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Systemic stablecoin and the defensive case for Central Bank Digital Currency: A critique of the Bank of England's framing

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ABSTRACT

The case for CBDC does not just rest on its benefits or attractions, but also on its scope to avert potential problems associated with stablecoin. In this brief paper I critique the 'illustrative scenario' at the heart of the Bank of England's recent *New Forms of Digital Money* discussion paper. I suggest that it does not deal realistically with the motives and practices of issuers. The argument speaks to contradictory trends both in the urgency of regulation of stablecoin and the underlying case for CBDC.

1. Introduction

Central Bank Digital Currency (CBDC) has become a major focus of interest in the last few years and numerous countries, as well as regional organizations such as the European Central Bank, now have projects at one stage of development or another. Boston Consulting Group's CBDC Tracker categorises these projects into 'research' (early stage exploratory work by a designated organization on behalf of the state etc.), 'proof of concept' (advanced research and publication of findings), 'pilot' (in the testing stage) and 'launched'.¹ As of March 2022, the Tracker listed 95 projects, of which 62 were in the research stage and 16 were at proof of concept. There were 15 pilot projects and 2 implemented CBDCs (Nigeria and the Bahamas). There are several different approaches to CBDC, but if we focus on 'retail' CBDC, the common thread is that the central bank issues a digital money in addition to cash (and in the long term perhaps to replace it), which unlike the central bank reserve system, households, non-financial businesses etc. have access to. As cash use declines and an increasing proportion of payments become digital, retail CBDC offers a new point of access to central bank money for the public and thus provides an important visible 'anchor' or source of trust for money and the payments system, while also facilitating financial inclusion. Moreover, insofar as CBDC are built using distributed ledger technology (DLT) and 'smart contracts', CBDC offers a new range of technological possibilities for speed, efficiency and security of settlement, monetary policy transmission and so on.² The general consensus is that it is likely that an increasing number of countries will adopt CBDCs over the next decade for a

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¹ Visit: <https://cbdctracker.org> It should be noted that some countries occur twice. For example, the Bank of England occurs under two different projects, one retail and one wholesale. There is also an additional category of canceled projects (currently 6).

² CBDC need not be built using DLT but it is in this context that the benefits are typically discussed.

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number of reasons (e.g. [Carney, 2021](#): 110–119; [Prasad, 2021](#): 193–238).

However, the case for CBDC has not only rested on the inherent attractions of CBDC, but also the potential threats posed by the emergence of a new form of private digital money, ‘stablecoin’. Stablecoin is a cryptocurrency variant. While stablecoin can be stabilised using an algorithmic method (supply is automatically adjusted through smart contracts in response to varying demand), the dominant variant is ‘reserve-linked’. Here, the issuer maintains a reserve of assets to at least the value of issued stablecoin, though the composition of such reserves varies from high quality liquid assets to other cryptocurrencies. So, stablecoin is a variant of cryptocurrency issued in exchange for a reference asset (typically a fiat currency such as the US\$) and underpinned by a guarantee from the issuer to redeem the stablecoin at 1:1 with the reference asset. According to Chainalysis, currently stablecoin are mainly used for ease of entry into and rapid exit from speculative investments in cryptocurrency exchanges, and in some emerging economies, for the purposes of remittance, avoidance of capital controls and in processes of flight to safety and ‘dollarisation’ in the context of currency devaluation ([Chainalysis, 2021](#)). For example, stablecoin trading has in the last two years spiked in response to problems of valuation of both the Turkish Lira and the Russian Rouble. Looking ahead, however, the IMF, FSB, BIS and numerous central banks and other regulators are concerned by the scope for rapid adoption of a stablecoin, rendering it ‘systemic’ ([FSB, 2022](#); [IMF, 2021](#); [FSOC, 2021](#); [Arner et al., 2020](#)). This would constitute a major disruption, affecting the global currency hierarchy, domestic money hierarchies, funding of and loan provision by retail/commercial banks, financial stability, integrity of payments systems, and monetary policy. Meta’s aborted Diem project has merely served to underscore these concerns ([Kharif, 2022](#); [Diem, 2020](#); [Eichengreen and Viswanath-Natraj, 2020](#)).

