risk with the platform model, it would be necessary to ensure the infrastructure is protected to the very highest standards and this, as stated by the consultation paper, would include working together with the National Cyber Security Centre.

11.Which design choices should we consider in order to support financial inclusion?

The design choice should have due regard to the public sector equality duty including its impact on those who are described as having protected characteristics set out in the Equality Act 2010. Financial inclusion would mean that no one, including those with protected characteristics, should experience any inhibitions to using the Digital Pound due to their protected status. As highlighted above, one apparent category that may suffer from the use of the Digital Pound if not easy to use would be the elderly, who have for years been used to transacting in cash and through bank branches. The design features should, therefore, factor in the need for digital inclusion for the Digital Pound to be accessible to all generations from the baby boomers to Gen Zs. As such, digital inclusion strategies should be built within the operation of the system and there could be a programme built into the design for supporting users of the Digital Pound. Provision could also be made for alternative modes to accessing the Digital Pound, beyond using digital platforms such as smart phones for those who find it difficult using these platforms.

It would also be worth designing the Digital Pound to be accessible offline as contemplated for the Sand Dollar in the Bahamas and eNaira in Nigeria, so that those not having internet connectivity can still access the system. This is significant as without offline accessibility it is likely that a good number are likely to be excluded from accessing the system not having access to internet connectivity.

12.The Bank and HM Treasury will have due regard to the public sector equality duty, including considering the impact of proposals for the design of the digital pound on those who share protected characteristics, as provided by the Equality Act 2010. Please indicate if you believe any of the proposals in this Consultation Paper are likely to impact persons who share such protected characteristics and, if so, please explain which groups of persons, what the impact on such groups might be and if you have any views on how impact could be mitigated.

As stated above, it is important that the design of the system facilitates the ease of use by all users, young and old. Whilst Gen Z are more technologically savvy and conduct most of their transactions online, it is likely the Digital Pound would appeal much more to them than possibly to the boomers who have used fiat in bank accounts most of their lives and who may find using the Digital Pound tasking, if it is not easy to use.