



Gillmore Centre for  
Financial Technology

## Regulatory regime for systemic payment systems using stablecoins and related service providers: consultation response from Gillmore Centre Finance and Technology

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The Gillmore Centre for Financial Technology which is based at Warwick Business School/University of Warwick, is a multi-disciplinary research hub exploring the transformative impact of emerging technologies such as artificial intelligence, machine learning, blockchain, mobile payments, cryptocurrencies and crowdfunding platforms.

We welcome the Bank of England's discussion paper on a regulatory regime for systemic payment systems using stablecoins and related service providers, and the opportunity to respond.

Without any claim to being comprehensive or authoritative, we nevertheless raise a number of both high-level and detailed issues for the Bank's consideration. We first briefly summarise as best we can some of our key points on each of the 32 consultation questions, then provide more detailed discussion and explanatory details on each of these.

We would be pleased to hear from anybody interested to discuss or collaborate on any of these or other relevant issues from any disciplinary perspective.

Yours sincerely  
Gillmore Centre for Financial Technology

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## Highlighting a few points from our response

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**Secondary markets for stablecoins made by dealers who trade on regular price deviations from par would be inconsistent with the singleness of money.** However, under the proposal to give access to reserves (meaning issuance/redemption can settle via changes in reserve balances) and elastic issuance/redemption of coins at par (under proposed requirements on redeemability), secondary markets may in any case not arise (section 1.2). Individual holding limits can keep demand within any limits to the elasticity of issuance (section 1.2 and 4.1). If settlement between stablecoins and banks proves costly, alternative secondary exchange more resembling a clearing system (no bid-ask spread) might emerge to facilitate efficient transactions.

While it is reasonable to take a graduated approach to regulation depending on the scale of issuers and payment systems, **the singleness of money necessitates that, whoever the issuer, any claim to being pounds sterling must be equally safe for consumers.** Thus, despite regulatory distinctions between say GSIBs and smaller banks, the underlying expectation remains steadfast: all bank deposits must offer uniform security for consumers. **However, the proposed regulatory framework for stablecoins in payments introduces a notable deviation: whereas it is argued coins from systemic issuers should be subject to the same standards as bank deposits (on stability of value and par redeemability), other regulated stablecoins used in every day transactions would not be held to the same standards.** This goes against the singleness of money and would require consumers to discern between stablecoins based on their systemic classification. Arguably this risks confusing consumers and undermining confidence in money and payments (section 1.2.1).

**Proposals seems to provide for individually systemic issuers and service providers, but could we potentially witness the emergence of regulated stablecoins that, while not individually meeting systemic importance criteria, are collectively systemic?** In such a scenario, the proposal for sub-systemic stablecoin issuance to be backed by HQLA would, for example, raise the same concerns as for HQLA backing of systemic coins (summarised below). Whilst payments infrastructure used by many non-systemic issuers might be captured under current proposals, it is not clear how the collective monetary and market stability implications of many non-systemic issuers could be managed (section 1.2.3).

**The divergence between the proposed FCA and Bank of England regimes means that transitioning a stablecoin that has grown to scale under the non-systemic regime to systemic status, could prove difficult or even unachievable, possibly leading to market disruptions or pressure on regulators to collaborate with stablecoins in operating under their existing models.** Shifting from a business model relying on the return on backing assets to a purely transactions-based revenue model could be particularly challenging. In such cases, one regulatory pathway for stablecoins unable or unwilling to transition to the systemic regime might be to operate within banking regulations (or some sub-regime thereof), if they can sustain this. Although this would call for further clarity on regulatory strategies in the realm of market-based finance. Additional complications may also arise e.g. if the stablecoin has grown within public permissionless blockchains that fall short of regulatory standards (from systemic issuers) (section 1.2.4).

Although the DP argues full reserve backing is necessary for stablecoins to meet the same standards as bank deposits, a full reserve stablecoin could offer a safer more liquid settlement asset than bank deposits. Indeed, although stablecoin would be a promise to pay bank deposits (which are in turn a promise to pay central bank money), **under the proposed full reserve requirement systemic stablecoin would in many ways resemble and have similar implications to the proposed digital pound** (section 3.1.1.1). This becomes particularly pertinent as legislative efforts surrounding stablecoins outpace both technical groundwork and public discourse on CBDCs. It also raises questions regarding the potential interaction between full-reserve stablecoin and the digital pound: stablecoin issuers and PIPs for the digital pound would need to compete on transactions-based business models, with PIPs benefitting from use of a settlement asset that is a direct claim on the Bank (compared to a claim on private stablecoin issuer) (section 4.3.3). This raises the question whether there would be any incentive to be a private issuer at all (if you have a transactions-based model, why not just operate as a payment interface for the digital pound, potentially avoiding issuance/redemption costs). Conversely, considering the potential for stablecoins to “get there first”, it is worth contemplating how the success of regulated stablecoin might impact the future case for and/or viability of the digital pound as a project.

Many will argue for allowing backing with HQLA. Whilst a full reserve coin may provide an even safer more liquid

settlement asset than bank deposits, nevertheless **for HQLA backed coins to meet necessary standards would require suitable backstops for the fragility arising from liquidity transformation.** The safety and redeemability of uninsured stablecoins backed by HQLA would hinge on liquidity in core government debt markets, which have shown increased susceptibility to liquidity issues. While the Bank of England has intervened to support the functioning of these markets, the introduction of HQLA-backed stablecoins would call for formalisation of the role of the Bank in backstopping market functioning and as dealer of last resort. Moreover, it is crucial to recognize that in circumstances where dealer balance sheets are constrained, stablecoin redemptions - and the resulting selling pressure as stablecoins attempt to liquidate backing assets - could exacerbate challenges in these important markets. **Whilst these risks might be mitigated, the monetary implications of HQLA backing must also be carefully considered. While full reserve backing entails a straightforward exchange of settlement assets, resulting in no net money creation (but the draining of deposits and reserves from the banking system), HQLA backing may lead to net money creation.** This occurs as stablecoin buyers exchange bank deposits for newly minted stablecoins, and when the stablecoin issuer reinvests in securities, both reserves and deposits (if securities seller is a non-bank) return to the banking system, so the immediate impact is net money creation (section 3.1.2.1). Considering these factors, opting for a full reserve requirement may offer a more straightforward arrangement.

Imposing the **proposed full reserve requirement would require strictly linking issuance and redemption to settlement with finality**, since any doubt regarding full backing of coins in circulation could lead to a run on the coin and/or discounting of the coin (sections 1.1.1, 3.1.1.3, 3.3, 3.4, and 3.5). This may have implications for business models (section 4.3).

Given full-reserve stablecoins could provide a safer more liquid asset than bank deposits, individual holding limits are justified in order both to prevent large deposit outflows and runs out of bank deposits into stablecoins, as well to mitigate against the risk stablecoins could trade above par in response to issuance constraints. **Since any overall shift out of bank deposits would be equal to the overall shift into stablecoins (across all issuers), and digital pound balances (if the digital pound is introduced), arguably the approach to individual holding limits should reflect this.** Limits on wallets can be based on user context (retail users vs. corporate users etc.). However implementing and enforcing these limits would pose complex challenges, particularly in tracking and managing overall balances across the system and establishing sweeping arrangements (presumably requiring real time settlement in reserves) between stablecoin wallets and bank accounts could be costly.

Whilst these proposals focus on retail use cases, some form of wholesale use case stablecoin operating for a private settlement system might be as or more likely to become systemic. We also note that **a full-reserve stablecoin could potentially be very attractive for institutional users who do not otherwise have access to reserves hence could easily go wholesale if limits/restrictions on this are not imposed** (section 4.1) (This would have a number of distinct implications, but we leave discussion of associated risks and opportunities from wholesale use of stablecoins to a follow up paper).

**We find little justification for paying interest (at an administered rate) on reserves for full-reserve stablecoins unable to engaged in any liquidity or maturity transformation or pay interest to coinholders. However consistency is needed**, in particular regarding both narrow/limited purpose banking models under banking (remunerated reserves) vs. stablecoin (unremunerated reserves) regimes, and e-money providers that achieve scale (section 3.2).

Proposed full backing with unremunerated reserves means **stablecoins would not generate income directly on issuance** (all seigniorage going to the Bank) **so would need to pursue transactions based revenue models** (consistent with the objective they be payments focussed but issuers that make their stablecoin available for use by other payment systems could face challenges). **Whilst this seems to raise the question why be an issuer at all, there may be a case that the ability to issue, would allow private stablecoins to compete by building alternative payments systems that do not rely on or require updating of legacy systems. This could make a difference to competition/contestability and innovation in payments markets.** Interoperability would be essential with payments between bank deposits and stablecoin (presumably via RTGS) driving issuance/redemption (potentially costly for stablecoins and perhaps for banks via impact on intraday liquidity costs). But issuers able to bring efficiency and innovation to in-stablecoin payments (where full reserve backing would enable 24/7/365 real-time gross settlement) might succeed (success stories like Swish may be relevant). Given that retail payments already meet consumer expectations to a large extent, compelling new functionalities might be necessary to drive adoption. Although, competitive fees and settlement speeds alone might attract merchants, fostering diffusion.

## Summary of response on each question

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This section provides a brief summary of our response on each of the 32 consultation questions in which we do our best to capture some of the key points we make under each. For detailed discussion and considerations please see (or follow the links to) the main text.

### **Question 1: Do you agree that, to preserve the singleness of money, systemic payment stablecoins must be fully interchangeable with other forms of money at par?**

In practice, different forms of money may not always be interchangeable, as specific types may be needed for particular transactions. Thus, ensuring that various settlement assets essential for different payments are exchangeable at parity is key, alongside also managing risks related to monopoly or concentration. Beyond mere parity, the singleness of money ideally entails payments-based interoperability. For any cost, convenience, or functionality advantages stablecoins may be able to offer, they must be fully exchangeable at par with other forms of money and interoperable with them for payments purposes. Introducing a new value transfer system in the UK economy that adds frictions in terms of speed, convenience, fungibility, or cost would be fragmentary and undermine uniformity, detracting from, rather than enhancing, the existing setup. Upholding this principle of singleness of money is crucial to uphold the stability of the UK monetary system and economy.

**Interchangeability with bank deposits:** The issuance and redemption of stablecoins necessitate settlement in reserves between stablecoin issuers and commercial banks - impacting the balance sheets of both sectors. Par interoperability between stablecoins and bank deposits for payments purposes could occur via issuance and redemption - facilitated by settlements in central bank reserves. Imposing the proposed full reserve requirement would mean strictly linking issuance and redemption to settlement with finality. This process would incur transaction costs that would depend on settlement modality. Under prohibition of redemption fees this could then prove challenging if payments and sweeping drove large volumes of issuance/redemptions. In principle the secondary exchange of stablecoins and bank deposits in circulation could also be used to facilitate payments between stablecoins and bank accounts (based on a currency conversion step – which would need to be at par). The choice (or balance) between issuance/redemption-based settlement of payments vs. a currency conversion based chain, may hinge on cost considerations and implications for settlement times and finality. However net demand for stablecoin settlement liquidity would necessarily have to be met through issuance/redemption (and bank balance sheets would need to flex). These arrangements could significantly affect banks' liquidity needs and costs, warranting further examination, including the potential impact of reserves locked up in funding stablecoin-based settlement on reserve velocity and of possible real-time gross settlement of stablecoin issuance and redemption on intraday liquidity needs. Finally there would be the possibility of convertibility via secondary markets for stablecoins. However we question whether secondary markets would arise where issuers stand ready to meet all demand at par and settlement and clearing systems exist for payments purposes, and secondary market trading away from par would go against the singleness of money.

**Interchangeability with physical currency:** The DP underscores the necessity for any form of money in the UK economy to maintain its value consistently and be interchangeable at par with other sterling-denominated money, encompassing both Bank of England-issued cash and commercial bank-issued bank deposits. However, the mechanism and feasibility for convertibility with cash or the process of issuance or redemption against cash are not discussed. Given bank deposits promise redeemability in cash, and stablecoins promise bank deposits, stablecoins would also be exchangeable for physical currency and vice versa – even if perhaps only indirectly. We also note here the Bank's ambitions for the digital pound to provide fast and convenient convertibility into and out of cash, and stablecoin convertibility with the digital pound.

**Interchangeability between stablecoins:** A full reserve requirement for stablecoins implies settlement between different stablecoins in reserves. As they would by definition all have settlement accounts, in theory this should be straightforward. Whilst the legal claim on issuers would be par redemption in bank deposits, this redeemability against bank deposits and proposed requirements on redemption fees should make different stablecoins de facto exchangeable (via bank deposits), and this might eliminate any potential incentive for stablecoins to resist settling directly between themselves. The secondary exchange of different coins raises more complex issues, with parallels to considerations on the secondary exchange of stablecoins and bank deposits.

**Interchangeability with the digital pound:** in [our response on the digital pound](#), we argued that enabling on-demand convertibility at par between the digital pound (if introduced) and any prospective sterling stablecoins could enhance the coherence of the system. Such an arrangement would ensure the necessary interchangeability across all forms of currency and further extend the stabilizing influence (or monetary anchor) of central bank money to privately issued stablecoins. The ramifications of choosing between a layered hierarchy wherein bank deposits represent a commitment to pay either cash or the digital pound, while stablecoins pledge redeemability in bank deposits, versus an alternative scenario where stablecoins also commit to convertibility into the digital pound (and potentially cash), would warrant careful reflection.

**Question 2: Do you have views on further requirements that may be needed to ensure the singleness of money when stablecoins are traded in secondary markets?**

The singleness of money within the sterling system demands that all forms of currency maintain their value parity to enable seamless exchange without loss of value. Any trading deviations from par, even minor ones, would compromise this singleness and undermine their utility in payments. The proposed mandate for issuers to ensure on-demand redemption at par provides a robust foundation, bolstered by the full reserve requirement. It is improbable that banks would refuse redemptions arriving as payments, and exempting reserves from leverage ratios mitigates the risk of redemption pressure prompting deleveraging actions. While the DP outlines stringent standards on redemption, potential constraints on issuance should also be considered, such as capital or other capacity or profitability constraints on the issuer, or limits to the Bank's willingness to meet reserve demand. Individual holding limits (but only individual limits will do) could serve as an effective defence against vulnerabilities in issuance, so play a crucial role in mitigating the risk of secondary market trading away from par. We note that secondary markets are not necessarily required for payments settlement purposes and with these safeguards secondary markets may not arise at all. However, if settlement between stablecoins and banks (issuance/redemption) proves costly, alternative secondary exchange - more resembling a clearing systems - could emerge to facilitate efficient transactions, potentially supporting stablecoin value propositions for domestic but also in cross-border payments.

**Question 3: Do you agree that the most likely, and suitable, payment systems using new forms of digital money to become systemic in the UK are sterling-denominated stablecoins which are backed by assets denominated in fiat currency?**

We are seeing the emergence of numerous new and aspiring stablecoin issuers wanting their liabilities to be acceptance as settlement assets. The promises of current contenders lack the credibility necessary to be suitable for widespread adoption in everyday payments, and are predominantly USD-pegged and backed by dollar-denominated assets, making their adoption in the UK even more unlikely - though the prospect of non-sterling stablecoins gaining prominence as liquid stores of value or safe haven assets might be more plausible. Yet, even if the par promises of these new issuers are inadequate to establish their suitability, they could nevertheless become convincing enough to gain traction, especially if issuers offer attractive convenience and functionality (although use cases not covered by the DP including cross-border payments – not domestic payments - may be more likely to see early diffusion). Political opposition to initiatives like Libra has not halted development – underscored by developments such as PayPal's recent launch of a USD stablecoin and card companies integrating stablecoins into their networks. As stablecoins inch closer to the possibility of widespread adoption, policymakers face the dilemma of whether to ignore, shut down, or collaborate with them on par. While shutting them down may seem appealing, regulating to mitigate risks whilst supporting potential for innovation and competition may be more principled and more prudent. However, this sort of pre-emptive collaboration will inevitably further increase the likelihood of/accelerate stablecoin integration and further risk a significant halo effect for unregulated issuers.

**Question 4: Do you agree with the Bank's proposed approach to assessing the systemic importance of stablecoins used for payments?**

**Systemic/sub-systemic boundary:** While the same regulatory standards are not expected of all banks, we nevertheless expect uniform safety of all bank deposit liabilities. In contrast, under the proposed regulatory framework for stablecoins for payments, some coins will be held to the same standards as bank deposits, and some will not. Arguably this risks confusing consumers and undermining confidence in money and payments.

**Systemic at launch:** considering the potential for large financial firms and big tech companies could leverage their



size, networks, and reputation to rapidly scale a stablecoin project, systemic at launch may be a reasonable provision to include. While prioritizing safety is paramount, some degree of proportionality for prospective systems may also be necessary to foster innovation. However, implementing systemic at launch also introduces complexities to regulatory dynamics, particularly considering the proposal on reserve access and full reserve backing. A full reserve stablecoin represents a distinct form of settlement asset compared to other arrangements. Recognizing a stablecoin as systemic at launch would essentially grant a privilege to large incumbent firms. It also blurs the line between responsive policy regulating private market developments vs. a decision to launch a new form of money in a public-private partnership (comparable in some respects to the digital pound).

**Collectively systemic:** Could we witness the emergence of regulated stablecoins that, while not meeting systemic importance criteria individually, collectively hold systemic implications? In this scenario, consider the proposal for sub-systemic coins to be backed by HQLA, which could raise concerns regarding liquidity transformation risk and runability. Moreover, given their potential to engage in net money creation and compete for HQLA, these stablecoins could have significant monetary and financial stability implications. Such coins might pose risks to core government bond markets and would benefit from the Bank acting as a market-maker of last resort in these markets. While current proposals account for individually systemic issuers and service providers, including infrastructures widely relied upon by numerous non-systemic issuers, there may be a question how collective systemic risk posed by smaller issuers could be addressed. Additionally, while e.g. a wallet or payment system offering services to many non-systemic stablecoins might fall under these proposals, it remains unclear how risks stemming from a smart contract relied upon by numerous non-systemic issuers could be effectively managed.

**Transition from non-systemic to systemic regime:** Transitioning from FCA regulation to the Bank of England's regime for systemic stablecoins would require radical shifts in business model and pose significant challenges for a stablecoin, potentially posing feasibility issues. An issuer accustomed to relying on income on backing assets could struggle to move to the transactions-based revenue model that would be required under systemic regime. Moreover, if the stablecoin has grown within public permissionless blockchains that fall short of regulatory standards (for systemic issuers), additional complications may arise. The divergence between the proposed FCA and Bank of England regimes indicates that transitioning non-systemic stablecoins to systemic status could prove difficult or even unachievable, possibly leading to market disruptions or pressure on regulators to collaborate with stablecoins in operating under their existing models. In such cases, it may be prudent for stablecoins unable or unwilling to transition to the systemic regime to operate within banking regulations, if they can sustain this. This may underscore the need for further clarity on regulatory strategies in the realm of market-based finance.

**Question 5: Do you agree with the Bank's proposed approach to the regulatory framework for systemic payment stablecoins, as set out in Section 2?**

Establishing robust standards for stablecoin issuance is imperative to mitigate the potential disruption posed by a successful stablecoin and to legitimize their use as retail payment instruments. However, ensuring stability and security across the entire payment chain demands a comprehensive approach that extends beyond issuance functions. We therefore commend the Bank's initiative to regulate systemic payment systems employing stablecoins end-to-end. It is worth noting that the current approach in the DP and UK legislation focuses on stablecoins' potential usage in everyday payments and widespread adoption, with an emphasis on determining appropriate backing arrangements in this situation, ultimately advocating for full reserve backing (a new type of stablecoin). Nonetheless, it is crucial to recognize that diverse backing structures, under proper regulation and management (appropriate to the backing model), could uphold equivalent levels of reliability in payments, while bearing vastly different implications for the broader monetary and financial system. Thus, an alternative approach to the 'same business, same risk, same rules' principle involves establishing clear regulatory boundaries that accommodate various business models, with backing arrangements as a central consideration in which business models belong where. This may entail subjecting stablecoins operating on a more diverse HQLA-backed model to banking regulation (or some sub-regime), while transactions and infrastructure-focused business models operating with banking licenses could better align with the proposed systemic stablecoin regime. This highlights the need for alignment between regulatory expectations and the business models operators pursue to prevent regulatory arbitrage or unfair competition - such as the pursuit of a narrow-banking model under banking regulation (rather than systemic stablecoin regime) to exploit income from reserves. Furthermore, ensuring consistency is essential, including regulatory provisions for addressing e-money issuers that attain systemic scale. Achieving this alignment and consistency will be instrumental in fostering a fair and stable regulatory environment for the evolving money and payments landscape.

**Question 6: Do you agree with the Bank's assessment of the risks posed by vertical integration of stablecoin functions? Are there other risks that the Bank should consider based on existing business models? What mitigants could be put in place to ensure that risks posed by multi-function entities are addressed?**

We strongly agree that there is potential for additional risk posed by vertical integrated models. It may be the case that most of these risks are already highlighted within existing capital markets regulations. Thus, potentially where a particular risk arises e.g. due to a stablecoin issuer also engaging in other activities that present a risk (such as facilitating the trading of an issuer's own stablecoins, engaging in brokerage, market making), this would require both systemic stablecoin and relevant capital markets regimes be applied. We are not currently clear on the details and careful consideration should be given to these risks and how the regime for systemic payment stablecoins interacts with existing regimes. Moreover, it is also clear that the proposed regime is designed for limited purpose entities with specific business models and it seems likely some functions will not be compatible.

**Question 7: Do you agree with our approach regarding subsidiarisation of non-UK issuers? Do you agree with our approach to other non-UK elements of the payment chain? What alternative policy arrangements could be used to effectively supervise, oversee, and regulate non-UK systemic stablecoin issuers and other non-UK elements of the payment chain?**

Establishing a UK presence for international banks is a prerequisite, and similar standards should apply to stablecoin issuers. Subsidiarisation would be essential though potentially streamlined for proportionality. Ring-fenced backing assets and capital against UK issuance should be held within the UK. Even so, spillovers from an issuer's wider international operations due to real or perceived connections would remain a risk and necessitate ongoing monitoring and careful oversight for licensing and supervision purposes.

