DIGITAL MONEY, DIGITAL EXCLUSION: CBDCS AND HUMAN RIGHTS

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I. INTRODUCTION

Monetary sovereignty is entering an era of unprecedented disruption. The increasing use of electronic means of payment, declining usage of physical cash, and the emergence of new digital currencies and cryptocurrencies all present challenges to the state's ability to exert power through money. In response to these trends, the IMF has found that more than half the world's central banks are exploring or developing central bank digital currencies (CBDCs).[1] Much of the existing discourse on CBDC implementation centers on the affordances provided by CBDCs to enhance monetary policy and corresponding benefits to governments; counterarguments from the human rights community are often rooted in concerns regarding privacy and surveillance. This commentary seeks to take a different approach by examining the Bank of England's digital sterling proposal through the lens of digital exclusion and poverty, which in turn engages many of the fundamental norms in the international human rights framework. This analysis concludes with a call for the international community to review CBDC proposals from the perspective of economic and social rights. CBDCs represent a fundamental reordering of many of the existing technologies of monetary pol-

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1. Andrew Stanley, *The Ascent of CBDCs,* IMF (Sept. 2022), https://www.imf.org/en/Publications/fandd/issues/2022/09/Picture-this-The-ascent-of-CBDCs (last visited Nov. 8, 2022).

icy; without further scrutiny, the United Kingdom risks a digital exclusion crisis with serious implications for the most vulnerable.

An understanding of the nature of CBDCs requires some context-setting. Broadly speaking, there are three important forms of money in use.[2] The first is physical cash (i.e. the coins and banknotes issued in the U.K. by the Royal Mint and Bank of England). The second is commercial bank deposits, which are deposits held by the public in checking and savings accounts at commercial banks.[3] The third is central bank reserves, which are deposits held by banks at the central bank. The important feature of reserves is that they cannot be held by the public. CBDCs therefore seek to introduce a direct monetary linkage between citizen and state, through the introduction of a fourth form of money. In this commentary, the term CBDC is used to refer to money that is issued by the central bank in electronic form that can be held and spent by households and companies as well as banks and non-bank financial institutions (i.e. a "retail CBDC").[4] Unlike private cryptocurrencies, the Bank of England has noted that a CBDC does not require distributed ledger technology to function.[5] A

2. BANK OF ENGLAND, CENTRAL BANK DIGITAL CURRENCY: OPPORTUNITIES, CHALLENGES AND DESIGN 9-10 (Future of Money Discussion Paper, March 2020), https://www.bankofengland.co.uk/-/media/boe/files/paper/2020/central-bank-digital-currency-opportunities-challenges-and-design.pdf?la=EN&hash=DFAD18646A77C00772AF1C5B18E63E71F68E4593.

3. An important feature of this form of money is that, in legal terms, they are liabilities of commercial banks (not the central bank). In practice, banks do not actually back all bank deposits with actual cash on hand that is available for withdrawal; a person depositing money in a commercial bank therefore takes the risk that the bank may go insolvent and default on the debt owed. *Id.* at 9.

4. If a digital sterling is eventually introduced in the U.K., it is likely to take the form of a retail CBDC. *See* BANK OF ENGLAND, NEW FORMS OF DIGITAL MONEY 10 (Discussion Paper, 2021) ("A central bank digital currency [. . .] would be an electronic form of central bank money provided for *retail use*") (emphasis added).

5. BANK OF ENGLAND, *supra* note 2, at 6 ("we do not presume any CBDC must be built using DLT, and there is no inherent reason it could not be built using more conventional centralised technology"). *See also* GABRIEL SODERBERG ET AL., BEHIND THE SCENES OF CENTRAL BANK DIGITAL CURRENCY: EMERGING TRENDS, INSIGHTS, AND POLICY LESSONS 16 (IMF Fintech Notes No 2022/004, 2022) ("there is no universal case for DLT as the primary engine of CBDC").

