



## A Pros and Cons Analysis of the CBDC

*This editorial is based on [“CBDC in India — the Pros and the Cons”](#) which was published in *The Hindu BusinessLine* on 23/04/2022. It talks about the merits and demerits of the Central Bank Digital Currency (CBDC) announced in the Union Budget 2022-23 to be launched by 2022-23.*

**For Prelims:** Economic Development, Cryptocurrency, Blockchain, Central Bank Digital Currency (CBDC), Reserve Bank of India (RBI).

**For Mains:** Central Bank Digital Currency (CBDC) - Opportunities and Risks Associated

Since many of the securities traded in the market have been digitised in the last decade, the next in the pipeline is the [Central Bank Digital Currency \(CBDC\)](#).

There is an increasing appetite for CBDC across the world. With private digital currencies — [cryptocurrencies](#) — making rapid inroads, threatening the stability of the financial system with possible money laundering and illicit financing, **governments have to act fast to manage their risks.**

### What is the Scenario of CBDC?

- CBDCs are a **digital form of a paper currency** and unlike cryptocurrencies that operate in a regulatory vacuum, these are **legal tender issued and backed by a central bank**.
- Many countries have decided to have their own CBDC to provide more reliable digital currencies to work as legal tender, prompting displacement of private digital currencies.
  - **Bahamas** has been the **first economy to launch its nationwide CBDC — Sand Dollar**.
  - **Nigeria** is another country to have rolled out **eNaira** in 2020.
  - China became the world's first major economy to pilot a digital currency **e-CNY** in April 2020.
    - **Korea, Sweden, Jamaica, and Ukraine** are some of the countries to have begun testing its digital currency and many more may soon follow.
- Recently, in its **Budget 2022-23**, the Government of India announced that its **central bank will issue a digital currency** as early as 2022-23.
- The main objective is to **mitigate the risks and trim costs in handling physical currency**, costs of **phasing out soiled notes**, transportation, insurance and logistics.
- It will also **wean people away from cryptocurrencies** as a means for money transfer.

### What are the Merits of CBDC?

- **A Combination of Traditional and Innovative:** CBDC can gradually bring a **cultural shift towards virtual currency** by reducing currency handling costs.
  - CBDC is envisaged to **bring in the best of both worlds** - the **convenience and**

**security of digital forms** like cryptocurrencies, and the regulated, **reserved-backed money circulation of the traditional banking system.**

- **Easier Cross-Border Payments:** CBDC can provide an easy means to **speed up a reliable sovereign backed domestic payment** and settlement system partly replacing paper currency.
  - It could also be **used for cross-border payments**; it could **eliminate the need for an expensive network** of correspondent banks to settle cross-border payments.
- **Financial Inclusion:** The increased use of CBDC could be **explored for many other financial activities** to **push the informal economy into the formal zone to ensure better tax and regulatory compliance** .
  - It can also pave the way for furthering **financial inclusion**.
- There is a need to **enforce strict compliance of Know Your Customer (KYC) norms** to prevent the currency's use for [terror financing](#) or [money laundering](#).

## What are the Risks Associated with CBDC?

- **Privacy Concerns:** The first issue to tackle is the heightened risk to the privacy of users—given that the **central bank could potentially end up handling an enormous amount** of data regarding user transactions. This has serious implications given that **digital currencies will not offer users the level of privacy** and anonymity offered by transacting in cash.
  - Compromise of credentials is another major issue.
- **Disintermediation of Banks:** If sufficiently large and broad-based, the shift to CBDC can **impinge upon the bank's ability to plough back** funds into credit intermediation.
  - If e-cash becomes popular and the [Reserve Bank of India \(RBI\)](#) places no limit on the amount that can be stored in mobile wallets, **weaker banks may struggle to retain low-cost deposits**.
- **Other risks are:**
  - **Faster obsolescence of technology** could pose a threat to the CBDC ecosystem calling for **higher costs of upgradation**.
  - Operational risks of intermediaries as the **staff will have to be retrained** and groomed to work in the CBDC environment.
  - **Elevated cyber security risks**, vulnerability testing and **costs of protecting the firewalls**
  - **Operational burden** and costs for the central bank in managing CBDC.

## How to Overcome the Risks of CBDC?

- In order to obviate some weaknesses of CBDCs, the **usage should be payment-focused** to improve the payment and settlement system. Then it can steer away from serving as a store of value to avoid the risks of disintermediation and its major monetary policy implications.
- The data stored with the central bank in a centralised system will hold grave security risks, and **robust data security systems** will have to be set up to prevent data breaches. Thus, it is important to **employ the right technology that will back the issue of CBDCs**.
- The sizing for the infrastructure required for the CBDC will remain tricky if payment transactions are carried out using the same system. The RBI will have to map the technology landscape thoroughly and **proceed cautiously with picking the correct technology for introducing CBDCs**.
- The financial data collected on digital currency transactions will be sensitive in nature, and the government will have to carefully think through the **regulatory design**. This would require close interaction between the banking and data protection regulators.
  - Also, the institutional mechanisms would need to **ensure that there is no overlap between different regulators** and chart out a clear course of action in case there is a data breach of digital currencies.

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

“Despite all the challenges, it would be prudent not to drop the idea of CBDCs altogether. It is rather important to address the various risks so as to introduce CBDCs in a manner that is beneficial to the whole system”. Discuss

## UPSC Civil Services Examination, Previous Year Questions (PYQs)

**Q. With reference to “Blockchain Technology”, consider the following statements: (2020)**

- (1) It is a public ledger that everyone can inspect, but which no single user controls.
- (2) The structure and design of blockchain is such that all the data in it are about cryptocurrency only.
- (3) Applications that depend on basic features of blockchain can be developed without anybody's permission.

Which of the statements given above is/are correct?

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

**Ans: (d)**

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

Terms sometimes	Context/Topic seen in news
Belle II experiment	Artificial Intelligence
Blockchain technology	Digital/ Cryptocurrency
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)**