

The Role of RBI on Implementation of Digital Currencies in India

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ABSTRACT

In the present technological world, technology provided many advances and the widespread use of the Internet, various digital currencies have emerged. In most cases, Internet platforms such as Face-book and Amazon restrict the functionality of their digital currencies to enhance the business model and maximize their profits. While platform-based digital currencies would increase the efficiency of retail payments, they could also raise some important policy issues if they were to become widely used outside of the platform. Thus, it is important to closely monitor the evolution of these digital currencies.

KEYWORDS: Digital Currency, Virtual currencies, CBDC, Crypto, RBI

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INTRODUCTION

Digital Currency as a broad term can contain anything that represents value in a digital manner. Digital currency can contain firstly what we would call electronic 'money'. Money that is simply a digital representation of government issued fiat currency. Fiat currency is government backed. Digital currency can also cover virtual currency – electronic currency that it is not considered legal tender. Virtual currencies are controlled and created by their developers, with value being appreciated in a specific community. Like crypto currencies, Crypto currency being the most attracting virtual money in India there are more than 20million crypto investors are there with worth of \$5.3 billion as on 2021. The global crypto currency market is projected to grow from \$910.3 million in 2021 to \$1,902.5 million in 2028 at a CAGR of 11.1% in forecast period, 2021-2028.

India is aiming to achieve digitalization in currency and taken a bold step to introduce digital currency to the economy which gas backed by the Indian government. Digital currency or rupee is an electronic form of money. That can be used in contactless

2456 transactions. Presenting Union Budget 2022, Finance Minister Nirmala Sitharaman announced that the Reserve Bank of India (RBI) would be rolling out its digital currency in 2023 with the help of The Central Bank Digital Currency (CBDC).

DIGITAL CURRENCY BEFORE BITCOIN

If we understand that Digital currency is just an electronic representation of any asset, it is useful to point out and understand that digital currency can be traced back to the 1960s.

- 1960- IBM and American Airlines jointly create the SABRE (Semi-Automatic Business Research Environment) system where office terminals used telephone lines to turn cash into virtual credit. This would be deemed a virtual currency.
- 1970- Banks start using mainframe computers to track transactions between branches and other banks. This is essentially the first uses of Electronic Money.
- 1980- Minitel terminals were introduced in France to allow customers to pay for products from home. Four New Manhattan, Chemical Bank

and Manufacturers Hannover) offer chance to online bank from home using dial-up connections

- 1990- David Chaum's Digi Cash: A d currency that enabled anonym transfers of funds. Although was revolutionary there was enough individuals and company interested to take this further.
- 1998- PayPal enables electronic money to be sent electronically using email address.
- 2008- Satoshi Nakamoto produces white paper for bit coin the world's first decentralized digital currency.

LITERATURE REVIEW:

Raphael Auer, Giulio Cornelli and Jon Frost (2020) In their study the authors concentrated about Central bank digital currencies (CBDCs) are receiving more attention than ever before. Yet the motivations for issuance vary across countries, as do the policy approaches and technical designs. We investigate the economic and institutional drivers of CBDC development and take stock of design efforts. We set out a comprehensive database of technical approaches and policy stances on issuance, relying on central bank speeches and technical reports.

ItaiAgur, Anil Ari , & GiovanniDell'Ariccia (2022)This paper is about study on optimal design of a Central Bank Digital Currency (CBDC), The optimal design of a central bank digital currency (CBDC) is analyzed in an environment where agents sort into cash, CBDC, and bank deposits according to their preferences over anonymity and security; and where network effects make the convenience of a payment instrument depend on the number of its users A CBDC can be designed with attributes similar to cash or deposits, and can be interest bearing that closely competes with deposits depresses bank credit and output, while a cash-like CBDC may lead to the disappearance of cash.

Michael Kumhof CEPR, Clare Noone(2018) This paper sets out three models of central bank digital currency (CBDC) that differ in the sectors that have access to CBDC. It studies sectoral balance sheet dynamics at the point of an initial CBDC introduction, and of an attempted large-scale run out of bank deposits into CBDC. We find that if the introduction of CBDC follows a set of core principles, bank funding is not necessarily reduced, credit and liquidity provision to the private sector need not contract, and the risk of a system-wide run from bank deposits to CBDC is addressed.

