

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 be 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/>