**Question 8: Do you consider that the Bank's existing binding rules on governance, operational resilience and third-party outsourcing risk management are suitable for systemic payment systems using stablecoins?**

It should be a prerequisite for both systemic and non-systemic stablecoin issuers to adhere to the highest standards of operational resilience and risk management throughout the stablecoin ecosystem. Widespread adoption of stablecoins would necessitate preparedness for potential disruptions, such as cyber events, which could pose liquidity or solvency risks and potential for spillovers via interconnectedness. It is therefore imperative that existing regulatory frameworks on governance, operational resilience, and third-party outsourcing risk management be critically assessed for their suitability in the context of systemic stablecoin payment systems which might leverage blockchain or other DLT. While blockchain technology offers redundancy and eliminates single points of failure through its distributed architecture, current rules may overlook these benefits, warranting careful consideration. However, the adoption of blockchain networks also introduces novel governance, coordination, and compliance challenges that require meticulous evaluation. Thus, any reassessment should aim to strike a balance between acknowledging the advantages of blockchain technology and addressing the complexities it introduces, ensuring that regulatory standards evolve in tandem with the digital payment landscape.

**Question 9: Do you consider that stablecoin issuers can exercise sufficient control over, and mitigate the risks of, public permissionless ledgers (be it via rule setting and/or the use of innovative solutions)?**

By definition, no single entity can (or should) exercise control over a public permissionless ledger. The only way to exercise control over a network is to make it permissioned. We note however that public and permissionless are independent dimensions for the design of a distributed ledger.

**Question 10: How do you consider that existing and emerging stablecoin payment chains operating with a public permissionless ledger may be adapted in order to meet the Bank's expectations and international standards?**

Stablecoin issuers grapple with significant hurdles in meeting regulatory requirements within public permissionless ledgers. These include establishing legal settlement frameworks, defining governance structures, and implementing robust risk management protocols. Despite attempts to introduce regulations and innovative tools like smart contracts and DAOs, the decentralized nature of these ledgers complicates enforcement and exposes them to new risks. While these measures can partially mitigate risks, the fundamental character of permissionless ledgers underscores the need in these systems for collaborative risk management efforts involving ecosystem stakeholders.

**Question 11: Do you agree with the Bank's assessment of the important role of backing assets in ensuring the stability of value of the stablecoin?**

Backing assets and their good management fundamentally underpin the value of an issuers' liabilities. As we have argued, money issued with different backing arrangements can be made safe (through appropriate regulations and backstops). The choice of backing assets not only shapes the credibility of stablecoin issuers' liabilities but also defines the nature of the money being issued, with significant implications for the broader monetary and financial system. We consider first the implications of full-reserve, then some implications from HQLA backing arrangements.

**Full reserve backing model:**

**New type of money:** The proposed full reserve backing model for stablecoins implies the creation of a new type of money and financial institution via a unique public-private partnership. The DP emphasise that a full-reserve requirement would be essential for stablecoins to meet standards equivalent to commercial bank money. However a full-reserve stablecoin could offer a safer more liquid settlement asset than bank deposits – indeed whilst they would be a promise to pay bank deposits, if regulatory frameworks and supervision assure full backing by central bank funds, stablecoins could mirror many characteristics of a CBDC. Under the proposed regime, a systemic stablecoin would have many of the same implications as the proposed design for the digital pound and concerns about the monetary and financial stability impacts from a digital pound, as well as the effects on commercial banks, are likely to apply similarly to the introduction of full-reserve stablecoins.

**Money creation:** Full-reserve backing and requirements on issuance (on receipt of funds) implies - just as with proposed digital pound - a direct exchange of retail settlement assets without net money creation, but draining deposits and reserves from commercial banks.

**Run risk:** The potential for a full reserve stablecoin to serve as a close alternative to holding central bank liabilities raises concerns about the possibility of bank runs into systemic stablecoins as attractive safe-haven assets during times of stress. Implementing limits to prevent these runs is crucial (as argued in response to question 24), as relying solely on prohibiting interest payments may not be enough to deter panic-driven demand. Meanwhile ensuring confidence in full backing (by strictly linking issuance to settlement with finality) will be key to avoiding runs out of a coin or discounting.  
Full reserve backing model:

**New type of money:** The proposed full reserve backing model for stablecoins implies the creation of a new type of money and financial institution via a unique public-private partnership. The DP emphasise that a full-reserve requirement would be essential for stablecoins to meet standards equivalent to commercial bank money. However a full-reserve stablecoin could offer a safer more liquid settlement asset than bank deposits – indeed whilst they would be a promise to pay bank deposits, if regulatory frameworks and supervision assure full backing by central bank funds, stablecoins could mirror many characteristics of a CBDC. Under the proposed regime, a systemic stablecoin would have many of the same implications as the proposed design for the digital pound and concerns about the monetary and financial stability impacts from a digital pound, as well as the effects on commercial banks, are likely to apply similarly to the introduction of full-reserve stablecoins.

**Money creation:** Full-reserve backing and requirements on issuance (on receipt of funds) implies - just as with proposed digital pound - a direct exchange of retail settlement assets without net money creation, but draining deposits and reserves from commercial banks.

**Run risk:** The potential for a full reserve stablecoin to serve as a close alternative to holding central bank liabilities raises concerns about the possibility of bank runs into systemic stablecoins as attractive safe-haven assets during times of stress. Implementing limits to prevent these runs is crucial (as argued in response to question 24), as relying solely on prohibiting interest payments may not be enough to deter panic-driven demand. Meanwhile ensuring confidence in full backing (by strictly linking issuance to settlement with finality) will be key to avoiding runs out of a coin or discounting.

**Credit conditions:** Although not fundamentally altering traditional money creation channel, private stablecoins could still impact credit formation. The potential impact might vary depending on initial conditions. For instance, if excess

reserves are constraining bank lending (due to balance sheet costs or leverage requirements) this could be alleviated by shifting deposits into stablecoins, potentially boosting credit provision. Conversely, in scenarios with limited reserves, strong stablecoin issuance pressure could prompt banks to deleverage, reducing credit supply and market making. Meanwhile, if banks are close to leverage limits, strong stablecoin redemption pressure may similarly prompt bank deleveraging and reduced market making. The Bank would need to consider these factors when managing quantitative easing/tightening, lending operations, and leverage ratio capital requirements. It is worth noting that some of these risks would be mitigated by the PRA's current exclusion of eligible liability-matched claims on central banks from the leverage ratio.

#### **HQLA backing model as an alternative:**

**Money creation and impact on banking:** The issuance of stablecoins backed by securities (as under the FCA's proposed sub-systemic stablecoin regime) has notable implications for money creation channels. When stablecoins are issued against bank deposits, which are then used to purchase government bonds, both the newly minted stablecoins and the initial bank deposits enter circulation without depleting deposits or reserves from the banking system, indicating a net creation of money. However, this setup introduces the potential for substituting bank loan financing with bond funding (potentially contracting credit and deposits), and the replacement of bank deposits with stablecoins for payment transactions – thus the net impact on money creation and banking sector is in principle uncertain. This arrangement mirrors aspects of “shadow banking,” where entities like Money Market Funds (MMFs) issue shares resembling money. However HQLA-backed stablecoins are intended for payments unlike MMFs, which serve as liquid stores of value. Even if adopted as means of payment, stablecoins since they are created against and promise to repay deposits, would extend the hierarchical structure of the financial system where bank deposits represent a promise to pay central bank money, and stablecoins signify a pledge to repay commercial bank deposits.

**Run risk:** By issuing liabilities with a fixed money value, against assets with variable prices, stablecoins would engage in liquidity transformation, rendering them susceptible to runs, potentially affecting asset markets as stablecoins liquidate underlying assets to facilitate redemptions. While stablecoin balance sheets would bear the liquidity mismatch, positioned below bank deposits in the hierarchy of claims (a commitment to redeem coins on demand at par, contingent upon the ability of banks to issue these deposits) they would ultimately rely on elasticity within the banking system, underscoring the importance of market liquidity, intermediation capacity in securities markets, and the central bank's role as market maker of last resort. However, whilst the hierarchy of claims is clear, the perception of stability for stablecoins backed by HQLA vis-a-vis bank deposits remains uncertain. Their narrow business model and backing by safe liquid assets, could potentially attract inflows - similar to some flows seen into money market funds. Nonetheless, the presence of deposit insurance for bank deposits may continue to make them more appealing, particularly for smaller depositors, assuming individual holding limits do not greatly exceed deposit insurance. The likelihood of runs out of HQLA-backed coins may outweigh runs into them. Both scenarios could impact asset markets, but runs into HQLA-backed coins would be expansionary, and recycle liquidity back into the system, potentially alleviating systemic strains.

**Competition for HQLA and UK debt market impact:** Restricting backing assets to the safest and most liquid securities (as proposed by the FCA for regulated stablecoins) helps to reduce credit and liquidity risks for coinholders. However, this strategy places stablecoins in competition with other market participants for these critical assets. This could limit growth, particularly due to constraints posed by the government's bond portfolio structure. Alternatively, a significant shift in gilt purchasing behaviour towards shorter maturities, driven by regulated stablecoins, could expose the UK government to heightened refinancing risks. While the FCA's emphasis on solvency and confidence, rooted in the use of safest assets, is clear, the redeemability of stablecoins hinges on market liquidity, as highlighted by recent/past market events. To address these liquidity risks, mechanisms such as secured credit lines could prove beneficial, enabling stablecoins to swiftly monetize high-quality assets during stress periods without resorting to asset liquidation, akin to practices employed by e.g. CCPs. Ultimately the Bank's willingness to take backing assets onto its own balance sheet would be necessary to mitigate liquidity risks and avoid liquidity problems morphing into solvency problems via asset price feedback.

**Question 12: Do you agree that the proposed remuneration policy is consistent with systemic stablecoins being used primarily for payments?**

It is proposed systemic stablecoins would neither receive interest on reserves balances at the Bank of England nor pay interest on their own coins, thus emphasizing their role in facilitating payments rather than serving as vehicles for savings

or investment. Not paying interest to coinholders aligns with current practices with cash, e-money, and current accounts (though this not mandated), as well as with proposals for the digital pound. However, whilst non-remuneration supports the objective of payments focus, its influence may vary depending on the interest rate environment, and consumer education may play a role in ensuring stablecoins are used as intended given evidence not all consumers distinguish properly between remunerated and unremunerated balances. The non-remuneration of issuers' reserve balances pushes stablecoin contenders towards a transactions-based model, aligning with the policy objective of emphasizing payment utility. While this approach could potentially hinder the development of commercially viable business models, a systemic stablecoin excelling in transfer function convenience, efficiency, and functionality might succeed under such a model. Nevertheless, income from backing-assets is not inherently incompatible with a payments-focused business model, but paying interest on reserves for full reserve coins that cannot engage in liquidity or maturity transformation lacks justification. If reserves were remunerated coins should also be allowed to pay interest (the case for this is ambiguous and similar issues at stake as on question of whether to pay interest on digital pound. These questions tightly interlinked and any future change in policy on digital pound would impact systemic stablecoin regime), or alternatively this need not necessarily be at policy rate. Alternative solutions such as relaxing the full reserve requirement to allow backing assets to be invested in HQLA may be viable but would fundamentally alter the stablecoin's character, and arguably call for regulation under banking regime (or anyway suitable risk mitigations such as liquidity backstop via market maker of last resort). Finally, the decision on devising a remuneration strategy for the digital pound holds significant implications. Whilst we advocate a cautious approach, we also believe further examination, consultation, and public discourse are warranted. Thus, if a future digital pound were at any point to be remunerated, this would impact the proposed systemic stablecoin regime, necessitating thorough consideration of this interaction.

**Question 13: Do you agree with the Bank's proposed requirements on the redemption process, including the role of all firms in the payment chain?**

The redemption requirements outlined for stablecoins establish their character as a claim on the issuer, specifically a promise to pay bank deposits on demand at par. This par exchangeability is essential for their fungibility with existing forms of money, thus claim to also be money. Arguably redemption should be executed at least as fast as existing commercial bank payments (i.e. immediately up to £10,000) and as the current convertibility of bank deposits for cash (i.e. immediately and without charge). However this redeemability is essential not only for maintaining trust and confidence in the stablecoins, but also - since settlement between stablecoin issuer and banks requires issuance and redemption - for enabling seamless transfers between stablecoins and bank accounts for transfers, and payments purposes and any sweeping arrangements for enforcement of holding limits (although secondary exchange of coins/deposits already in circulation might also facilitate some level of payments between stablecoins and bank accounts with interbank settlement not settlement between stablecoin issuer and banks). The resulting link between redemption time and payments settlement modalities and speeds implies that redemption must occur at a minimum end of day, or immediately for real time gross settlement that might be needed to support stablecoins' value proposition. However, there is a potential tension between the necessity for swift and low-cost redemption for payments and the need for frequent AML checks on redemptions.

**Question 14: Do you have views on requirements on redemption fees, or prohibiting these, to minimise any frictions across the redemption process?**

The singleness of money within the sterling system demands that all forms of currency maintain their value parity to enable seamless exchange without loss. Redemption fees contradict this principle, undermining the credit relationship a par claim establishes. Ensuring on-demand redemption at par without fees is also pivotal to prevent the emergence of secondary markets where the coins trade away from par. However, complexities do arise regarding fees, particularly in the distinction between payments and transfers vs. redemptions for stablecoins, blurring demarcations observed in traditional banking. Since the imposition of redemption fees could deter adoption, this might be contained by competition. Conversely, fees could be exploited for user retention, fostering concentration dynamics akin to those in BigTech. The prohibition of redemption fees (so issuers bear full redemption costs) is likely to have a significant effect on stablecoin business models, suggesting models that economise on issuance/redemption based payments, with the value proposition being fast low cost in-stablecoin settlement (leading to familiar scale effects). Uncertain or fluctuating fees could trigger runs on stablecoins, posing risks to users. Moreover, if obtaining and redeeming coins is free for users but costly for issuers, vulnerabilities to attack may arise, suggesting equilibrium in costs incurred by both parties for system stability.

**Question 15: Can you identify any issues with the requirements on systemic stablecoin issuers and other relevant firms within a payment chain to cooperate and support the appointed administrators with a view to facilitating redemption or payout in the event of a firm failure?**

It would be important to establish a specific resolution regime for systemic stablecoin issuers to ensure the orderly management of issuer failures and minimize market disruptions. All stablecoin issuers must be resolvable, and potential impediments to resolution need to be identified through tailored resolution plans. The complexity of payment chains and the involvement of multiple parties in redemption and pay-out processes increase the likelihood of issues and delays during firm failures. Therefore, issuers and other relevant entities in payment chains should maintain robust, regularly updated recovery and administration plans, alongside meticulous record-keeping and reconciliation processes, to mitigate delays. These plans, records, and reconciliation processes should undergo rigorous testing and auditing both initially and continuously to ensure effectiveness.

**Question 16: Do you agree that issuers should have access to customer information to be able to fulfil redemptions in the case of the failure of an entity providing the customer interface, e.g. a wallet provider and/or to facilitate a faster payout in insolvency?**

To ensure trust and credibility in the stablecoin market it would be sensible to have access to customer information in such circumstances that fulfil existing KYC and AML checks. It would be beneficial for an orderly 'pay-out' to have information in the form of a 'Single Customer View' file, to fulfil timely redemption in the case of failure. In view of the full reserve backing of a stablecoin it will be the information asymmetry between issuer and customer, that would hinder timely pay-outs by the administrator. Clear rules governing information access should be put in place to ensure their proper usage and smooth functioning during extreme circumstances.

**Question 17: Do you have views on the Bank's proposed safeguarding regime being centred on two key features (statutory trust in favour of coinholders; and safeguarding rules)?**

The Bank's proposed safeguarding regime, centred on statutory trust in favour of coinholders and safeguarding rules, appears suitable. However, the success of this model hinges on meticulous execution of organizational controls, rigorous record-keeping, seamless reconciliation processes, and strict segregation of funds. It is imperative that these operational aspects are diligently inspected and audited both initially and continuously. Any lapses in these areas must be swiftly identified and addressed to ensure the integrity and effectiveness of the safeguarding regime.

**Question 18: Do you think there are any other features that need to be reflected in the safeguarding regime for systemic payment stablecoins?**

Consumers holding stablecoins should have access to their balances swiftly in the event of firm failures, ideally within a timeframe similar to that of traditional bank failures covered by schemes like the Financial Services Compensation Scheme, typically within seven days. Given that stablecoins aim to provide alternatives to physical wallets and current accounts, immediate access to funds is crucial, potentially requiring a predefined time-stamped schedule in these arrangements. A formal resolution regime (as argued in response to question 15) with stabilization options, such as a bridge institution to take on the critical function, could ensure continuity of access in case of issuer failure, minimizing disruptions. The proposed full-reserve requirement should facilitate timely payouts.

**Question 19: Do you agree with the requirements for stablecoins owned by the issuers held in treasury wallets?**

Some issuers "mint" quantities of stablecoin tokens into treasury addresses they control to later transfer to market participants' wallets; others "mint" directly into market participants' wallets. Redemptions are typically handled by sending tokens back to a treasury wallet, with issuers periodically "burning" redeemed tokens, although issuers also have the option "burn" tokens directly from market participants' wallets. The potential leakage of treasury tokens into the market would pose significant risk as it could dilute the stablecoin's value and trigger mass redemptions. This risk should be mitigated. The proposed solution of fully backing treasury tokens would require funding – essentially tier 1 common equity (contrary to FCA interpretation) - and the implications of this burden should be understood. An alternative solution to mitigating this risk might be tight linking of "minting" and "burning" to issuance and redemption with finality, although there may be operational and technical complexities requiring consideration.

**Question 20: Do you consider that the capital requirements would effectively mitigate risks that may result in a shortfall in the backing assets or that can threaten the ability of issuers to operate as a going concern?**

We support the mandate for issuers of stablecoins in systemic payment systems to maintain capital reserves against risks that could lead to backing asset shortfalls or operational disruptions. Modelling capital requirements after those for systemic payment systems seems fitting under the proposed full reserve requirement – given no liquidity or credit risk on reserves. However, stringent enforcement of the full reserve requirement necessitates strict linkage between issuance/redemption and settlement to mitigate settlement risk, especially were issuance/redemption to play a significant role in payments interoperability with the banking sector. Capital requirements should thus consider settlement modalities and legal definitions surrounding issuance/redemption. Meanwhile capital constraints on issuance, could potentially lead to secondary market trading away from par. Whilst individual holding limits can balance the tension between the commitment to par value vs. preventing destabilising shifts from bank deposits to stablecoins, vigilance to the potential impact of capital requirements in this regard might also be required. Additionally, we argue that the proposed requirement to fully back treasury tokens should be acknowledged as an additional capital requirement and Tier 1 loss-absorbing capital for issuers opting for this approach.

**Question 21: Do you have views on the approach (including any existing or bespoke methodologies) that should be considered for calibrating capital requirements?**

We support the Bank's proposal to mandate issuers to transparently identify risks that could result in a shortfall in backing assets, encompassing operational risks like fraud or mismanagement, as well as the expenses associated with distributing assets to coinholders. However, we urge caution, as operators have frequently underestimated these risks, resulting in undercapitalization. Additionally, as acknowledged by the Bank, the industry's novelty and the consequent lack of historical data pose challenges in estimating capital requirements. Therefore, it is imperative for the Bank to meticulously examine issuers' assumptions and subject them to thorough stress-testing both initially and on an ongoing basis. Some specific considerations may include: settlement modalities and legal definitions surrounding issuance/redemption, the role of treasury tokens in logistics of issuance/redemption, and also the potential impact of capital requirements stablecoins ability meet demand for coin at par (all discussed in more detail in response to question 20).

**Question 22: Do you have views on the requirement to hold reserve assets in a statutory trust, to ensure that stablecoins are fully backed and the backing assets are duly protected and available to satisfy coinholders' redemption requests at all times?**

Implementing the same safeguarding regime for reserve assets as for backing assets is a logical step to ensure the integrity and reliability of stablecoin systems.

**Question 23: Do you have views on the range and quality of the assets issuers would be required to hold to mitigate shortfall risks?**

Generally an issuer experiencing a loss due to operational incident may have some opportunity to absorb the loss and restore backing. However the primary focus should nevertheless centre on the stablecoins' capacity to convert backing-assets into bank deposits to fulfil redemption requests, emphasizing the liquidity of these assets, especially during stress events. Reserves represent the gold standard in this regard, offering a reliable source of liquidity. Additionally, other forms of HQLA backing may also be suitable. Recent stress episodes in core government debt markets underscore the potential for liquidity to be a problem exactly when it is needed most, even for the very safest of assets. While this poses a significant consideration for the design of stablecoins substantially backed by HQLA (and the backstops they would require), it may be more acceptable concerning operational risks. Arguably any issuer needing to maintain excessive capital against operational risks should not be permitted to operate.

**Question 24: Do you agree that, at least during a transition, limits would likely be needed for stablecoins used in systemic payment systems, to mitigate financial stability risks stemming from large and rapid outflows of deposits from the banking sector, and risks posed by newly recognised systemic payment systems as they are scaling up?**

The DP emphasizes the necessity for any stablecoin intended for systemic payment systems to adhere to standards equivalent to those expected of commercial bank money, advocating for full reserve backing to achieve this. Arguably

however this backing-arrangement could offer a safer and more liquid settlement asset than bank deposits. The proposal to prohibit stablecoin issuers from paying interest to coinholders could help limit stablecoin use primarily to payments (rather than as a store of value) in general, so avoid disruptive bank disintermediation. However, given full-reserve stablecoins would be the next safest thing to a CBDC, concerns arise regarding the potential for runs out of bank deposits into systemic stablecoins during stress events, suggesting a need to implement individual holding limits as a precautionary measure. These limits would not only guard against disruptive deposit flight but also serve as a defence against stablecoin trading away from par on secondary markets (in response to issuance constraints). Whilst the DP suggests limits might be temporary, run risk and the potential for issuance constraints to undermine par would be permanent. The intricacies of enforcing such limits, particularly across the entire system, would pose complex challenges however, especially concerning potential implications for issuer cost dynamics and viable business models.