CBDC would provide a form of money free from credit risk (like physical cash, given that it is backed by the state) while also serving as a convenient means of electronic and remote payment (like commercial bank deposits).[6]

In the U.K., the Bank of England is actively considering the introduction of a central bank digital currency in response to the falling use of banknotes and the increasing use of privately issued money.[7] Although the Bank has been careful to point out that it has not yet taken the decision to introduce a CBDC to the U.K., current popular sentiment is that CBDCs are likely to play an important role in the global financial system in the future.[8] This commentary argues that the global drive for CBDCs can be located in the state's desire to reassert sovereignty over money. As Brunnermeier et al. note, in the modern economy, there is "essentially no direct monetary interaction between the government and private citizens."[9] Declining cash usage has meant that most consumers hold their money as commercial bank deposits, which are an entirely privately issued form of money.[10] Digitization and the reduced importance of physical cash weakens the ability of the state to exert monetary control over its citizens.[11] CBDCs therefore act as a "countermeasure"[12] to these developments by creating a direct linkage between citizen and state, providing retail customers direct access to central bank reserves in digital form.

6. BANK OF ENGLAND, *supra* note 2, at 10.

7. *Id.* at 5.

8. John Kiff and Jonas Gross, *CBDCs for the People? Where the Current State of Digital Currency Research Leads*, COINDESK (Dec 3, 2021, 1:24 PM), https://www.coindesk.com/policy/2021/12/03/cbdcs-for-the-people-where-the-current-state-of-digital-currency-research-leads/ ("So central banks are proceeding carefully, but given the amount of intellectual effort being expended, it's likely CBDCs will have a place in the global financial system.").

9. Markus K. Brunnermeier et al., *The Digitalization of Money* 25 (BIS Working Papers No. 941, 2021).

10. BEN DYSON AND GRAHAM HODGSON, DIGITAL CASH: WHY CENTRAL BANKS SHOULD START ISSUING ELECTRONIC MONEY 13 (Positive Money, 2016), https://positivemoney.org/wp-content/uploads/2016/01/Digital_Cash_WebPrintReady_20160113.pdf.

11. Brunnermeier et al. argue that the proliferation of digital currencies may eventually alter the financial hierarchy and diminish the role of banks, *supra* note 9, at 25. This in turn weakens the government's ability to influence public economic behavior through the traditional tools of monetary policy (i.e. setting interest rates).

12. *Id.* at 25.

The development of CBDCs can be seen as part of the wider reconfiguration of traditional notions of monetary sovereignty (and in turn, statehood itself) in the digital age.[13]

The structure of this commentary is as follows: Part II discusses the opposability of human rights norms to central banks and how the international human rights framework may be engaged by the implementation of a U.K. CBDC, focusing in particular on the human rights dimensions of poverty and social exclusion. Part III examines the financial inclusion justification for the introduction of CBDCs from the perspective of ordinary citizens, to assess compatibility with human rights outcomes. Part IV provides some preliminary conclusions and suggestions for further research in this area.

II. Central Banks and the International Human Rights Framework

Central banks such as the Bank of England are institutionally independent, which decouples the implementation of monetary policy from political exigencies. This in turn may lead to the mistaken assumption that, because central banks operate independently of political leadership, they are not accountable for the socio-political ramifications of their policies. However, the ostensibly technical decisions of central banks have real and immediate impact on livelihoods. Central banks are not, and should not be, immune from human rights considerations. Under customary international law, central banks are organs of the state to which international responsibility attaches.[14] This extends to responsibility for human rights violations. In May 2022, the Special Rapporteur on extreme poverty and human rights, Olivier De Schutter, specifically criticized the role of the Lebanese Central Bank in the devaluation of the Lebanese currency and the resulting impoverishment of the Lebanese people.[15] The De Schutter noted that, although the Banque du Liban is an independent institution under Leb-

13. Katharina Pistor, *Statehood in the Digital Age*, 27 Constellations 3 (2020).

14. Int'l Law Comm'n, *Draft Articles on Responsibility of States for Internationally Wrongful Acts*, Rep. of the Int'l Law Comm'n on the Work of Its Fifty-Third Session, art. 4, U.N. Doc. A/56/10 (2001).