It is, therefore, important to be aware of the *defensive* case for CBDC as well as the positive case. Retail CBDC is also an attempt to ensure stability and integrity of the money and payments system and to reassert, in the context of innovations, the power of the state, limited though that has always been in modern money market capitalism. Adoption may also reflect a degree of competition between states. The US Federal Reserve, for example, notes a CBDC may help to preserve the global dominance of the US\$ and China anticipates a CBDC may help to internationalise its currency and reduce dependency on the US\$ ([Federal Reserve, 2022](#); [Wang, 2022](#)). As Jon Cunliffe, Deputy Governor of the Bank of England for Financial Stability, recently noted, there has been a great deal of work done in order to develop regulation for cryptocurrency and stablecoin (e.g. [CPMI-IOSCO, 2021](#); [HM Treasury, 2021](#); [FSB, 2020](#); [EC 2020](#); [G7 WGS, 2019](#)), but regulators are playing catch-up and more urgency is required ([Cunliffe, 2021a, 2021b](#)). His comments speak to issues underlying the Bank of England’s preliminary paper on CBDC ([Bank of England, 2020](#)) and the subsequent ‘discussion paper’, *New Forms of Digital Money* ([Bank of England, 2021](#)). In this short paper I explore one core aspect of the discussion paper, its ‘illustrative scenario’, which sets out a baseline for substitution of stablecoin for retail/commercial bank deposits. In so doing, I comment on the adequacy of the ‘framing’ of the problem, since this speaks to the urgency and adequacy of the defensive case for CBDC. The significance of this will become clear as we proceed.

2. The Bank of England’s discussion paper’s ‘illustrative scenario’

2.1. Context

The Bank of England published its discussion paper, *New Forms of Digital Money*, in June 2021. The paper sets out the range of issues invoked by the rapid rise of cryptocurrency in general and stablecoin in particular over the previous few years and followed the Bank’s March 2020 paper on the potential for a UK CBDC, subsequently dubbed ‘Bitcoin’. The purpose of the discussion paper is to highlight the scope for regulatory responses to new forms of private digital money and also to provide context for any further development of a UK CBDC. The discussion paper defines systemic digital money as one with ‘the potential to scale up and grow rapidly and to become widely used as a trusted form of sterling-denominated... retail payments.’ ([Bank of England, 2021](#): 7). By ‘systemic digital money’ they essentially mean a stablecoin and a key focus of the discussion paper is the problem of reserve drain and ‘disintermediation’. If the public choose to adopt stablecoin, then they will initially be making payments from retail/commercial bank deposits, since stablecoin are issued in exchange for fiat currency. Stablecoin wallets are thus substituted for deposits and then when payments are made, stablecoin are transferred using blockchain, and insofar as this is the case, they are *not* redeposited with retail/commercial banks. This has two consequences.

First, the retail/commercial bank lose both an asset and liability – hence reserve drain or disintermediation. A deposit is a liability and central bank reserves an asset. If £ 10 is exchanged for stablecoin then the retail/commercial bank loses a £ 10 liability, but also an equivalent sum of reserves at the central bank. The balance sheet thus tends to shrink, but retail/commercial banks will still want to lend and, while central banks now recognise reserves are not the source of lending, reserves are required for settlement purposes (for background see [McLeay et al., 2014](#)). As such, to maintain capacity to lend retail/commercial banks will be required to seek reserves, and thus attract new deposits, borrow from the central bank or from money markets, all of which incur ‘funding’ costs, leading to possible falls in lending and increased charges to borrowers.

Second, a ‘reserve-linked’ stablecoin issuer accumulates fiat currency. Clearly, what happens next depends on what the stablecoin issuer does, which, in turn, depends in part on how they are regulated. For, example, the issuer is likely to buy assets to populate its reserve. Insofar as it buys securities these may well be bought from corporations who will deposit the payment with a retail/commercial bank. So, the ultimate effect of loss of many small retail deposits from *many* banks may be replacement with large wholesale deposits at *some* banks. Basel III rules mean wholesale deposits tend to be treated differently for risk purposes, and more capital has to be retained against these deposits, again, increasing costs.

