OPEN ACCESS

Manuscript ID: ECO-2023-11026115

Volume: 11

Issue: 2

Month: March

Year: 2023

P-ISSN: 2319-961X

E-ISSN: 2582-0192

Received: 28.12.2022

Accepted: 13.02.2023

Published: 01.03.2023

Citation:

Arumugam, U., and M. Manida. "Prospects and Problems of Digital Currency." *Shanlax International Journal of Economics*, vol. 11, no. 2, 2023, pp. 58–62.

DOI:

https://doi.org/10.34293/ economics.v11i2.6115



This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License

Prospects and Problems of Digital Currency

U Arumugam

Assistant Professor, Department of Commerce Alagappa University, Karaikudi, Tamil Nadu, India

M Manida

Assistant Professor, Department of Commerce

Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu, India

(iii) https://orcid.org/0000-0002-2605-1645

Abstract

Digital currency is money managed, stored, and exchanged through digital devices such as computers and smartphones. There are two types of electronic currency: Virtual and crypto currencies that have no physical form and exist only digitally. Digital currency, also known as digital money or cyber cash, can be used to purchase goods and services, but may be restricted to certain online communities such as games or social networks. The data required for the study were collected using secondary data collection methods. This paper explores the importance of digital currency in India and the modern world.

Keywords: Digital Currency, Block Chain, Cryptocurrency, CBDC.

Introduction

CBDC is a digital token that acts as a digital equivalent of a banknote that can be electronically transferred from one holder to another. Put it in your phone wallet and use it as cash. The RBI has hired at least five lenders including the National Bank of India, ICICI Bank, IDFC First Bank and HDFC Bank to work on retail Central Bank Digital Currency (CBDC) pilot. The central bank has started testing India's own digital currency, the digital rupee. The central bank added that the digital rupee retail pilot will be launched within a month. The regulator issued a Conception Note on Central Bank Digital Currencies (CBDC) on October 7, 2022, explaining the structures and objectives of the E-rupee. Stakeholders have seen no benefit after a month from India's pilot to use the official digital rupee for transactions between banks and institutions, some bankers say. The problem is that electronic rupee trading does not fully replace trading using established procedures and thereby expands bank bookkeeping. "If the pilot project is completed without pressure from the RBI, banks will not want to use it," said a private banker. As part of testing, banks use it to process transactions with government securities. In his first two weeks he traded up to 5 billion to 6 billion rupees per day, but on Thursday he traded 2.1 billion rupees (\$26 million) worth of bonds in e-rupees. The RBI did not respond to an emailed request for comment. We started testing E Rupees on November 1st. Payment mechanisms reduce the number of intercessors by eradicating the need for clearinghouses. It will also offer retailers more secure digital payment methods, according to RBI.

Review of Literature

Manpreet Kaur (2020), in her paper entitled "Digital Currency and Its implications for India" observed For a country like India, where 90% of transactions are cash, this difficult decision has caused people to switch to digital payment methods in the short term. Acceptance of digital payment methods is driven by an extraordinary increase in smartphone owners and the availability of user-friendly payment methods such as PAYTM and BHIM UPI.

Anil Kumar, Swathy. P (2019),concluded Its crypto currencies, especially Bitcoin, offer new models of effective and attractive payment methods that can increase the revenue of businesses and operators. It also offers alternative payment methods other than real money, allowing users to easily perform financial activities such as buying, selling, transferring money, and exchanging. However, crypto currencies are not yet so trusted. Many crypto currency platforms have many concerns, challenges and problems. Until crypto currencies are properly regulated and governed, users must take extra precautions to use such virtual currencies.

Pradipta Mukhopadhyay (2021), in his paper entitled "A Case Study on Digital Currency with a Special Reference to India" highlighted that Digital currency is actually an intangible currency that can only be owned and traded using a digital device such as a computer or electronic wallet connected to the Internet or a specific network, and not a physical currency such as banknotes or minted coins. Since then, some digital currencies have been restricted for use in certain online communities such as gaming sites, gaming portals, and social networks, while some digital currencies have been treated like other standard fiat currencies. We also found that it can be used to purchase goods and pay for other types of services. Digital currencies typically have all the essential properties of physical currencies and can seamlessly perform instant transactions for crossborder payments.

