

An Overview of Central Bank Digital Currencies Launched By RBI

Shyamal Vyas^{1*}, Dr Rupal N Patel²

ABSTRACT

The Reserve Bank of India (RBI) has embarked on a transformative journey towards the introduction of a digital currency, commonly referred to as the "Digital Rupee." This research paper presents a comprehensive study aimed at understanding the basic concept of CBDC (Digital currency), reason behind popularity of Central Bank Digital Currency and risk in Central Bank Digital Currency. As the world embraces digital currencies, central bank digital currencies (CBDCs) have gained prominence as a potential financial innovation. This study employed an explorative methods approach, including secondary data and data collected from paper, website, books, article, journal. The research explores the key dimensions of public awareness regarding the RBI's Digital Rupee, including knowledge of its existence, purpose, benefits, and concerns.

Keywords: India, CBDC, cryptocurrency, digital rupee, central bank digital currency, blockchain.

A central bank will issue legal tender in the form of digital money known as central bank digital currency (CBDC). A CBDC is equivalent to fiat money and may be traded for cash or fiat paper money at a 1:1 ratio (Bordo, 2021; Chaum, Grothoff, and Moser, 2021). The sole distinction, according to Inozemtsev and Nektov (2022; Kahn, Singh, and Alwazir, 2022) is that a CBDC is money in digital form. The majority of CBDCs may be stored in a token-based or account-based wallet (Xu, 2022).

The Reserve Bank of India (RBI) stated in August 2022 that a digital rupee, a central bank digital currency, will be launched gradually, starting with wholesale firms in the fiscal year 2022–2023. The India CBDC is simultaneously being built for both retail and wholesale applications. The Reserve Bank of India, however, could introduce the virtual money to wholesale enterprises first. A CBDC is being issued in India for four main reasons: (i) the Reserve Bank of India (RBI) wants to join other central banks that have already done so; (ii) there has been a significant increase in digital transactions in India; (iii) private digital currencies pose a threat; and (iii) India already has a mature and well-functioning payment system.

The Reserve Bank of India has frequently rejected private digital currencies prior to the announcement of a gradual CBDC adoption in India. It is commonly accepted that the Reserve

¹ Phd Scholar, Department of Business Studies, S. P. University, Vallabh Vidyanagar

² Associate professor, BJVM College

*Responding Author

Received: July 15, 2023; Revision Received: August 02, 2023; Accepted: September 21, 2023

An Overview of Central Bank Digital Currencies Launched By RBI

Bank of India started making preparations to introduce a CBDC digital rupee as a result of the advent of private digital currencies, namely bitcoin. In order to implement a digital rupee CBDC, the Reserve Bank of India has recommended changes to the Reserve Bank of India Act of 1934. With few exclusions, the government also intends to outlaw all private digital currencies in India. Private digital currencies are discouraged by the RBI because they facilitate tax evasion, money laundering, and financing of terrorism. The Reserve Bank of India also reported that the number of Unified Payments Interface (UPI) transactions in India climbed by 427 percent between March 2020 and August 2022, and that by the end of July 2022, there were 86 percent more UPI acceptance points that could take payments using QR codes. According to the Reserve Bank of India, these advancements in the digital payment industry show that the country is prepared to adopt a central bank digital currency and that digital contactless payments are becoming more and more popular in India. The Reserve Bank of India was likewise motivated by this development to launch a phased CBDC implementation approach.

LITERATURE REVIEW

(Kulkarni, 2022)

In this study, the public impression of the "Digital Rupee" in India following its announcement by the Indian government in February 2022 was examined. The study looked at this goal in relation to CBDC (Central Bank Digital Currency) and also clarified the meaning of CBDC, blockchain, and distributed ledger technology for CBDC. The study also emphasised how CBDC operates and its traits, benefits, and difficulties. By using sentiment and statistical analysis approaches on data gathered from a poll and on Twitter, the research has examined how the public feels. The study project has come to a close, with recommendations made for future work based on the findings, which may be used as a reference when the "Digital Rupee" launches to compare public impression before and after implementation.

(Amitoj Singh*David Parapallicherayil John, 2022)

This review article discusses the exploratory study on CBDCs carried out by various central banks and international organisations, as well as the framework that should be used to establish CBDCs so that the monetary system of a particular nation is not impacted. As we all know, CBDCs and crypto currencies in general have gained a lot of attention and are a hot topic among academics, economists, and financial professionals. Although many people think crypto currencies have no inherent worth, the underlying technology has value. The implementation of digital currencies in an economy only be considered after careful study and pilot programmes are carried out by the central banks, even though the idea of them may excite many people.