In any case, the Bank of England discussion paper devotes considerable attention to the various regulatory possibilities – both for regulation of the stablecoin issuer’s reserve and regarding how retail/commercial banks might respond to new wholesale deposits

(how to ‘term out’ the deposit and so on). However, the underlying issue relates to the Bank of England’s assessment of the *extent* of adoption of stablecoin i.e. the scope for a stablecoin to become ‘systemic’, since it is this that creates the potential for disintermediation as well as for the eventual scale of problem of the many other threats a stablecoin might represent. The discussion paper offers an ‘illustrative scenario’ and this provides a point of departure or baseline for the extent of adoption (Bank of England, 2021: 31–40).

2.2. The illustrative scenario

The ‘illustrative scenario’ is set up to explore the potential for payments by households and corporations to ‘migrate away from the banking sector’. The key concern is that this affects banks’ sources of ‘funding’, costs, lending rates and liquidity. The discussion paper emphasizes the scenario is not a ‘forecast’ and is far from certain, since its main subject is forms of systemic stablecoin that have yet to be designed and implemented and it is open to question quite how banks and potential users of a new stablecoin money will respond. The Bank states:

The illustrative scenario depends crucially on the underlying assumptions related to demand, the response of banks and non-banks and wider economic factors. In practice, the emergence of new forms of digital money could produce very different outcomes. It is impossible to produce a meaningful range of outcomes without giving the impression of greater certainty than is warranted. (Bank of England, 2021: 38).

This notwithstanding the authors still attempt to quantify responses. The authors focus on three ‘nonfinancial’ (i.e. not cost related) reasons, which they consider likely motives for deposits to ‘migrate’ from banks to stablecoin wallets (Bank of England, 2021: 34–35):

1. ‘Safety’: here they suggest, stablecoin might alter how depositors with balances above the £ 85,000 insured by the Financial Services Compensation Scheme (FSCS) think about what is ‘safe’, if a stablecoin is deemed reasonably trustworthy. The stablecoin’s 1:1 redemption commitment offers an alternative, which can be used to diversify risk. The authors suggest *some* households and *all* uninsured non-financial corporate balances might migrate and they put a figure of 21 % of total household and corporate deposits on this.
2. Relative ‘trust’: the authors highlight research indicating about 30 % of households trust large tech companies *more* than their bank. Around 20 % of this 30 % of households use apps for payments. The authors suggest this group could readily switch deposits to new digital money and this amounts to about 3 % of total retail deposits.
3. ‘Convenience’: the authors suggest some depositors will switch to hold wallets in similar fashion to how they currently hold cash (ease of payment for some purposes and so on). This will likely be equivalent to the amount of cash they currently hold, leading to a figure of approximately 2 % of total deposits.

So, the authors initially suggest about 26 % of deposits might migrate to new digital money. However, they also suggest two ‘offsetting’ factors. First, ‘inertia’ i.e. the assumption that not all in the three categories will implement the changes they could (perhaps 80 % will, reducing the 26 % figure by about a fifth). Second, ‘complexity’ i.e. some potential adopters might be deterred by perceived complexity in the context of their own lack of financial sophistication and the authors put this at about another 2 %. The authors thus derive a figure of around 20 % migration of deposits.³

3. Framing discussion and the problem of neglect

The illustrative scenario is at the heart of the discussion paper. The scenario prefigures subsequent exploration of how retail/commercial banks might respond to disintermediation and to new wholesale deposits and also how stablecoin issuer reserves might be regulated.⁴ As such, it sets in motion the defensive case for CBDC insofar as it is indicative of the extent of the problem represented by stablecoin. There are several points we might make here. It is arguable whether migration of approximately a fifth of deposits constitutes a ‘systemic’ effect, if by this we mean systemic *change* and it is arguable whether the illustrative scenario tells us much about the more interesting issues that may emerge if there is in fact a transformative set of changes. It is, as such, not very ‘illustrative’. The focus is a rather limited set of nonfinancial motives for migration based on current conduct and concerns. In combination with the assumptions the point seems to be to convey a sense of reassurance.

Of course, a lack of recognition of other issues in the illustrative scenario does not mean transformative effects will occur. It merely means the discussion paper does not do much to advance our understanding of them. This could, however, ultimately appear

³ They also note that the situation might be different if stablecoin providers offer incentives to attract deposits (e.g. switching bonuses, cashback on use of the stablecoin in a payment system similar to those available on credit cards and most fundamentally, interest rates on stablecoin holdings which compete with interest rates for savers at retail/commercial banks). However, they think this less likely since the core business of payments is likely to be a greater focus of the business model. In any case, they state it is impossible to know how such incentives might affect migration.