Objectives of the study

- 1. To study on E-Rupee in India.
- 2. To study the Kinds of Digital Currencies in India
- 3. To examine the Countries with digital currency.
- 4. To study the Prospects and Problemsof digital currency.

Sources of Data

This paper is based on secondary data. Secondary data necessary for the study undertaken were together through Web Sites, Magazines, Reviews, Journals and etc

Kinds of Digital Currency Crypto Currencies

A crypto currency is an E- currency that practices cryptography to protect and verifies connections on its link. Cryptography is also recycled to fare and regulator the formation of such currencies.

Virtual Currency

A crypto currency is an unfettered E-currency measured by the developer or a creation body made up of various consumers intricate in the method. Virtual currencies can also be controlled algorithmically through defined network protocols. An example of a virtual currency is the Game Network Token, whose economy is defined and controlled by the developer.

Central Bank Digital Currency

A CBDC is a regulated E-currency issued by a country's central bank. CBDCs can complement or replace outdated fiat currencies. Unlike fiat currencies, which exist in both physical and digital forms, CBDCs exist purely in digital form. England, Sweden and Uruguay are some of the countries considering plans to adopt digital versions of their fiat currencies.

Prospects of Digital Currencies

The advantages of digital currencies are as follows: Fast Money Transfers and Transaction Times

Digital currency transfers are usually very fast as they exist within the same network and transfer without intermediaries. Digital currency payments are made directly between transacting parties without the need for an intermediary, so transactions are typically instant and cheap. This compares favourably with traditional payment methods that involve banks and clearinghouses. Electronic transactions based on digital currencies also bring much-needed record keeping and transparency to stores.

No Physical Craft Required

Many requirements for physical currency, such as: B. Digital currency lacks the establishment of a physical production facility. Such currency is also immune to physical defects and contamination present in physical currency.

Monetary and Fiscal Policy Implementation

Under the current monetary system, the Fed works with various intermediaries (banks and financial institutions) to keep money circulating in the economy. A CBDC helps circumvent this mechanism and allows government agencies to issue payments directly to citizens. It also simplifies the manufacturing and distribution process by eliminating the need to physically manufacture and transport banknotes from one location to another.

Low Transaction Costs

Digital currencies allow direct exchange within the network. For example, customers can pay shopkeepers directly as long as they are on the same network. Even the cost of digital currency transactions between different networks is relatively cheap compared to physical and authorization currencies. By eliminating middlemen that generate economic rents from processing transactions, digital currencies can lower the overall cost of transactions.

Problems of E-Currencies Storage and Infrastructure Issues

While no physical wallet is required, digital currencies have their individual storage and processing requirements. For example, an internet linking is just as necessary as a smartphone and the services associated with its offering. To store digital currency, you also need an online wallet with robust security.

Hacking Potential

Their digital origin makes digital currencies vulnerable to hacking. Hackers can steal digital currency from virtual wallets or alteration the etiquette of digital currency to render it unusable. Work is underway to secure digital structures and moneys, as the many cases of crypto currency hacks attest.

Volatile Value

Digital currencies recycled for exchange can exhibit violent price fluctuations. For example, the regionalize denvironment of crypto currencies has created an abundance of under capitalized E-currencies whose charges can change suddenly at the whim of investors. Other E-currencies have followed similar price trends in the early days. For example, the Linden Dollars recycled in the online game Second Life had similar price fluctuations in the early days.

Features of Digital Currencies

- 1. Easy to transfer
- 2. Payment of secure and Safe
- 3. Low cost method of trading
- 4. Accountability
- 5. Long life span
- 6. No Physical evidence
- 7. Hassle free international transaction
- 8. Provide credit worthiness
- 9. Minimum processing fee.