15. Olivier De Schutter, *Visit to Lebanon* at 11, U.N. Doc. A/HRC/50/38/Add.1 (April 11, 2022).

anese law, "as an organ of the State, it is bound by its international human rights obligations."[16]

What then are the relevant human rights norms? The starting point is that poverty is a human rights issue. The Committee on Economic, Social and Cultural Rights (the "Committee") has affirmed that "poverty constitutes a denial of human rights,"[17] and that a whole host of economic and social rights are implicated in the eradication of poverty.[18] Although it can be helpful to point to specific rights, such as the right to an adequate standard of living,[19] the Committee has emphasized that the entire human rights normative framework is engaged when considering the impact of poverty, including civil and political rights.[20] Similarly, the OHCHR has recognized that the indivisibility of human rights does not necessarily demand a reference to *every* single right set out in the International Bill of Rights, but it does demand an inclusive strategy for addressing poverty.[21]

This commentary draws on the "capability approach" developed by Amartya Sen, which has since been widely adopted by international human rights bodies.[22] This framework sees poverty as a set of deprivations related to the ability of a person to achieve wellbeing and not merely a lack of income.[23] Formulated another way, poverty is a "lack of basic capabilities to live in dignity," which in turn has many facets, including "hunger, poor education, discrimination, vulnerability and social exclusion."[24] The Committee has emphasized that "[p]overty is not confined to developing countries and socie-

16. *Id.*

17. Comm. on Econ., Soc. and Cultural Rights, Statement Adopted by the Comm. on Econ., Soc. and Cultural Rights on 4 MAY 2001 at 1, ¶ 1, U.N.Doc. E/C.12/2001/10 (2001) [hereinafter "ESCR Committee Statement"].

18. "The rights to work, an adequate standard of living, housing, food, health and education, which lie at the heart of the Covenant, have a direct and immediate bearing upon the eradication of poverty," *id.*

19. International Covenant on Economic, Social and Cultural Rights art. 11, Dec. 16, 1966, 993 U.N.T.S. 3 (entered into force Jan. 3, 1976).

20. ESCR Committee Statement, *supra* note 17, at 3.

21. OHCHR, *Human Rights and Poverty Reduction: A Conceptual Framework*, at 11, U.N.Doc. HR/PUB/04/1 (2004).

22. *Id.* at 6.

23. *Id.*

24. ESCR Committee Statement, *supra* note 17, at 2.

ties in transition."[25] Indeed, Philip Alston, former Special Rapporteur on extreme poverty and human rights, has noted that although the U.K. is the world's fifth largest economy, one in five people live in poverty.[26] Poverty and social exclusion on such a scale raises serious questions regarding the U.K.'s compliance with its human rights obligations.

The Committee has also repeatedly emphasized the importance of equality and non-discrimination as integral elements of the normative framework of international human rights.[27] The disproportionately higher risk of poverty for "[w]omen, racial and ethnic minorities, children, single parents, persons with disabilities and members of other historically marginalized groups" was recognized by Alston as a breach of the general principle of non-discrimination in international law.[28] Indeed, an understanding of intersecting hierarchies of exclusion is a crucial element of the capability framework of poverty.[29]

In short, the Bank of England is a state actor that has a responsibility to respect, protect, and fulfill human rights, and the eradication of poverty is a goal that engages many of the fundamental norms in the international human rights framework. As one of the main actors in the creation and implementation of economic policy, the Bank of England is situated in a critical position with respect to the fulfilment of international human rights.

III. Financial Inclusion and Digital Exclusion

It is often assumed that financial inclusion is not an important outcome for countries in the Global North such as the

25. *Id.*

26. Philip Alston (Special Rapporteur on Extreme Poverty and Human Rights), *Visit to the United Kingdom of Great Britain and Northern Ireland* at 1, U.N. Doc. A/HRC/41/39/Add.1 (2019).

27. ESCR Committee Statement, *supra* note 17, at 2.

28. Alston, *supra* note 26, at 15.

29. Sen provides the example of two persons with the same set of resources, where only one suffers from a disability. That person's disability makes them unequal in terms of what they can do with those resources for a variety of reasons; as such, an evaluation of someone's well-being must consider not only the amount of resources they have but what they are able to do with them. *See generally* Amartya Sen, *Equality of What?, in* The Tanner Lecture on Human Values 197 (Sterling M. McMurrin ed., 1979).