**Question 25: Do you have views on the use, calibration and practicalities of limits?**

Since it would be the overall shift out of bank deposits into reserves that would matter, arguably holding limits to mitigate financial stability risks associated with large deposit outflows from the banking sector should be set for overall individual holdings of stablecoins (across all issuers), and potentially also account for combined stablecoin and digital pound balances if the digital pound is introduced. Additionally, holding limits may be crucial not only to prevent large scale deposit flight from the banking sector, but also to serve as a defence against secondary market trading deviations from parity in response to issuance constraints, implying this might also be a key consideration when calibrating limits. However, implementing and enforcing these limits would pose complex challenges, particularly in tracking and managing overall balances across the system and establishing sweeping arrangements between stablecoin wallets and bank accounts. This sort of sweeping would require settlement (presumably by RTGS) and could significantly drive issuance/redemption volumes impacting issuer cost dynamics and viable business models. Since lower limits would likely exercise this system more, this might also be taken into account when calibrating limits. Addressing corporate involvement introduces complexities, including establishing distinct limits for firms and defining what qualifies as a “firm,” potentially requiring different limits for different types of firms. If secondary markets are introduced, exempting intermediaries from limits is crucial. Regulatory arbitrage risks arise from shell companies, undermining limit effectiveness. The elastic UK corporate landscape may compromise individual holding limits’ efficacy. Implementing automated sweeping facilities may make lower limits viable for firms, but cost and efficiency implications from large transaction volumes should be considered.

**Question 26: Do you have other views on the Bank’s proposals for requirements for systemic stablecoin issuers, as set out in Section 5?**

No opinion.

**Question 27: Considering the requirements for issuers in Sections 4 and 5, how might business models need to change in order to retain commercial viability from those in the market today?**

**No revenue potential in issuance:** Business models in the market today rely on generating income from investing coinholders’ funds; however, proposed regulations mandate full reserve backing for systemic stablecoins, eliminating income generation from backing assets and transferring seigniorage income to the Bank. Prohibition from charging redemption fees further undermines viable business models based solely on issuance. However, we find little justification for paying interest (at an administered, not market rate) on reserves for full-reserve stablecoins unable to engaged in any liquidity or maturity transformation and that do not pay interest to coinholders. The proposition of passing seigniorage to coinholders through interest on coin holdings poses risks, potentially affecting payment focus. Alternatively, relaxing full reserve requirements to permit investments in HQLA could be a viable alternative but would alter stablecoin characteristics, potentially necessitating regulation under banking regulations (or anyway liquidity and capital requirements, liquidity backstop via market maker of last resort, and could involve participation in deposit insurance). In any case, we believe consistency is needed, in particular regarding both narrow/limited purpose banking models under banking vs. stablecoin regimes, and e-money providers that achieve scale.

**Potential for transaction-based models:** A systemic stablecoin, lacking income from assets, must excel in transfer function efficiencies and additional features to succeed. In domestic payments, competitive fees and settlement times could attract merchants and foster adoption. Payments between bank deposits and stablecoin (presumably via RTGS) would drive issuance/redemption and this may be costly for stablecoins and perhaps for banks (via impact on intraday



liquidity costs) - settlement modalities would affect issuance/redemption costs and settlement times (issuance should be strictly linked to settlement finality to ensure full reserve requirement is met). However, stablecoin issuers able to bring efficiency and innovation to on-platform/in-stablecoin payments - where full reserve backing would enable 24/7/365 real-time gross settlement – might succeed (with familiar network effects likely leading to dominant player(s)). The proposed regime might thus enable private stablecoins to emulate successful models like Swish, albeit current opportunities in the UK market are not assessed. In this sense the issuance function could thus influence competition in the transaction function relative to current payments sector.

**Commercial viability if the digital pound is introduced?** We [previously proposed](#) that a platform model for the digital pound could enable Payment Interface Providers (PIPs) to introduce innovative payment features, similar to those that might attract users to privately issued stablecoins, while still retaining valuable seigniorage. However, the proposed full reserve requirement for private stablecoins combined with non-remuneration of reserve balances, would eliminate the possibility of seigniorage competition. As a result, competition between private stablecoins and digital pound PIPs would focus on transfer and store of value functions, with PIPs benefiting from use of a settlement asset that is a direct claim on the Bank (compared to claim on stablecoin issuer). This raises the question of whether, given these conditions, potential stablecoin issuers might find it more advantageous to compete as a PIP than as a private issuer. Conversely, considering the immediate regulation of stablecoins, it is worth contemplating how the success of regulated stablecoin might impact the future case for the digital pound.

**Question 28: Do you agree with our proposed expectations for custodial wallet providers for systemic stablecoins (including when provided via exchanges) and how we propose applying them in a systemic stablecoin payment chain?**

No opinion.

**Question 29: Do you consider that unhosted wallets could operate in a way that the systemic stablecoin payment chains can meet the Bank's expectations (including for the issuer to deliver against the Bank's requirements set out in this Discussion Paper)?**

While we remain open to the potential existence of solutions, the inherent anonymity linked with unhosted wallets presents a significant challenge. It is difficult to envision how payment chains could effectively function with unhosted wallets while meeting the stringent expectations and requirements set forth by the Bank. These requirements include provisions related to redemptions, holding limits, and crucially, AML checks. While certain considerations, such as holding limits, may not be applicable to non-systemic coins, others, particularly AML checks, should arguably be a prerequisite for issuers operating at any scale, if especially at a systemic level.

**Question 30: Do you agree with the Bank's proposal to regulate off-chain ledgers operated at systemic scale under the same requirements otherwise applicable to systemic payment systems?**

No opinion.

**Question 31: Do you agree with the Bank's approach to regulating service providers to firms operating in systemic stablecoin payment chains?**

No opinion.

**Question 32: The Bank will have due regard to the Public Sector Equality Duty, including considering the impact of proposals for the design of the regulatory framework for systemic payment stablecoins on those who share protected characteristics, as provided by the Equality Act 2010. Please indicate if you believe any of the proposals in this Discussion 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 any impact could be mitigated.**

No opinion.

## Full response Part 1: The Bank's proposed regulatory framework

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### 1 Innovation in payments and money, and the role of the Bank

#### 1.1 Question 1: Stablecoin interchangeability and the singleness of money?

**Question 1. Do you agree that, to preserve the singleness of money, systemic payment stablecoins must be fully interchangeable with other forms of money at par?**

*In practice, different forms of money may not always be interchangeable, as specific types may be needed for particular transactions. Thus, ensuring that various settlement assets essential for different payments are exchangeable at parity is key, alongside also managing risks related to monopoly or concentration. Beyond mere parity, the singleness of money ideally entails payments-based interoperability. For any cost, convenience, or functionality advantages stablecoins may be able to offer, they must be fully exchangeable at par with other forms of money and interoperable with them for payments purposes. Introducing a new value transfer system in the UK economy that adds frictions in terms of speed, convenience, fungibility, or cost would be fragmentary and undermine uniformity, detracting from, rather than enhancing, the existing setup. Upholding this principle of singleness of money is crucial to uphold the stability of the UK monetary system and economy.*

As the Bank itself states in the paper, "To maintain confidence in money and payments, all forms of money should have the same value, be generally accepted as a means of payment and be interchangeable without loss of value with all other forms of money used in the economy."

The concept of interchangeability in the context of currency raises questions about what this truly entails. It is important to recognize that different forms of money often lack true interchangeability; specific types of money may be required for certain transactions - such as needing bank deposits for online purchases and cash for offline transactions. This phenomenon is not unlike the necessity for Euros in the Eurozone and Yuan in China, except that bank deposits and cash exchange at par! Par exchangeability is key and the ultimate test of the singleness of money. The discussion paper from the Bank regarding the digital pound highlights concerns about fragmentation arising from restrictions on accessing certain services based on the chosen form of payment. However, such fragmentation may be inevitable. The crux of the matter lies in two key principles: firstly, ensuring that different forms of settlement assets required for different payments are exchangeable at par, and secondly, managing the risk of monopoly or concentration through competition, contestability, or regulatory measures. More than just convertibility, par means interoperability.

The key question then is how par convertibility between stablecoin and other forms of money would be assured.

##### 1.1.1 Par exchangeability with bank deposits

*The issuance and redemption of stablecoins necessitate settlement in reserves between stablecoin issuers and commercial banks - impacting the balance sheets of both sectors. Par interoperability between stablecoins and bank deposits for payments purposes could occur via issuance and redemption - facilitated by settlements in central bank reserves. Imposing the proposed full reserve requirement would mean strictly linking issuance and redemption to settlement with finality. This process would incur transaction costs that would depend on settlement modality. Under prohibition of redemption fees this could then prove challenging if payments and sweeping drove large volumes of issuance/redemptions. In principle the secondary exchange of stablecoins and bank deposits in circulation could also be used to facilitate payments between stablecoins and bank accounts (based on a currency conversion step - which would need to be at par). The choice (or balance) between issuance/redemption-based settlement of payments vs. a currency conversion based chain, may hinge on cost considerations and implications for settlement times and finality. However net demand for stablecoin settlement liquidity would necessarily have to be met through issuance/redemption (and bank balance sheets would need to flex). These arrangements could significantly affect banks' liquidity needs and costs, warranting further examination, including the potential impact of reserves locked up in funding stablecoin-based settlement on reserve velocity and of possible real-time gross settlement of stablecoin issuance and redemption on intraday liquidity needs. Finally there would be the possibility of convertibility via secondary markets for stablecoins.*

***However we question whether secondary markets would arise where issuers stands ready to meet all demand at par and settlement and clearing systems exist for payments purposes, and secondary market trading away from par would go against the singleness of money.***

#### *1.1.1.1 Issuance/redemption and payments-based par exchange and interoperability*

Issuance and redemption will always require settlement in reserves between stablecoin issuers and commercial banks - with issuance leading to expansion of stablecoin balance sheet and contraction of commercial bank (and banking sector) balance sheet (and vice versa for redemption). Redemption would thus incur the cost of settlement (presumably via RTGS). Since settlement arrangements are not explicitly discussed, it is not discussed what settlement modality would be appropriate or allowed. Imposing the proposed full reserve requirement (see response to question 11 on backing arrangements (section 3.1)) would mean strictly linking issuance and redemption to settlement with finality.

Payments-based par interoperability between bank deposits and stablecoin - such as transferring funds or making payments between a bank account and a stablecoin wallet or vice versa – might happen via issuance and redemption (i.e. payments between stablecoin and bank accounts settle in central bank reserves). Since issuance and redemption would always happen at par, so would issuance/redemption based payments (Garratt & Shin, 2023). This highlights an intrinsic connection between issuance and transfer functions (although this could be intermediated). Whilst a full reserve stablecoin would by definition have no trouble finding the settlement liquidity, it would still incur the transaction costs. Given proposals to potentially prohibit redemption fees, this might prove challenging, especially a large relative volume of payments between banks and stablecoins were to drive a lot of issuance and redemption.

An additional possibility though, is that the secondary exchange between stablecoins and bank deposits in circulation might facilitate some of these sorts of payments – i.e. if payment would involve a currency conversion step - where you swap deposits for stablecoin (or vice versa depending on what direction you are going in) - and settlement then happens either by moving bank deposits between bank accounts (requiring interbank settlement if accounts with different banks) or moving stablecoin between stablecoin wallets (which may be on-platform or between-platforms e.g. DLTs). In principle only net demand for settlement liquidity in the stablecoin would need to be met through issuance/redemption based settlement. This might occur in a p2p way or be facilitated by a vertically integrated stablecoin with accounts at different banks (think AliPay)<sup>1</sup>.

Whether this sort of clearing arrangement makes sense/has advantages for stablecoins with access to RTGS settlement would presumably depend on the relative cost of issuance/redemption vs. secondary exchange of currency in circulation. It is also the case that these choices may have implications in terms of settlement times and finality. The experience of fast payment systems on deferred net vs. coupled real time gross settlement between payment system providers may provide some relevant reference points.

The conclusions to these questions might also have important implications for the liquidity needs and costs of banks. The detailed implications require thinking through. One immediate thought is for example, if reserves do not circulate between stablecoin issuers and the banking system (but are locked up on stablecoin issuer balance sheet to fund stablecoin based settlement system), then this could reduce the velocity of reserves with implications for the systems reserve requirements that would need to be sourced by banks. Another thought is that if a real time gross settlement modality is employed for issuance/redemption, whilst a full reserve stablecoin would by definition have the liquidity to meet redemptions, banks would also need to hold liquidity buffers to support gross settlement of issuance driven demand.

Although the idea is that stablecoin would be fungible with bank deposits, settlement between stablecoin and banks should not happen by transferring stablecoin to commercial banks (as a digital bearer asset). This would entail the bank backing its own deposit liabilities with stablecoin. This scenario creates a circular hierarchy of settlement assets (since the stablecoin is a promise to pay bank deposits on demand) and exposes the bank to credit risk from the stablecoin issuer.

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<sup>1</sup> This somehow resembles interbank market for reserves, except that here the price would need to be par (the stablecoin issuer resembles a central bank targeting a zero nominal rate) with stablecoin and deposits exchanging at a transaction fee rather than a market price for scarce liquidity.

### 1.1.1.2 Secondary markets based exchangeability

Stablecoins and deposits could also in principle be exchanged not via issuance but via secondary markets. Intermediated markets would only arise if there were regular arbitrage opportunities (i.e. if the coin and bank deposits routinely traded away from par). This would thus be inconsistent with the principle that all money should have the same value – the singleness of money - and imply accepting (at least small) deviations. We thus argue that policies to ensure par may also preclude secondary markets arising (see response to question 2 on secondary markets and the singleness of money (section 1.2)). The question of whether secondary markets would arise, and also the magnitude of par deviations and stability of secondary market prices if they were to arise, would depend in particular on the level of trust that market participants place in the issuer's ability and willingness to exchange it for bank deposits without loss of value (see more detailed discussion in response to question 2 on secondary markets (also this section 1.1) and in response to questions 13-16 on redemption (see section 3.3)).

Given that secondary markets would be exchange of money but not payment,<sup>2</sup> this raises the question why then have a currency dealer at all. However under costly redemption (whether for issuer or coinholder) it might (as described above – section 1.1.1.1) also be possible to have more of a matching market (rather than arbitrage market) where coins and bank deposits are exchanged at par for a minimal transaction fee.

### 1.1.2 Par exchangeability with physical currency

***The DP underscores the necessity for any form of money in the UK economy to maintain its value consistently and be interchangeable at par with other sterling-denominated money, encompassing both Bank of England-issued cash and commercial bank-issued bank deposits. However, the mechanism and feasibility for convertibility with cash or the process of issuance or redemption against cash are not discussed. Given bank deposits promise redeemability in cash, and stablecoins promise bank deposits, stablecoins would also be exchangeable for physical currency and vice versa – even if perhaps only indirectly. We also note here the Bank's ambitions for the digital pound to provide fast and convenient convertibility into and out of cash, and stablecoin convertibility with the digital pound.***

The DP states that “A necessary requirement for any form of money used with confidence as a means of payment in the UK economy is that it maintains its value at all times and is interchangeable at par for other forms of sterling-denominated money. This includes both cash issued by the Bank of England and money issued by commercial banks in the form of bank deposits.” (BoE DP, p.54). However, it is not at all clear/explicit about how convertibility with cash would work or on issuance or redemption against cash.

We have previously argued that the physical nature of cash makes moving between cash and other forms of money challenging. Given that cash is no longer the most efficient possible bridging asset between bank deposits, it would seem even less practical to e.g. require (future) stablecoin issuers to distribute bank notes (Gillmore Centre Financial Technology, 2023). However, since convertibility between different types of digital money should be easier than between digital money and cash, perhaps easy convertibility with any digital money providing convertibility with cash is sufficient? Given bank deposits promise redeemability in cash, and stablecoins promise bank deposits, stablecoins would also be exchangeable for physical currency and vice versa – even if perhaps only indirectly. We also note here the Bank's ambitions for the digital pound to provide fast and convenient convertibility into and out of cash, and stablecoin convertibility with the digital pound (Bank of England, 2023c, 2023b) (although this ambition may be hard to achieve even for the digital pound).<sup>3</sup>

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2 The cash leg of secondary market transactions would settle in bank deposits (by payment between bank accounts, requiring interbank settlement if these are with different banks) and the stablecoin leg by the on-platform transfer of coin. Bank balance sheets change and so do wallet balances, but issuer balance sheet does not. This is exchange of money but not payment.

3 Noting LINK network is generally withdrawal only.

### 1.1.3 Par exchangeability between stablecoins

***A full reserve requirement for stablecoins implies settlement between different stablecoins in reserves. As they would by definition all have settlement accounts, in theory this should be straightforward. Whilst the legal claim on issuers would be par redemption in bank deposits, this redeemability against bank deposits and proposed requirements on redemption fees should make different stablecoins de facto exchangeable (via bank deposits), and this might eliminate any potential incentive for stablecoins to resist settling directly between themselves. The secondary exchange of different coins raises more complex issues, with parallels to considerations on the secondary exchange of stablecoins and bank deposits.***

Implementing a full reserve requirement implies that different stablecoins would need to settle in reserves.<sup>4</sup> In theory, this should be straightforward since all issuers would by definition require settlement accounts with the Bank and participate in the same settlement system. However, if the legal claim on the issuer is par redemption in bank deposits, and there are restrictions on redemption fees that apply to interchangeability with bank deposits (as the DP proposes – we discuss these issues in section 3.3), in principle there may be some risk issuers might opt to introduce frictional exchangeability with other stablecoins.

Despite this potential complication, given the requirements on redeemability against bank deposits, stablecoins should remain de facto exchangeable - in practice, it would always be possible to swap coin 1 for bank deposits and then exchange bank deposits for coin 2. While this may introduce an extra step and cost to the system, it wouldn't directly affect the coinholder swapping coins. Therefore, it might eliminate any incentive for stablecoins to resist settling directly between themselves.

This leaves open a range of potential complex issues regarding the secondary exchange of different coins in circulation. Similar considerations and arguments as we have set out in relation to the question of secondary exchange of stablecoins and bank deposits (which we discuss in section 1.1.1.2 and 1.2) might potentially equally apply here.

### 1.1.4 Par exchangeability with the digital pound

***As we previously argued in our response on the digital pound, on demand convertibility at par between the digital pound – if introduced – and any future sterling stablecoins, would be essential to achieving a seamless system. This would provide the interchangeability required for all money, and also extend the monetary anchor provided by central bank money to private stablecoin issuance.***

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<sup>4</sup> It is argued in section 1.1.1.1 that stablecoin issuers and commercial banks must settle in reserves (just as banks do), as settling in stablecoin would imply banks issuing deposits against stablecoins - this would lead to circularity in claims: a stablecoin is a promise to pay bank deposits, and bank deposits are a promise to pay central bank money. Similarly, different stablecoins should settle in reserves, because one coin issuing against another coin would further extend the hierarchy of claims.

## 1.2 Question 2: Secondary market trading and the singleness of money?

**Question 2. Do you have views on further requirements that may be needed to ensure the singleness of money when stablecoins are traded in secondary markets?**

*The singleness of money within the sterling system demands that all forms of currency maintain their value parity to enable seamless exchange without loss. Any trading deviations from par, even minor ones, would compromise this singleness and undermine their utility in payments. The proposed mandate for issuers to ensure on-demand redemption at par provides a robust foundation, bolstered by the full reserve requirement. It is improbable that banks would refuse redemptions arriving as payments, and exempting reserves from leverage ratios mitigates the risk of redemption pressure prompting bank deleveraging actions. While the DP outlines stringent standards on redemption, potential constraints on issuance should also be considered, such as capital or other capacity or profitability constraints on the issuer, or limits to the Bank's willingness to meet reserve demand. Individual holding limits (but only individual limits will do) could serve as an effective defence against vulnerabilities in issuance, so play a crucial role in mitigating the risk of secondary market trading away from par. We note that secondary markets are not necessarily required for payments settlement purposes and with these safeguards secondary markets may not arise at all. However, if settlement between stablecoins and banks (issuance/redemption) proves costly, alternative secondary exchange - more resembling a clearing systems - could emerge to facilitate efficient transactions, potentially supporting stablecoin value propositions for domestic but also in cross-border payments.*

We firmly advocate that the singleness of money requires that all forms of money (within the sterling system) are easily exchanged without loss of value. Par exchange is the fundamental test of this. If coins trade in secondary markets, they not only can, but must trade away from par. Trading in secondary markets thus precludes the idea that there can be “singleness”. Deviation from par in secondary markets would undermine not only trust and confidence in the coin itself and compromise its general acceptance, but also the singleness of money and trust and confidence in money and payments more broadly. This should be taken very seriously.

Arguably the most robust strategy for ensuring a coin does not trade away from par in secondary markets is surely to ensure that it can be readily redeemed from the issuer at par without loss of value. If coins can always be readily obtained and redeemed without loss of value, why would coins ever trade away from par?<sup>5</sup> Indeed, why would a secondary market even arise in this situation? Par redemption is thus the key challenge here. We thus support proposals on requiring stablecoins to redeem coins on demand at par at minimal (or without) redemption fee (see our discussion in response to questions on redemption requirements – section 3.3). Stipulation that issuers should always be required to provide on demand redemption at par means failure of par would show up as stablecoin failure rather than a market price. However, under proposed full reserve backing model, this should not in principle be a problem for issuers. We note that in general if banks were close to their leverage ratio this could make it difficult for them to accommodate stablecoin redemptions (as leverage ratio would tighten). Moreover, since these would arrive as customer payments, they would not be discretionary. It could thus prompt banks to deleverage by shedding assets, cutting their supply of credit, or withdrawing from market making activities. However, we note in this regard that the PRA currently excludes eligible liability-matched claims on central banks from the leverage ratio, mitigating this type of risk.

Whilst the DP articulates stringent standards on redemption, this may leave more open the matter of limits to issuance. If demand for a coin exceeds supply but the stablecoin is unable or unwilling to issue more coins, this could also cause trading away from par in secondary markets. The question of course is how and whether this situation could arise. The potential scenario of capital constraints impacting the stablecoin's capacity to expand issuance warrants consideration. Though current proposals on capital requirements seemingly do not constrain stablecoin leverage, the design of capital requirements should explicitly take this issue into account (see our discussion in response to question 3.5 on capital requirements). However, if a coin faces other capacity or profitability constraints on issuance these could in principle lead to their coins trading away from par.