Need for Cash Alternatives

CBDC addresses the steady decline in cash payments, a trend that has continued for years. With the regular rise of online shopping, a multitude of electronic payment options, including contact less payments in brick-and-mortar stores and restaurants, are gradually replacing coin and banknote payments. With a 42 degree rise from 2019, cash will be the least used form of payment by 2025.

CBDC for Financial Inclusion in Central Bank Digital Currencies

One of the main factors in the popularity of CBDCs is their ability to promote broader financial inclusion. CBDC allows anyone to make electronic payments with central bank money. Best of all, users don't need a traditional bank account to use digital cash. CBDC offers new ways to send money digitally, including peer-to-peer for the unbanked.

Payment System Efficiency

With government-backed currencies, this kind of transaction does not have to go through different banks (from one bank deposit to another bank deposit) and takes days. CBDCs can streamline payment

systems by essentially eliminating unnecessary intermediaries in the payment process.

China Digital Currency

CBDCs can address the risks of new forms of private finance creation. Central banks have a duty to maintain monetary and financial efficiency and stability in the public interest. CBDC represents a response to the disruptive forces exerted on the domestic payments ecosystem by crypto currencies and alternative finance.

China's CBDC Digital Currency

China is digital yuan ready and leading the global CBDC race. The People's Bank of China (PBoC) has been conducting large-scale live tests since April 2020. As of the end of October 2021, approximately 140 million people, or 10% of the population, have created digital renminbi or electronic renminbi wallets worth a total of 62 billion yuan (US\$9.7 billion). Over 1.5 million merchants accept e-CNY wallet payments and he has 10 million corporate accounts set up. PoBC has tested cross-border payments with the Hong Kong Monetary Authority. PoBC has not announced an official time line, but the digital currency will be fully launched in China by February 2022 as he heads towards the Winter Olympics. E-CNY will be given the same legal status as cash and will be available through various wallets operated by six licensed state-owned banks. At its simplest, consumers don't need a bank account. A phone number is enough.

US Digital Currency: Legislative Support is needed Digital Currencies

China is digital yuan ready and leading the global CBDC race. The People's Bank of China (PBoC) has been conducting large-scale live tests since April 2020. As of the end of October 2021, approximately 140 million people, or 10% of the population, have created digital renminbi or electronic renminbi wallets worth a total of 62 billion yuan (US\$9.7 billion). Over 1.5 million merchants accept e-CNY wallet payments and he has 10 million corporate accounts set up. (Bloomberg, 3 November 2021) PoBC has tested cross-border payments with the Hong Kong Monetary Authority. PoBC has not announced an official time line, CA, from January

2022, but no decision has been made to issue his CBDC in the US payment system. The topic of a universal Fed digital dollar is still highly debated. In contrast, US Treasury Bureau Janet Yellen said in early December 2021 that the Federal Reserve had not reached a conclusion on whether or not a universal digital dollar should be counterfeited, needs further investigation.

UK Digital Currency: Bitcoins for 2025 at the Earliest UK Digital Currency

The Bank of England (BoE) has yet to decide whether to proceed with a digital currency and is still in the research stage. Said it would start negotiations with the development period is "several years". Interestingly, Tom Mutton, director of fintech at the Bank of England, said in a recent interview that CBDC would most likely be used in phone apps, but not including those without smartphones. Special attention should be paid to for this reason; prepaid cards are also being considered. Apps and maps are provided by private companies.

Digital Cash in European Wallets no Sooner than 2026 Digital Currencies in Europe

The European Union is tackling the issue at a similar pace. The digital euro benefits from the experimental work on the digital euro that the Euro system launched in 2020. In July 2021, the European Central Bank (ECB) decided to start the research phase of a digital euro. This first step will begin in October 2021 and will last for two years. Its goal is to address key issues regarding the design and dissemination of the digital euro, potential market impact, data protection and necessary changes to European law. The verdict to grow a digital euro will be made on the basis of this research phase.

What are the Main Challenges and Vulnerabilities of Digital Money?

