



FedFin Client Report

Monday, October 4, 2021

Central Banks "Envision the CBDC Ecosystem," Like It a Lot

Client Report: CBDC8

Executive Summary

As we [noted](#) last week, the BIS and seven major central banks have advanced global CBDC policy with three new reports evaluating key design features. None of these central banks, including the Fed, has agreed to CBDC, but each has accepted conclusions which appear bound to propel most if not all of them soon to active CBDC development. This FedFin analysis thus assesses each of the BIS reports, all of which focus on retail-facing CBDC, which faces the most challenging operational, policy, and social-welfare questions. All of the reports not only assess critical policy questions ranging from consumer impact to systemic risk, but also reach conclusions that often reject suggestions that CBDC is unnecessary in friction-free banking systems or poses undue intermediation, bank-profitability, illiquidity, or financial-stability risk. Where problems are identified, the reports often proffer solutions to them, noting that risk analysis must not only consider the risks posed by CBDC, but also those that would result without it given the certain evolution of private digital currency.

Countering proposals for "FedAccounts" or the "public ledger" advocated by Comptroller-nominee Omarova, the BIS reports conclude that CBDC that functions directly as a national banking system is inappropriate except in limited cases where nations lack established private-sector banking and payment systems. However, the report also suggests that, to advance inclusion and fiscal-benefit delivery, CBDC might include basic-banking services.

Analysis

A. Interoperability and Overall System Design

The [first of the CBDC reports](#) takes inter-operability as a key tenet and then builds out how to achieve it in areas such as messaging protocols and the daunting amount of public-private coordination necessary to ensure sound CBDC that operates smoothly, works well with private digital currencies, secures privacy, and enhances public trust. Much in this report details the "plumbing" challenges facing central banks not only with regard to their own resources, but also to ensuring that intermediaries are well aligned with central-bank objectives and pose no risk to financial stability. Intermediaries are

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defined broadly to include banks, payment-service providers, mobile operators, fintechs, and even bigtech companies.

All of the reports assume that AML/CFT risks are addressed with one noting that this could be done without threatening privacy if anonymity is allowed only for small-balance payments. This report also includes CBDC goals to which the central banks and BIS agreed:

- continued access to central-bank money;
- resilience;
- increased payment diversity;
- financial inclusion (perhaps enhanced by partnerships with post offices or other entities);
- improved cross-border payments;
- supporting privacy; and
- facilitating fiscal transfers (i.e., government benefits) perhaps through mandated access for basic banking services.

B. User Needs and CBDC Adoption

The second report looks at what may be necessary to ensure user adoption and merchant acceptance based not just on the benefits of fiat currency, but also factors such as lower cost, offline access, better privacy compared to other options, and easy access. CBDC would also have to be adaptable given rapid payment-system developments, perhaps basing itself on flexible core systems and working within the diverse payments ecosystem described above.

This report also lays out a strong case for CBDC adoption on grounds that failure to offer one risks an array of public-policy objectives, increases systemic risk, and threatens consumers. This paper also details the ways in which CBDC may address unmet needs, [countering](#) those such as FRB Vice Chairman Quarles who see no value-add.

The next step in this part of the CBDC project will assess specific user needs, essential financial-stability safeguards, and how best to engage in public consultation. However, this report is the most emphatic in its statement that analytical conclusions do not necessarily spell out policy positions, noting also that central banks have many tools with which to address identified risks not discussed in this paper because they are matters solely for individual central banks.

C. Systemic Risk and the Future of Finance

Although the second paper touches on financial stability, the third turns to it in earnest.

This paper is the only one which lays out significant policy concerns about a general-purpose CBDC, noting as it does so that these concerns must be weighed against benefits and counter-factuals (e.g., what could happen if currency digitalization were left to "less controllable" private entities).

The paper also looks at systemic risks such as bank and MMF runs to CBDC, concluding that *ex ante* safeguards could prevent runs (e.g., access permission, limited account amounts, using CBDC only for payments, and CBDC-remuneration choice). However, runs from prime MMFs are considered more likely and problematic.

Key to anticipating systemic risk is better understanding of likely adoption rates. Adoption rates also directly affect the BIS's conclusions about CBDC's structural impact. The paper focuses on bank disintermediation, concluding that it will be manageable due to the slow pace of adoption and the ability of central banks both to design CBDC to mitigate this impact and to step in to offset it.

The BIS paper also notes that the financial system has often handled structural change without disintermediation and that bank disintermediation could actually be worse without CBDC. Nonetheless, this sanguine prediction is noted as uncertain due to national differences and the unknown pace of adoption.

The paper also includes a stylized model attempting to assess CBDC's impact on bank profitability and thus on lending and economic growth. It outlines an array of largely positive conclusions but we observe that stylization is sometimes either over-simple or counter-intuitive (e.g., that higher bank loan prices will not adversely affect loan demand or bank competitiveness). However, a literature survey also sheds insight into possible intermediation and resulting structural effects, suggesting for example that more deposit competition from a central bank will lower deposit prices and thus encourage more or less-costly bank lending. Although the paper also notes that CBDC could increase systemic reliance on nonbanks and adversely affect small, retail-focused banks, it also notes that it might encourage payment-system innovation and greater payment diversity.

This paper also begins an assessment of monetary-policy impact, laying out how central banks might for example adjust reserves or increase asset purchases to offset bank deposit declines and how this might affect broader financial markets given less central-bank control over short-term rates.