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<sup>5</sup> Even if uniformed participants were ready to buy above par or sell below par, the simplicity of arbitraging this situation if coins are easily obtained from/ redeemed with issuer should provide strong discipline (noting also that anybody could easily engage in this sort of arbitrage given that under proposals, any coinholder has right of redemption).

Another possible consideration might be limits to the Bank of England's willingness to meet stablecoin demand for reserves: the Bank of England generally accommodates changes in demand for its liabilities/reserves through changes in the amount of assets it holds – often government bonds. Thus, in principle large enough changes in the level of demand for reserves generated by stablecoin issuance (or perhaps volatility generated by issuance and redemption) could have potential to complicate/impact the Banks balance sheet management and monetary policy implementation (e.g. liquidity demand spikes in run situations etc. – see 3.1.1.3). If limits to the Banks' willingness to meet demand were reached this would be highly disruptive: not only might coins in issuance then trade away from par, but perhaps even more importantly, given the role of issuance in payments, this would imply/entail settlement fails for everyday payments.

We note that individual holding limits may be one possible – perhaps the most effective available – line of defence against these vulnerabilities on the issuance side. This should thus potentially be a key consideration in setting/calibrating and updating holding limits (see our discussion on questions 24-25 on holding limits – section 4.1) which might thus play a central role not just in mitigating risk of largescale deposit flight from the banking sector, but also in defending par coverability and the singleness of money under the entry of privately issued stablecoins. In [our response on the digital pound](#) (Gillmore Centre Financial Technology, 2023), we raised the question whether even individual holding limits could lead to the emergence of some sort of shadow price - we do not have further insights to add at this stage.

At present, the Bank has indicated its reluctance to outrightly prohibit the trading of systemic payment stablecoins on secondary markets, opting instead to maintain a vigilant stance. The feasibility/practicality of prohibiting such trading may be uncertain and could potentially incur supervision and enforcement costs. The question of how to approach secondary market trading also prompts inquiry into the potential significance of secondary markets within the broader system. Existing stablecoins impose various restrictions on redemption, giving a vital role to intermediaries and secondary markets. However, under the Bank's proposals, which mandate issuers to offer on-demand redemption at par to all coinholders, coupled with full reserve backing to mitigate credit and liquidity risks in settlements between stablecoins and banks, the need for secondary markets may be obviated. As discussed above, secondary markets might still arise if there are issuance constraints, but here arbitrageurs would be of limited help (once their inventories are run down elasticity can only come ultimately from the issuer).

We also note that concern about secondary markets to some extent presupposes a bearer instrument model (i.e. a transferrable claim on the issuer).<sup>6</sup> Given the broad scope of the regulatory framework set out, this need not of course necessarily/always be the case. However even considering the case that coins are issued as digital bearer instruments, payments from stablecoin wallet to bank accounts must be settled in reserves – i.e. via redemption - if these payments were settled via transfer of stablecoin to the commercial bank (rather than transfer of reserves from stablecoin issuer to the bank) then the bank would end up backing its own deposit liabilities with stablecoin (which are of course a promise to pay bank deposits!) and assume credit risk exposure to the stablecoin issuer - this seems clearly undesirable. Settlement in reserves with expansion/contraction (issuance/redemption) of issuer balance sheet will be conducive to par since this would simply be implemented by the Bank of England operated settlement system. Redemptions with the issuer may be driven both by portfolio decisions (over holding bank deposits vs. stablecoin) and by payments (between stablecoin wallets and bank accounts). Meanwhile the settlement of payments between stablecoin wallets simply requires the transfer of stablecoin between payer and payee. In this sense from a payments perspective secondary markets are not required raising the question why then have a currency dealer at all (where business model is based on regular deviations from par - rather than price of liquidity – so precluding singleness of money)?

One potential motivation could be e.g. if redemption costs from settlement between stablecoin issuer and banks (presumably via RTGS) is costly (but these costs cannot be passed on by the issuer), it may make sense to facilitate some sort of secondary market exchange if this can be achieved at lower cost. However perhaps this could be organised more as some sort of alternative clearing system (rather than via arbitrage trading).

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<sup>6</sup> Even if uniformed participants were ready to buy above par or sell below par, the simplicity of arbitraging this situation if coins are easily obtained from/ redeemed with issuer should provide strong discipline (noting also that anybody could easily engage in this sort of arbitrage given that under proposals, any coinholder has right of redemption).

Of course, these transactions would lead to settlement obligations between banks, but these might benefit from efficiencies that issuance and redemption (real time gross settlement in reserves) does not. This type of arrangement could also allow conversion between sterling and non-sterling stablecoins without the need for issuance/redemption which might support the value proposition stablecoin could provide in cross-border payments – potentially a key use case.

## 2. Summary of some key points

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### 1.1 Question 3: Relevance?

**Question 3. Do you agree that the most likely, and suitable, payment systems using new forms of digital money to become systemic in the UK are sterling-denominated stablecoins which are backed by assets denominated in fiat currency?**

*We are seeing the emergence of numerous new and aspiring stablecoin issuers wanting their liabilities to be acceptance as settlement assets. The promises of current contenders lack the credibility necessary to be suitable for widespread adoption in everyday payments, and are predominantly USD-pegged and backed by dollar-denominated assets, making their adoption in the UK even more unlikely - though the prospect of non-sterling stablecoins gaining prominence as liquid stores of value or safe haven assets might be taken more seriously. Yet, even if the par promises of these new issuers are inadequate to establish their suitability, they could nevertheless become convincing enough to gain traction, especially if issuers offer attractive convenience and functionality (although use cases not covered by the DP including cross-border payments – not domestic payments - may be a more likely to see early diffusion). Political opposition to initiatives like Libra has not halted progress – underscored by developments such as PayPal's recent launch of a USD stablecoin and card companies integrating stablecoins into their networks. As stablecoins inch closer to the possibility of widespread adoption, policymakers face the dilemma of whether to ignore, shut down, or collaborate with them on par. While shutting them down may seem appealing, regulating to mitigate risks whilst supporting potential for innovation and competition may be more principled and more prudent. However, this sort of pre-emptive collaboration will inevitably further increase the likelihood of/accelerate stablecoin integration and further risk a significant halo effect for unregulated issuers.*

We are seeing an explosion of new and would be issuers who would like their liabilities to be seen and used as a store of value and settlement asset. The suitability and potential for acceptance of these for payments purposes comes down in large part (though far from entirely) to the reliability with which they can be exchanged without loss of value for already accepted forms of money (commercial bank deposits and/or physical currency - but especially bank deposits). It is this promise of par that makes stablecoins contenders (at least) to become accepted as money for payments purposes.

Considering current stablecoin contenders, this promise probably lacks the necessary credibility to make wide adoption for payments purposes likely, and they certainly lack the reliability to make them suitable. Given that existing issuers are largely USD pegged and backed by dollar denominated assets, this prospect seems even less imminent for the UK - although in the longer term even the possibility non-sterling denominated stablecoins could become widely used should not be entirely discounted. Moreover the potential for non-sterling denominated stablecoins to become a significant store of value and/or safe haven asset, may be much more immediately plausible (we note here e.g. the rapidly developing role of US dollar pegged stablecoins in hyperinflation countries - not just as an inflation hedge but in everyday payments.<sup>7</sup> Whilst the strength and stability of sterling makes this sort of dollarization highly unlikely, a run out of bank deposits into US dollar stablecoins when we have our next banking crisis might not be outside the realms of possibility – especially in the absence of an alternative sterling alternative such as digital pound [ref our response on digital pound consultation]).

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<sup>7</sup> See e.g. The Banker reporting on the situation in Argentina and other South American economies (Montagner, 2023): <https://www.thebanker.com/Stable-coins-gain-momentum-in-Argentina-as-peso-plummets-1698742139>



However, even if the promises of new issuers are not adequate to make them suitable, they might happen anyway. Plausibly if new sterling issuers offering advantages in terms of cost, convenience and functionality maintain par convincingly enough (whatever their backing arrangements), many people in the UK could quickly start to use stablecoins for everyday payments. This could particularly be the case if institutions with existing reputation and networks decided to issue stablecoin. We note here both how UK consumers may already fail to appreciate the different levels of protection when adopting e-monies compared to bank deposits, as well as the potential for payments innovations to overcome network effects and diffuse rapidly (as demonstrated by experiences such as the stellar rise of Swish in Sweden).<sup>8</sup> Whilst political opposition crushed Libra,<sup>9</sup> this did not end the story – far from it. Note e.g. PayPal’s recent launch of a USD stablecoin without any federal policy framework in place (having obtained the necessary approvals to launch under state law).<sup>10</sup> And card companies are also increasingly integrating stablecoins into their networks (e.g. Visa’s recent expansion in stablecoin settlement capabilities to allow merchants to accept stablecoins).<sup>11</sup>

If stablecoin became widely adopted, policy would then be faced with a question of what to do about the new contenders. Ignore them – caveat emptor? Shut them down? Or collaborate with them on par – via regulation and market liquidity backstop? In a situation where use has already grown, caveat emptor could be highly problematic from a consumer protection, perhaps systemic risk, and a range of other perspectives. Shut them down might be a simple attractive solution – or it might not! If this is the approach, it would be best pursued early and by all jurisdictions. However, this sort of decisiveness and consensus may be hard and unlikely (note again here PayPal launch under state law whilst federal law makers whilst Congress has not yet been able to reach a consensus). It would also shut the door on potential innovation and competition in an industry characterised by very high barriers to entry and monopolistic positions. Besides which, it would be heavy handed - and might ultimately lead to unpredictable political backlash. If stablecoins happened anyway, there would arguably be strong pressure to choose to collaborate (this sort of argument is made for example by Awrey (2020)<sup>12</sup>). If it could happen anyway, there may be a strong argument that the prudent approach is to regulate in advance, rather than waiting for failures and harms. In any case there will be other pressures to regulate in advance: Meta was a social media platform that wanted to enter financial services to capitalise on its data advantages. It was challenging a significant convention on the separation between financial and payments companies and non-financial companies (this perhaps understates the political obstacles). But if established credible financials and payments institutions bring forth serious proposals, these will need to be given due consideration, and potentially regulated space.

But there is some inevitable circularity to pre-emptive collaboration which will certainly increase the likelihood that it will happen and create the possibility of new public-private partnerships - regulation and supervision will allow new forms of stablecoin that private markets could not have brought forth (note e.g. Société Générale’s announced stablecoin launch in anticipation of MiCa coming into force (Asgari, 2023)). Not only will it bring forth new regulated contenders, but it is highly likely to also generate some halo effect for non-regulated issuers (and potential for consumer confusion).

As a final note, whilst the DP focusses on retail use cases, some form of wholesale use case stablecoin operating for a private settlement system might be as or more likely to become systemic.

If stablecoin became widely adopted, policy would then be faced with a question of what to do about the new contenders. Ignore them – caveat emptor? Shut them down? Or collaborate with them on par – via regulation and market liquidity backstop? In a situation where use has already grown, caveat emptor could be highly problematic from a consumer protection, perhaps systemic risk, and a range of other perspectives.

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8 See e.g. Riksbank (2022).

9 E.g. see (Murphy & Stacey, 2022) and <https://www.reuters.com/technology/facebooks-cryptocurrency-venture-wind-down-after-asset-sale-silver-gate-2022-02-01/>

10 This reporting on “why PayPal’s stablecoin is likely to succeed where Libra failed” <https://www.reuters.com/technology/why-paypals-stablecoin-is-likely-succeed-where-facebooks-libra-failed-2023-08-21/>  
Other reporting on PayPal launch: <https://www.bloomberg.com/news/newsletters/2023-09-28/paypal-s-stablecoin-could-become-a-risky-success-pyusd-py-pl?leadSource=verify%20wall>

11 See VISA (2023) here: <https://usa.visa.com/about-visa/newsroom/press-releases.releaseId.19881.html>

12 Albeit specifically in US context where state/federal system and a range of other factors make a significant difference to the policy context.

Shut them down might be a simple attractive solution – or it might not! If this is the approach, it would be best pursued early and by all jurisdictions.

If stablecoin became widely adopted, policy would then be faced with a question of what to do about the new contenders. Ignore them – caveat emptor? Shut them down? Or collaborate with them on par – via regulation and market liquidity backstop? In a situation where use has already grown, caveat emptor could be highly problematic from a consumer protection, perhaps systemic risk, and a range of other perspectives. Shut them down might be a simple attractive solution – or it might not! If this is the approach, it would be best pursued early and by all jurisdictions.

However, this sort of decisiveness and consensus may be hard and unlikely (note again here PayPal launch under state law whilst federal law makers whilst Congress has not yet been able to reach a consensus). It would also shut the door on potential innovation and competition in an industry characterised by very high barriers to entry and monopolistic positions. Besides which, it would be heavy handed - and might ultimately lead to unpredictable political backlash. If stablecoins happened anyway, there would arguably be strong pressure to choose to collaborate (this sort of argument is made for example by Awrey (2020) ). If it could happen anyway, there may be a strong argument that the prudent approach is to regulate in advance, rather than waiting for failures and harms. In any case there will be other pressures to regulate in advance: Meta was a social media platform that wanted to enter financial services to capitalise on its data advantages. It was challenging a significant convention on the separation between financial and payments companies and non-financial companies (this perhaps understates the political obstacles). But if established credible financials and payments institutions bring forth serious proposals, these will need to be given due consideration, and potentially regulated space.

But there is some inevitable circularity to pre-emptive collaboration which will certainly increase the likelihood that it will happen and create the possibility of new public-private partnerships - regulation and supervision will allow new forms of stablecoin that private markets could not have brought forth (note e.g. Société Générale's announced stablecoin launch in anticipation of MiCa coming into force (Asgari, 2023)). Not only will it bring forth new regulated contenders, but it is highly likely to also generate some halo effect for non-regulated issuers (and potential for consumer confusion).

As a final note, whilst the DP focusses on retail use cases, some form of wholesale use case stablecoin operating for a private settlement system might be as or more likely to become systemic.

## 1.2 Question 4: Assessing systemic importance?

### **Question 4. Do you agree with the Bank's proposed approach to assessing the systemic importance of stablecoins used for payments?**

We note that both systemic and sub-systemic coins are expected (under BoE and FCA proposals) to be money (used for everyday payments in the UK). However, a different level of safety is to be expected of each, with systemic coins expected to meet equivalent standards to commercial bank money, while sub-systemic coins would not be.

Given the potential that a limited-purpose stablecoin might evolve into a widely used coin bringing monetary and financial stability risks, we believe a proportional graduated approach to regulation probably makes sense. We also note that since both large financial firms and large technology companies (big techs) launching a stablecoin could potentially leverage their existing positions (size, networks, reputation etc.) to rapidly scale (BIS, 2019; Petralia et al., 2019), it may also make sense to include provision for “systemic at launch”.

This said, we also see a number of potential issues and risks arising both from the fundamental premise of the Act that distinguishes systemic from non-systemic coins, as well as some of the particular details of non-alignment between the two regulatory regimes, that we recommend giving careful consideration.

### 1.2.1 *The proposed systemic vs. sub-systemic boundary and the singleness of money*

***While the same regulatory standards are not expected of all banks, we nevertheless expect uniform safety of all bank deposit liabilities. In contrast, under the proposed regulatory framework for stablecoins for payments, some coins will be held to the same standards as bank deposits, and some will not. Arguably this risks confusing consumers and undermining confidence in money and payments.***

We would point out, that under the current system of bank regulation, whilst we may expect different standards of different issuers (mostly reflecting whether or not their failure could be managed in an orderly way due to their size and/or interconnectedness), we nevertheless expect the same standards of their deposit liabilities. I.e. we have differing regulatory requirements on small challenger banks, compared to more established banks, compared to G-SIBs, and yet bank deposits are bank deposits and the liabilities of all regulated banks should be equally good money. Whilst banks' bonds may trade at different prices, their deposit liabilities should not and we expect them to be equally safe.

Under the currently proposed regulatory regime for stablecoins, different standards would be expected of different coins. Perhaps this is OK, but it could also prove problematic and would require users to learn to understand that not all money is equally good. There seems to be a clear risk that users could fail to fully appreciate the difference between systemic and sub-systemic coins - moreover that the emergence of systemic coin(s) could well create a halo effect for and stimulate the emergence of other 'sub-systemic' stablecoins. Whilst there may perhaps not be monetary policy or systemic risk implications from limited-purpose coins or coins with small issuance, there are nevertheless significant consumer protection issues. Moreover, if users do not appreciate the difference, then any problems in sub-systemic stablecoin sector could conceivably undermine confidence in money and payments more broadly.

As the Bank itself states in the paper, "To maintain confidence in money and payments, all forms of money should have the same value, be generally accepted as a means of payment and be interchangeable without loss of value with all other forms of money used in the economy. This is called the singleness of money." (Bank of England, 2023a, p. 12).

While recognising the boundaries of this consultation and the limits of the Bank's powers in this respect, we believe there may thus be valid question regarding the fundamental premise of the Act.

### 1.2.2 *The proposed provision for "systemic at launch"*

***Considering the potential for large financial firms and big tech companies could leverage their size, networks, and reputation to rapidly scale a stablecoin project, systemic at launch may be a reasonable provision to include. While prioritizing safety is paramount, some degree of proportionality for prospective systems may also be necessary to foster innovation. However, implementing systemic at launch also introduces complexities to regulatory dynamics, particularly considering the proposal on reserve access and full reserve backing. A full reserve stablecoin represents a distinct form of settlement asset compared to other arrangements. Recognizing a stablecoin as systemic at launch would essentially grant a privilege to large incumbent firms. It also blurs the line between responsive policy regulating private market developments vs. a decision to launch a new form money in a public-private partnership (comparable in some respects to the digital pound).***

The concept of being 'systemic at launch' presents an intriguing proposition. On one hand, since both large financial firms and large technology companies (big techs) deciding to launch a stablecoin could potentially leverage their existing positions (size, networks, reputation etc.) to rapidly scale (BIS, 2019; Petralia et al., 2019), it may be prudent to include provision for "systemic at launch".

While safety considerations must take precedence, from a pragmatic standpoint, it is reasonable to anticipate that, in the interests of fostering innovation, some degree of proportionality for prospective systems may prove essential or advantageous. After all, if prospective new systems cannot test new methods (in a controlled manner) and are required to identify and mitigate all risk ahead of launch, their business models may never undergo testing. Therefore, opportunities such as sandbox testing, and phased approaches and other strategies could be explored to strike a balance between innovation and risk mitigation in systemic launches.

Whilst systemic at launch may be an important provision, it also seems to add an extra layer of complexity to the regulatory dynamics particularly in the context of specific proposals on full reserve access and full reserve backing.

Access to reserves is a unique privilege that can only be bestowed by regulator's approval leading to a sort of public-private partnership. Trust in the safety and liquidity of reserve backed coins would benefit from their direct access to reserves as a (credit and liquidity) risk-free settlement asset/ "the safest and most liquid assets available". Full reserve backing represents a fundamentally distinct (and potentially attractive) form of settlement asset and in stress situations store of value/safe haven compared to other arrangements (see relevant discussion under question 11 on backing assets (section 3.1), and question 24-25 on holding limits (section 4.1)). Under the proposal that systemic coins would have access to reserves, and sub-systemic coins would not, recognising a stablecoin as "systemic at launch" would thus represent the bestowal at launch of a privilege that will moreover only be available to large incumbents (though in principle not necessarily only financial) firms. It also seems to blur a line between responding to the reality of a market vs. a policy decision to provide the framework for a new form of money resembling a retail CBDC.<sup>13</sup> This might be seen as significant given the legislative program on stablecoins is outpacing both the technical groundwork and public debate on CBDCs – with currently a commitment that any future decision on digital pound would be subject to parliamentary debate and primary legislation.<sup>14</sup>

### 1.2.3 Possible question of individually vs. collectively systemic

***Could we witness the emergence of regulated stablecoins that, while not meeting systemic importance criteria individually, collectively hold systemic implications? In this scenario, consider the proposal for sub-systemic coins to be backed by HQLA, which could raise concerns regarding liquidity transformation risk and runability. Moreover, given their potential to engage in net money creation and compete for HQLA, these stablecoins could have significant monetary and financial stability implications. Such coins might pose risks to core government bond markets and would benefit from the Bank acting as a market-maker of last resort in these markets. While current proposals account for individually systemic issuers and service providers, including infrastructures widely relied upon by numerous non-systemic issuers, there may be a question how collective systemic risk posed by smaller issuers could be addressed. Additionally, while e.g. a wallet or payment system offering services to many non-systemic stablecoins might fall under these proposals, it remains unclear how risks stemming from a smart contract relied upon by numerous non-systemic issuers could be effectively managed.***

One possibly interesting issue/question might be whether you could potentially see the emergence of regulated stablecoins that do not individually meet systemic importance criteria, but that collectively have a systemic role/implications. Under the current proposal that sub-systemic coins would be HQLA backed coins, the growth of a sub-systemic stablecoin sector could have significant implications including for money creation, monetary policy and financial stability (see our response on question 11 on requirements on backing assets (section 3.1) for a more detailed discussion. To briefly summarise some of the reasons for this, this is because HQLA backed coins would engage in (net) money creation, they would compete with other financial sector participants for HQLA, a stablecoin run could destabilise core government bond markets, and they would benefit from central bank liquidity backstop of non-bank financial institutions market maker of last resort – see recent financial stability interventions to stabilise core government bond markets). Indeed, most if not all of the reasons for which the Bank rules out this backing model for systemic coins (exposure to financial risk and potential to disrupt asset markets), could in principle become an issue if the regulated coins used for payments evolved to be significant as a sector. Whilst perceptions of the overall sector could potentially lead to a broad run on stablecoin issuers, it may be equally important to assess context, whether e.g. operational risks such as dependence on shared infrastructure, or e.g. the same smart contracts, could become a potential source of significant correlation across the sector.

This seems to lead to the question how to either (a) curtail the potential for smaller issuers to become collectively systemic or (b) manage/regulate this situation if it arises. We note that the FCA does not appear at present to be considering any measures to limit overall adoption or scale of the sector.

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<sup>13</sup> Whilst it is uncertain of course whether such a launch would happen, and if it happened, whether it would be successful, nevertheless this legislative stage is the right time at which to properly consider this issue.