Raphael Auer & Jon Frost (2021).This paper is a study about economic implications of CBDC's that in just a few years, central banks have rapidly ramped

up their research and development effort on central bank digital currencies (CBDCs). A growing body of economic research informs these activities, often focusing on the “reserves for all” aspect of CBDCs for retail use. However, CBDCs should be considered in the full context of the digital economy and the centrality of data, which raises concerns around competition, payment system integrity and privacy. This paper gives a guided tour of the growing literature on CBDCs on the microeconomic considerations related to operational architectures, technologies and privacy, and the macroeconomic implications for the financial system, financial stability and monetary policy.

Objectives of Study:

- To study the role of digital currency to improve the Indian economy
- To study the role of RBI to digital currency implementation
- To study about past and present scenario of digital and virtual currencies
- To know about benefits of implementing digital currency
- To know about RBI regulations regarding digital currency in India

WHY DIGITAL CURRENCY IS IMPORTANT:

Digital currency would benefit in many ways to Indian economy, as coping with technological changes is being inevitable now a days in order to be an effective and efficient financial system and some of the benefits are listed as below.

➤ **They have fast transfer and transaction times:** Because digital currencies generally exist within the same network and accomplish transfers without intermediaries, the amount of time required for transfers involving digital currencies is extremely fast. As payments in digital currencies are made directly between the transacting parties without the need for any intermediaries, the transactions are usually instantaneous and low-cost

➤ **They do not require physical manufacturing and cannot be soiled:**

Many requirements for physical currencies, such as the establishment of physical manufacturing facilities, are absent for digital currencies. Such currencies are also immune to physical defects or soiling that are present in physical currency.

➤ **Helps in ease implementation of monetary and fiscal policy:**

Under the current currency regime, the Fed works through a series of intermediaries—banks and financial institutions—to circulate money into an economy. CBDCs can help circumvent this

mechanism and enable a government agency to enable disburse payments directly to citizens

➤ **They can make transaction costs cheaper:**

Digital currencies enable direct interactions within a network. For example, a customer can pay a

shopkeeper directly as long as they are situated in the same network. Even costs involving digital currency transactions between different networks are relatively cheaper as compared to those with physical or fiat currencies.

THE ROLE OF RBI ON IMPLEMENTING DIGITAL CURRENCIES IN INDIA:



Reserve Bank of India (RBI) is working out a phased implementation strategy for introduction of Central Bank Digital Currency (CBDC) by examining use cases, to avoid any disruptions. It further said that the RBI moved a proposal in October seeking to amend the Reserve Bank of India Act, 1934 to enhance the scope of the definition of 'bank note' to include currency in digital form. The purpose of creating a digital currency is to provide significant benefits, such as reduced dependency on cash, higher seigniorage due to lower transaction costs and reduced settlement risk. India is expected to launch a digital version of its currency, the rupee. The plan for the sovereign-backed digital currency comes as the popularity of crypto currencies is on the rise. A Central Bank Digital Currency would be an alternative to private digital currencies

In the annual budget on February 1st, Finance Minister Nirmala Sitharaman proposed the introduction of a digital currency to be issued by the Reserve Bank of India (RBI) in the coming financial year.

The Central Bank Digital Currency (CBDC) is aimed at giving a boost to the digital economy and providing an alternative to the private virtual currencies that have proliferated in recent times. Work on this ambitious project has been going on for over a year.

Earlier, India was preparing to clamp down on its booming crypto currency trade as it felt it could pose serious concerns to macroeconomic and financial stability, and become an avenue for money laundering, fraud and terror financing.

Since digital currency can strengthen financial inclusion, Chakraborty believes the digital currency can be an effective prelude if the finance ministry wants to announce targeted cash transfers into the hands of people as part of ongoing economic stimulus programs.

"CBDC can strengthen fiscal and monetary policy coordination. Moreover, it supports financial innovation and strengthens entrepreneurship, especially because it eases cross-border transactions in real-time," added Chakraborty.

According to RBI, India's high currency-to-GDP ratio calls for a switch to CBDCs. If large cash transactions can be replaced by CBDCs, the cost of printing, transporting, storing and distributing currency can be reduced.

COUNTRIES DEVELOPING A CENTRAL BANK DIGITAL CURRENCY (CBDC)

A central bank digital currency (CBDC) is a digital form of cash issued by a nation's central bank. Digital forms of currency are already widely used today. When you swipe your debit or credit card instead of using cash, or when you are paid via direct deposit, the associated financial institution must digitally record the transaction and update your account balance.

