

DIGITAL CURRENCY: A CASE STUDY WITH A PARTICULAR EMPHASIS ON INDIA

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Abstract

Any currency that is primarily handled, kept, and traded via digital devices—such as computers, smartphones, etc.—is referred to as digital currency. Digital currency, which includes virtual money and crypto currency, is a form of money that solely exists digitally and lacks a physical form. The digital Currency, commonly referred to as digital money or cyber cash, can be used to buy products and services, but it can also be limited to specific online communities like social networks or gaming. With particular reference to the current state of digital currency in India, we shall examine the true significance of digital currencies in the modern world in this essay. The current research has been exploratory and informal, and empirical in character, and the information required for the study project has been gathered through the use of both direct and indirect methods.

Keywords: Digital currency, CBDC, RBI wallet, banknote method.

1. INTRODUCTION

Digital currency is a payment method that operates solely electronically and cannot be handled or retained in physical form. While some legal tenders, like gaming coins, have no real value outside of a specific community, others, like Bitcoins, have some real-world worth. On the one hand, digital currencies are touchable and can only be owned and purchased through digital devices, such as computers or electronic carry-ons, that are connected to the internet or other designated networks. On the other hand, physical currencies, such as banknotes and minted coins, are touchable and can be purchased by their legal owners. In due course, we also see that although some digital Certain digital currencies can be used to buy products and pay for other services just like any other regular currency, but their use may be restricted in specific online communities, such as social networks, gaming portals, or gaming websites. Additionally, it has been noted that, when linked

to compatible devices and networks, digital currencies can facilitate hit-and-run transactions that can be easily deployed for cross-border payments. These currencies also possess all the fundamental characteristics of physical currencies.

During the 2022 Union Budget Address, Union Finance Minister Nirmala Sitharaman announced the Central Bank Digital Currency (CBDC) launch. The introduction of a new currency, she added, encourages digital thrifty living and makes the money-arranged system more affordable and effective.

The Reserve Bank of India and Indian government have consistently supported digital payments. The creation of digital money is the latest step the government and RBI have taken to engage with the people of digital finance. Digital rupees, also known as central bank digital currency (CBDC), are sovereign currencies that are issued by the Reserve Bank of India, which is the country's central bank. They own promoted the development of an

online payment pulpit and also their sweeping implementation.

Conforming to RBI, the CBDC will be a sovereign currency accessible in a digital form. CBDC will also loom as a liability on the balance sheet of the central bank. Just like typical currency printed by the central bank. Now that you understand what digital currency is, it's time to take a look at its stress. Thus, they can be used for user-to-user and custom-to-custom transactions to facilitate.⁴⁹³

1.2 YOU NEED TO KNOW CONCERNING THE DIGITAL CURRENCY

The central bank Digital currencies are a relatively recent development. Concerned about falling behind private competitors, central banks are kicking up the creation of digital currency, whether it be stablecoins or cryptocurrencies like Bitcoin, or digital currency printed by innovation troops like Facebook's proposed Libra blueprint and the success of WeChat Pay and Alipay in China. In terms of the digital rupee, India doesn't appear to be far behind. China. Even though China, India's geopolitical neighbour, has been the least successful at launching a CBDC, India is not immune to this trend.

1.3 Retains the Digital Rupees launched? Can I use the digital rupee?

The Digital Rupee has been pioneered since December 2022 (its retail version). The Reserve Bank of India (RBI) has been firing on cryptocurrencies, and India has shifted to restrict their use. Modi's governance in India has included an info stance on letting central bank officials run the show.

this respect, alike to China's overall stance on digital money. Both a wholesale and market CBDC were pioneered in late 2022, with pilots expanding throughout different metropolises in 2025. The RBI has alleged that both digital rupees don't offer interest – so they're not

meant to battle with bank reserves and deposits. It also uses government fiat to dispense with any transaction processing fees – a foreign notion for those people who live in countries where credit cards (and their large replacement fees for merchants) exist.