<sup>14</sup> Treasury Committee, Correspondence from the Chancellor of the Exchequer regarding Commitment on Central Bank Digital Currency, dated 23 May 2023 (1 June 2023)

This may reflect how e.g. holding limits are intended as a tool to the draining of reserves from the banking system rather than additional endogenous money creation (as would be the case for HQLA backed stablecoins under FCA proposals - as we discuss in more detail in answer to question 11 – section 3.1.2).

#### 1.2.4 Transition for non-systemic stablecoins later recognised as systemic

**Transitioning from FCA regulation to the Bank of England's regime for systemic stablecoins would require radical shifts in business model and pose significant challenges for a stablecoin, potentially posing feasibility issues. An issuer accustomed to relying on income on backing assets could struggle to move to the transactions-based revenue model that would be required under systemic regime. Moreover, if the stablecoin has grown within public permissionless blockchains that fall short of regulatory standards (for systemic issuers), additional complications may arise. The divergence between the proposed FCA and Bank of England regimes indicates that transitioning non-systemic stablecoins to systemic status could prove difficult or even unachievable, possibly leading to market disruptions or pressure on regulators to collaborate with stablecoins in operating under their existing models. In such cases, it may be prudent for stablecoins unable or unwilling to transition to the systemic regime to operate within banking regulations, if they can sustain this. This may underscore the need for further clarity on regulatory strategies in the realm of market-based finance.**

Whilst “systemic at launch” presents an intriguing proposition with some complexities (see 1.2.2 above), how a stablecoin regulated under FCA which has become progressively more widely used for payments, becoming systemic over time, would transition into the Bank’s regime for systemic stablecoins also raises interesting issues and challenges under the proposed dual two-tier regime.

It is far from obvious that a stablecoin that has achieved systemic scale without access to reserves, would be able to shift from HQLA backing (under FCA regime) to full reserve backing with unremunerated reserves (under Bank regime/dual regulation). This would require a radical change in business model (see our more detailed discussion under question 27 on viable business models (section 4.3)). Other challenges might also include for example that whilst an FCA regulated stablecoin may have grown on public permissionless blockchains, the BoE DP is (we think understandably) clear that “The Bank does not consider that a systemic payment chain operated in such a decentralised way [without a (set of) entities that can take full responsibility for ensuring the robust operation and risk management of the transfer function] can meet the FPC’s expectations and international standards.” (BoE DP, p. 49) (see our discussion of this under our response to questions 9-10 on the suitability of public ledgers (section 2.2)).

Overall/more broadly a significant non-alignment between proposed FCA and Bank of England regimes means that any transition between regimes for non-systemic stablecoins that achieve scale over time is unlikely to be easy or even feasible. This could thus easily lead to a situation where either: the stablecoin is either effectively forced out the market<sup>15</sup> (which could be controversial and considering this would be an issuer that has achieved systemic scale, also potentially disruptive considering the systemic risks associated with HQLA backed model<sup>16</sup> - a number of which are identified by the DP itself); or (more likely) where the Bank is forced to tolerate continued operation of HQLA backed coin(s) at systemic scale. Since this would undoubtedly have systemic implications, it would almost certainly lead to pressure for regulators to find alternative ways to collaborate with stablecoins in maintaining the promise of par with bank money under their existing HQLA backed structure. Arguably at this point, an issuer that has achieved scale if not changing its model to operate under systemic stablecoin regime, should be required to operate under a banking regime. Thus the emergence of systemic stablecoins might call for further clarification and strengthening of regulatory approach on market based finance (Bank of England, 2021).

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<sup>15</sup> Although we may be seeing Alipay and WeChat Pay make this transition from situation where they were investing customer deposits, to full reserve backing, we note that their reserve balances are remunerated – a significant difference.

<sup>16</sup> See discussion on systemic risks associated with HQLA backed stablecoins in section 3.1.2.

### 1.3 Question 5: The proposed regulatory framework?

#### **Question 5. Do you agree with the Bank's proposed approach to the regulatory framework for systemic payment stablecoins, as set out in Section 2?**

*Establishing robust standards for stablecoin issuance is imperative to mitigate the potential disruption posed by a successful stablecoin and to legitimize their use as retail payment instruments. However, ensuring stability and security across the entire payment chain demands a comprehensive approach that extends beyond issuance functions. Therefore, we commend the Bank's initiative to regulate systemic payment systems employing stablecoins end-to-end. It is worth noting that the current approach in the DP and UK legislation focuses on stablecoins' potential usage in everyday payments and widespread adoption, with an emphasis on determining appropriate backing arrangements in this situation, ultimately advocating for full reserve backing (a new type of stablecoin) as the optimal solution. Nonetheless, it's crucial to recognize that diverse backing structures, under proper regulation and management (appropriate to the backing model), could uphold equivalent levels of reliability in payments, while bearing vastly different implications for the broader monetary and financial system. Thus, an alternative approach to the 'same business, same risk, same rules' principle involves establishing clear regulatory boundaries that accommodate various business models, with backing arrangements as a central consideration in which business models belong where. This may entail subjecting stablecoins operating on a more diverse HQLA-backed model to banking regulation (or some sub-regime), while transactions and infrastructure-focused business models operating with banking licenses could better align with the proposed systemic stablecoin regime. This highlights the need for alignment between regulatory expectations and the business models operators pursue to prevent regulatory arbitrage or unfair competition - such as the pursuit of a narrow-banking model under banking regulation to exploit income from reserves. Furthermore, ensuring consistency is essential, including regulatory provisions for addressing e-money issuers that attain systemic scale. Achieving this alignment and consistency will be instrumental in fostering a fair and stable regulatory environment for the evolving money and payments landscape.*

We support the Bank's aims to regulate systemic payment systems using stablecoins end-to-end. Regulatory standards on issuance function will be essential – both to ensure stablecoins do not disrupt the functioning of the payment system but also for stablecoins to hope to become a legitimate means of payment for retail purposes. However, this is not sufficient. It is essential to ensure that risks in the full payment chain are comprehensively assessed and controlled for.

Nevertheless we observe that in delineating regulatory boundaries and the appropriate framework for stablecoins, the Bank's Discussion Paper and UK legislation, emphasise the ways in which (possible future) stablecoins are used (such as everyday payments and widespread adoption), whilst being unspecific on backing arrangements: the definition used focuses on stablecoins as digital representations of value, purporting to maintain a stable value relative to fiat currency by holding assets as backing.<sup>17</sup> Having adopted a use-based approach to scope, the issue of suitable backing arrangements for such currencies is then addressed. The conclusion then drawn is essentially that this would necessitates the creation of a new type of stablecoin: a full reserve coin, resembling a retail CBDC.

It is evident however that various structures and backing arrangements (suitably regulated and managed), can support equivalent levels of reliability for money (the DP itself argues reserve-backed stablecoins could meet the same standards as bank deposits). However, beyond their role in underpinning a coin's value, backing arrangements fundamentally define the character of the money issued in ways that extend well beyond this, with far-reaching implications for its role within the broader monetary and financial system (see our discussion on the contrasting implications of reserve vs. HQLA backing arrangements from monetary and financial stability perspectives - under question 11 on backing assets (section 3.1)).

Consequently - and in line with 'same business, same risk, same rules' principle - there may be a compelling argument for establishing clarity regarding regulatory boundaries and the different business models that fit within these, with backing arrangements serving as a central consideration. Different regulatory frameworks should account for the distinct considerations inherent in alternative backing models for ensuring their fungibility with other money, as well as the distinct systemic implications of alternative backing arrangements.

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<sup>17</sup> This could equally describe bank deposits.

Additionally, while licensing is crucial in defining permissible activities within a regulatory framework, it is also important to consider the business model a firm chooses to pursue, to prevent regulatory arbitrage or unfair competition. For instance, if a 'systemic stablecoin' does not receive interest on reserves, yet an institution with a banking license opts for a narrow-banking model (full reserve deposits with associated services, benefiting from net interest due to the banking license), it could be seen as regulatory arbitrage and contravene the principle of 'same business, same risk, same rules.' This underscores the need for alignment between regulatory expectations and business models pursued by firms, ensuring fairness and stability in the financial ecosystem.<sup>18</sup> In this context it should also be considered how to handle any e-money providers that were to reach systemic scale in the UK (given current requirements on e-money providers not consistent with proposed requirements on a systemic stablecoin – including backing with bank deposits and HQLA as well as interest income on these assets).

There could be an argument that a reserve or reserve and HQLA backed stablecoin is effectively a limited purpose bank focussed on payments with a balance sheet that only covers this limited business line (similar to Monzo, ClearBank, India's Payments Banks etc.).

#### 1.4 Question 6: Risks from vertical integration/multi-function entities?

**Question 6. Do you agree with the Bank's assessment of the risks posed by vertical integration of stablecoin functions? Are there other risks that the Bank should consider based on existing business models? What mitigants could be put in place to ensure that risks posed by multi-function entities are addressed?**

*We strongly agree that there is potential for additional risk posed by vertical integrated models. It may be the case that most of these risks are already highlighted within existing capital markets regulations. Thus, potentially where a particular risk arises e.g. due to a stablecoin issuer also engaging in other activities that present a risk (such as facilitating the trading of an issuer's own stablecoins, engaging in brokerage, market making and proprietary trading), this would require both systemic stablecoin and relevant capital markets regimes be applied. We are not currently clear on the details and careful consideration should be given to these risks and how the regime for systemic payment stablecoins interacts with existing regimes. Moreover, it is also clear that the proposed regime is designed for limited purpose entities with specific business models and it seems likely some functions will not be compatible.*

#### 1.5 Question 7: Treatment of non-UK issuers?

**Question 7. Do you agree with our approach regarding subsidiarisation of non-UK issuers? Do you agree with our approach to other non-UK elements of the payment chain? What alternative policy arrangements could be used to effectively supervise, oversee, and regulate non-UK systemic stablecoin issuers and other non-UK elements of the payment chain?**

*Establishing a UK presence for international banks is a prerequisite, and similar standards should apply to stablecoin issuers. Subsidiarisation would be essential though potentially streamlined for proportionality. Ring-fenced backing assets and capital against UK issuance should be held within the UK. Even so, spillovers from an issuer's wider international operations due to real or perceived connections would remain a risk and necessitate ongoing monitoring and careful oversight for licensing and supervision purposes.*

UK establishment is required of international banks, and the same requirement should be made of stablecoin issuers. Subsidiarisation might be streamlined for proportionality but would be essential. In particular, ring-fenced backing assets and capital against UK issuance should be held in the UK.

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<sup>18</sup> E.g. Monzo held reserves against customer deposits. Perhaps this was just a transitional phase in their launch although management also quoted as being explicit that their business model not to be about maturity transformation (Hale, 2018). See e.g. "Monzo: When is a bank not a bank?" by Thomas Hale, at <https://www.ft.com/content/ec39240e-cba1-3d2e-b4be-cba85d5c00f3>

Although this measure could theoretically ensure independence between the balance sheet of UK subsidiaries and that of non-UK parents or other non-UK subsidiaries, it is crucial to acknowledge the potential nevertheless for spillovers between subsidiaries due to real or perceived connections.<sup>19</sup> This underscores the importance of careful consideration and ongoing monitoring, not only of the compliance of UK subsidiaries but also of broader international operations and risk taking, for the purposes of licensing and supervision.

## Part 2: Further details of the Bank's proposed regulatory framework

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### 2 Requirements for the transfer function

#### 2.1 Questions 8: Dealing with governance, operational resilience and third-party outsourcing risk?

**Question 8. Do you consider that the Bank's existing binding rules on governance, operational resilience and third-party outsourcing risk management are suitable for systemic payment systems using stablecoins?**

*It should be a prerequisite for both systemic and non-systemic stablecoin issuers to adhere to the highest standards of operational resilience and risk management throughout the stablecoin ecosystem. Widespread adoption of stablecoins would necessitate preparedness for potential disruptions, such as cyber events, which could pose into liquidity or solvency risks and potential for spillovers via interconnectedness. It is therefore imperative that existing regulatory frameworks governing governance, operational resilience, and third-party outsourcing risk management be critically assessed for their suitability in the context of systemic stablecoin payment systems which might leverage blockchain or other DLT. While blockchain technology offers redundancy and eliminates single points of failure through its distributed architecture, current rules may overlook these benefits, warranting careful consideration. However, the adoption of blockchain networks also introduces novel governance, coordination, and compliance challenges that require meticulous evaluation. Thus, any reassessment should aim to strike a balance between acknowledging the advantages of blockchain technology and addressing the complexities it introduces, ensuring that regulatory standards evolve in tandem with the digital payment landscape.*

#### 2.2 Question 9-10: On the suitability of public permissionless ledgers?

**Question 9. Do you consider that stablecoin issuers can exercise sufficient control over, and mitigate the risks of, public permissionless ledgers (be it via rule setting and/or the use of innovative solutions)?**

*By definition, no single entity can (or should) exercise control over a public permissionless ledger. The only way to exercise control over a network is to make it permissioned. We note however that public and permissionless are independent dimensions for the design of a distributed ledger.*

**Question 10. How do you consider that existing and emerging stablecoin payment chains operating with a public permissionless ledger may be adapted in order to meet the Bank's expectations and international standards?**

*Stablecoin issuers grapple with significant hurdles in meeting regulatory requirements within public permissionless ledgers. These include establishing legal settlement frameworks, defining governance structures, and implementing robust risk management protocols. Despite attempts to introduce regulations and innovative tools like smart contracts and DAOs, the decentralized nature of these ledgers complicates enforcement and exposes them to new risks. While these measures can partially mitigate risks, the fundamental character of permissionless ledgers underscores the need in these systems for collaborative risk management efforts involving ecosystem stakeholders.*

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<sup>19</sup> For example, when Circle's USDC/USD de-pegged on March 10, 2023, the EURC/EUR de-pegged as well, even though its balance sheet is independent, investors have correlated beliefs across the two currency pairs as they both belong to Circle.



Stablecoin issuers grapple with significant hurdles in meeting regulatory requirements within public permissionless ledgers. These include establishing legal settlement frameworks, defining governance structures, and implementing robust risk management protocols. Despite attempts to introduce regulations and innovative tools like smart contracts and DAOs, the decentralized nature of these ledgers complicates enforcement and exposes them to new risks. While these measures can partially mitigate risks, the essence of permissionless ledgers underscores the need for collaborative risk management efforts involving ecosystem stakeholders.

Exerting control over a ledger, entails making it permissioned, limiting validation and block addition to a select group of validators. However, this approach diverges from the core tenets of distributed ledger technology (DLT). While fewer validators may offer enhanced accountability from a regulatory perspective, blockchain security often strengthens with a greater number of independent validators. We could see consumers choosing to tolerate certain risk levels when using public permissionless ledgers like Ethereum, particularly if it translates to faster and more cost-effective transactions, especially in cross-border payments.

### 3. Requirements on backing assets and restrictions on remuneration for the issuance of stablecoins used in systemic payment systems

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#### 3.1 Question 11: Requirements on backing assets of issuer?

**Question 11. Do you agree with the Bank's assessment of the important role of backing assets in ensuring the stability of value of the stablecoin?**

***Backing assets and their good management fundamentally underpin the value of an issuers' liabilities. As we have argued, money issued with different backing arrangements can be made safe (through appropriate regulations and backstops). The choice of backing assets not only shapes the credibility of stablecoin issuers' liabilities but also defines the nature of the money being issued, with significant implications for the broader monetary and financial system. We consider the implications of both full reserve and (to some extent) HQLA backing arrangements.***

It is clear that backing assets and their good management fundamentally underpin the value of an issuers' liabilities, the stability of this value and the reliability of the promise to pay (in full/at par). As such it would be hard to underemphasise the importance of backing arrangements for any "stablecoin" issuers, which is a particularly key consideration.

Besides underpinning the value of an issuers liabilities, backing arrangements also fundamentally define what type of money is being issued, with profound implications for its role within the wider monetary and financial system. This is why we argue in response to question 5 that rather than taking a use-based approach, then considering appropriate backing assets, it could make more sense to establishing clear regulatory boundaries and determine which regime a stablecoin falls under depending on its backing arrangements (i.e., business models (see section 1.3). This reasoning also connects with arguments we make in response to the proposal that systemic and sub-systemic stablecoins should come under different regimes (see our response to question 4 - section 1.2) where we question whether holding the money they issue to different standards could undermine the singleness of money - note that whilst banks bonds may trade at different prices, their deposit liabilities should not and we expect them to be equally safe. Any form of money used by the public as a means of payment and short-term store of value should be equally safe, not just those that circulate widely enough to be "systemic".

We will discuss the implications both of the full reserve backing arrangement that has been proposed for systemic stablecoins, and HQLA backing both as an alternative and in the context of proposed FCA regime.

### 3.1.1 Proposed full reserve backing model

#### 3.1.1.1 A new type of money and comparison with proposed digital pound

**The proposed full reserve backing model for stablecoins implies the creation of a new type of money and financial institution via a unique public-private partnership. The DP emphasise that a full-reserve requirement would be essential for stablecoins to meet standards equivalent to commercial bank money. However a full-reserve stablecoin could offer a safer more liquid settlement asset than bank deposits – indeed whilst they would be a promise to pay bank deposits, if regulatory frameworks and supervision assure full backing by central bank funds, stablecoins could mirror many characteristics of a CBDC. Under the proposed regime, a systemic stablecoin would have many of the same implications as the proposed design for the digital pound and concerns about the monetary and financial stability impacts from a digital pound, as well as the effects on commercial banks, are likely to apply similarly to the introduction of full-reserve stablecoins.**

Regarding the specific proposals set forward on backing assets: the proposal to give systemic stablecoins direct access to central bank reserves and require them to fully back their issuance with reserves would seem to extend the regulatory framework to accommodate the introduction of a rather new type of money and financial institution (although there is nothing new under the sun – see **Box 1** on some relevant reference points).

Access to reserves is a unique privilege that can only be bestowed by regulators' approval leading to a sort of public-private partnership. Trust in the safety and liquidity of reserve-backed coins would benefit from the issuers direct access to reserves as a (credit and liquidity) risk-free settlement asset (see our discussion of this in relation to systemic at launch provision – section 1.2).

The consultation paper argues that a full-reserve requirement is necessary in order for stablecoin to meet standards equivalent to those expected of commercial bank money in relation to stability of value, robustness of legal claim and the ability to redeem at par in fiat (see e.g. (Bank of England, 2023a, p. 63)). Arguably however, a stablecoin on this structure could provide not just an equivalent, but a safer and more liquid settlement asset and store of value than bank deposits.

A CBDC is a direct liability of the central bank. A full-reserve stablecoin by contrast is a promise to pay bank deposits (and/or possibly physical cash) albeit backed by central bank reserves (Pantelopoulos, 2023). This seems to put stablecoins below deposits in the hierarchy of money (Aldasoro, Mehrling, & Neilson, 2023). However, assuming that the regulatory framework and supervision arrangements ensured stablecoins' liabilities were always fully backed by funds at the central bank, these coins could share many of the characteristics of a CBDC<sup>20</sup> and would thus also have many of the same implications as the digital pound (based on design recently set out by the Bank/HMT (Bank of England, 2023b, 2023c)) - see discussion on question of interaction between full reserve stablecoin and digital pound in response to question 27 on viability of business models (section 4.3.3).

#### 3.1.1.2 Money creation

**Full-reserve backing and requirements on issuance (on receipt of funds) implies - just as with proposed digital pound - a direct exchange of retail settlement assets without net money creation, but draining deposits and reserves from commercial banks.**

A full reserve backing structure arguably would minimise the monetary and financial stability implications of stablecoin issuance compared to alternative backing arrangements. In terms of money creation, a full reserve coin – like proposed digital pound - would be a one-for-one swap of one type of retail settlement asset for another (without net money creation) but would drain deposits and reserves from commercial banks. Any concerns regarding the potential monetary or financial stability implications of introducing the digital pound, and the potential impact on commercial banks, are likely to be also relevant when considering the introduction of full-reserve stablecoins.

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<sup>20</sup> We note that this arrangement has as result been variously termed “synthetic CBDC” (Adrian & Mancini-Griffoli, 2019) and “indirect CBDC” (Kumhof & Noone, 2018), however since the coins would not be a direct claim on the central bank (so would not be central bank money) but rather on the stablecoin issuer, we prefer full reserve backed stablecoin - for CBDC to exist as a claim denominated in central bank money, it must never be booked on the liability side of payment service providers (Pantelopoulos, 2023).

### 3.1.1.3 Run risk

***The potential for a full reserve stablecoin to serve as a close alternative to holding central bank liabilities raises concerns about the possibility of bank runs into systemic stablecoins as attractive safe-haven assets during times of stress. Implementing limits to prevent these runs is crucial (as argued in responses to question 24), as relying solely on prohibiting interest payments may not be enough to deter panic-driven demand. Meanwhile ensuring confidence in full backing (by strictly linking issuance to settlement with finality) will be key to avoiding runs out of a coin or discounting.***

Since a full reserve coin might be thought to provide the next best thing to directly holding central bank liabilities (reserves or CBDC) there seems clear potential for runs out of the banking system into systemic stablecoins to occur in times of stress, with any systemic stablecoin issuer in principle providing a nearly unlimited supply of very attractive safe-haven assets. Designing in limits on this sort of run would be essential. Whilst proposal that issuers would not be allowed to pay interest may help to keep demand for stablecoins payments focussed (rather than as a store of value) in normal times, it is unlikely this would be sufficient to mitigate run risk if concern over bank credit risk or panic kicked in.<sup>21</sup> Holding limits may be the only effective strategy. We note that whilst the DP discusses holding limits as a potentially temporary measure that might be relaxed or removed in time, this sort of run risk is not a feature of an adjustment processes/period until the system finds its equilibrium following the introduction of stablecoin, but rather a permanent feature. We also note that a full-reserve stablecoin could potentially be very attractive for institutional users who do not otherwise have access to reserves<sup>22</sup> hence could easily go wholesale if limits/restrictions on this are not imposed (as argued in response to question 24-25 on holding limits – section 4.1).<sup>23</sup> (We will discuss the risks and opportunities we see for wholesale stablecoin in a separate piece). Meanwhile ensuring confidence in full backing (by strictly linking issuance to settlement with finality) will be key to avoiding runs out of a coin or discounting.