⁴ The Bank sets out four different regulatory options: requiring issuers to be authorised as banks, requiring issuance to be settled in central bank reserves (high powered money), requiring reserves to be backed by approved HQLA, and requiring the issuer to operate in conjunction with (i.e. deposit at) an approved retail/commercial bank with access to the central bank reserve system (Bank of England, 2021: 52–61).

complacent, given the growing recognition among regulators that more urgency is required.⁵ Clearly, the point of the paper is to create ‘discussion’, so highlighting omission may seem to be a trivial point – all major issues of substance ought to arise through responses. But equally one might argue that the discussion paper ‘frames’ the nature of debate and thus serves to focus responses to some issues, while neglecting or marginalizing others. In what follows I set out three possible areas that likely affect the adoption of stablecoin that speak to the type of threat it might pose.

3.1. *Insufficient attention to the potential of stablecoin technology and thus its uses and adoption?*

The discussion paper emphasizes that private money is not new since retail/commercial bank money is private money (see also Segal-Knowles, 2021). This, however, does not fully address the appeal of any particular form of private money and that seems important to the premises of the illustrative scenario. As almost every discussion of new forms of digital money highlight, new forms of digital money may change not only how one pays for something, but also what can be paid for. Stablecoin adds the additional attraction of stability (a primary feature of store of value and trust) to the potentials inherent to cryptocurrency (DLT etc.). Stability increases the likelihood of adoption of a new form of money able to facilitate micropayments, programmable money forms, automatic payment and atomic settlement. In combination with smart contracts, it has applications as an alternative to subscription models, and for use with Internet of Things, derivatives, cross-border payments, any form of time-dependent, time-controlled or purpose-specific payment and so on. It is a technological change that readily integrates with a whole range of other developing technological changes that may transform society and economy, sometimes referred to as 4IR. There have, of course, been numerous skeptical responses to the claims made regarding the form any such broader technological revolution *might* take and what its impacts might be (e.g. Moll, 2021; Morgan, 2019) and as things stand there has been little progress on possibilities such as micropayments (principally because of transaction costs), but the point remains that the payment possibilities associated with stablecoin and similar technologies are new and innovative reasons to use a currency *not* duplication of current conditions.

The assumptions of the illustrative scenario, in contrast, treat stablecoin as simply another generic means of payment, rather than as a technology with new potentials. It is simply what one might use or hold based on relative risk compared to insured proportions of bank deposits and based on convenience and this delimits the scope for *substitution*. As such, the assumptions which dictate the proportion of deposit migration in the illustrative scenario are not just conservative, they are inattentive to the technology under consideration. It should, however, be noted that the discussion paper does acknowledge later that in ‘applying its approach to stablecoin, the Bank would consider if any modifications or changes in focus are required [in regulating payments system providers]. These could reflect the unique design, or technological features of stablecoin.’ (Bank of England, 2021: 54). This, however, does not lead to discussion of how technology bears on stablecoin’s *adoption*.

3.2. *Insufficient attention to the motives and strategies of stablecoin issuers?*

The illustrative scenario is focused on stablecoin *becoming* a substitute, but ascribes no motives to the issuers and propagators and so does little to realistically allow for inducements by issuers and their partners that might affect adoption. Put another way, it leaves the scope of influence or power unexplored. As background, the discussion paper simply informs the reader that a contemporary HM Treasury consultation document highlights the need to focus on ‘ensuring consumer protections; and promoting competition and innovation’ (Bank of England, 2021: 65). In the UK, this is the remit of the Financial Conduct Authority (FCA) and Payment Systems Regulator (PSR). Promoting competition, of course, places great emphasis on the efficacy of market processes, and yet the Bank also recognizes ‘there may be only a small number of stablecoins’ (Bank of England, 2021: 67). The discussion paper orients on this in two ways. First, it notes ‘multiple networks are less likely to suffer outages at the same time’ (Bank of England, 2021: 44). Second, it suggests if there are fewer stablecoin issuers there may be a problem of ‘limited ability to pool risk’ (Bank of England, 2021: 67). Neither point addresses the motives, behaviors and scope for action of a systemic stablecoin issuer. Libra/Diem appears only in an endnote, which does no more than acknowledge the project and says nothing about the practices this or a similar project might deploy.