(Ma, 2023)

Researchers are becoming more conscious of the significance of Central Bank Digital Currency (CBDC) as part of the global study and development of CBDC. India, one of the major economies in the world, has contributed significantly to CBDC's research efforts. This paper examines the beneficial policies and potential hazards involved in the process of establishing CBDC in India, drawing on data and conclusions from earlier studies. It examines how the implementation of CBDC in India has affected global monetary policy and what it means for other nations based on study findings. According to the report, insufficient infrastructure and disparities in the quality of education among the people might make it more difficult to implement CBDC. In the process of worldwide Central Bank Digital Currency (CBDC) research and development, Based on the study findings, it examines how the implementation

An Overview of Central Bank Digital Currencies Launched By RBI

of CBDC in India has affected global monetary policy and what it means for other nations. According to the report, insufficient infrastructure and disparities in the quality of education among the people might make it more difficult to implement CBDC.

(Md Hasraf haque, february 2023)

This paper focus on operational mechanism of e₹ while exploring its challenges and potential opportunities. The first pilot programme for the digital rupee, also known as the e-Rupee (e), in India was just started by the Reserve Bank of India (RBI). An important step forward in the "Digital India" revolution has been made with the introduction of the digital rupee. It will be an excellent chance for India since it might simplify doing business while boosting the security and robustness of the whole payments system. Digital currency aims to advance monetary policy quickly in order to replace physical money, reduce transaction fees, and alter the way that money will move around.

Objectives:

1. To understand the concept of Central Bank Digital Currency or CBDC.
2. To study the reason behind popularity of Central Bank Digital Currency.
3. To identify the risk in Central Bank Digital Currency.

The selected research design is explanatory in nature. The researcher has conducted a thorough study of the literature.

RESEARCH METHODOLOGY:

Research Design:

The selected research design is explanatory in nature. The researcher has conducted a thorough study of the literature.

Secondary Data:

The secondary data was collected from Scholarly articles, various online journals, Research Papers, Magazine Articles.

Data Analysis:

The secondary data so obtained is analysed and presented in a systematic manner such as : First Part represents concept of Central Bank Digital Currency, second part Reason behind CBDC popularity in india and last part covers Risk of Central Bank Digital Currency.

CENTRAL BANK DIGITAL CURRENCY OR CBDC

A CBDC is legal money that is issued in digital form by a central bank, according to RBI. It is interchangeable one-to-one with fiat cash and is the same as fiat currency. Its only difference is in form. In other terms, digital money is the equivalent of real cash and is a digitised or virtual form of domestic currency. Despite being a virtual or digital currency, CBDC differs from private cryptocurrencies in that it meets the essential condition of having a central bank back and issue it. CBDC is equivalent to central bank money, with the exception that it doesn't come in paper (or polymer) form. It is a sovereign currency in electronic form, and on the balance sheet of the Indian central bank, it would show up as a liability (currency in circulation). The private virtual currencies or crypto currencies that have exploded over the past ten years cannot be compared to CBDC, despite the fact that it is a virtual or digital money. Understanding the distinctions between CBDC and crypto currencies is also crucial. While not all crypto currencies are digital currencies, all crypto currencies are. While digital currency

An Overview of Central Bank Digital Currencies Launched By RBI

may not function in an encrypted way, crypto currency does so thanks to block chain technology. Private virtual currencies do not reflect any person's debt or obligations because there is no issuer. The retail version of the digital rupee is token based. Broadly this means, you find out the recipient's public key (think of it like an email address) and transfer money to them using your private key (essentially, a password).

Reason behind CBDC popularity in india

The Reserve Bank of India (RBI) has been researching the potential introduction of a central bank digital currency (CBDC) since 2013. What advantages issuing a CBDC would have for the RBI is unknown. However, it is asserted that it would enable greater management and supervision of the country's financial stability and money supply. Many countries are creating CBDCs, and some have even put them into practise. The Bahamas, Nigeria, Jamaica, and eight nations in the Eastern Caribbean Union are among the 11 nations that have already introduced their digital currencies as of August 2022. Many countries, including China, continue to test and improve their CBDCs. The motivations behind CBDC in India are numerous and diverse. But at its foundation, CBDC is required because a more effective and inclusive monetary system is desired. India's existing monetary system is based on paper money, which is prone to deterioration and counterfeiting. This indicates that the expenses of its manufacturing and dissemination are high. The storage and transportation of paper money is equally inefficient. This will also make sure that India does not lag behind other nations in the adoption of new technology and maintains its leadership position in the global financial system.