U.K.[30] However, the reality is that, despite COVID-19 accelerating trends toward digital payments,[31] a significant portion of the U.K.'s population lives outside the digital banking system. In 2020, the FCA found that 1.2 million adults in the U.K. were unbanked,[32] and an unpublished Bank of England survey found that "cash is the first choice payment method for 21% of people in the U.K."[33] Lack of access to the banking system has material outcomes on wellbeing, with effects on the management of savings, access to credit during periods of hardship (e.g., unemployment), and obtaining insurance.[34]

The Bank of England explicitly sets out financial inclusion as one of its policy goals for a U.K. CBDC.[35] Crucially, the Bank of England's report frames financial inclusion as a means to an end, namely boosting "economic participation,"[36] rather than a substantive outcome in its own right. Empowering greater access to the financial system is not a goal rooted in social wellbeing *per se* but instead part of the broader neoliberal calculus: the more people that are given access to banking and lifted out of poverty, the more consumers and spenders there are in the economy. Under this logic, financial inclusion is inseparable from the state's interest in reasserting

30. *See* DYSON AND HODGSON, *supra* note 10, at 13 ("In the U.K., the problem of the 'unbanked' appears to be less severe. World Bank data suggests that 98.9% of adults (aged 15+) hold an account at a financial institution and 96.4% have a debit card"). The Bank of England has also noted that 2018 figures suggest that 98% of adults possess a bank account, BANK OF ENGLAND, *supra* note 2, at 19 n. 10.

31. BANK OF ENGLAND, *supra* note 4, at 32.

32. FINANCIAL CONDUCT AUTHORITY (FCA), FINANCIAL LIVES 2020 SURVEY: THE IMPACT OF CORONAVIRUS 116 (2021), https://www.fca.org.uk/publication/research/financial-lives-survey-2020.pdf.

33. BANK OF ENGLAND, *supra* note 4, at 35.

34. ESWAR S. PRASAD, THE FUTURE OF MONEY: HOW THE DIGITAL REVOLUTION IS TRANSFORMING CURRENCIES AND FINANCE 54 (2021).

35. BANK OF ENGLAND, *supra* note 4, at 37-8. *Cf.* however, the Bank of England has at times stated that "financial inclusion [does] not fall directly within the Bank's remit", BANK OF ENGLAND, *supra* note 2, at 19. *See also* John Kiff et al., *A Survey of Research on Retail Central Bank Digital Currency* 12 (Int'l Monetary Fund, Working Paper No. 2020/104, 2020) [hereinafter "IMF Working Paper"]; and SODERBERG ET AL., *supra* note 5, at 4.

36. BANK OF ENGLAND, *supra* note 4, at 38.

monetary control over ordinary citizens as it directly increases the number of households subject to monetary policy.[37]

In line with the capability framework, a blunt definition of financial inclusion focused solely on access to bank accounts is inadequate—a more nuanced understanding of the ability of citizens to avail themselves of the benefits that such access provides is needed. For example, consumers with newly acquired bank accounts are often dissatisfied due to charges incurred from banks; half of the people with basic bank accounts (without overdraft or credit facilities) therefore prefer to manage their money in cash.[38] A digital cash account provided by the central bank could then perhaps "provide such people with the convenience of cash and the security of a bank account without the hassle of having to deal with a high street bank."[39]

However, the Bank is unlikely to have the mandate, capacity, or resources to implement an entirely centralized CBDC infrastructure. As such, for pragmatic and policy reasons the Bank envisages operating via a "platform" model, where the Bank only provides the underlying technology infrastructure required for minimum CBDC functionality; private sector "Payment Interface Providers" would then supply "customer-facing CBDC payment services."[40] For proponents of CBDCs, the explicit assumption here is that private intermediaries "are likely to prove accessible, flexible and welcoming to those who are currently financially excluded from or struggle to deal with the traditional banking sector."[41] This is a large logical leap. In this model, private intermediaries have essentially stepped into the shoes of high-street commercial banks. It is unclear why replacing one private sector interface with another is likely to lead to greater accessibility. In particular, the IMF's review of existing CBDC projects has noted that private sector

37. *See* IMF Working Paper, *supra* note 35, at 15 ("monetary policy transmission could strengthen if CBDC increases financial inclusion and, therefore, exposes more households and firms to interest-sensitive instruments.").