It should be noted, however, that the independence of central banks and the standard commitment to ‘market neutrality’ tends to make central banks wary of analysis or pronouncements that smack of politics. This, in turn, tends to make them wary of venturing into political economy and sociology, but this is a serious constraint when considering the reality of market structure. Libra/Diem may have been abandoned by Facebook/Meta, but the very fact the project was conceived and developed is suggestive. Libra/Diem, and possible equivalents, are attempts to *dominate* payments and this is clearly a facet of any realistic use of the term ‘systemic’. Libra/Diem was a collaborative project among several major corporations. In any case, Facebook/Meta is a monopoly-tending organization in an oligopolistic environment, and there is no reason to assume introduction of a stablecoin cryptocurrency by some equivalent will not be done with monopolizing intent.⁶ The scope for monopoly, moreover, is not restricted (or prevented) by the regulatory concern with liquidity i.e. the requirement for the stablecoin to be liquid (and thus transferable and the technology to be, in the jargon, ‘interoperable’), since it is as ‘first port of call’ that monopoly power will likely be dictated on platforms.

⁵ The discussion paper does, however, distinguish between a ‘steady state’ in which practice and regulation settles down, focused on use of stablecoin (in some proportion representing substitution or migration) and transitional disruption (see Bank of England, 2021: 12, 43, 49 and 63). But this is not quite the same as exploration of transformation and of the more fundamental regulatory issues that might arise.

⁶ It should be noted though that during the period of development of Diem, the project head claimed that they preferred a CBDC and the organization was keen to work with regulators.

There is no reason to expect some efficiency-tending competitive market outcome for private digital money, given the infra-structural context of the *technology* of payment in its *private* digital money guise. The broader issues are how might features of the technology reinforce monopoly tendencies, how might powerful actors ('Big Tech' as is, or some future equivalent) seek to influence, capture or game regulation and in the meantime how might they attempt to rapidly upscale use of *their* stablecoin? Stablecoin is different in design than standard cryptocurrencies. The latter, such as Bitcoin, are, in the jargon 'open-source, permissionless, and non-hierarchical' to facilitate peer-to-peer transactions. The former, in contrast, are permissioned and hierarchical, which essentially means access to key features of the system is restricted and controlled. While this is quite different than the original intent claimed when cryptocurrencies were first launched (the Nakamoto manifesto), it does, in principle, provide solutions to vulnerabilities such as '51 % attacks' which might, for example, undermine the security of a blockchain. This in combination with the commitment to stability by a *large* established corporation or coalition of corporations may encourage adoption – providing trust or credibility which has so far eluded providers (something that has dogged, for example, Tether). So the existent oligopoly-monopoly status of providers may (at least initially) stand in their favour (quite the opposite of the standard assumption that a more competitive market structure is good). Furthermore, though stablecoin may be a new technology, its potential adoption could turn on the leveraging of already existing platforms and payment systems to exploit the potentials of the technology. None of this is reflected in the 'illustrative scenario' or in the subsequent elaborations within the discussion paper. As any sociologist or business school academic with an interest in market practices will readily recognize, there is great scope for the issuer to exploit stablecoin in order to tie the user to *continual* or *preferred* use and thus, in turn, tie them to platforms. Tactics might involve:

- Use of familiar strategies for online systems that channel and retain customers. For example, a presumed default to stablecoin payment on platforms, or use of 'simulated consent' which is relatively easily generated (if not prevented) via complex terms and conditions (with an embedded link few would ever read) and by adding in additional costs that channel the user to given choices in order to make the stablecoin the primary payment system offered in subsequent visits.
- Inducements: these range across interest paid on stablecoin deposits, 'buy now pay later' (credit type offers) settled in stablecoin that generate debt dependency, 'cashback' and loyalty schemes.

Presumably these are all possibilities put aside by the illustrative scenario insofar as they might be deemed 'uncertain'. And yet based on the evolved practices of corporations each seems likely. Given businesses like Facebook/Meta already allocate considerable resources to designing systems that 'invite users in', it seems naïve to think they would not apply the same principles to stablecoin as an *integral* aspect of payment.

