



## E-rupee to Bolster Indian Economy

This editorial is based on [“How the e-rupee will work”](#) which was published in The Indian Express on 02/12/2022. It talks about the launch of CBDC in India, its types and advantages.

**For Prelims:** Digital rupee, E-rupee, Unified Payments Interface (UPI), Settlement of Trade, Globalisation, Cryptocurrency, Digital illiteracy, Know Your Customer (KYC), Terror financing, Money laundering.

**For Mains:** Central Bank Digital Currency (CBDC), Advantages of E-rupee, Challenges Associated with E-Rupee.

India is witnessing massive growth in digital transactions, the **volume and value of [Unified Payments Interface \(UPI\) transactions increased by 118%](#)** in 2022. [India's Digital rupee move](#) based on **transparent and efficient technology** will provide customers with continuous access to the payment system.

India launched its **[Central Bank Digital Currency \(CBDC\)](#) or digital rupee or e-rupee on December 1, 2022**. It is an **electronic version of cash** and will be primarily meant for **retail transactions**. The pilot will initially cover the four cities of **Mumbai, New Delhi, Bengaluru, and Bhubaneswar**.

This makes it important to know what CBDCs are, **how they are different from cryptocurrencies and UPI transactions**, and also about the **safety concerns associated with it**.

### What is CBDC or E-rupee?

- It is a legal tender **issued by the RBI in digital form**. It is the same as the **fiat currency and is exchangeable one-to-one with the fiat currency**.
- **E-rupee will be in the form of a digital token representing a claim** on the central bank and will **effectively function as the digital equivalent of a banknote** that can be **transferred electronically from one holder to another**.
- Based on usage and the functions performed by the digital rupee, and considering different levels of accessibility, the **RBI has demarcated the digital rupee into two categories**:
  - **Retail E-rupee:** It is an **electronic version of cash** primarily meant for **retail transactions**, which can potentially be used by almost everyone, and **can provide access to safe money for payment and settlements**.
  - **Wholesale CBDC:** It is designed for **restricted access to select financial institutions**.
    - Financial transactions involving **government securities (G-Sec)** and **interbank transactions could be transformed by this technology**.
    - It also makes the capital market more efficient and secure in terms of operational costs, use of collateral, and liquidity management.

## How will the E-rupee be Circulated in the Market?

- E-rupees will be issued in the **same denominations as paper currency and coins**, and will be **distributed through the intermediaries, that is [banks](#)**.
  - Transactions will be through a **digital wallet offered by the participating banks and stored on mobile phones and devices**.
- Transactions can be both **person to person (P2P)** and **person to merchant (P2M)**.
  - For P2M transactions (such as shopping), **there will be QR codes at the merchant location**.
- Users will be able to **withdraw digital tokens from banks** in the same way they **can currently withdraw physical cash**.
  - They will be able to keep their **digital tokens in the wallet**, and spend them online or in person, or **transfer them via an app**.

## What are the Advantages of E-rupee?

- **Reducing Dependency on Dollar:** India can establish **Digital Rupee as a superior currency for trade with its strategic partners**, thus reducing reliance on the dollar.
  - This occurs at a time when **[India is already in talks with Russia, UAE and Saudi Arabia to allow settlement of trade in the Indian rupee](#)**.
- **Cutting Cost of Maintaining Physical Currency:** CBDC has the potential to **reduce dependency on cash**. To the extent large cash usage can be replaced by CBDCs, the **cost of printing, transporting, storing and distributing currency can be reduced**.
- **Regulated Intermediation:** Along with reducing operational costs, it will offer the public the same features as any private virtual currency (cryptocurrency) without any risks associated with it.
  - Unlike crypto, **E-rupee has regulated intermediation and control arrangements** that plays the crucial role of ensuring **integrity and stability of the monetary and financial ecosystem**.
- **Globalisation of Payment System:** CBDC can also enable a more real-time and **cost-effective [globalisation](#) of payment systems**. It could eliminate the **need for an expensive network of correspondent banks to settle cross-border payments**.
  - For **Indians working abroad, sending money home will become simpler and cheaper resulting in huge savings for India**, the world's top recipient of remittances.

## What are the Challenges Associated with E-Rupee?

- **Privacy and Security Concern:** E-rupee has the capacity to **accumulate sensitive user and payment data on a massive scale**. In the wrong hands, **this data can be easily used to spy on the private transactions of citizens**.
  - If implemented **without proper security protocols**, an E-Rupee could substantially **amplify the scope and scale of many of the security and [privacy threats](#)** that already exist in today's financial system.
- **Digital Divide and Financial Illiteracy:** High level of **[digital illiteracy](#)** is the biggest challenge and hindrance in the success of E-rupee in India. India had a rank of **73 out of 120 countries for internet literacy (2021)**.
  - Also, **digital services are not available in local languages**, which is a major barrier to **[financial literacy](#)**.
- **Acceptability Concern:** Traceability of e-rupee transactions could become a deterrent to its uptake in India where **cash transactions are still hugely popular**, largely **because of their anonymity**. According to government data, the **volume of bank notes in circulation rose 5% in fiscal year 2022**.

## What Should be the Way Forward?

- **Secured Digital Environment:** India's regulatory systems need to catch the **evolving risks of data privacy** and guide banking institutions to place appropriate safeguards and cushions to **avoid any [personal data breach](#)**.
- **Strict KYC Norms:** A digital rupee may well be a boon but **there is a need to enforce strict**

compliance of [Know Your Customer \(KYC\)](#) norms to prevent the **digital currency's use for terror financing or money laundering.**

- Also, given **India's still-vast digital divide, a protocol for offline use has to be worked out.**

### ***Drishti Mains Question***

What is the relevance of Central Bank Digital Currency (CBDC) in Indian context? Also discuss major challenges involved in its implementation.

## **UPSC Civil Services Examination Previous Year Question (PYQ)**

### ***Prelims***

**Q. Consider the following pairs: (2018)**

**Terms sometimes seen in news Context/Topic**

1. Belle II experiment Artificial Intelligence
2. Blockchain technology Digital/ Cryptocurrency
3. CRISPR – Cas9 Particle Physics

**Which of the pairs given above is/are correctly matched?**

- (a)** 1 and 3 only
- (b)** 2 only
- (c)** 2 and 3 only
- (d)** 1, 2 and 3

**Ans: (b)**

### ***Mains***

**Q. What is Cryptocurrency? How does it affect global society? Has it been affecting Indian society also? (2021)**