CBDC: changing the geography of central bank money

Central bank money still cannot be used in international payments. But the transactions that are likely to benefit the most from central bank digital currencies (CBDCs) are international wholesale payments, including foreign exchange and securities trading. ***Ousmène Jacques Mandeng*** *writes that central banks have today a historical opportunity to shape a new format of money.*

Central bank digital currencies (CBDC) have seen a significant increase in interest. But what contribution are they expected to make and what concerns could delay or prevent their introduction? The innovation with CBDC is the adoption of digital tokens as a new format of money akin to a digital bearer instrument to enable peer-to-peer transactions irrespective of space and time. It would be the same euro, peso, rand or won only in another representation. The use case for CBDC is naturally strongest where central bank money plays a special role and where existing arrangements impose undue limitations. This is the case especially in international payments.

CBDCs may be as significant as the move from metallic coins to bank notes. The proliferation of modern bank notes during the second half of the nineteenth century amid dominance of gold and silver payments was spurred by the need of more flexible and less cumbersome payment mediums to meet new demands amid a rapidly globalising and industrialising economy. At the time, new technology—the steam-driven stamping press—was instrumental in allowing adoption of the gold standard as the basis for the new bank notes. CBDC rests on the same rationale of advancing new functionalities that help expand reach and utility of central bank money in an increasingly digital economy. Blockchain and other distributed ledger (DLT) platforms are now offering a scalable and secure technology to issue CBDC.

CBDC is mostly about settlement and the unification of asset and payment cycles. The adoption of digital tokens would allow exchanging tokenised financial instruments by simple token swaps to enable instant and atomic exchanges, where both legs of the transaction need to succeed or none of them will, thereby eliminating open positions in trading and all settlement and credit risks. Digital tokens are programmable. They enable embedding complex business logic into tokens for behaviour conditional on pre-determined events, which extends the scope for new payment use cases.

The transactions that are likely to benefit the most are international wholesale payments, including foreign exchange and securities trading. Central bank money is the preferred settlement medium for wholesale transactions to offer safety and finality in payments. Today, central bank money cannot be used in international payments. A future CBDC may offer needed functionality and controls that could transform the role of central bank money in international transactions, reduce risks and increase efficiencies of cross-border and offshore payments.

Retail payments may benefit from CBDC, but central bank money plays a lesser role for small value transactions. The number of alternative payment mediums in retail payments may also diminish the appeal of CBDC. However, from a public policy point of view, access to a digital central bank money for the general public may be considered as essential to serve across a wider range of payment platforms supporting financial innovation, advance diversification and increase choice and resilience.

The impact of CBDC on payments will depend in large part on the propensity to hold CBDC. For domestic wholesale payments, CBDC may serve as a mere substitute for existing large value payment systems. For international payments, CBDC may crowd out traditional bank payments if payments can be settled directly in central bank money. For the foreign exchange market, those changes should be small as CBDC would enable a direct exchange of tokens rather than an indirect exchange via the respective national large value payments systems. In retail, it will depend on the general public seeing CBDC as a store of value and superior to bank deposits. Distribution and design of CBDC will be essential, and the ability of banks to differentiate their products will determine the extent to which CBDC replaces bank deposits. Evidence on bank disintermediation amid credit concerns are rare and even in times of financial distress, runs on weak institutions or runs to state-owned institutions like postal services have seldom occurred.

The adoption of CBDC is more an evolution than a revolution. Four main challenges need to be overcome: ensuring CBDC can be used across different DLT-platforms; integrating CBDC with existing payments and core banking systems; adjusting regulation to provide clarity when using CBDC in an international setting; and close cooperation between the fiscal and monetary authorities to ensure CBDC can respond effectively to overall economic policy objectives.

Many technical solutions have already been developed to facilitate inter-operability and integration. Regulatory principles towards the use of CBDC in international payments are still required and ministries of finance have only begun to join the debate about CBDC. CBDC will also need to be accompanied by complementary measures including but not limited to the access policy of the central bank and elimination of other possible frictions.

CBDC is part of a broader trend of increased diversification by mediums and actors in payments. Nineteenth century merchants complained about the difficulty of using specie payments. Today, likewise, the economy needs a format of money adapted to changing payments demands. Central banks have today a historical opportunity to shape a new format of money and help advance standards to ensure its orderly integration into existing payment systems. The effect of CBDC will largely depend on whether it can change how payments are conducted and produce promised efficiency gains, and whether CBDC will crowd out other monies. This will most likely be in international large value payments. CBDC is therefore essentially about changing the geography of central bank money.

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Notes:

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