In general, it seems very likely an issuer like Diem would create numerous subtle ways to channel payments to platforms and thus undermine 'interoperability' of types of payment, even if it was formally committed to the principle. Yet, the closest the discussion paper comes to recognition of this is technical reference to the possibility of a 'closed loop' stablecoin (Bank of England, 2021: 26). And, of course, issuers are liable to aim to monetize the data derived from their customer base, and while the discussion paper acknowledges this later, it is not given prominence as an obvious attraction of creating and operating a stablecoin cryptocurrency for an organization like Facebook/Meta.

The point to emphasize here is that stablecoin offers a step-change opportunity for corporations to dominate markets. Future systemic stablecoin cannot be adequately assessed in isolation because its propagation by corporations and adoption by customers will likely occur within more complicated strategic behavior. As such, being able to think like the issuer is an important component in anticipating how issuers treat regulation and how stablecoin might proliferate. The illustrative scenario is arguably a reassuring distraction from the more complex activity of a realistic market-relevant scenario building exercise. As such, it inadvertently diverts attention from the nature of the threat stablecoin might pose. It is, therefore, problematic as a constituent of the defensive case for CBDC. This brings us to a final point.

3.3. *Insufficient attention to the motives and strategies of the rest of the financial system and its actors?*

The discussion paper's illustrative scenario suggests that the main consequences of a shift to stablecoin are a convenience-related substitution of stablecoin for cash and a risk-related substitution of stablecoin for uninsured deposits. This is deemed a limited source of disruption since the authors assume the ultimate effect is a transformation of many small deposits into fewer wholesale deposits – a complication of redepositing (how recycling occurs). However, whether in fact this change is *disruptive* depends on a further set of unstated conditions, which the authors must assume are benign.

There is an implicit assumption that recycling is into domestic banking entities and is relatively evenly spread around existing banks. However, neither necessarily follows and it seems likely that stablecoin providers will have preferential agreements with given banks (as is already the case), in which case migration will be from many banks to only some. Furthermore, unless prevented there is no reason why recycling to domestic incorporations of banks should occur, just because they are in Sterling. This will depend on what advantages can be gained by doing so.⁷ As in the previous sub-section, this is ultimately a problem of recognition of complex strategic behavior. This is a matter which speaks to a broader issue. Banks are nodal points in an increasingly complex finance system with

⁷ Note, this should not be confused with the discussion paper's reference to generalized issues of use of stablecoin for cross-border payments and the phenomena of 'dollarization', since these have no bearing on the illustrative scenario and are recognized as problems for 'developing' countries with weaker or volatile currencies (Bank of England, 2021: 51).

numerous interconnections of entities owned and operated in multiple jurisdictions. Stablecoin creates scope for new practices and new connections between organizations (alliances, ownership networks etc.). This has three inflections.

First, the existence of stablecoin reserves creates a new focal point for financial distress – reserves, their management and failure. Second, stablecoin exposes the balance sheet of any bank offering custodial services for stablecoin reserves. Third, stablecoin creates a new nodal point which may trigger contagions. This potential for contagion is most readily understood through a sudden need for a systemic stablecoin to sell securities used to populate its reserve in response to unanticipated redemptions. Such a liquidity mismatch could quickly become a ‘fire sale’ with material consequences for the pricing of securities, which, in turn would mean the reserve was recognizably no longer ‘full’, exacerbating a run on the stablecoin reserve, while, as an unintended consequence, affecting the collateral position of all other financial actors holding similar securities – a margin and covenant problem.

Systemic stablecoin, therefore, invokes problems of ‘systemic risk’ and as the global financial crisis illustrated this cannot be adequately understood through individual balance sheets (a ‘microprudential’ perspective), since it concerns properties of the system whose consequences follow from interdependency: herd behavior, fallacies of composition, procyclicality and so on. I by no means wish to suggest that regulators are unaware of this – the Bank of England now has a Financial Policy Committee (FPC) and a keen interest in macroprudentialism, and Jon Cunliffe’s recent speeches are obviously within this context.⁸ The point rather is that the discussion paper’s ‘illustrative scenario’ is constructed in a compartmentalized fashion that simply puts all of this aside. It thus does little to provide a realistic point of departure for scenarios of the potential significance of stablecoin. If anything it works against the sense of urgency Jon Cunliffe draws attention to at the Bank and that other work highlights – notably Chapter 2 of the recent *Global Financial Stability Report* (IMF, 2021) and the US Presidential Working Group *Report on Stablecoins* (PWG, 2021) and contemporaneous commentary in the Financial Stability Oversight Council *2021 Annual Report* (FSOC, 2021: 124–125, 173–175).⁹ The scenario thus highlights that there are conflicting tendencies in how stablecoin is being assessed. This clearly bears on the defensive case for CBDC.¹⁰

