

## What RBI needs to keep in mind for a new digital currency?

### What is the issue?

Several considerations, including the underlying technological architecture and impact on cash circulation and banks, will determine how the new digital currency is designed.

### What is the new digital currency?

- In the Union budget the government has proposed to introduce a digital currency in the coming financial year.
- The RBI is still in the process of figuring out the contours of what a digital rupee will look like.
- RBI needs to examine several design/conceptual issues. It is expected to carry out pilot studies in this area.
- RBI's views on each of the features will determine the form, functionality and ultimately the utility of the digital rupee.

### What considerations have to be made?

- **Technology Architecture** - The first consideration centres around underlying technology architecture.
- There are inherent advantages in distributed ledger technology (decentralised consensus approach)
- However it is "slow and inefficient" compared to centralised ledger systems.
- The number of transactions that can be handled by the network is low.
- It takes 10 minutes on average to settle a bitcoin transaction.
- **Account- or Token-based** - An account-based framework, like bank deposits, links ownership with identity.
- A token-based framework, like cash, provides for greater anonymity.
- While the former could potentially increase the risks for banks, the latter raises concerns such as money laundering.
- **Quantum of CBDCs in circulation** - Quantum of CBDCs in circulation as well as interest bearing option will have a bearing on the financial system and monetary policy.
- The central bank can issue CBDCs over and above the incremental physical currency that it prints and injects every year into the economy.
- This will lead to a significant expansion of its balance sheet.
- Then RBI has to purchase an additional equivalent amount of government debt or any other securities.
- On the other hand RBI can choose to limit the supply of digital currency by substituting it for some part of the incremental physical currency it injects each year.
- This may effectively reduce the circulation of digital currency as well as the amount that can be held by individuals and companies.
- This will, in turn, limit its usage, at least in the initial years.
- Imposing limits on holding CBDC will also reduce the risk of deposits shifting away from commercial banks, thus allaying fears during times of financial distress.

- **Interest Bearing Option-** RBI should decide if the digital currency will be interest-bearing or not
- An interest-bearing digital currency, without any caps, will emerge as a perfect substitute for bank deposits.
- Banks will then face the threat of deposits shifting to the CBDC, and losing out on their source of funding.
- Banks will respond by raising funds at higher costs, which will impact their margin or lending rates, thus affecting credit demand.
- On the flip-side an interest-bearing CBDC, without any caps, can turn into an instrument for monetary policy.
- CBDCs can improve the efficacy of monetary policy by reducing the problems associated with the “pass through” of rates through banking channels.
- However the notion that CBDCs will help central banks face the zero lower bound does not really apply to developing economies like India.
- So, RBI has to explore the possibility of putting in place a permanent “window” for banks, to help offset any asset-liability mismatches that may arise.
- **Limiting the usage of cash** - Unlike US and Sweden, the Indian economy is still characterised by the widespread use of cash.
- Limiting the physical currency in circulation may affect various parts of the economy, like agricultural sector that are predominantly dependent on cash as a medium of exchange.
- Forced formalisation of the informal sector will render it uncompetitive.

## What needs to done?

- While formulating its views on digital currencies, the RBI should simply be guided by the desire to preserve its monetary sovereignty. Either way, it should tread carefully.

### Reference

1. <https://indianexpress.com/article/opinion/columns/what-rbi-needs-to-keep-in-mind-for-a-new-digital-currency-7779003/>

