



# Central Bank Digital Currency: Motivations and Implications

**Dr. Puneet Kumar**

Institute of Technology and Science,  
Mohan Nagar,  
Ghaziabad (UP)

## Abstract

The rise of digital currencies such as Bitcoin, as well as the blockchain distribution technology, has sparked a lot of interest. These developments increase the chances of having a major impact on the financial system and perhaps the whole of the economy. This paper addresses the question of whether the central bank should extract digital currency that can be used by the general public. It starts by discussing potential reasons for the central bank to withdraw digital money.

The effects of this new age digital currency are being tested, focusing on the central bank ledgers, monetary policy, banking system and financial stability, and payments. Finally, CBDC differs from the digital currency in a significant way considered.

**Key Words:** Bank topics, Bank notes, Digital currencies, Financial services, Payment clearing and settlement services

## Introduction

The rise of digital currencies like Bitcoin, as well as the fundamental blockchain and distribution technologies, has sparked a lot of curiosity. This discovery has raised the prospect of a significant impact on the financial sector, and possibly the economy as a whole.

As a result, during the last few years, government officials and big banks all over the world have been watching and studying advancements in digital money.

Several times, the question of whether large banks should issue digital currency that may be used by the general public has been posed. Portable bank notes and electronic bank deposits, often known as fixed sources or residential rates, are the two most common types of loans issued by the central bank.

Bank notes, or money, can be held and used by anyone. They are one of the most extensively used payment methods by customers and are accepted by merchants. Do bank notes pay interest – answer is no. They are administrative tools and as a result, the parties involved in the transaction can remain anonymous, there is no need for an honest third party to keep a record of transfers from one party to another. Transactions using bank notes are also final and non-reversible. Contrary to bank notes, access to central bank deposits is often limited to eligible financial institutions operating in a large payment system. For example, in Canada, only members of Payments Canada who meet certain technical requirements (related to the ability to process large payments) are eligible to have Canadian Bank accounts, which have affiliated central banking facilities. These accounts are kept in a central bank, and the final transfer of funds between these accounts is used to pay claims between the participants. This transfer applies to almost all non-monetary transactions in the economy. And since these electronic transfers have central bank loans through major bank ledger accounts, they are virtually harmless, and final and irreversible. Recent technological advances have led to a proposal by a major bank to consider issuing digital currency to the public through intermediate accounts in its books. In theory, this will increase the provision of savings, currently only accessible to certain financial institutions, in general. In this case, the big bank can be seen as a "small bank" that offers general public accounts, and allowing account holders to apply the ratings to these accounts to make payments with a large bank ledger. Alternatively, the central bank can issue digital currency in a separate way, as is how the virtual currency is distributed. In this paper, we look at this type of central bank digital currency (CBDC) setup. The CBDC, at the basic level, is simply a computerized (digital, or electronic symbol) that represents a large bank account that can be used to pay.

Feasibility of central bank releasing CBDC over the bank notes and central bank deposits, instead of bank notes. CBDC's main economic focus here - especially on the motives for CBDC's emancipation and its economic implications. Much of the paper is concerned with highlighting the visible or potential effects of certain CBDC aspects. However, there is major uncertainty given the complexity and connected nature of the potential consequences. We also think that the technologies for issuing and using CBDC will work, and will be acceptable to the central bank. Therefore, the analysis in this paper is not directly technical.

### **What is a Central Bank Digital Currency and How is it Different from E-Money, Crypto currency and Stable coin?**

It is a digital version of the country's fiat currency (such as digital rupee, digital dollar or digital digital) and will be made available priced to its users. It will be issued and certified by the central bank. It will be different from the existing central bank funds such as banknotes and accounts held by financial institutions (especially banks) and the central bank.

The CBDC should be separated from existing types of standalone funds such as e-money (cash deposits in prepaid funds) or bank accounts, which can be transferred electronically using credit cards or mobile

payment applications. Such funds are disbursed by private entities i.e., banks or non-banks and are not the responsibility of the central bank.

Similarly, CBDC differs from cryptocurrencies and solidcoins issued by private organizations. Unlike CBDCs that will be a central bank loan, cryptocurrencies are a personal obligation and their value is based on the expectation that they will be informed and used by others. Due to their limited use and volatility, those funds often fail to operate efficiently.