The situation, of course, is an evolving one, and yet one might also note that a basic tension between urgency and delay continues to be a feature of the process of regulatory reform for new forms of digital money. For example, in March 2022, in responding to a House of Lords Economic Affairs Committee report from January (EAC, 2022) the Bank of England did little more than acknowledge it was considering the responses to its various consultations and that it would publish a further consultation paper in conjunction with work with HM Treasury later in the year.¹¹

4. Conclusion

As the BIS makes clear, one of the primary reasons to consider a CBDC is the disruptive potential of stablecoin (Arner et al., 2020: 5, 21–22). Arguably, the Bank of England’s *New Forms of Digital Money* represents a new variant on a constraint on central banks recognised by Andrew Baker (Baker, 2018; Baker and Morgan, 2021). The ‘illustrative scenario’ fits into an evolved tendency of the Bank to restrict its analysis to, broadly speaking, a technical remit, leaving more ‘social’ and normative issues to others (see also Dow, 2019).¹² And yet the Bank recognises that:

Money is in the end a social convention that can be very fragile under stress. Money is not only a social convention, it is a very dynamic one. The forms it can take and the uses to which it can be put have varied materially through history and between societies. (Cunliffe, 2021a: 2).

It is odd then, and potentially counterproductive, for the Bank to offer unrealistic assessments of stablecoin. This surely undermines adequate understanding of the case for CBDC and what a, to adopt a term from the call for this special issue, ‘paradigm shift’ would involve. CBDC may be the future of money, but money remains a relatively poorly understood phenomenon (e.g. Lawson and Morgan, 2021; Ingham, 2004).

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

Arner, D., Auer, R., Frost, J., 2020. ‘Stablecoins: risks, potential and regulation.’. BIS Work. 905.

⁸ Cunliffe, for example, recently noted that stablecoin may be a small percentage of global assets but so were Collateralized Debt Obligations in 2008.

⁹ The Presidential Working Group report, for example, discusses concentration of economic power (PWG, 2021: 14).

¹⁰ It should also be noted that the case for CBDC is complicated by the relative threats to current practice that CBDC represents. Most notably, a retail CBDC involves a similar disintermediation problem for retail/commercial banks to stablecoin. The Bank, however, suggests this is not an equivalent problem (see Kumhof and Noone, 2018).

¹¹ Visit: <https://committees.parliament.uk/publications/9359/documents/160751/default/and> <https://www.bankofengland.co.uk/paper/2021/responses-to-the-bank-of-englands-march-2020-discussion-paper-on-cbdc>

¹² The Bank, of course, does have a public facing role and is also democratically accountable. For example, the previously mentioned House of Lords Economic Affairs Committee report on CBDC and its various testimonies and submissions (EAC, 2022). But this is different than whether in fact it is the task of the Bank to engage in more sociologically informed research or to adopt a position.