### 3.1.1.4 Credit conditions

***Although not fundamentally altering traditional money creation channel, private stablecoins could still impact credit formation. The potential impact might vary depending on initial conditions. For instance, if excess reserves are constraining bank lending (due to balance sheet costs or leverage requirements) this could be alleviated by shifting deposits into stablecoins, potentially boosting credit provision. Conversely, in scenarios with limited reserves, strong stablecoin issuance pressure could prompt banks to deleverage, reducing credit supply and market making. Meanwhile, if banks are close to leverage limits, strong stablecoin redemption pressure may similarly prompt bank deleveraging and reduced market making. The Bank would need to consider these factors when managing quantitative easing/tightening, lending operations, and leverage ratio capital requirements. It is worth noting that some of these risks would be mitigated by the PRA's current exclusion of eligible liability-matched claims on central banks from the leverage ratio. Top of Form***

Implementing a full reserve requirement for stablecoins could minimize the monetary and financial stability risks associated with their issuance. As discussed in [our response to the digital pound](#), this approach would not fundamentally alter the traditional channels of money creation. Yet, the removal of reserves and deposits from the banking system might affect credit formation. The impact would vary based on initial conditions; for instance, if excess reserves are limiting bank lending due to balance sheet costs or leverage requirements, shifting deposits into stablecoins could alleviate this constraint and boost credit provision. Conversely, in scenarios with limited reserves, like during quantitative tightening, liquidity shortages and reduced deposit funding (if not replaced) due to strong stablecoin issuance pressure could prompt banks to deleverage by shedding assets, cutting their supply of credit, or withdrawing from market making activities. A corollary of this is that conversely, if commercial banks were already close to leverage limits, strong stablecoin redemption pressure (which might be hard to resist if these arrive as customer payments) could also in principle prompt banks to deleverage.

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21 Note withdrawal of bank deposits and inflows to MMFs last year in response to SVB and Silvergate, when MMF clearly do not provide the level of safety or liquidity that a full reserve stablecoin would offer.

22 With the risk that investors who would otherwise provide short-term funding to other market participants could rapidly withdraw that funding and instead convert those funds into stablecoins – essentially parking them at the central bank.

23 Noting here the FCA DP has a question (Q1) on whether retail and wholesale issuers should be distinguished and how.

The Bank must therefore consider these factors when managing quantitative easing/tightening, and lending operations and on leverage ratio capital requirements. It is worth noting that some of these risks would be mitigated by the PRA's current exclusion of eligible liability-matched claims on central banks from the leverage ratio.

### 3.1.2 Implications of alternative HQLA backing model

#### 3.1.2.1 Money creation and impact on banking sector

***The issuance of stablecoins backed by securities (as under the FCA's proposed sub-systemic stablecoin regime) has notable implications for money creation channels. When stablecoins are issued against bank deposits, which are then used to purchase government bonds, both the newly minted stablecoins and the initial bank deposits enter circulation without depleting deposits or reserves from the banking system, indicating a net creation of money. However, this setup introduces the potential for substituting bank loan financing with bond funding (potentially contracting credit and deposits), and the replacement of bank deposits with stablecoins for payment transactions – thus the net impact on money creation and banking sector is in principle uncertain. This arrangement mirrors aspects of «shadow banking,» where entities like Money Market Funds (MMFs) issue shares resembling money. However HQLA-backed stablecoins are intended for payments unlike MMFs, which serve as liquid stores of value. Even if adopted as means of payment, stablecoins since they are created against and promise to repay deposits, would extend the hierarchical structure of the financial system where bank deposits represent a promise to pay central bank money, and stablecoins signify a pledge to repay commercial bank deposits.***

The issuance of stablecoins backed not by reserves, but by securities (preferably HQLA) as in the FCA's proposed regime for sub-systemic stablecoin, presents distinctive implications for money creation channels. When stablecoins are issued against bank deposits, which are then used to acquire government bonds, both the newly minted stablecoins and the initial bank deposits enter circulation. The deposited funds become available to bond sellers for various purposes, such as investment in other securities, bank loan repayment, or other financial activities. Unlike full-reserve coins or digital pound equivalents, this process does not deplete deposits or reserves from the banking system. (i.e. contrary to views sometimes heard, this is thus net money creation<sup>24</sup>).

However, this setup allows for the potential substitution of bank loan financing with bond funding, leading to possible credit and deposit contractions<sup>25</sup> (Mcleay, Radia, & Thomas, 2014), and the replacement of bank deposits with stablecoins for payment transactions, thereby reducing the demand for bank deposits driven by payments. The net impact on the banking sector's balance sheets and overall money creation is thus uncertain and contingent upon the extent of bank loan repayments.

This arrangement resembles aspects of so-called "shadow banking," where entities like MMFs issue shares akin to money or near-money, as they pledge to redeem funds at par upon demand. However, unlike MMFs, which serve as highly liquid stores of value but not means of payment, liabilities issued by HQLA-backed stablecoins are intended for everyday payments. Nevertheless, they are somewhat inferior to bank deposits as they can only be generated against received bank deposits and promise to repay these deposits at par.<sup>26</sup> This hierarchical structure extends the existing hierarchy, where commercial bank deposits signify a commitment to pay central bank money, and stablecoins signify a pledge to repay commercial bank deposits. (Note that a fundamental question to address for stablecoins is, why extend this hierarchy?).

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24 Whilst to some this may seem to state the obvious, it may not be obvious to all. For example the Libra v2.0 whitepaper (2020) appears to entirely miss this, stating " Each single-currency stablecoin will be supported by a Reserve of cash or cash-equivalents and very short-term government securities denominated in that currency and issued by the home country of that currency. Single-currency stablecoins will only be minted and burned in response to market demand for that coin. Because of the 1:1 backing of each coin, this approach would not result in new net money creation." (Libra Association Members, 2020).

25 Say the seller of the government bond, now invests in a new corporate bond issue, and the corporate repays bank loans.

26 Thus, proposed requirements on issuance (on receipt of funds in the form of bank deposits) and coin holders right of redemption of bank deposits on demand at par, lead to a clear position in the hierarchy of money claims.

### 3.1.2.2 Run risk

*By issuing liabilities with a fixed money value, against assets with variable prices, stablecoins would engage in liquidity transformation, rendering them susceptible to runs, potentially affecting asset markets as stablecoins liquidate underlying assets to facilitate redemptions. While stablecoin balance sheets would bear the liquidity mismatch, positioned below bank deposits in the hierarchy of claims (a commitment to redeem coins on demand at par, contingent upon the ability of banks to issue these deposits) they would ultimately rely on elasticity within the banking system, underscoring the importance of market liquidity, intermediation capacity in securities markets, and the central bank's role as market maker of last resort. However, whilst the hierarchy of claims is clear, the perception of stability for stablecoins backed by HQLA vis-a-vis bank deposits remains uncertain. Their narrow business model and backing by safe liquid assets, could potentially attract inflows - similar to some flows seen into money market funds. Nonetheless, the presence of deposit insurance for bank deposits may continue to make them more appealing, particularly for smaller depositors, assuming individual holding limits do not greatly exceed deposit insurance. The likelihood of runs out of HQLA-backed coins may outweigh runs into them. Both scenarios could impact asset markets, but runs into HQLA-backed coins would be expansionary, and recycle liquidity back into the system, potentially alleviating systemic strains.*

Holding assets with variable prices while issuing liabilities with a stable value introduces liquidity transformation, leaving stablecoins vulnerable to runs—sudden spikes in liquidity demand—if investor confidence falters regarding the assets' ability to cover liabilities. There is thus potential to impact asset markets as stablecoins liquidate underlying assets to facilitate redemptions. Stablecoins represent a commitment to repay deposits on demand at par, positioning them below bank deposits in the hierarchy of claims. The stablecoin issuer's ability to meet their on-demand-at-par commitment, thus depends in some ultimate way on banks - since only banks can issue these deposits. While the liquidity mismatch primarily resides on stablecoin balance sheets, their ultimate dependence lies on the elasticity of settlement liquidity within the banking system, highlighting the importance of market liquidity and intermediation capacity in securities markets, as well as the role of the central bank as a market maker of last resort (the central bank liquidity backstop for non-bank financial institutions has been highlighted by recent notable strains in core government bond markets).

On the other hand, it is not immediately evident whether stablecoins backed by HQLA would be perceived or treated as less safe than bank deposits. The narrow business model and backing by safe liquid assets in regulated stablecoins could render them attractive safe-haven assets, as evidenced by inflows into money market funds following certain bank credit events.<sup>27</sup> However, it could be argued that bank deposits, benefiting from deposit insurance, remain safer and more attractive, particularly for smaller depositors. Under the proposal for individual holding limits, this sort of demand might well be restricted as long as holding limits do not greatly exceed deposit insurance (noting that bank deposits currently insured up to £85,000 under FSCS,<sup>28</sup> while digital pound has proposed upper limits of £20,000).<sup>29</sup> All of this suggest that runs out of (rather than into) HQLA-backed coins may be more likely. In any case, whilst a run into a full-reserve stablecoin would deplete liquidity and funding from the banking system, a run into an HQLA-backed coin – although it could impact asset markets - would both be expansionary and recycle liquidity to the system, potentially mitigating systemic strains.

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27 E.g. inflows into MMFs last year in response to SVB and Silvergate. Although acknowledging that MMFs pay interest and so not just unnerved depositors with credit risk concerns regarding banks, but also sluggishness of bank deposit rates response to higher base rates will also have played some part here. See e.g. Oefele et al (2023, 2024) on stablecoin as For some relevant reporting see e.g Reuters reporting: <https://www.reuters.com/markets/europe/shadow-bank-boxing-money-funds-drain-deposits-2023-03-29/>

28 Currently customer deposits held by banks, building societies and credit unions (including in Northern Ireland) in UK establishments that are authorised by the PRA are protected by the Financial Services Compensation Scheme up to £85,000. See: <https://www.bankofengland.co.uk/prudential-regulation/authorisations/financial-services-compensation-scheme#:~:text=Customer%20deposits%20held%20by%20banks,FSCS%20up%20to%20%C2%A385%2C000>

29 Bank of England (2023b). Available here: <https://www.bankofengland.co.uk/paper/2023/the-digital-pound-consultation-paper>

### 3.1.2.3 Competition for HQLA on potential of impact on UK debt markets

**Restricting backing assets to the safest and most liquid securities (as proposed by the FCA for regulated stablecoins) helps to reduce credit and liquidity risks for coinholders. However, this strategy places stablecoins in competition with other market participants for these critical assets. It could limiting growth, particularly due to constraints posed by the government's bond portfolio structure. Alternatively, a significant shift in gilt purchasing behaviour towards shorter maturities, driven by regulated stablecoins, could expose the UK government to heightened refinancing risks. While the FCA's emphasis on solvency and confidence, rooted in the use of safest assets, is clear, the redeemability of stablecoins hinges on market liquidity, as highlighted by recent/past market events. To address these liquidity risks, mechanisms such as secured credit lines could prove beneficial, enabling stablecoins to swiftly monetize high-quality assets during stress periods without resorting to asset liquidation, akin to practices employed by e.g. CCPs.**

Restricting backing assets to the safest and most liquid securities, as proposed by the FCA for regulated stablecoins, serves to mitigate credit and liquidity risks for coinholders. However, this approach pits stablecoins against other market participants for these critical assets, crucial for entities like UK pension funds (we note increase in demand for short-maturing gilts following strains more concentrated in longer-maturing UK debt markets).<sup>30</sup> The narrow focus on backing assets, particularly short-maturity UK treasury debt, could constrain the growth of the stablecoin sector due to limitations imposed by the government's bond portfolio structure. On the other hand if regulated stablecoins drive a significant shift in gilt purchasing behaviour towards shorter maturities, it could expose the UK government to heightened refinancing risks in the future.

While the FCA's discussion paper lacks depth on stabilization mechanisms and redeemability, the overarching emphasis remains on solvency and confidence, primarily derived from the use of the safest assets. However, the redeemability of stablecoins hinges on market liquidity, as evidenced by recent/past market events such as the 'dash for cash' in March 2020 or gilt market stress in September/October 2022.

To mitigate stablecoin contributions to and exposure to such liquidity risks, exploring mechanisms like secured credit lines could be beneficial. These credit lines would allow stablecoins to swiftly monetize high-quality liquid assets during times of stress or heightened funding needs without resorting to asset liquidation - which could exacerbate price volatility (this concept mirrors practices employed e.g. by CCPs to rapidly monetize noncash collateral). Or perhaps indeed with the Bank (King; Tucker, 2023). Ultimately the Bank's willingness to take backing assets onto its own balance sheet would be necessary to mitigate liquidity risks and avoid liquidity problems morphing into solvency problems via asset price feedback.

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<sup>30</sup> We note increased demand for short-maturity UK debt following recent liquidity strains in longer-dated bonds. See e.g. FT reporting "UK told to issue more short-dated debt as pension fund demand wanes": <https://www.ft.com/content/369ba1d8-43e9-49eb-a31d-12936bc66313>

### **Box 1: Reference points for proposal on (in particular full reserve) stablecoins**

There is nothing new under the sun. A few ad hoc examples of relevant reference points could include:

We note resemblance to narrow banking proposals (mostly by economists) that have returned periodically over the last century and more - (Pennacchi, 2012) provides one not very recent but still relevant review. We note however that these have tended to focus on the provision of a safe store of value and settlement asset rather than innovation in “transfer function” or payment technology and rails. Meanwhile a variety of backing arrangements have been considered including full reserve backing, and HQLA backing.

Beyond economic theory: India has introduced Payments Banks – limited purpose banks focussed on payments, Recently The Narrow Bank (TNB) has sought a Fed master account in the US for a general-purpose full reserve narrow bank but met with regulatory opposition and assertions that interest would not necessarily be paid on reserve balances for an institution pursuing this type of business model. More recently, proposals for full reserve banking based deposit and payment services for crypto have similarly met with sceptical responses (see Custodia Bank and rejection of its application for Fed master account (Federal Reserve System, 2023))<sup>31</sup>. We note that besides Custodia Bank’s mission to serve crypto sector (rather than everyday payments), also whilst proposing full reserve backing as initial investment model, Custodia would not have been legally restricted to this and indeed planned to diversify over time (albeit to include some HQLA).

We also note very close similarity to new e-money providers that have arisen in other markets such as Alipay and WeChat Pay in China that are now fully reserved with the central bank (although these currently benefit from net interest income receiving interest on reserves). Interestingly these have transitioned via regulatory intervention (in a phased way) from model of making (risky) investments with customer deposits, to full reserve backing – but again note interest on reserve balances.

We also note some innovative new firms focussed on infrastructure, transactions, or other services based models without engaging in significant liquidity or maturity transformation, operating with banking licences – e.g. ClearBank and Monzo may be relevant examples. ClearBank report the “vast majority” of their HQLA is held on deposit at the Bank of England and also state “all UK sterling funds are held securely at the Bank of England and not used for other purposes such as commercial lending. This unique strength of our business model ensures that we can simultaneously repay all our depositors on demand if needed”.<sup>32</sup> Monzo reports for 2022 some 95 % of its assets held as HQLA, and nearly 70 % of this as cash on deposit at the Bank of England.

31 Here: <https://www.federalreserve.gov/newsevents/pressreleases/files/orders20230324a1.pdf>

32 See: <https://clear.bank/uploads/assets/ClearBank-Pillar-3-2022.pdf>

33 See financial statements: <https://monzo.com/static/docs/monzo-annual-report-2022.pdf>

### 3.2 Question 12: Non-remuneration?

**Question 12. Do you agree that the proposed remuneration policy is consistent with systemic stablecoins being used primarily for payments?**

*It is proposed systemic stablecoins would neither receive interest on reserves balances at the Bank of England nor pay interest on their own coins, thus emphasizing their role in facilitating payments rather than serving as vehicles for savings or investment. Not paying interest to coinholders aligns with current practices with cash, e-money, and current accounts, as well as with proposals for the digital pound. However, while non-remuneration supports the objective of payment focus, its influence may vary depending on the interest rate environment, and consumer education may play a role in ensuring stablecoins are used as intended given evidence not all consumers distinguish properly between remunerated and unremunerated balances. The non-remuneration of issuers' reserve balances pushes stablecoin contenders towards a transactions-based model, aligning with the policy objective of emphasizing payment utility. While this approach could potentially hinder the development of commercially viable business models, a systemic stablecoin excelling in transfer function convenience, efficiency, and functionality might succeed under such a model. Nevertheless, income from backing-assets isn't inherently incompatible with a payments-focused business model, but paying interest on reserves for full reserve coins that cannot engage in liquidity or maturity transformation lacks justification. Alternative solutions such as relaxing the full reserve requirement to allow backing assets to be invested in HQLA may be viable but would fundamentally alter the stablecoin's character, and arguably call regulation under banking regime. Finally, the decision on devising a remuneration strategy for the digital pound holds significant implications. Whilst we advocate a cautious approach, we also believe further examination, consultation, and public discourse are warranted. Thus, if a future digital pound were at any point to be remunerated, this would impact the proposed systemic stablecoin regime, necessitating thorough consideration of this interaction.*

Under the proposed policy, systemic stablecoins would neither receive interest on reserves at the Bank of England nor pay interest on their own coins, reinforcing the focus on payment services rather than savings or investment.

We agree that not paying interest to coinholders would be consistent with existing practices where cash, e-money, and (generally speaking) current accounts also do not offer interest and we note that it is also in line with proposals on the digital pound. It is improbable in any case, stablecoins would afford paying interest, considering proposed full reserve requirement combined with non-remuneration of reserve balances. Whilst non-remuneration would undoubtedly support the objective to keep stablecoin use payment-focussed (by reducing its attractiveness as a store of value), this influence may vary depending on the interest rate environment. Also large balances in zero-interest current accounts may suggest not all consumers distinguish properly between remunerated and unremunerated balances (implying education/clear communication may also be key to ensuring stablecoins are used for their intended purposes).

Meanwhile on non-remuneration of issuers reserve balances, as we argue in response to question 27 (section 4.3), entirely restricting any possibility of generating any revenues on backing assets must inevitably push any stablecoin contenders to focus on a transactions-based model - in line with the policy objective of keeping stablecoin use mainly for payments. We argue that whilst this could potentially preclude any commercially viable business model at all, a systemic stablecoin excelling in the convenience, efficiency and functionality on the transfer function might succeed on a transactions-based model (where full reserve backing would enable 24/7/365 real-time gross settlement – resembling pre-funding arrangement based fast payment systems) and that the proposed regime and allowing private stablecoins the issuance function might potentially enabling them to compete with banks and e.g. emulate successful models like Swish (albeit current opportunities in the UK market are not assessed) - see section 4.3.2 for more detailed arguments.

Income on backing-assets is not necessarily inconsistent with a payments focussed business model. However, we find little justification for paying interest (at an administered, not market rate) on reserves for full reserve coins that cannot engaged in any liquidity or maturity transformation and do not pay interest to coinholders. Although as we point out in response to question 27, there are examples of innovative payments focussed models operating with the benefit of interest on reserves (including both some successful Asian e-money provides (e.g. AliPay,



WeeChat Pay)<sup>34</sup> as well as some innovative new payments infrastructures here in the UK operating under banking licences (e.g. ClearBank<sup>35</sup> and Monzo<sup>36</sup> may be relevant examples). As we argue in response to question 5 (section 1.3), this highlights the need for consistency - for example if some initiatives sought to pursue narrow banking models under a banking regime (rather than systemic stablecoin regime) in order to benefit from interest on reserves, or if e-money providers reached systemic scale in the UK (given current requirements on e-money providers not consistent with proposed requirements on a systemic stablecoin – including backing with bank deposits and HQLA as well as interest income on these assets).

If interest ever were to be paid on reserve holdings, arguably this seigniorage should be passed through to coinholders via interest on their coins (so stablecoins would get seigniorage funding but not make excess profits if competition or oversight drove coin rates towards rate received on reserves). This may imply a policy channel. However, the case for this may be ambiguous and is not clear how it would necessarily remain payments focussed.<sup>37</sup> Alternatively remuneration on reserves need not necessarily be at policy rate, and coinholders could be unremunerated to avoid monetary transmission implications.

We previously argued in [our response on the digital pound](#), the decision on devising a remuneration strategy for the digital pound – with zero interest rate being one possibility – holds substantial implications due to the associated risks and advantages. Given the intricacies and uncertainties involved we advocated a cautious approach, initially favouring a non-interest bearing digital pound. However, we also argued that it is premature to definitively settle this matter, and if the digital pound were to proceed, it warrants further examination, consultation and public discourse on the question of remuneration (we note the recent Treasury Committee recommendation in this regard to do further analysis and not preclude the possibility of paying interest on the digital pound).<sup>38</sup> It seems likely that most of the same issues are at stake when it comes to the question of remuneration for full-reserve stablecoins. Moreover, these questions seem tightly interconnected. E.g. if a future digital pound ever were to pay interest this would have significant implications for the proposed systemic stablecoin regime.

Another solution could be to instead relax the full reserve requirement and allow some proportion of backing assets to be investments in HQLA.<sup>39</sup> We note however that this would fundamentally alter the character of the stablecoin which would then participate in liquidity transformation and net money creation (see our more detailed discussion of the implications from HQLA backing in response to question 11 on backing assets (section 3.1)). Whilst this could potentially be a viable option, we believe that this model would raise the question whether this type of issuer might not be best regulated under (some version of) a banking regime (as we argue in response to question 5 on the proposed regulatory framework (section 1.3)). On this model stablecoins would need to be subject to liquidity and capital requirements (cornerstones of banking regulation) and might be required to participate in (and contribute in some proportionate way to) deposit insurance (we note in this regard initiatives such as India's Payments Banks,<sup>40</sup> and Monzo in the UK).

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34 E.g. since AliPay and WeChat Pay required to move to full reserve backing by Chinese authorities. E.g. Sun & Rizaldy (Sun & Rizaldy, 2023, p. 14) make some discussion of business models of successful Asian e-money providers.