38. DYSON AND HODGSON, *supra* note 10, at 14.

39. *Id.*

40. BANK OF ENGLAND, *supra* note 2, at 6.

41. DYSON AND HODGSON, *supra* note 10, at 14. *See also* BANK OF ENGLAND, *supra* note 2, at 19 ("[a] well designed CBDC may also help to boost financial inclusion in an increasingly digital world by being accessible to a broader range of people, potentially in different formats, than private sector solutions").

intermediaries are "likely [to] be privately-owned and *for-profit firms*."[42] Marginalized communities have already been excluded by the traditional for-profit retail banking sector; there is little evidence to suggest that CBDC payment intermediaries would be more inclusive, especially given the lack of clarity surrounding how these intermediaries would charge for their services.[43]

Underlying this entire logic is a set of problematic assumptions regarding digital access and digital literacy. The link between access to the internet and poverty is well documented. Alston has noted that although overall internet access across the U.K. may be high, "many poorer and more vulnerable households are effectively offline."[44] Statistics compiled by the U.K. Office for National Statistics show a strong correlation between access to the internet and household income.[45] Again drawing on insights from the capability framework, access is only one part of the equation. The Lloyds Consumer Digital Index report has found that although 99% of the U.K. is now online, 27% of the population (equivalent to approximately 14 million people) have "the lowest digital capability," meaning that "they are likely to struggle interacting with online services and are at risk of being left behind and left out from society."[46] Although the majority of the population may be comfortable with the existing digital payment system and would adapt easily to a new form of digital money, the U.K.'s experience in transitioning to an increasingly cashless society demonstrates that the most vulnerable members of society "are rarely early adopters," and that technology is often

42. SODERBERG ET AL., *supra note* 5, at 8 (emphasis added).

43. *See* BANK OF ENGLAND, *supra* note 2, at 29; SODERBERG ET AL., *supra note* 5, at 11.

44. Alston, *supra* note 25, at 14.

45. *Exploring the UK's digital divide*, OFFICE FOR NAT'L STATISTICS (Mar 4, 2019), https://www.ons.gov.uk/peoplepopulationandcommunity/householdcharacteristics/homeinternetandsocialmediausage/articles/exploringtheuksdigitaldivide/2019-03-04 [hereinafter "ONS Digital Divide"].

46. LLOYDS BANK, 2022 CONSUMER DIGITAL INDEX 8-9 (2022), https://www.lloydsbank.com/assets/media/pdfs/banking_with_us/whats-happening/221103-lloyds-consumer-digital-index-2022-report.pdf (last visited Nov. 8, 8:22 PM).

designed with the majority in mind rather than the "poor, rural or vulnerable."[47]

Indeed, the declining use of cash in an era of increasing digital payments cannot be ignored. Some states such as Sweden see CBDCs as a means of encouraging digital payments for certain segments of the population who are reliant on cash—particularly the elderly and groups with certain disabilities.[48] And yet U.K. national statistics demonstrate that age and disability are reliable indicators of digital exclusion.[49] A digital solution to the exclusion faced by such groups is therefore counterintuitive. The Bank has recognized that, if cash becomes less widely used, there is no guarantee that private retail payment systems will meet the needs of all users, "leaving underbanked groups of society particularly at risk."[50] Indeed, IMF analysis suggests that widespread adoption of CBDCs could "drive cash out of common usage."[51] Once again, the poor would lose out—the Access to Cash report has found "around 17% of the U.K. population—over 8 million adults—would struggle to cope in a cashless society," and that "poverty is the biggest indicator of cash dependency" in the U.K.[52] Disadvantaged groups would therefore find themselves situated in a series of overlapping exclusions, with the CBDC payment system they are excluded from in turn driving their conventional means of payment of common usage.

