CBDC: A Step into the Future of Money

KID: 20240218

Since the dawn of civilization, money has played a crucial role in economic activities. Its importance is captured in the mnemonic: Money is a matter of functions four: a medium, a measure, a standard, a store. It facilitates exchange, determines value, enables future payments, and preserves worth. Over time, money evolved from cowrie shells to gold, paper, and plastic. Just when its transformation seemed complete, cryptocurrency emerged. In 2008, Satoshi Nakamoto introduced Bitcoin, a peer-to-peer digital currency based on blockchain. While David Chaum had earlier explored digital money, Nakamoto's push for decentralization fueled Bitcoin's rise, inspiring platforms like Ethereum and Polkadot. However, private cryptocurrencies pose risks—high volatility threatens investors, anonymity enables illegal activities, and decentralization challenges national monetary control. To balance these risks with blockchain's benefits, central banks are now developing Central Bank Digital Currencies (CBDCs).

CBDCs are digital versions of currency issued by central banks, offering the same functions as physical notes with added speed and cost efficiency. According to the Bank of International Settlements (BIS), CBDCs should coexist with cash without disrupting financial stability. Key features include: (1) sovereign issuance aligned with monetary policy,
(2) central bank liability,
(3) universal acceptance as legal tender and a store of value,
(4) free convertibility with cash and bank money,
(5) usability without a bank account, and
(6) reduced costs of money issuance and transactions.

CBDCs may be remunerative (interest-bearing) or non-remunerative (non-interest-bearing). While a non-interest-bearing CBDC prevents disruptions in banking and financial disintermediation, it may weaken monetary policy transmission. In contrast, an interest-bearing CBDC improves rate transmission but could reduce credit availability. To balance this, policymakers can impose conversion limits between cash and CBDC or offer lower interest rates on CBDC compared to bank deposits. CBDC holds significant potential to revolutionize the country's payment system. Its timely and well-planned adoption can reduce financial risks posed by private cryptocurrencies while integrating the nation into a fast, secure, and efficient payment network.

Various countries are promoting the adoption of CBDCs for different reasons. For example, in Sweden, the dwindling use of paper currency prompted the government to push for digital currency. In the Caribbean Islands, the physical barrier of moving currencies between various islands and atolls popularized the use of CBDCs. Additionally, central banks aim to counter the usage of private cryptocurrencies. CBDCs also introduce competition in the digital payment space, fostering innovations and advancements in fintech. However, the extent of these benefits depends on the type of CBDC implemented.

The design of a CBDC varies based on a country's specific needs, with no universal model. There are two main types: Retail (CBDC-R), accessible to the public, and Wholesale (CBDC-W), limited to financial institutions. CBDCs can be issued through a Direct model, where the central bank handles everything, or an Intermediate model, where service providers assist in distribution.

Mr Ujjwal Sharma
Research Scholar in Economics
Dept of Liberal Arts