35 ClearBank report the “vast majority” of their HQLA is held on deposit at the Bank of England and also state “all UK sterling funds are held securely at the Bank of England and not used for other purposes such as commercial lending. This unique strength of our business model ensures that we can simultaneously repay all our depositors on demand if needed”. See: <https://clear.bank/uploads/assets/ClearBank-Pillar-3-2022.pdf>

36 Monzo reports for 2022 some 95% of its assets held as HQLA, and nearly 70% of this as cash on deposit at the Bank of England. See financial statements: <https://monzo.com/static/docs/monzo-annual-report-2022.pdf>

37 Where this sort of pass-through model could make sense is for interbank settlement, where the depositors would be the normal receivers of interest income for monetary policy reasons (as with e.g. Fnalilty proposal).

38 HC Treasury Committee (2023). See <https://committees.parliament.uk/publications/42395/documents/210641/default/>

39 Not only would this allow for some income on non-reserve investments, but there may also be monetary policy arguments for remunerating reserves under this model.

40 In addition to restrictions on lending activities and account size, payments banks are only permitted to invest deposit balances in short-dated government debt (with a maturity of up to one year (75%)), time and fixed deposits at a scheduled commercial bank (25%), and to maintain a cash reserve ratio of 4% at the Reserve Bank of India. See e.g.: [https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2016/12/GSMA\\_The-business-case-for-payments-banks-in-India\\_2016-1.pdf](https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2016/12/GSMA_The-business-case-for-payments-banks-in-India_2016-1.pdf)

### 3.3 Question 13-16: Legal claim on issuers and redemption arrangements?

**Question 13. Do you agree with the Bank's proposed requirements on the redemption process, including the role of all firms in the payment chain?**

*The redemption requirements outlined for stablecoins establish their character as a claim on the issuer, specifically a promise to pay bank deposits on demand at par. This par exchangeability is essential for their fungibility with existing forms of money, thus claim to also be money. Arguably redemption should be executed at least as fast as existing commercial bank payments (i.e. immediately up to £10,000) and as the current convertibility of bank deposits for cash (i.e. immediately and without charge). However this redeemability is essential not only for maintaining trust and confidence in the stablecoins, but also - since settlement between stablecoin issuer and banks requires issuance and redemption - for enabling seamless transfers between stablecoins and bank accounts for transfers, and payments purposes and any sweeping arrangements for enforcement of holding limits (although secondary exchange of coins/deposits already in circulation might also facilitate some level of payments between stablecoins and bank accounts with interbank settlement not settlement between stablecoin issuer and banks). The resulting link between redemption time and payments settlement modalities and speeds implies that redemption must occur at a minimum end of day, or immediately for real time gross settlement that might be needed to support stablecoins' value proposition. However, there is a potential tension between the necessity for swift and low-cost redemption for payments and the need for frequent AML checks on redemptions.*

The stipulated redemption requirements clarify the character a stablecoin would have and locate it within the hierarchy of claims: a coin would be a claim on the issuer, a promise to pay bank deposits on demand at par (see our discussion on hierarchy of claims in response to question 11 - section 3.1). Par redeemability would be essential for trust that different types of money have the same value and the fungibility of the coin with bank deposits. This could not be left to secondary markets which by definition would trade away from par (we discuss this in detail in response on question 2 (section 1.1)).

Besides being the acid test of par in order to underpin trust and confidence, different types of money will not always be equally acceptable everywhere and so it must be easy to swap between them. Perhaps even more important than this, redeemability would also be essential for payments-based interoperability: fund transfers and payments between bank deposits and stablecoin (including transfers between users' own wallets and bank accounts, sweeping arrangements for implementing individual holding limits, and payments between stablecoin and bank accounts) would need to happen via coin issuance and redemption - although we argue that secondary exchange of coins/deposits already in circulation might also facilitate some level of payments between stablecoins and bank accounts with interbank settlement not settlement between stablecoin issuer and banks (we discuss the reasons for this in response to question 1 on requirement for the singleness of money (section 1.1) and further details in response on question 2 on secondary market trading (section 1.1). as well as some possible implications for viable business models in response to question 27 - section 4.3)).

There would thus be a close link between redemption time and settlement speeds and modalities. Redemption would have to be at a minimum end of day<sup>41</sup> - if settlement between stablecoin issuers and banks happened on a deferred net settlement modality (as Faster Payments), or much faster than this if coupled real time gross settlement modality was desired (as for systems like Swish). Note that while full reserving would limit settlement risk on redemptions, there would still be credit risk associated with incoming payments. Therefore, a rigorous adherence to full reserve backing would require issuance to be strictly tied to settlement with finality.

While the DP proposes that redemption times should be end of day and in real time wherever possible, arguably redemption should be executed at least as fast as existing commercial bank payments - i.e. immediately up to £10,000, and as the current convertibility of bank deposits for cash - i.e. immediately and without charge. This may also be important for the value proposition presented (see discussion in response to question 27 on viable business models (section 4.3)).

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<sup>41</sup> In line with CPMI-IOSCO and FSB published recommendations and proposals put forward in the discussion paper.

There does seem to be some tension between the need for timely and low cost redemption for payments purposes, and the potential for frequent AML check needs.

**Question 14. Do you have views on requirements on redemption fees, or prohibiting these, to minimise any frictions across the redemption process?**

*The singleness of money within the sterling system demands that all forms of currency have the same value and can be exchanged seamlessly without loss of value. Redemption fees contradict this principle, undermining the credit relationship a par claim establishes. Ensuring on-demand redemption at par without fees is also pivotal to prevent the emergence of secondary markets where the coins trade away from par. However, complexities do arise regarding fees, particularly in the distinction between payments and transfers vs. redemptions for stablecoins, blurring demarcations observed in traditional banking. Since the imposition of redemption fees could deter adoption, this might be contained by competition. Conversely, fees could be exploited for user retention, fostering concentration dynamics akin to those in BigTech. The prohibition of redemption fees (so issuers bear full redemption costs) is likely to have a significant effect on stablecoin business models, suggesting models that economise on issuance/redemption based payments, with value proposition being fast low cost in-stablecoin settlement (leading to familiar scale effects). Uncertain or fluctuating fees could trigger runs on stablecoins, posing risks to users. Moreover, if obtaining and redeeming coins is free for users but costly for issuers, vulnerabilities to attack may arise, suggesting equilibrium in costs incurred by both parties for system stability.*

We believe/agree that the singleness of money requires that all forms of money (within the sterling system) are easily exchanged without loss of value. Par exchange is the fundamental test. Redemption fees directly go against par exchange and undermine the credit relationship par claim establishes (see response to question 13 (section 3.3)). Moreover, the most robust strategy for ensuring a coin does not trade away from par in secondary markets (or that secondary markets do not emerge) is surely to ensure that it can be readily redeemed from issuer at par without loss of value (see our discussion in response to question 2 on requirements when coin trades in secondary market). The clear implication is that redemption fees should be prohibited or minimised.<sup>42</sup> Nevertheless, we do see certain complexities that warrant consideration and could potentially shape the policy details on fees.

Notice that currently, a clear distinction exists between payments and transfers (between bank accounts and banks) versus redemption (cash withdrawal, where customers request their money back). While banks and other entities in the payment chain may levy transaction fees for payments, banks typically do not charge customers for cash withdrawals, and withdrawals via intermediaries are generally free (up to a point!).<sup>43</sup> However, for a stablecoin, this demarcation would become less clear-cut, as every transfer or payment to a bank account would entail redemption (see our discussion on par exchangeability with bank deposits in response to question 1 (section 1.1.1)). Additionally, any redemption or transaction fee could essentially function as an exchange rate.

The imposition of redemption fees would diminish the convertibility between a stablecoin and bank deposits. Since this could discourage use/adoption, fees might be mitigated by competition between issuers. However, it is also possible they could be exploited to retain users within a platform, thereby mirroring the concentration dynamics observed in BigTech firms. Conversely, if issuers must bear redemption costs that cannot be transferred to coinholders upon redemption, this could set up economies of scale, fostering concentration and erecting barriers to entry. This parallels the concentration dynamics seen in the current system, where large payment providers benefit from a higher volume of “on us” payments. It’s worth noting that the cost to stablecoins of settling in reserves (presumably via the RTGS system) might influence these dynamics (we discuss this in some detail in within our comments on the potential for viable business models in response to question 27 (section 4.3.2)).

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<sup>42</sup> We note that MiCA prohibits redemption fees by stablecoin issuers (although it allows income on assets). Meanwhile FCA DP is that fees should reflect costs (and also allows income on assets).

<sup>43</sup> “Around 95% of cash withdrawals are free of charge and at the majority of cash machines in the UK there is no charge for cash withdrawals when using a debit card or ATM card.” and “The LINK Network allows both free and chargeable (“pay-to-use”) access to cash. Government and Parliament have recognised that chargeable as well as free access to cash can benefit the public and local businesses alike.” Although charges may apply for withdrawals over e.g. a daily limit. See: <https://www.link.co.uk/consumers/charges/>

Another consideration is the risk posed by uncertain or fluctuating redemption fees to users. Plausibly the anticipation of fee hikes might trigger a self-fulfilling run on a coin, even in the absence of concerns on the quality of backing assets.

Another potentially important consideration could be the vulnerability that arises if the process of obtaining and redeeming a coin is free for coinholders but entails significant costs for issuers. This dynamic could potentially expose issuers to various forms of attack or exploitation. If not ensuring equilibrium in the costs incurred by both coinholders and issuers, it could be essential to take alternative measures to for maintaining the stability and integrity of the system.

In conclusion, we recommend that any redemption fees, if imposed, should be stable, predictable, and certainly not exceed the issuer's redemption costs.

**Question 15. Can you identify any issues with the requirements on systemic stablecoin issuers and other relevant firms within a payment chain to cooperate and support the appointed administrators with a view to facilitating redemption or payout in the event of a firm failure?**

*It would be important to establish a specific resolution regime for systemic stablecoin issuers to ensure the orderly management of issuer failures and minimize market disruptions. All stablecoin issuers must be resolvable, and potential impediments to resolution need to be identified through tailored resolution plans. The complexity of payment chains and the involvement of multiple parties in redemption and pay-out processes increase the likelihood of issues and delays during firm failures. Therefore, issuers and other relevant entities in payment chains should maintain robust, regularly updated recovery and administration plans, alongside meticulous record-keeping and reconciliation processes, to mitigate delays. These plans, records, and reconciliation processes should undergo rigorous testing and auditing both initially and continuously to ensure effectiveness.*

**Question 16. Do you agree that issuers should have access to customer information to be able to fulfil redemptions in the case of the failure of an entity providing the customer interface, e.g. a wallet provider and/or to facilitate a faster payout in insolvency?**

*To ensure trust and credibility in the stablecoin market it would be sensible to have access to customer information in such circumstances that fulfil existing KYC and AML checks. It would be beneficial for an orderly 'pay-out' to have information in the form of a 'Single Customer View' file, to fulfil timely redemption in the case of failure. In view of the full reserve backing of a stablecoin it will be the information asymmetry between issuer and customer, that would hinder timely pay-outs by the administrator. Clear rules governing information access should be put in place to ensure their proper usage and smooth functioning during extreme circumstances.*

#### 3.4 Question 17-19: Proposed safeguarding rules?

**Question 17. Do you have views on the Bank's proposed safeguarding regime being centred on two key features (statutory trust in favour of coinholders; and safeguarding rules)?**

*The Bank's proposed safeguarding regime, cantered on statutory trust in favour of coinholders and safeguarding rules, appears suitable. However, the success of this model hinges on meticulous execution of organizational controls, rigorous record-keeping, seamless reconciliation processes, and strict segregation of funds. It is imperative that these operational aspects are diligently inspected and audited both initially and continuously. Any lapses in these areas must be swiftly identified and addressed to ensure the integrity and effectiveness of the safeguarding regime.*

**Question 18. Do you think there are any other features that need to be reflected in the safeguarding regime for systemic payment stablecoins?**

*Consumers holding stablecoins should have access to their balances swiftly in the event of firm failures, ideally within a timeframe similar to that of traditional bank failures covered by schemes like the Financial Services Compensation Scheme, typically within seven days. Given that stablecoins aim to provide alternatives to physical wallets and current accounts, immediate access to funds is crucial, potentially requiring a predefined time-*

*stamped schedule in these arrangements. A formal resolution regime (see question 15 - 3.3) with stabilization options, such as a bridge institution to take on the critical function, could ensure continuity of access in case of issuer failure, minimizing disruptions.<sup>44</sup> The proposed full-reserve requirement should facilitate timely payouts.*

**Question 19. Do you agree with the requirements for stablecoins owned by the issuers held in treasury wallets?**

*Some issuers “mint” quantities of stablecoin tokens into treasury addresses they control to later transfer to market participants’ wallets; others “mint” directly into market participants’ wallets. Redemptions are typically handled by sending tokens back to a treasury wallet, with issuers periodically «burning» redeemed tokens, although issuers also have the option “burn” tokens directly from market participants’ wallets. The potential leakage of treasury tokens into the market would pose significant risk as it could dilute the stablecoin’s value and trigger mass redemptions. This risk should be mitigated. Backing treasury tokens would require funding – essentially tier 1 common equity - and the implications of this burden should be understood. An alternative solution to mitigating this risk might be tight linking of “minting” and “burning” to issuance and redemption with finality, although there may be operational and technical complexities requiring consideration.*

This question pertains to the technical operations of current stablecoins in the market. Typically, the logistics of issuance and redemption can vary among issuers. For instance, some issuers mint stablecoin tokens into designated “treasury” addresses they control, later transferring these tokens to market participants from their treasury wallet to the buyer’s wallet. Others directly mint stablecoin tokens into the wallet addresses of market participants. When it comes to redemptions, most issuers handle them by having market participants send tokens back to a treasury wallet address. If the treasury wallet accumulates a significant balance of redeemed stablecoins, the issuer will periodically “burn” quantities of the stablecoin, removing them from the technical outstanding balance of the tokens. Although some issuers will also handle redemptions by “burning” tokens directly from market participants’ wallets (Ma, Zeng, & Zhang, 2023).

Tokens that have either not been issued or that have already been redeemed with finality (i.e. tokens owned by the issuer themselves) do not represent a promise to pay anybody. Consequently, there is no apparent reason to believe they require backing with assets of equivalent value. However, assuming these tokens, if leaked into circulation (due for instance to theft, fraud, misuse, mismanagement, negligence or inadequate practices of reconciliation and record-keeping), would be fully fungible with issued tokens in circulation, there is undoubtedly some risk involved. Any such leak or even rumours/anxiety about one could potentially dilute the value of the coin (jeopardising par and the singleness of money) and/or lead to mass redemptions, potentially resulting in defaults. In principle even a small leak (thus shortfall between backing assets and face value of tokens in circulating) would incentivise a run on the coin. The potential severity of this risk necessitates serious consideration and mitigation.

Nevertheless, the proposal that treasury tokens should also be backed may present its own complexities. While the current accounting treatment of these treasury tokens is not known to us, they appear properly speaking to be non-balance sheet items. The Bank’s view that issuers should be required to back these tokens implies an asset position that would need to be funded, likely requiring tier 1 capital common equity with backing assets purchased out of retained earnings – so loss absorbing capital in event of insolvency (note this contrasts with FCA discussion paper interpretation that issuer would be its own customer).<sup>45</sup> Although the operational implications are not fully clear to us, it may be worth noting that this approach would entail a slow-moving variable, unable to respond elastically to issuance and redemption volumes. Therefore, this warrants discussion and consideration under the question of capital requirements (including whether there could be potential to introduce balance sheet constraints on issuance that might undermine par – as we argue in response to question 2 on secondary markets (section 1.2), and question 20 on capital requirements (section 3.5)).

Requiring the tight linking of “minting” and “burning” to issuance and redemption with finality might offer the most satisfactory solution. However, we acknowledge the possibility that there may be operational and technical complexities to consider, which could make this approach costly or inefficient.

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<sup>44</sup> For non-systemic issuers some form of payout may be appropriate since the issuer is not undertaking a ‘critical function’, which a systemic issuer would.

<sup>45</sup> “While this would mean a regulated stablecoin issuer would have an interest in the backing assets, we consider this would be due to its status as a consumer at the time. So, we do not think this would impact the integrity of the backing assets in the event of insolvency” (Financial Conduct Authority, 2023)

### 3.5 Questions 20-23: Capital requirements?

**Question 20. Do you consider that the capital requirements would effectively mitigate risks that may result in a shortfall in the backing assets or that can threaten the ability of issuers to operate as a going concern?**

*We support the mandate for issuers of stablecoins in systemic payment systems to maintain capital reserves against risks that could lead to backing asset shortfalls or operational disruptions. Modelling capital requirements after those for systemic payment systems seems fitting under the proposed full reserve requirement – given no liquidity or credit risk on reserves. However, stringent enforcement of the full reserve requirement necessitates strict linkage between issuance/redemption and settlement to mitigate settlement risk, especially where issuance/redemption to play a significant role in payments interoperability with the banking sector. Capital requirements should thus consider settlement modalities and legal definitions surrounding issuance/redemption. Meanwhile capital constraints on issuance, could potentially lead to secondary market trading away from par. Whilst individual holding limits can balance the tension between the commitment to par value vs. preventing destabilising shifts from bank deposits to stablecoins, vigilance to the potential impact of capital requirements in this regard might also be required. Additionally, we argue that the proposed requirement to fully back treasury tokens should be acknowledged as an additional capital requirement and Tier 1 loss-absorbing capital for issuers opting for this approach.*

We agree issuers of stablecoins used in systemic payment systems should be required to hold capital against risks that could lead to a shortfall in backing assets or threaten the firm's operational continuity. The proposal that capital requirements be modelled after those for systemic payment systems may be appropriate under the proposed full reserve requirement under which issuers would not be taking liquidity or credit risk (so no need for overcapitalisation) and proper segregation of backing assets should also minimise any risk of shortfall when it comes to coinholders' claims. Nevertheless, certain considerations merit attention.

One crucial aspect may be that to ensure strict enforcement of the proposed full reserve requirement, it would be necessary to strictly link issuance/redemption to settlement with finality. Without this settlement risk would arise – and could be an important issue particularly if issuance/redemption were integral to payments interoperability with the banking sector (an issue we discuss in response to question 1 – section 1.1.1.1). Any doubt regarding full backing of coins in circulation could lead to a run and/or discounting of the coins. The settlement modality and legal definitions surrounding issuance and redemption should thus inform the design and calibration of capital requirements.

Moreover, it's vital to remain vigilant about the possibility of capital constraints impeding issuance, potentially leading to secondary market trading deviations from par (as we argue in more detail response to question 2 - section 1.2). Individual holding limits may serve as a crucial mechanism to balance the tension between the commitment to par value vs. the imperative to prevent destabilizing shifts from bank deposits to reserves/stablecoin (as we argue in more detail in response to question 24 – section 4.1). However, the impact of capital requirements on issuance should also be considered – for example if operating expenses<sup>46</sup> scale with issuance, strong issuance could outstrip a stablecoin's capacity to lay aside additional capital.

Lastly, as we argue in response to question 19 (section 3.4), the proposal to require full backing of treasury tokens (tokens that the stablecoin has "minted" but not issued, or that they have redeemed but not "burnt"), would constitute an additional capital requirement and Tier 1 loss-absorbing capital for issuers that chose to operate in this way. This should therefore be explicitly acknowledged and discussed under the question of appropriate capital requirements.

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<sup>46</sup> Under current proposals/requirements under PFMI that a systemic payment system must hold capital in an amount at least equal to the highest of any of the following: (a) six months of operating expenses; (b) potential business losses; or (c) wind-down costs.

**Question 21. Do you have views on the approach (including any existing or bespoke methodologies) that should be considered for calibrating capital requirements?**

*We support the Bank's proposal to mandate issuers to transparently identify risks that could result in a shortfall in backing assets, encompassing operational risks like fraud or mismanagement, as well as the expenses associated with distributing assets to coinholders. However, we urge caution, as operators have frequently underestimated these risks, resulting in undercapitalization. Additionally, as acknowledged by the Bank, the industry's novelty and the consequent lack of historical data pose challenges in estimating capital requirements. Therefore, it is imperative for the Bank to meticulously examine issuers' assumptions and subject them to thorough stress-testing both initially and on an ongoing basis. Some specific considerations may include: settlement modalities and legal definitions surrounding issuance/redemption, the role of treasury tokens in logistics of issuance/redemption, and also the potential impact of capital requirements stablecoins ability meet demand for coin at par (all discussed in more detail in response to question 20 – section 3.5).*

**Question 22. Do you have views on the requirement to hold reserve assets in a statutory trust, to ensure that stablecoins are fully backed and the backing assets are duly protected and available to satisfy coinholders' redemption requests at all times?**

*Implementing the same safeguarding regime for reserve assets as for backing assets is a logical step to ensure the integrity and reliability of stablecoin systems.*

**Question 23. Do you have views on the range and quality of the assets issuers would be required to hold to mitigate shortfall risks?**

*Generally an issuer experiencing a loss due to operational incident may have some opportunity to absorb the loss and restore backing. However the primary focus should nevertheless centre on the stablecoin's capacity to convert backing-assets into bank deposits to fulfil redemption requests, emphasizing the liquidity of these assets, especially during stress events. Reserves represent the gold standard in this regard, offering a reliable source of liquidity. Additionally, other forms of HQLA backing may also be suitable. Recent stress episodes in core government debt markets underscore the potential for liquidity to be a problem exactly when it is needed most, even for the very safest of assets. While this poses a significant consideration for the design of stablecoins substantially backed by HQLA (and the backstops they would require), it may be more acceptable concerning operational risks. Arguably any issuer needing to maintain excessive capital against operational risks should not be permitted to operate.*

## **4. Other requirements for the issuance of money used in systemic payments systems**

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### **4.1 Questions 24-25: Individual holding limits?**

**Question 24. Do you agree that, at least during a transition, limits would likely be needed for stablecoins used in systemic payment systems, to mitigate financial stability risks stemming from large and rapid outflows of deposits from the banking sector, and risks posed by newly recognised systemic payment systems as they are scaling up?**

*The DP emphasizes the necessity for any stablecoin intended for systemic payment systems to adhere to standards equivalent to those expected of commercial bank money, advocating for full reserve backing to achieve this. Arguably however this structure could offer a safer and more liquid settlement asset than bank deposits. The proposal to prohibit stablecoin issuers from paying interest to coinholders could help limit stablecoin use primarily to payments (rather than as a store of value) in general, so avoid disruptive bank disintermediation. However, given full-reserve stablecoins would be the next safest thing to a CBDC, concerns arise regarding the potential for runs out of bank deposits into systemic stablecoins during stress events, suggesting a need to implementing individual holding limits as a precautionary measure. These limits would not only guard against*

*disruptive deposit flight but also serve as a defence against stablecoin trading away from par on secondary markets (due to issuance constraints). Whilst the DP suggests limits might be temporary, run risk and the potential for issuance constraints to undermine par would be permanent. The intricacies of enforcing such limits, particularly across the entire system, would pose complex challenges however, especially concerning potential implications for issuer cost dynamics and viable business models.*

The consultation paper (rightly) argues that any stablecoin to be used in systemic payments systems for settlement purposes should meet standards equivalent to those expected of commercial bank money in relation to stability of value, robustness of legal claim and the ability to redeem at par in fiat (see e.g. (Bank of England, 2023a, p. 63)). It is further argued that full reserve backing should be required to achieve this. Arguably however, a stablecoin on this structure could provide not just an equivalent, but a safer and more liquid settlement asset and store of value than bank deposits – this is because a fully reserve backed stablecoin would arguably provide the next best thing to directly holding central bank liabilities (reserves or a CBDC) (see discussion on backing assets under question 11 (section 3.1)).