A CBDC would support systems already established by private financial institutions by issuing a digital fiat currency that has the full backing of a central bank. In most countries, the only type of central bank money available to the public is physical bank notes. CBDC's has skyrocketed in recent years. According

to the Atlantic Council an independent think tank headquartered in Washington, D.C.-a total of 87 countries are exploring issuing a CBDC as of March 2022. Less than two years prior, in May 2020, just 35 countries were considering a CBDC.

PRESENT GLOBAL SCENARIO OF CBDC:

There are nine countries that have fully launched a central bank digital currency (CBDC). Eight of the nine countries are located in the Caribbean. Nigeria and its e-Naira became the latest country to institute a CBDC. It is the first country in Africa to create a CBDC

INDIA

In February 2022, India's finance minister Nirmala Sitharaman announced that the Reserve Bank of India (RBI) will introduce a digital rupee sometime in the 2022 to 2023 financial year, which begins April 1, 2022. If it sticks to its plans, India will be one of the largest economies to issue a CBDC.

RUSSIA

The Bank of Russia first announced plans to launch a digital ruble in October 2017. The country's central bank stated that a CBDC would reduce the cost of payment services, promote competition among financial institutions, provide a convenient means of payment to its citizens in territories with limited access to financial infrastructure, and decrease Russia's dependence on the U.S. dollar

BRAZIL

Brazil has been exploring a CDDBC since at least 2020, after the successful rollout of PIX, an instant payment system created by the Brazil Central Bank (BCB). There have been 7 billion transactions completed, with more than 60% of the adult population counted as PIX users. Assured that Brazil has the infrastructure for a digital currency, the BCB indicated that it would launch a pilot of the digital real in 2022, with a final version expected in 2024.

THE UNITED STATES

Although the United States has no confirmed plans to launch a digital currency, the Federal Reserve Bank has expressed interest in CBDCs. In January 2022, the Fed released a much-anticipated report providing economic context and weighing the benefits and risks of CBDCs. This report was described by the Fed as a "first step" in issuing a CBDC. Its purpose was to facilitate a broad discussion of the implications of a CBDC in the U.S.

RECENT DEVELOPMENTS AND GUIDELINES ISSUED BY RBI TO REGULATE DIGITAL CURRENCIES IN INDIA:

➤ The Indian population has shown significant interest in virtual currencies. According to

industry estimates as of July 2021, there were estimated to be nearly 15 million investors in India holding more than US\$1.3 billion worth of virtual currencies.

- India will impose a tax of 30% on income from crypto currencies and other digital assets, finance minister Nirmala Sitharaman said while presenting the federal budget on Tuesday. Aside from placing earnings from crypto currencies and non-fungible tokens (NFTs) in India's highest tax band, Sitharaman also said losses from their sale could not be offset against other income, delivering another disincentive to trading and investment in digital assets.
- In the past, the RBI and the Ministry of Finance had issued warning statements about the risks associated with virtual currencies, including money laundering, consumer protection, market integrity, cyber security and volatility
- Some issuances of virtual currency tokens may also amount to collective investment schemes, which are regulated under the Securities and Exchange Board of India Act 1992.
- After the issuance of the Banning of Unregulated Deposit Schemes Act 2019, virtual currency token issuers will need to ensure, to be outside the purview of the Act, that any money received should not be liable to be returned
- In the *IAMAI* case, the Supreme Court expressed some doubt over whether a virtual currency could be classified only as a good or commodity. Ultimately, it held that a virtual currency is an intangible property that acts under certain circumstances as money.

CONCLUSION:

By conducting study, we come to know that how important to implement digital currencies in India, as we are the one of world's largest economy in the world, that has significantly bulk hard cash transmission. That required tons of paper every year to manufacture hard money, so it would be a appropriate alternative for the hard cash. Digital currency implementation will also helps in easy track and monitor on flow of money. However there is no solid private data protection law regarding any virtual or digital currencies in India. RBI has to take necessary security measure and protocols in order to protect interest of participants. There are many virtual currencies in Indian investment market already in form of bit coins which are attracting large potential investors towards them. So it will not be tough task to RBI or government to attract investors, participants and public towards our own legal digital rupee.

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