



## Proposed Digital Rupee

**For Prelims:** Reserve Bank of India (RBI), e-rupee, Central Bank Digital Currency (CBDC), virtual currency, Digital Payments.

**For Mains:** Significance of e-rupee & virtual currencies.

### Why in News?

The [Reserve Bank of India \(RBI\)](#) will soon commence limited pilot launches of **e-rupee (e`)**, or Central Bank Digital Currency ([CBDC](#)) or [digital rupee](#), for specific use cases.

- It has hinted at two broad categories for the use of e-rupee — retail and wholesale — for various transactions.

### What is e-rupee?

- **Definition:** RBI defines the CBDC as the **digital form of currency notes issued by a central bank**. It is a sovereign or entirely independent currency issued by the central bank (in this case, RBI), in accordance with the country's monetary policy.
- **Legal Tender:** Once officially issued, **CBDC will be considered as a medium of payment and legal tender by all three parties** - citizens, government bodies, and enterprises. Being government-recognised, it can be freely converted to any commercial bank's money or notes.
  - RBI is **not in favour of e-rupee with interest**. Because people might withdraw money from banks and convert it to digital rupee - causing banks to fail.
- **Difference with Cryptocurrencies:** The underlying technology of [cryptocurrency \(distributed ledger\)](#) can underpin parts of the digital rupee system, but the RBI has not decided on this, yet. However, **cryptocurrencies like bitcoin or ethereum are 'private' in nature. Digital rupee on the other hand, will be issued and controlled by the RBI.**
- **Global Scenario:** As of July 2022, 105 countries were exploring CBDC. **Ten countries have launched CBDC**, the first of which was the Bahamian Sand Dollar in 2020 and the latest was Jamaica's JAM-DEX.

### What is RBI's Plan for CBDC?

- **Types of CBDC:** On the basis of **usage and the functions** performed by the digital rupee and considering the different levels of **accessibility, CBDC can be demarcated into two broad categories — general purpose (retail) (CBDC-R) and wholesale (CBDC-W).**
  - **Retail CBDC** is an **electronic version of cash primarily meant for retail transactions**. It will be used by all — private sector, non-financial consumers and businesses. However, the **RBI has not explained how e-rupee can be used in merchant transactions in the retail trade.**
  - **Wholesale CBDC** is designed **for restricted access to select financial institutions**. It has the potential to transform the settlement systems for financial transactions undertaken by banks into government securities ([G-Sec](#)) segment, inter-bank market and capital

market more efficiently and securely in terms of operational costs, use of collateral and liquidity management.

▪ **Structure:**

- **A token based CBDC would be a bearer instrument like banknotes**, the person receiving a token will verify that his ownership of the token is genuine. A token-based CBDC is viewed as a preferred mode for CBDC-R as it would be closer to physical cash.
- **An account-based system** would require **maintenance of records of balances and transactions of all holders of the CBDC and indicate the ownership of the monetary balances**. In this case, an intermediary will verify the identity of an account holder. This system can be considered for CBDC-W.

▪ **Available in online and offline mode:** The offline functionality as an option will allow **CBDC to be transacted without the internet** and thus enable access in regions with poor or no internet connectivity.

- However, the RBI feels in the offline mode, **the risk of 'double-spending' will exist** because it will be technically possible to use a CBDC unit more than once without updating the common ledger of CBDC.

▪ **Model for Issuance:**

- **In the direct model**, the **central bank will be responsible for managing all aspects of the digital rupee system** such as issuance, account-keeping and transaction verification.
- **An indirect model** would be **one where the central bank and other intermediaries (banks and any other service providers), each play their respective role**. The central bank will issue CBDC to consumers indirectly through intermediaries and any claim by consumers will be managed by the intermediary.

## What are the advantages of e-rupee?

- **Reduction in operational costs** involved in physical cash management, fostering **financial inclusion**, bringing resilience, efficiency and **innovation in the payments system**.
- Provide the public with uses that any private virtual currencies can provide, without the associated risks.

## What are the issues related to CBDC in India?

- **Cyber Security:** CBDC ecosystems **may be at a similar risk of cyber-attacks that the current payment systems are exposed to**.
- **Privacy issue:** The CBDC is expected to generate huge sets of data in real time. Privacy of the Data, concerns related to its anonymity and its effective use will be a challenge.
- **Digital divide and financial illiteracy:** The [NFHS-5](#) also provides data segregation based on the rural-urban divide. **Only 48.7% of rural males and 24.6% of the rural females have ever used the internet**. So, CBDC may wide gender-based hurdle in financial inclusion along with digital divide.

## Way Forward

- **Technical clarity** must be ensured to decide on the underlying technologies that can be trusted to be safe and stable.
- To make CBDC a successful initiative and movement, RBI must address the demand side infrastructure and knowledge gap to increase its acceptance in rural areas for wide base.
- The RBI must proceed cautiously, remaining mindful of the various issues, the design considerations and the implications surrounding the introduction of the digital currency.

## [Infographics](#)

## UPSC Civil Services Examination Previous Year Question

### ***Mains***

**Q.** What is Cryptocurrency? How does it affect global society? Has it been affecting Indian society also?

**Source:** [IE](#)

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