The proposal that stablecoin issuers would not be allowed to pay interest to coinholders may do a lot to help limit stablecoin use - in general - to payments rather than as a store of value – so limiting deposit outflows from the banking system (although we note that depositors are in fact not that sensitive to interest rates and UK consumers leave large balances in unremunerated current accounts). In stress events however and if there is concern over safety of banks, a full reserve stablecoin might nevertheless be seen as a safe haven implying definite potential for runs out of bank deposits into systemic stablecoins. Without holding limits or other constraints, this would in principal be unlimited. As bank deposits are already a promise to pay cash, runs out of the banking system into central bank money are a risk we live with already. However, in practice there are considerable limits on cash withdrawal and the easiest and more likely way to run on a single bank is by transferring deposits to another bank, while there is limited scope for overall runs out of the banking system. A high-quality digital settlement asset and store of value such as a full reserve stablecoin or the digital pound might make such a run more likely than it is under current arrangements.

We therefore agree that individual holding limits would be a sensible precaution against the risk of disruptive deposit flight/large outflows of deposits from the commercial banking system. Whilst the DP suggests holding limits might be a temporary measure, we note that although concern over business as usual disintermediation might be assuaged over time, run risk would be a fundamental/permanent feature. Also – as we also noted in [our response on the digital pound](#) – whilst holding limits can put a saturation limit on any overall shift from bank deposits into a stablecoin/central bank reserves, the speed of outflow potentially remains a key risk. We note that the Bank proposes to reserve the right to require, or allow for, a temporary pause on redemption for financial stability reasons (Bank of England, 2023a, p. 64). Since a run into (rather than out of) a full reserve stablecoin may be both more likely and more disruptive from a systemic risk perspective, one idea could be to reserve similar discretion to intervene on issuance. Clearly this would need to be used with caution, given the tension between the role of convertibility in underpinning trust on the one hand, and systemic risk from mass redemptions on the other.

Since it would be the combined overall shift from bank deposits to public money that would be key/relevant, this seems to imply holding limits should be set for overall individual holdings of stablecoins (across all issuers) and moreover were the decision taken to introduce the digital pound, limits might need to consider users combined stablecoin and digital pound balances (we argued this in [our response on digital pound](#) consultation (Gillmore Centre Financial Technology, 2023)).

However this raises the questions how overall balances would be tracked and enforced over the entire system and would potentially pose a complex and challenging problem. Meanwhile enforcement of holding limits would presumably require sweeping arrangements between stablecoin wallets and linked bank accounts (presumably requiring settlement via RTGS). This could drive significant issuance/redemption volumes (especially if holding limits are set low) with potential implications for issuer cost dynamics and (viable) business models (see discussion under question 27 on availability of viable of business models (section 4.3), as well as question 1 on interchangeability with bank deposits (section 1.1.1)). We argued in our response on the digital pound that sweeping arrangements could pose a significant challenge, and it seems likely to be even more difficult with private stablecoins.

As well as mitigating risk of disruptive flows out of bank deposits into full-reserve stablecoins, individual holding limits could provide a valuable line of defence against the possibility issuance constraints could lead to a stablecoin trading away from par on secondary markets (see our response to question 2 on secondary market trading and the singleness of money (section 1.2)).



**Question 25. Do you have views on the use, calibration and practicalities of limits?**

*Since it would be the overall shift out of bank deposits into reserves that would matter, arguably holding limits to mitigate financial stability risks associated with large deposit outflows from the banking sector should be set for overall individual holdings of stablecoins (across all issuers), and potentially also account for combined stablecoin and digital pound balances if the digital pound is introduced. Additionally, holding limits may be crucial not only to prevent large scale deposit flight from the banking sector, but also – conversely - to serve as a defence against secondary market trading deviations from parity in response to issuance constraints, implying this might also be a key consideration when calibrating limits. However, implementing and enforcing these limits would pose complex challenges, particularly in tracking and managing overall balances across the system and establishing sweeping arrangements between stablecoin wallets and bank accounts. This sort of sweeping would require settlement (presumably by RTGS) and could significantly drive issuance/redemption volumes impacting issuer cost dynamics and viable business models. Since lower limits would likely exercise this system more, this might also be taken into account when calibrating limits. Addressing corporate involvement introduces complexities, including establishing distinct limits for firms and defining what qualifies as a «firm,» potentially requiring different limits for different types of firms. If secondary markets are introduced, exempting intermediaries from limits is crucial. Regulatory arbitrage risks arise from shell companies, undermining limit effectiveness. The elastic UK corporate landscape may compromise individual holding limits' efficacy. Implementing automated sweeping facilities may make lower limits viable for firms, but cost and efficiency implications from large transaction volumes should be considered.*

As we argue in our response to question 24 on the need for holding limits to mitigate financial stability risks stemming from large and rapid outflows of deposits from the banking sector, since it would be the combined overall shift out of bank deposits (into reserves/stablecoins) that would be relevant, this seems to imply holding limits should be set for overall individual holdings of stablecoins (across all issuers) and moreover - were the decision taken to introduce the digital pound - limits might need to also consider users combined stablecoin and digital pound balances. (Note we previously argued this in our [response on the digital pound](#) consultation).

We also argue that individual holding limits might not be important not just in mitigating risk of largescale deposit flight from banking sector, but also in part and the singleness of money under the entry of privately issued stablecoins by providing a key line of defence against potential for issuance constraints to lead to emergence of secondary market trading away from par. Thus this should also potentially be a key consideration in setting and updating holding limits (see discussion under question 2 on secondary market trading and the singleness of money (section 1.2) and on question 24 on holding limits (section 4.1)).

All of this raises the questions how overall balances would be tracked and enforced over the entire system - potentially a complex and challenging problem. Moreover, enforcement of holding limits would presumably require sweeping arrangements between stablecoin wallets and linked bank accounts (presumably requiring settlement via RTGS). This could drive significant issuance/redemption volumes, with potential implications for issuer cost dynamics and (viable) business models. Lower holding limits would be likely to exercise this system more and this might be one consideration when setting limits. (See relevant discussion on interchangeability with bank deposits (question 1, section 1.1.1); redemption fees (on question 14 section 3.3); and viable business models (question 27 section 4.3)).

We argued in our response on the digital pound that sweeping arrangements could pose a significant challenge, and it seems likely to be even more difficult with private stablecoins.

Addressing corporates entails various complexities: establishing distinct limits for firms, defining what qualifies as a “firm” and whether different types of firms should be subject to different limits (if secondary markets are deemed positive, intermediaries within these markets must be exempt from limits). There exists a risk of regulatory arbitrage through the formation of shell companies, potentially undermining limit effectiveness without robust enforcement mechanisms. Furthermore, due to the elastic nature of the UK corporate landscape compared to individual users, the efficacy of individual holding limits as a quantitative restraint on stablecoin issuance may be compromised. Implementing automated sweeping facilities may allow firms to operate within lower limits, but the cost/efficiency implications from large sweeping driven volumes should be considered.

## 4.2 Questions 26: Other proposed requirements on issuers?

**Question 26. Do you have other views on the Bank's proposals for requirements for systemic stablecoin issuers, as set out in Section 5?**

No opinion.

## 4.3 Question 27: Viability of business models under proposed requirements?

**Question 27. Considering the requirements for issuers in Sections 4 and 5, how might business models need to change in order to retain commercial viability from those in the market today?**

It is evident that operating as a systemic stablecoin within the proposed regulatory framework would necessitate some radically different business model compared to those in the market today. In fact, the proposed regime may preclude any commercially viable business model at all, thus effectively precluding the emergence of any widely used stablecoin. A potentially significant tensions may also arise here from the fact that that the proposed regime would also require a radical change in business model from those likely to arise under the proposed FCA regime for sub-systemic stablecoins (see our more detailed discussion of this tension and its possible resolution in response to question 4 and 5 (section 1.2 and section 1.3)).

We note the DP makes a useful distinction between issuance, transfer, and store of value functions. Considering the revenue generating opportunities under each of these:

### 4.3.1 Lack of revenue potential on issuance function

***Business models in the market today rely on generating income from investing coinholders' funds; however, proposed regulations mandate full reserve backing for systemic stablecoins, eliminating income generation from backing assets and transferring seigniorage income to the Bank. Prohibition from charging redemption fees further undermines viable business models based solely on issuance. However, we find little justification for paying interest (at an administered, not market rate) on reserves for full-reserve stablecoins unable to engaged in any liquidity or maturity transformation and that do not pay interest to coinholders. The proposition of passing seigniorage to coinholders through interest on coin holdings poses risks, potentially affecting payment focus. Alternatively, relaxing full reserve requirements to permit investments in HQLA could be a viable alternative but would alter stablecoin characteristics, potentially necessitating regulation under banking regulations (or anyway liquidity and capital requirements, liquidity backstop via market maker of last resort, and could involve participation in deposit insurance). In any case, we believe consistency is needed, in particular regarding both narrow/limited purpose banking models under banking vs. stablecoin regimes, and e-money providers that achieve scale.***

Business models in the market today rely on generating income from the investment of coinholders' funds. However, under the proposed regime where systemic stablecoin would be required to be fully back their issuance with reserves and receive no remuneration on reserve balances, stablecoin issuers would be unable to generate income on backing assets, and seigniorage income would accrue to the Bank. Furthermore, if further prohibited from charging any redemption fee, issuers would not be able to offset redemption costs (settlement via RTGS?). Consequently, while issuance is the primary function, there appears to be no viable solely issuance-based business model.

However, (as we argue in response to question 12 (section 3.2)) we find little justification for paying interest (at an administered, not market rate) on reserves for full reserve coins that cannot engaged in any liquidity or maturity transformation and do not pay interest to coinholders. Although we do acknowledge that there are examples of innovative transactions-based models operating with the benefit of interest on reserves (including both some successful Asian e-money providers (e.g. AliPay, WeeChat Pay)<sup>47</sup> as well as some innovative new firms focussed on

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<sup>47</sup> Under current proposals/requirements under PFMI that a systemic payment system must hold capital in an amount at least equal to the highest of any of the following: (a) six months of operating expenses; (b) potential business losses; or (c) wind-down costs.

infrastructure, transactions, or other services without engaging in significant liquidity or maturity transformation, operating with banking licences (e.g. ClearBank<sup>48</sup> and Monzo<sup>49</sup> may be relevant examples)). This highlights the need for consistency - for example if some initiatives seek to pursue narrow banking models under a banking regime (rather than systemic stablecoin regime) in order to benefit from interest on reserves, or if e-money providers reached systemic scale in the UK (given current requirements on e-money providers not consistent with proposed requirements on a systemic stablecoin). (See our further discussion under question on proposed regulatory framework (section 1.3)).

If interest ever were to be paid on reserve holdings however, we believe this seigniorage should be passed through to coinholders via interest on coin holdings. However, this approach, while advocated by some for providing a policy tool, could pose numerous challenges and risks and is not clear how it would necessarily remain payments focussed (see our more detailed discussion of the implications from full reserve backing in response to question 11 on backing assets (section 4.1)). Where this sort of pass-through model could make sense is for interbank settlement, where the depositors would be the normal receivers of interest income for monetary policy reasons (as with e.g. Fnlity proposal).

Another solution could be to instead relax the full reserve requirement and allow some proportion of backing assets to be investments in HQLA.<sup>50</sup> We note however that this would fundamentally alter the character of the stablecoin which would then participate in liquidity transformation and net money creation (see our more detailed discussion of the implications from HQLA backing in response to question 11 on backing assets (section 3.1)). Whilst this could potentially be a viable option, we believe that this model would raise the question whether this type of issuer might not be best regulated under (some version of) a banking regime (see our comments on the role of asset-backing in deciding what business model belongs within which regulatory regime (question 5 section 1.3)). On this model stablecoins would need to be subject to liquidity and capital requirements (cornerstones of banking regulation) and might be required to participate in (and contribute in some proportionate way to) deposit insurance (we note in this regard initiatives such as India's Payments Banks,<sup>51</sup> and Monzo in the UK).

We note that under proposed FCA regime, it will be possible to operate this type of model as a sub-systemic regulated stablecoin (although without access to reserves). As we argue in response to question 4 (section 1.2), this raises concerns regarding the singleness of money (although we note that with e-money we already have differing qualities of money in circulation). However there is a significant question, what happens if a market entrant achieves scale under FCA regime?

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48 ClearBank report the "vast majority" of their HQLA is held on deposit at the Bank of England and also state "all UK sterling funds are held securely at the Bank of England and not used for other purposes such as commercial lending. This unique strength of our business model ensures that we can simultaneously repay all our depositors on demand if needed". See: <https://clear.bank/uploads/assets/ClearBank-Pillar-3-2022.pdf>

49 Monzo reports for 2022 some 95% of its assets held as HQLA, and nearly 70% of this as cash on deposit at the Bank of England. See financial statements: <https://monzo.com/static/docs/monzo-annual-report-2022.pdf>

50 Not only would this allow for some income on non-reserve investments, but there may also be monetary policy arguments for remunerating reserves under this model.

51 In addition to restrictions on lending activities and account size, payments banks are only permitted to invest deposit balances in short-dated government debt (with a maturity of up to one year (75%)), time and fixed deposits at a scheduled commercial bank (25%), and to maintain a cash reserve ratio of 4% at the Reserve Bank of India. See e.g.: [https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2016/12/GSMA\\_The-business-case-for-payments-banks-in-India\\_2016-1.pdf](https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2016/12/GSMA_The-business-case-for-payments-banks-in-India_2016-1.pdf)

#### 4.3.2 Viability of transactional-based models?

***A systemic stablecoin, lacking income from assets, must excel in transfer function efficiencies and additional features to succeed. In domestic payments, competitive fees and settlement times could attract merchants and foster adoption. Payments between bank deposits and stablecoin (presumably via RTGS) would drive issuance/redemption and this may be costly for stablecoins and perhaps for banks (via impact on intraday liquidity costs) - settlement modalities would affect issuance/redemption costs and settlement times (issuance should be strictly linked to settlement finality to ensure full reserve requirement is met). However, stablecoin issuers able to bring efficiency and innovation to on-platform/in-stablecoin payments - where full reserve backing would enable 24/7/365 real-time gross settlement – might succeed (with familiar network effects likely leading to dominant player(s)). The proposed regime might thus enable private stablecoins to emulate successful models like Swish, albeit current opportunities in the UK market are not assessed. In this sense the issuance function could thus influence competition in the transaction function relative to current payments sector.***

Considering that revenues cannot be directly generated from the issuance function (as discussed above), systemic stablecoins would need to excel in offering a more efficient transfer function to be profitable. If stablecoins could compete with existing systems in terms of fees and settlement times, transaction-based models might become feasible, with merchants playing a pivotal role in driving adoption.

On the potential for more efficient transfer function: payments between bank accounts and stablecoins, and vice versa, could drive significant issuance and redemption activity. Stablecoins would incur settlement costs, likely via RTGS, for these transactions. The choice of settlement modality for issuance and redemptions would impact both issuer costs and settlement times. The use of deferred net settlement (DNS) modality could help reduce the cost of issuance and redemption. However, it is important to note that while full reserve backing would mitigate settlement risk on redemptions, there would still be credit risk associated with incoming payments. Therefore, a rigorous adherence to full reserve backing would necessitate issuance to be strictly tied to settlement with finality. Real-time gross settlement modality would entail transaction costs for a stablecoin issuer, and potentially be more costly for the banking sector which would need to provide the reserves and maintaining the liquidity required to support real-time gross settlement with systemic stablecoins. Frequent AML checks may also be a significant friction. It is also possible alternative clearing systems to facilitate the secondary exchange of stablecoins in circulation with bank deposits might emerge to facilitate payments between stablecoins and bank deposits if these could be more cost efficient than issuance/redemption settled via RTGS (see discussion in response to question 2 on secondary market trading (section 1.2)).

However (and without taking any position on what technologies might be), stablecoin issuers able to bring efficiency and innovation to on-platform/in-stablecoin payments might be able to succeed. Full reserve backing would enable a stablecoin to offer real-time settlement with finality on-platform around the clock, every day of the year (even while RTGS is closed - resembling pre-funding arrangement based fast payment systems). Considering that some potential users, particularly merchants, may prioritize both low fees and fast settlement, a stablecoin leveraging efficient technologies to achieve low-cost real-time settlement (along with whatever innovative functionality they might offer) could perhaps attract a sizable customer base. Only issuers offering significant value propositions in transfer/exchange would be viable. Natural scale effects would likely come into play (initially as a barrier to diffusion, then leading to the emergence of large players).

Innovative stablecoin-based transaction-models of course would only emerge if there is also an incentive to engage in issuance. However there may be a case that the ability to issue, would allow private stablecoins to compete with banks to emulate successful models like Swish (given the likely scale effects, there may be a strong first-mover advantage), albeit current opportunities in the UK market are not assessed. Stablecoins might benefit from building new systems bottom up compared to banks needing to update legacy systems.<sup>52</sup> In this sense whilst issuance would not directly generate revenues, it could nevertheless make a difference to competition/contestability compared to what happens currently (with cards etc.).

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<sup>52</sup> Fast payment system build for participants (i.e. commercial banks) is invariably difficult due to the complexity and age of their current systems. Upgrading those systems to enable real-time posting and 24/7 operation takes time (CPMI, 2021). See: <https://www.bis.org/cpmi/publ/d201.pdf>

### 4.3.3 If the digital pound were to be introduced?

*We previously proposed that the platform model for the digital pound could enable Payment Interface Providers (PIPs) to introduce innovative payment features, similar to those that might attract users to privately issued stablecoins, while still retaining valuable seigniorage. However, the proposed full reserve requirement for private stablecoins would eliminate the possibility of seigniorage competition. As a result, competition between private stablecoins and digital pound PIPs would focus on transfer and store of value functions, with PIPs benefiting from use of a settlement asset that is a direct claim on the Bank (compared to claim on stablecoin issuer). This raises the question of whether, given these conditions, potential stablecoin issuers might find it more advantageous to function as a PIP. Conversely, considering the immediate regulation of stablecoins, it is worth contemplating how the success of regulated stablecoin might impact the future case for the digital pound.*

In our previous response on the digital pound, we posited that the proposed platform model could allow for Payment Interface Providers (PIPs) to implement and compete on the sorts of value-adding payments innovations which might potentially make future privately issued Sterling backed stablecoins attractive (for example allowing PIPs to implement and offer programmability), without sacrificing valuable seigniorage. We note that the proposed full reserve requirement ensures that private stablecoins would not have the opportunity to compete for this seigniorage. Any shift towards unremunerated reserves - whether through the digital pound or private stablecoins - would result in seigniorage accruing to the public purse. Consequently, private stablecoins and digital pound PIPs would compete based on the value propositions of their transfer and store of value functions – although PIPs would arguably benefit from having the highest possible quality settlement asset. This prompts the question: if you have a transactions-based business model, why bother with the issuance function at all? Perhaps the optimal approach under these requirements would be to aim to function as a PIP?

On the other hand, with stablecoin regulation going ahead right away, and a decision on the digital pound uncertain and still some way off, if systemic stablecoin were to take off in the meantime, it is interesting to consider how this might influence the future case for the digital pound?

## 5. Requirements for wallet providers

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### 5.1 Questions 28: Requirements on custodial wallet providers?

**Question 28. Do you agree with our proposed expectations for custodial wallet providers for systemic stablecoins (including when provided via exchanges) and how we propose applying them in a systemic stablecoin payment chain?**

No opinion.

### 5.2 Question 29: Suitability of unhosted wallets?

**Question 29. Do you consider that unhosted wallets could operate in a way that the systemic stablecoin payment chains can meet the Bank's expectations (including for the issuer to deliver against the Bank's requirements set out in this Discussion Paper)?**

*While we remain open to the potential existence of solutions, the inherent anonymity linked with unhosted wallets presents a significant challenge. It is difficult to envision how payment chains could effectively function with unhosted wallets while meeting the stringent expectations and requirements set forth by the Bank. These requirements include provisions related to redemptions, holding limits, and crucially, AML checks. While certain considerations, such as holding limits, may not be applicable to non-systemic coins, others, particularly AML checks, should arguably be a prerequisite for issuers operating at any scale, if especially at a systemic level.*

### 5.3 Question 30: Treatment of off-chain ledgers?

**Question 30. Do you agree with the Bank's proposal to regulate off-chain ledgers operated at systemic scale under the same requirements otherwise applicable to systemic payment systems?**

No opinion.

## 6. Requirements applicable to other service providers

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### 6.1 Questions 31: Regulating service providers

**Question 31. Do you agree with the Bank's approach to regulating service providers to firms operating in systemic stablecoin payment chains?**

No opinion.

## 7. Public sector equality duty

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### 7.1 Question 32: Public sector equality duty

**Question 32. The Bank will have due regard to the Public Sector Equality Duty, including considering the impact of proposals for the design of the regulatory framework for systemic payment stablecoins on those who share protected characteristics, as provided by the Equality Act 2010. Please indicate if you believe any of the proposals in this Discussion 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 any impact could be mitigated.**

No opinion.

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