Card-based payments offer a robust infrastructure and business model, and despite criticism (fees, de facto duopoly, etc.), have proven to be very resilient over the past 50 years. This model works for issuers, acquirers, customers and traders. Other new methods based on instant money transfers are emerging and growing to enable fast peer-to-peer payments. CBDCs must demonstrate that the promised benefits

justify the investment in receiving and processing infrastructure.

Attractiveness for Users

CBDC is successful when used at scale. Therefore, it is necessary to create enough appeal so that many users can use them. In some respects, CBDC should prove to be superior and more effective than current payment methods. Different/ better means of respecting privacy, being accessible to minors, having no income requirements, not requiring a bank account or financial history, etc. Benefits include very easy registration (if there is registration in some cases), universal acceptance, a wide range of payment channels and use cases, and faster cross-border payments. The dilemma between data protection and money laundering regulation The European Central Bank consultation on the digital euro showed that data protection was a key concern of respondents.

Conclusion

From the statistical analysis of the study, it was concluded that the implementation of Central Bank Digital Currency (CBDC) has significant relationship with monetary enactment of deposit money banks in India.

References

- Anil Kumar, V.V., and P. Swathy. "A Study on Opportunities and Challenges of Cryptocurrency in India with Special Reference to Bitcoin." *International Journal of Research and Analytical Reviews*, vol. 6, no. 1, 2019.
- Arumugam, U. "Covid-19: Transformation of Edtech in India from Real to Virtual: An Analysis of Issues and Challenges by University Students in Tamilnadu." *ComFin Research*, vol. 10, no. 1, 2022, pp. 80-91.
- Baladevi, M., et al. "Impact of Foreign Direct Investment in Indian Banking Sector." International Journal of Recent Technology and Engineering, vol. 8, no. 3S, 2019,

- pp. 250-53.
- Frakenfield, Jake. "Digital Currency Types, Characteristics, Pros & Cons, Future Uses." *Investopedia*, 2022, www.investopedia.com/ terms/d/digital-currency.asp
- Kanagavalli, G., and M. Manida. "Assessment on the Market Prospective of Freight Forwarding Business with Special Reference to Tamilnadu." *ComFin Research*, vol. 10, no. 2, 2022, pp. 24-29.
- Kaur, Manpreet. "Digital Currency and Its implications for India." *The Management Accountant Journal*, vol. 54, no. 11, 2019, pp. 64-67.
- Mukhopadhyay, Pradipta. "A Case Study on Digital Currency with a Special Reference to India." *International Journal of Advanced Research in Science, Communication and Technology*, vol. 7, no. 2, 2021, pp. 727-35.
- Nedumaran, G., et al. "Impact on Customer Perceptions of Green Banking Process with Special Reference in Rajapalayam Taluk." Test Engineering and Management, 2020.
- Nirmal Kumar, S., and M. Manida. "A Study on Role Inclusive Leader in Drioving Performance in Global Organisation (MNCs) in India." *ComFin Research*, vol. 10, no. 3, 2022, pp. 1–7.
- Prabhakaran, V., et al. "The Rural Development Planning in Indian Economy A New Century." *International Journal of Management*, vol. 11, no. 12, 2020.
- Ramar, N., et al. "Role of Business Incubation Centres in Promoting Entrepreneurship with Special Reference to Tamilnadu." *International Journal of Scientific & Technology Research*, vol. 9, no. 1, 2020.
- "e-Rupee: India's Digital Currency Fails to Excite Interest, Say Bankers." *Business Standard*, 2022, www.business-standard. com/article/finance/e-rupee-india-s-digital-currency-fails-to-excite-interest-say-bankers-122120100811_1.html

Author Details

U **Arumugam,** Assistant Professor, Department of Commerce, Alagappa University, Karaikudi, Tamil Nadu, India, **Email ID**: arumugam.uc@gmail.com

M Manida, Assistant Professor, Department of Commerce, Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu, India, **Email ID**: manidamcom@gmail.com