## Considerations before RBI for CBDC Issuance

### A. Identifying Opportunities for CBDC Issuance

- **Provide a Complement to Cash:** In contrast to countries like the UK and Sweden, India is still very much interested in cash. Distribution on GDP percent in Sweden and the UK is 2.3% and 3.4% respectively compared to 12% in India. However, India should continue to monitor expenditure, and citizen payment practices from any depreciation can deny citizens the only way to get a central bank payment that addresses their needs without a commercial perspective.
- **Improved Investment:** Due to population growth, India (190 million) (since 2017) continues to have the largest number of bankers, near China (225 million). RBI National Investment Strategy: 2019-2024, also notes the scope of development in India to ensure adequate access to financial services by people under care. Up to this point, the CBDC would obviously be an option to encourage investment. In this regard, the CBDC must be able to address the root causes of stigma, which can lead to complex social and economic issues. The RBI notes that significant challenges to financial inclusion include inadequate infrastructure, poor communication, social and cultural barriers, digital learning, etc. encourage investment. It will have to be embedded in a broad set of changes.
- **Promoting Economic Inclusion, Improving the efficiency of payment systems and Promoting Competition and Innovation:** India has taken a few steps over the past few years to promote digital payments, including providing real-time users with 24/7 payment options, promoting NPCI competition, new business umbrella business framework and providing cost-effective payment solutions. Contrary to this, it is important to examine whether the selling CBDC can offer any other benefits and if so, how it can fit within the existing payment country. In addition, India needs to consider whether the opportunities created by the CBDC can be achieved in other ways, rather than building new CBDC infrastructure.
- **Responding to the issuance of external CBDCs and securities securities:** Significant adoption of securities or even external CBDCs could affect the central bank's ability to perform its functions related to monetary policy and financial stability. However, the issuance of CBDC in India should not be in response to proposals for cryptocurrencies or solidcoin, but rather an effort focused on the use of technology to pursue public policy objectives.

- **Improve Border Payments payments.**
- **Rethink the role of the RBI:** At present, access to central bank finance is in a financial position. With the growth of digital and if money goes down, CBDC can help the RBI maintain direct communication between the central bank and citizens.
- **Financial crime prevention:** CBDC can improve the country's ability to fight financial crime such as money laundering and tax evasion as it can make transactions more accessible and easier to identify. For this reason, the structure of the CBDC should include high levels of security, and be subject to strict regulation to ensure transparency and compliance. This can also contribute to the easy-to-use and efficient operation of the CBDC. In the absence of these factors, the CBDC itself could be a new channel for financial crime.

### ***B. Role of RBI and the Private Sector***

The introduction of the CBDC for sale in India may lead to the RBI delivering services to the general public. This indicates a departure from its existing operations, where the RBI does not have direct relationships with end customers. In the case of a Direct Model, the RBI will address new job areas that will require new skills within the bank. Alternatively, the RBI may consider a two-story Model, in which the RBI may take on a smaller operational role, and more consumer-oriented resources are provided to consultants. However, even under this model, the RBI will still need to improve its monitoring, risk management and risk management activities, and establish programs to respond to potential disruptions to the CBDC.

### ***C. Legal Considerations***

Legal considerations will be determined by the final design of the CBDC. However, the first issues to consider are the following:

- Any CBDC issuance by the RBI must be legal.
- In order to obtain CBDC-based trading tokens, the State Bank of India Act, 1934 (“RBI Act”) must be amended to enable the RBI to explicitly issue digital currency.
- With a CBDC based store account, the RBI Act should specifically empower the RBI to open accounts for all users (excluding banks).
- The launch of the two-phase CBDC Model will involve the participation of actors from the private sector. This requires establishing a legal framework for the monitoring and control of those players.
- Under Indian law, there is no legal ban on awarding official tender status to CBDC. Giving a formal tender status to the CBDC will only be good if the majority of the population has the same facilities (including technical facilities) for the same payment and receipt. This should be compared to the notes (which enjoy the official tender status) that are readily available to everyone.

- The implications of CBDC's exit from other laws relating to payment systems, data protection, money laundering prevention, customer awareness and money laundering will need to be considered.

## Conclusion

It must not be an interest-bearing instrument, as that would pose an existential threat to the banking system. Intermediary function of commercial banks would come under stress if the CBDC offered by RBI becomes an interest-bearing instrument. A central bank digital currency (CBDC) is a virtual version of the sovereign currency of the country and is issued by the central bank. This is different from Cryptocurrencies like Bitcoin, issued by private parties. If CBDCs do end up bearing interest, they could adversely affect the money supply in the economy.

## References:

- Agarwal, R and M Kimball (2015): "Breaking through the zero lower bound", *IMF Working Papers*,
- Bacchetta, P (2017): "The sovereign money initiative in Switzerland: an economic assessment", *CEPR Discussion Papers*,
- Bank of England (1963): "Origin of the branches."
- Bech, M and R Garratt (2017): "Central bank cryptocurrencies", *BIS Quarterly Review*, September,
- Bech, M, Y Shimizu and P Wong (2017): "The quest for speed in payments", *BIS Quarterly Review*, March, pp 57–67.
- Bech, M, U Faruqui, F Ougaard, and C Picillo (2018): "Payments are a-changin' – but cash still rules", *BIS Quarterly Review*, March,
- Benes, J and M Kumhof (2012): "The Chicago Plan revisited", *IMF Working Papers*, no WP/12/2012.
- Bindseil, U (2014): "Monetary policy operations and the financial system", Oxford University Press.
- Bordo, M and A Levin (2017): "Central bank digital currency and the future of monetary policy", *NBER Working Papers*,
- Carlson, M, B Duygan-Bump, F Natalucci, B Nelson, M Ochoa, J Stein and S Van den Heuvel (2016): "The demand for short-term, safe assets and financial stability: some evidence and implications for central bank policies", *International Journal of Central Banking*, vol 12, no 4, December,
- Cochrane, J (2014): "Toward a run-free financial system", University of Chicago, working paper.