Similarly, the one by Axis Bank. Currently, 15 banks offer aviator software with the digital rupee comparable to China. The digital rupee admits a two-tier structure, with private banks sacrificing digital rupee apps – such as the ones from SBI and HDFC. For aptitude to facilitate honest-time disbursements and its regulation by India's central bank. Even though the central bank has aviators, this quite aggressively isn't a significant demand at absolutely for this new CBDC. As of late 2024, 2024 though aviator had been running for nearly two years. As of late 2024, digital rupee usage was about 0.006% of all total banknotes.

1.4 IMPLICATIONS INTERNATIONALLY

Other than the e-CNY and Plan Bridge, the Reserve Bank of India has expressed concern over further internationalisation of the rupee. To date, India has not collaborated with other central banks to enhance its use abroad. Rupee's use of the CBDC for cross-border payments hasn't been tested as thoroughly as the e-CNY up to this point.

1.5 Potential Benefits and Drawbacks of Digital Rupees

This could lead to many sales being hoovered up by spells directly to the central bank – leading the central bank to hold a sizable amount of records on citizens and residents of India and what they're giving their funds to. Sparse technical details are available on the digital rupee, such as how it works, what data is peaceful, and more. This pattern of result-seeking is typical of many central bank digital currencies, but it's mingled here by some obvious usability issues. With the success of UPI and usage patterns, it's now clear what the Digital Rupee is a solution for – it looks like a

⁴⁹³Dr Pradipta Mukhopadhyay, 'A Case Study on Digital Currency with a Special Reference to India' [2021] International Journal of Advanced Research in Science, Communication and Technology 727.
'Digital Currency: Name, Meaning, Features and Advantages'.

result searching for a problem to solve willingly than the other way around.

1.6 OBJECTIVE OF CASE STUDY

had consistently argued against private digital currencies, It was generally accepted prior to the announcement of a phased CBDC implementation in India that the Reserve Bank of India had started planning to introduce a CBDC digital Rupee because of private digital currencies, namely bitcoin. In order to introduce a digital rupee CBDC, the Reserve Bank of India has suggested amending the Reserve Bank of India Act of 1934. Additionally, the government intends to outlaw all private digital currencies in India, with a few exceptions, since they promote tax fraud, money laundering, and the funding of terrorism. Additionally, it was observed that between March 2020 and August 2022, the percentage of Unified Payments Interface (UPI) transactions in India that were facilitated by UPI QR codes increased by 427.

However, according to the Reserve Bank of India, these advancements in digital payments and the country's preference for digital contactless payments show the increasing acceptability of The Reserve Bank of India was likewise motivated by this development to start a phased implementation strategy for the CBDC. Digital currencies issued by central banks (CBDCs). However, what is a CBDC exactly? The idea is causing a stir in the finance industry. Let's dive into a case study of the RBI CBDC activities, so fasten your seatbelt, fellow financial fans. And what is India doing with this novel idea?⁴⁹⁴

2. OVERVIEW OF DIGITAL CURRENCY

Cash but, digital!

2.1 is it possible to hold and use e₹?

e-wallets provided by banks and non-banks can be used to conduct e-money transactions

⁴⁹⁴ Peterson K Ozili, 'Central Bank Digital Currency in India: The Case for a Digital Rupee' in Kiran Mehta, Renuka Sharma and Poshan Yu (eds), *Advances in Finance, Accounting, and Economics* (IGI Global 2023) <<https://services.igi-global.com/resolvedoi/resolve.aspx?doi=10.4018/978-1-6684-8624-5.ch001>> accessed 18 April 2025.
'A 2025 Overview Of What You Need To Know About The Digital Rupee'.

between individuals or between merchants. After installing the e₹ app from the Play Store or App Store and following the program's instructions, one can begin utilising the e₹ wallet. The banks and non-banks that offer the e₹ wallet can provide comprehensive usage instructions. The CBDC or UPI QR codes can be scanned at the appropriate merchant location to complete the merchant payment.

