



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)