The Bank of England has recognized many of the above issues and emphasized that the design of the CBDC payment system should minimize barriers to use from "(a) technical literacy, (b) disabilities, and (c) access to hardware (eg avoiding reliance on latest smartphones) or (d) access to mobile data networks (eg in rural areas),"[53] and has identified the importance of standard-setting in ensuring private intermediaries

47. ACCESS TO CASH REPORT 6 (2019), https://www.accesstocash.org.uk/media/1087/final-report-final-web.pdf (last visited Nov. 8, 8:27 PM).

48. SODERBERG ET AL., *supra note* 5, at 5.

49. *See* ONS Digital Divide, *supra* note 45 ("76% of those with zero basic digital skills [were] aged over 65 years in 2018"; "56% of adult internet non-users were disabled, much higher than the proportion of disabled adults in the UK population as a whole").

50. BANK OF ENGLAND, *supra* note 2, at 18.

51. IMF Working Paper, *supra* note 35, at 21.

52. ACCESS TO CASH REPORT, *supra* note 47, at 6.

53. BANK OF ENGLAND, *supra* note 2, at 23.

are incentivized to build systems that support inclusion and avoid barriers to access.[54] However, the extent to which user-centered design can create a truly inclusive CBDC is unclear, given the scale and severity of the exclusionary effects outlined above. For example, even where design choices are implemented to minimize reliance on online connectivity,[55] it is likely that some basic digital literacy and access will be required to engage with the system (e.g., a user would likely need to use a mobile app or website to view their balance and manage their CBDC holdings).[56] Ultimately, standard-setting cannot change the fundamentally digital nature of CBDC philosophy. It is also important to recognize that financial inclusion and managing reductions in cash usage can be achieved by a variety of other means, including "incentivizing private-sector financial institutions to improve their product offerings or [. . .] instituting relevant legislation to ensure merchants accept cash."[57] A human rights approach therefore resists the notion that CBDCs are a natural or inevitable outcome of technological progress, fundamentally rejecting the notion that some may need to be left behind in the acquisition of more sophisticated monetary technologies.

IV. Conclusion

A human rights analysis of CBDCs reveals clear and present risks regarding the potential exclusionary effects of the introduction of a digital sterling for the most vulnerable and disenfranchised members of society. These cannot be ignored in light of the Special Rapporteur's comments on current levels of poverty in the U.K. Underlying this discussion is a deep tension between the state's desire to reassert monetary sovereignty and the need to respect its human rights obligations: against the backdrop of historic levels of economic turbulence in the U.K.,[58] the Bank of England may be more des-

54. *Id.* at 33.
55. *E.g.* "rechargeable cards, quick response (QR) code based prepaid cards and smart chip enabled banknotes", IMF Working Paper, *supra* note 35, at 32.
56. Bank of England, *supra* note 2, at 27.
57. IMF Working Paper, *supra* note 35, at 20.
58. Dearbail Jordan and Daniel Thomas, *Bank of England expects UK to fall into longest ever recession*, BBC News (Nov. 3, 2022), https://www.bbc.com/news/business-63471725.

perate than ever for new tools to reassert economic stability. A protective focus on entrenching monetary power through new technologies of economic control may leave behind the most vulnerable members of society. This discussion has global ramifications: although the majority of IMF member states are evaluating the possibility of introducing CBDCs, few have actively committed to their development.[59] The bottom line is that such decisions cannot be taken without reference to the state's human rights obligations.

Going forward, the extent to which private sector actors will be engaged in the provision of user-facing digital currency services needs to be squarely addressed before the Bank of England can credibly consider the introduction of a CBDC that is compatible with the U.K.'s human rights obligations. Further research is needed on the ways in which the infrastructural design of the private intermediary framework will mediate individuals' access, use, and control over the digital sterling, and the potentially this has to shape the ways in which ordinary citizens are excluded from the financial system.

59. SODERBERG ET AL., *supra note* 5, at 1.