Furthermore, CBDC would promote broader inclusion by increasing access to financial services for people who are now shut out of the established banking system. Approximately 1.2 billion Indians do not now have access to formal financial services. They consequently lose out on chances to preserve money and develop their financial stability. By giving customers a secure and practical means to keep and access money without going via a bank, a CBDC might take care of this issue. The digital rupee, also known as CBDC, has a variety of practical uses, including programmable payments for subsidies and speedier lending and payments by financial institutions. The economy may soon make the practical shift to a cashless one, which might increase the government's emphasis on cashless transactions. Cross-border remittances may gain from increased use of CBDC as an environment for interoperability may be established, allowing for faster real-time transmission. Finally, CBDC may be able to lower the price of producing and dispersing paper money. Due to its digital nature, which makes it more secure and less expensive to generate, CBDC would reduce these expenses. Additionally, banks charge large costs for some services, such foreign money transfers; however, if CBDCs were used instead of banks to conduct the transactions, these fees may be decreased or perhaps eliminated. Additionally, CBDCs may make it feasible for payment systems to be more swift, simple, and international. If an Indian importer paid a foreign exporter directly in digital dollars without through a middleman, the transaction would be considered complete. If an Indian importer paid a foreign exporter directly in digital dollars without through a middleman, the transaction would be considered complete.

RISK OF CENTRAL BANK DIGITAL CURRENCY

The Indian government is attempting to issue CBDC, however there are drawbacks to this course of action. For instance, a CBDC may be vulnerable to fraud and other sorts of crime if it is improperly constructed, increasing the risk to cyber security. The possibility for CBDC to be utilised for money laundering and terrorist financing is one of the major threats. The existing financial system, which is already having to deal with high levels of non-performing loans, is

An Overview of Central Bank Digital Currencies Launched By RBI

another danger that CBDC poses. If CBDC is not effectively handled, there is also a chance that inflation will result. Banks are concerned about the possible long-term consequences if the central bank assumes responsibility for storing and distributing digital money, removing banks as a middleman between clients and the RBI. This may cause deposits to drop, and if banks begin to lose deposits over time, it will restrict their capacity to issue credit. Additionally, banks' interest margins may come under pressure if they lose substantial sums of low-cost transaction deposits, which would increase the cost of borrowing. Considering all of these issues, RBI has opted to move carefully and gradually, with wholesale CBDC as its primary emphasis. It will be used to ease payments between the RBI and commercial banks and other organisations that have accounts with central banks, according to wholesale CBDCs. The wholesale CBDC is believed to be the most well-liked idea among central banks due to its ability to increase the effectiveness, accessibility, and security of present wholesale financial institutions. Another problem is privacy issues. Contrary to entirely anonymous currency, the bulk of CBDCs will be designed such that the central banks can monitor the expenditure. Considering that the central bank will have access to a lot of data on user transactions, the heightened danger to user privacy must also be taken into consideration.

CONCLUSION

India is a country where a huge portion of transactions are made using actual money, making it a civilization that relies heavily on cash. For a variety of reasons, such as the expense and time involved in producing and distributing real cash, the possibility of counterfeiting, and the challenge of tracking and taxing transactions, this may be problematic. The popularity of CBDC (Digital currency) stems from their ability to provide secure, efficient and transparent digital payment system that can reduce transaction cost and increase financial accessibility for uncovered population. The adoption of CBDCs (Digital currency) is not without risk. Some of potential concerns include issues related to privacy. There is also risk of cyber security threats and need for robust security measures to protect the digital currency from hack and fraud.

REFERENCE

- Amitoj Singh*David Parapallicherayil John, A. P. (2022). A Review of Central Bank Digital Currencies. *Ushus-Journal of Business Management*, 11.
- Kaur, J. (2023). Central Bank Digital Currency - The 'digital rupee' in India. *EPW Engage*, 58 (1).
- Kulkarni, A. (2022). *Public perception of the "Digital Rupee" in India*. National College of Ireland.
- Ma, W. (2023). An Introduction to The Impact of India's Use of Central Bank Digital Currency on the International Financial System. *Frontiers in Business, Economics and Management*, 7.
- Md Hasraf haque, m. s. (Ed.). (february 2023). *BenchCouncil Transactions on Benchmarks, Standards and Evaluations (TBench)*, 3 (1).
- Shoaib, M. A. (2023). e₹—The digital currency in India: Challenges and prospects. *BenchCouncil Transactions on Benchmarks*, 3 (1).

Acknowledgments

The authors profoundly appreciate all the people who have successfully contributed to ensuring this paper in place. Their contributions are acknowledged however their names cannot be mentioned.

Conflict of Interest

An Overview of Central Bank Digital Currencies Launched By RBI

The author declared no conflict of interest.

How to cite this article: Vyas. S (2023). An Overview of Central Bank Digital Currencies Launched By RBI. *International Journal of Social Impact*, 8(3), 86-91. DIP: 18.02.06/20230803, DOI: 10.25215/2455/080306