Blockchain-based financial applications could help increase the competitiveness of the City

Even though the government has stated the goal of building an environment conducive to blockchain-based financial applications, progress has been lacklustre and the UK is falling behind the European Union in this area. ***Ousmène Jacques Mandeng*** *writes that the launch of a central bank digital currency and the issuance of blockchain-based gilts would signal the government's intent to support the competitiveness of the City and ensure its success.*

The new chancellor wants the City of London to become the world's leading financial centre. He also seems in need of some good ideas. While regulation and overhaul thereof will play a role, the Treasury and the Bank of England could also proactively support such ambition. Most significant recent financial advances emerged with the adoption of blockchain. Financial centres will likely struggle to keep up without being close to key financial innovations. The government announced for some time that building an environment conducive to blockchain-based financial applications is a goal. So far progress has been lacklustre. A major initiative would be to bring forward the project of issuing government debt and the pound on blockchain. It would signal forcefully the government's intent to support the future and competitiveness of the City.

The UK Treasury has indicated in the past that it may consider using blockchain for the issuance of government debt. The Bank of England has been active in conducting research on central bank digital currencies (CBDC). Neither has undertaken significant steps towards piloting or adoption. In the European Union, decisive measures are under way with a clear intent to adopt a digital euro, a number of key CBDC experiments and pilots and the start of the DLT pilot regime to support blockchain-based capital markets trading, settlement, and custody. The UK has been falling far behind.

Notwithstanding, adoption of blockchain-based major financial instruments has been slow. Incumbents may have few incentives to move if no imminent threat to their dominant position is being detected as first-mover and adverse selection problems seem to be holding back large-scale adoption. The government ought to step in if it perceives more diversified and innovative financial market infrastructures to represent an important public good.

Blockchain is about advancing diversification and choice in finance. It is to equip the financial system with new functionalities and expand, though sometimes also replace, existing financial market infrastructures. It may give rise to new actors, business models, and use cases, strengthening competition and promoting financial integration and inclusion. It facilitates connecting counterparties irrespective of space and time and could give rise to a new geography of financial transactions. While the case for blockchain is not universal, there are certain financial applications where blockchain is set to excel.

Blockchain changes how financial transactions are conducted and financial relations are formed. It facilitates and offers many out-of-the-box capabilities towards building peer-to-peer networks and enabling circulation of digital tokens with properties akin to bearer instruments. Because financial relations on a blockchain are direct, no intermediaries are needed. Tokens are particularly good at bi-directional transactions that can be atomic, that is, both legs of a transaction have to succeed or none does, implying there are no open positions in trading and no counterparty and settlement risks. Transactions can be performed instantly and transacting parties are never short in liquidity as they either hold cash or a security that can be "repoed" instantly recalibrating the very meaning of liquidity.

Blockchain provides also greater flexibility to change financial relations. The peer-to-peer network makes it easy to admit and exclude trading partners. The programmability of blockchain affords embedding the most complex business logic enhancing trading possibilities. The traceability of tokens increases transparency and ensures integrity is being preserved through the life cycle of the financial instrument.

CBDC represents central bank money in a digital token format typically issued on blockchain. It complements banknotes and reserves. It is the same pound, euro, or rupee but in a new format and would make central bank money available across a wide range of financial market infrastructures ensuring equitable access to central bank money and the possibility to perform end-to-end settlement in tokens.

Debt instruments issued on blockchain represents an alternative registration similar to dematerialisation. Tokenised debt encapsulates all information needed for a transfer of ownership similar to a transfer of a bearer bond. Custodians and central securities registries, entities safeguarding financial instruments today, would likely become integral parts of blockchain networks.

Central bank money and government debt would represent pillars of a blockchain-enabled financial ecosystem. CBDC could serve as native settlement medium for the trading of tokenised debt. Trading tokenised debt would occur on the basis of a simple exchange of tokens, atomic and instant, where trade execution is the settlement and no additional intermediaries are needed, increasing significantly settlement efficiency.

The success of the City over the medium term will depend on its capacity to be close to the most innovative segments of finance. The bank introducing a wholesale CBDC and the Treasury announcing that a significant share of gilts will be issued on blockchain could be catalysts for the adoption of blockchain-based financial applications. It may be the nudge the market needs as the benefits will likely go far beyond the City.

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Notes:

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