- Baker, A., 2018. 'Macroprudential regimes and the politics of social purpose'. *Rev. Int. Political Econ.* 25 (3), 293–316.
- Baker, A., Morgan, J., 2021. 'From the political economy of financial regulation and economic governance to climate change: an interview with Andrew P. Baker.'. *Real. -World Econ. Rev.* 98, 170–203. (<http://www.paecon.net/PAERReview/issue98/BakerMorgan98.pdf>).
- Bank of England, 2020. Central Bank Digital Currency: opportunities challenges and design. London: Author, March.
- Bank of England, 2021. New Forms of Digital Money. London: Author, June.
- Carney, M., 2021. *Value(s)*. William Collins, London.
- Chainalysis, 2021 The 2021 Geography of Cryptocurrency Report: Analysis of Geographic Trends in Cryptocurrency Adoption and Usage. Author, October. (<https://go.chainalysis.com/rs/503-FAP-074/images/Geography-of-Cryptocurrency-2021.pdf>).
- CPMI-IOSCO, 2021. Consultative report: Application of the Principles for Financial Market Infrastructures to stablecoin arrangements. Authors, October.
- Cunliffe, J., 2021a. 'Do we need public money?' Speech given at OMFIF Digital Money Institute London, May 13th. Bank of England.
- Cunliffe, J., 2021b. 'Is 'Crypto' a financial stability risk?' Speech given at SIBOS, October 13th. Bank of England.
- Diem, 2020. Cover Letter and White Paper V.2. Author, December.
- Dow, S.C., 2019. 'Monetary reform, central banks, and digital currencies'. *Int. J. Political Econ.* 48 (2), 153–173.
- EAC, (Economic Affairs Committee), 2022. Central Bank Digital Currencies: A solution in search of a problem? Third Report of Session 2021–22, HL Paper 131. House of Lords Economic Affairs Committee, London, 13th January.
- Eichengreen, B., Viswanath-Natraj, G., 2020. 'Libra still needs more baking.' *Vox Eu*, 25th April, (<https://voxeu.org/article/libra-still-needs-more-baking>).
- EC [European Commission], 2020. Proposal for a Regulation of the European Parliament and the Council on Markets in Cryptoassets, and amending Directive (EU) 2019/1937. Brussels, September.
- Federal Reserve, 2022. Money and payments: The US Dollar in the age of digital transformation. Research & Analysis, Board of Governors of the Federal reserve, January. (<https://www.federalreserve.gov/publications/files/money-and-payments-20220120.pdf>).
- FSB [Financial Stability Board], 2022. Assessment of Risk to Financial Stability from Crypto-assets. 16th February.
- FSB [Financial Stability Board], 2020. Addressing the regulatory, supervisory and oversight challenges raised by "global stablecoin" arrangements. 14th April.
- FSOC [Financial Stability Oversight Council] 2021, 2021 Annual Report. Washington DC: Author. (<https://home.treasury.gov/system/files/261/FSOC2021AnnualReport.pdf>).
- G7 WGS [Working Group on Stablecoins], 2019. Investigating the impact of global stablecoins. October.
- HM Treasury, 2021. UK regulatory approach to cryptoassets and stablecoins: Consultation and call for evidence. London: Author, January.
- IMF, 2021. Global Financial Stability Report [Chapter 2: The Crypto Ecosystem and Financial Stability Challenges]. Washington DC: Author, October.
- Ingham, G., 2004. *The Nature of Money*. Polity Press, Cambridge.
- Kharif, O., 2022. 'Meta-backed Diem Association confirms asset sale to Silvergate.' *Bloomberg* 31st January (<https://www.bloomberg.com/news/articles/2022-01-31/meta-backed-diem-association-confirms-asset-sale-to-silvergate>).
- Kumhof, M. and Noone, C. 2018. Central bank digital currencies — design principles and balance sheet implications. Bank of England Staff Working Paper No. 725, May.
- Lawson, T., Morgan, J., 2021. Cambridge social ontology, the philosophical critique of modern economics and social positioning theory: an interview with Tony Lawson, part 2. *J. Crit. Realism* 20 (2), 201–237.
- McLeay, M., Radia, A., Thomas, R., 2014. 'Money creation in the modern economy'. *Bank Engl. Q. Bull.* Q1, 14–25.
- Moll, I., 2021. 'The myth of the fourth industrial revolution.'. *Theoria* 68 (167), 1–38.
- Morgan, J., 2019. 'Will we work in twenty-first century capitalism? A critique of the fourth industrial revolution literature.'. *Econ. Soc.* 48 (3), 371–398.
- Prasad, E., 2021. *The Future of Money*. Harvard University Press, London.
- PWG [Presidential Working Group on Financial Markets, the Federal Deposit Insurance Corporation and the Office of the Comptroller of the Currency], 2021. Report on Stablecoins. Washington DC: Author, November. (https://home.treasury.gov/system/files/136/StableCoinReport_Nov1_508.pdf).
- Segal-Knowles, C., 2021. 'Stablecoins: What is old is new again.' Speech given at the Westminster eForum Policy Conference, June 10th. Bank of England.
- Wang, H., 2022. 'China's approach to Central Bank Digital Currency' SSRN, 16th February. (https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4036466).