2.2 Digital Rupee: What is it?

Digital rupees India's Central Bank Digital Currency (CBDC) e₹ The Reserve Bank of India (RBI) issues the Rupee (₹), India's physical currency, in digital form. It has properties that are comparable to those of physical currency, such as ease of use, RBI guarantee, finality of settlement, etc. Like any physical ₹ note, e₹ is kept in the user's digital wallet and can be used for transactions, payments, and receipts.

2.3 An e₹ wallet: what is it?

A wallet that is electronic e₹ wallet is that can be opened on one's mobile phone/device. e₹ wallet stores the Digital Rupee.

2.4 Are e-wallets secure?

strong framework for cyber-security to guarantee that e-wallets are safe and secure. Even if the mobile device installing the e-wallet has a lost SIM card on a new phone, the e-wallet's contents are secure. Using the same phone number, the e-wallet can be recovered.

2.5 Which platform of mobile operating systems is now supported by e₹ wallet?

The wallet is accessible and compatible with both iOS and Android smartphones.

2.6 How do digital rupees become created and dispersed?

For both banks and non-banks, the RBI issues e₹. Electronically issuing retail e₹ follows the same procedure as issuing paper money. Following that, development and facilitation are in charge of distribution, live pilot mode, and the usage of e-waises in the retail industry (for the general public), which will start on December 1,

2022. e₹ is accessible to merchants and bank and non-bank pilot users around the country.

2.7 Is it possible to do transactions using Digital Rupee from a bank account outside of regular business hours?

Indeed. The e-wallet is available for loading, redeeming, and transferring funds from and to one's bank account around-the-clock.

2.8 Is there a minimum amount needed to create or keep an e-wallet?

No, create or keep an e-wallet. A minimum balance is not necessary.

2.9 Is e₹ considered legal tender?

According to Section 26 of the Reserve Bank of India (RBI) Act, 1934, every ₹ banknote is legal tender wherever it is issued in India, is guaranteed by the Central Government as legal tender, and is the responsibility of the Reserve

Bank of India e₹, which is a digital version of the ₹ banknote.

2.10 Is there any difference between e₹ and UPI?

While UPI is a payment method, e₹ is a digital version of ₹ that can also be used as a "store of value." This implies that e₹ can be taken out of one's bank account and stored in an e₹ wallet. P2M and P2P payments made at any CBDC QR code, as well as transactions between two e-wallets, are instantly cleared through the user's bank account without any delays.

2.11 Which pilot banks are presently providing consumers with CBDC wallets?

At the moment, CBDC wallets are available from 15 banks. The applications' names and download links are listed below.

Pilot Banks	Name of the App	Android
SBI	eRupee by SBI	<u>Android</u>
ICICI Bank	Digital Rupee by ICICI Bank	<u>Android</u>
IDFC First Bank	IDFC First Bank Digital Rupee	<u>Android</u>
YES BANK	Yes Bank Digital Rupee	<u>Android</u>
HDFC Bank	HDFC Bank Digital Rupee	<u>Android</u>
Union Bank of India	Digital Rupee by UBI	<u>Android</u>
Bank of Baroda	Bank of Baroda Digital Rupee	<u>Android</u>
Kotak Mahindra Bank	Digital Rupee by Kotak Bank	<u>Android</u>
Canara Bank	Canara Digital Rupee	<u>Android</u>
Axis Bank	Axis Mobile Digital Rupee	<u>Android</u>
IndusInd Bank	Digital Rupee by IndusInd Bank	<u>Android</u>
PNB	PNB Digital Rupee	<u>Android</u>

Federal Bank	Federal Bank Digital Rupee	<u>Android</u>
Karnataka Bank	Karnataka Bank Digital Rupee	<u>Android</u>
Indian Bank	Indian Bank Digital Rupee	<u>Android</u> ⁴⁹⁵

3. DIGITAL CURRENCY LANDSCAPE IN INDIA

With the advent of digital innovation, India's financial ecosystem is changing quickly. The nation is moving towards a cashless economy thanks to programs like Digital India, the Unified Payments Interface (UPI), and Aadhaar-based banking (Reserve Bank of India [RBI], 2023). It is anticipated that the rise of digital currencies, especially cryptocurrencies and CBDCs, would further alter financial activities. Although the Digital Rupee was introduced by the RBI as a government-backed substitute for cash, the growing use of cryptocurrencies has brought about both opportunities and regulatory difficulties. This study examines the effects of digital currency in India, evaluating its contribution to consumer behaviour, banking reform, and financial inclusion. It also discusses the difficulties posed by cybersecurity threats and governmental laws.

