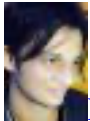


The risks and potential of Central Bank Digital Currencies

What CBDCs can mean on a global stage



By [Vaisakh E Hari](#) January 27, 2022



The Burning Question is a column that tackles some of the biggest questions in the intersection of science, technology, geopolitics and culture that shape the world as we know it.

Central Bank Digital Currencies (CBDCs), or digital tokens of sovereign currencies, are among the hottest topics in the world of finance today. A 2021 BIS survey found that over 86 per cent of central banks in the world were actively researching CBDCs, and 14 per cent were even deploying pilot versions.

India, too, is very cognisant of the change, with the finance ministry confirming that it has taken a proposal from the Reserve Bank of India (RBI) to improve the scope of the definition of banknotes to include currency in digital form. In his book *Future of Money*, Eswar Prasad, the Tolani Senior Professor of Trade Policy at Cornell University, explores the positives and negatives of CBDCs. Edited excerpts from a conversation:

1. For the end user, what would be the utility of a CBDC at the present moment?

This is the fundamental question for every Central Bank mulling CBDCs. What is the use case relative to physical cash? Many Central Banks are recognising that, given decreasing levels of cash in the economy, issuing CBDCs can keep Central Bank money relevant at the retail level. From a user perspective, private players have commercial objectives to provide fast, efficient and cheap digital payments. Certainly there is competition in the space, with network effects in play

that make the market less contestable. So, a CBDC, if properly designed, can promote private sector innovation in payments. For instance, if we have CBDCs in the form of digital tokens distributed by commercial banks or other payment providers who can then innovate on top of that, a variety of things can be accomplished. First, we make it easier for the masses to get access. Then, we can make an infrastructure on top of which the private sector can innovate. In many countries, there are potential impediments to digital payments. In the US, you need to have bank accounts, credit and debit cards. In China, token providers dominate, with little space for anyone else. India has been more far-sighted, the United Payments Interface (UPI) providing government-supported infrastructure on top of which the private players can innovate. For India, the use case for CBDCs might be weaker. Even then, bringing more people into the financial sector, promoting online payments and private sector innovation are all objectives that can be furthered by CBDCs.

2. What are the design possibilities for CBDCs? Is it absolutely necessary that decentralised ledger technologies come into play?

At a basic level, retail CBDCs can take two forms. There is the very simple value-based option of mobile phone apps where you can just transfer money and use them. A lot of Latin American countries use it, but is not a versatile form of CBDC. It limits functionality and it is not scalable. Account-based CBDCs hold a lot more promise. Each person in an economy would have access to a Central Bank wallet or an account. There are benefits and risks to this. Account-based wallets will allow more public participation and flexibility in monetary policy, but there are potential problems too. If you have even non-interest bearing CBDC accounts available, people might sweep deposits out of the commercial banking system, which is a particular risk in a country like the US where interest rates are low. This is applicable even for emerging market countries in a time of financial turmoil. Second, there is a risk that you limit financial sector innovation. This is not a good outcome, where the Central Bank starts playing a larger role in economy, in terms of credit management, payments and so on. However, there are technical solutions to all this. Countries like China have set up dual-layer systems where the digital wallets are not managed by the Central Banks, but by frontline operators like commercial banks. The Central Banks just provide tokens and underlying payments infrastructure for use of those tokens. Commercial banks manage the Know Your Customer (KYC) procedure and others. This reduces the risk of capital flight from traditional systems. This dual-layer system is considered the most advantageous. India can learn a lot from the trials happening in other countries.

3. You mentioned bank disintermediation as a possible threat. Does that translate well into an Indian context, where trust in banking system is nowhere near as eroded as their Western counterparts?

In India, the banking sector has certain problems, but there seems to be a certain amount of confidence in the public sector banks. But, even in countries with deposit insurance, if you can carry an account directly with the Central Bank, or a government agency, that is likely to be trusted more. This might become more important at a time of financial crisis. People might think: Yes, my bank account is safe, but what is safer than a Central Bank account? They might want to move their money there, and that sort of thinking can create the very financial instability that a CBDC is trying to avoid.

4. CBDCs can also mean the rise of programmable money. What are certain manoeuvres the Central Bank can perform with the help of CBDCs?

Certainly, smart money can raise a whole range of opportunities—economic and monetary policy-wise. However, it is a somewhat risky road to go down. For example, if you have money with expiration tags, you could end up in a situation where different units of Central Bank money start trading for different amounts. An even more dystopian situation would be if a government starts using money to achieve not just economical but social objectives. That in my view raises a set of concerns on a societal level. CBDCs can be used for a lot of objectives—what economists call 'helicopter drops' [instant, targeted money transfer] is one such objective. But the flip side should give one pause.

5. How can a Central Bank incentivise CBDC adoption, while aligning the incentives correctly so as to protect existing capital flow regulators like banks?

Design choices will be very important for India. The Central Bank should make sure that the CBDCs do not undercut existing financial institutions or private sector innovation. Given these concerns, it can set up CBDCs in such a form that they are interoperable.

6. Will CBDCs affect cryptocurrencies? If so, how?

Bitcoin has not lived up to its original promise of becoming a medium of exchange without Central Banks or states interfering. It has proven to become slow, expensive and volatile in prices. What BTC has done is create technology with a lot of possibilities. Even cryptocurrencies that can transact and settle fast face the issue of unstable values. That is where the new generation of stablecoins, utilising Bitcoin's underlying technology, but maintaining a stable value backed by reserves of fiat currency, come into play. Facebook's Diem for instance is backed by the US dollar. Access to low-cost payments and cross-border issues need to be addressed. CBDCs could become more reliable, cheaper, and that could undercut the base use case for crypto stablecoins. END