3.1 Digital Currency's Social Impact in India

Economic Growth and Financial Inclusion

Financial inclusion could be improved via digital money, particularly for the unbanked in rural areas. People can engage in formal banking systems without the need for physical bank offices thanks to the availability of digital payment platforms. Additionally, small business owners and Digital transactions that are safe and easy for women-led companies allow for economic empowerment.

3.2 The Indian Regulatory Environment for Cryptocurrencies and Virtual Assets

Changing policy measures and cautious optimism have been hallmarks of India's approach to regulating cryptocurrencies and virtual assets. India's regulatory environment has changed significantly over the years, reflecting the government's attempts to reduce the dangers connected to cryptocurrencies while encouraging innovation and expansion in the fintech industry.

3.3 Regulatory Reactions in the Early Stages

India reacted cautiously and with scepticism to cryptocurrencies at first. The Reserve Bank of India (RBI) sent a circular in December 2013 alerting virtual currency users, holders, and merchants to the possible dangers. The circular emphasised issues with volatility, security, and the absence of regulatory supervision. The RBI took a more assertive approach as a result. The RBI issued a second circular in April 2018 that essentially prohibited banks and other financial institutions from offering services to people and companies that trade in cryptocurrency. The purpose of this regulation was to shield consumers from the hazards involved and stop the usage of cryptocurrency for illegal purposes. But the prohibition also hindered the expansion.

⁴⁹⁵ 'Reserve Bank of India'.

3.4 Supreme Court Decision and Changes in Regulation

When the Supreme Court of India declared the RBI's 2018 circular to be illegal in March 2020, it marked a dramatic shift in India's regulatory strategy. The circular had a disproportionate effect on the cryptocurrency business and went against the fairness and proportionality criteria, according to the court's findings. The ruling cleared the path for additional regulatory changes and was viewed as a win for the bitcoin community.

The Indian government indicated that it intended to enact comprehensive laws to regulate cryptocurrencies and virtual assets after the Supreme Court's ruling. The Ministry of Finance's draft Cryptocurrency and Regulation of Official Digital Currency Bill, 2021 sought to outlaw all private cryptocurrencies while permitting the RBI to launch an official digital currency. The government's acknowledgement of the potential advantages of blockchain and fintech technologies beyond cryptocurrencies is reflected in the bill's measures for fostering innovation in these fields.

3.5 The 2021 Bill on Cryptocurrency and the Regulation of Official Digital Currency

The proposed Cryptocurrency and Regulation of Official Digital Currency Bill, 2021, is a big move in the right direction for India's cryptocurrency and virtual asset regulations. The law aims to address cryptocurrency concerns while encouraging the creation of a strong regulatory framework. The bill's main provisions are as follows:

Prohibition of Private Cryptocurrencies: The bill suggests outlawing all private cryptocurrencies, with few exceptions made to support the underlying technology and its uses. In addition to shielding customers against fraud and unstable finances, this clause attempts to stop the unauthorised usage of cryptocurrency.

The bill gives the RBI the authority to create and issue an official digital currency that will be

accepted as legal cash in India. A controlled substitute for private cryptocurrencies, the central bank digital currency (CBDC) is intended to improve the payment system's security

Blockchain Technologies Promotion: The law contains clauses aimed at encouraging the adoption of blockchain technology and its uses across a range of industries. This indicates that the government is aware of the potential advantages of blockchain technology beyond cryptocurrencies, such as supply chain management, smart contracts, and digital identity verification.⁴⁹⁶

4. IMPACT OF DIGITAL CURRENCY ON THE INDIAN ECONOMY

The e-rupee, often known as the digital rupee, is a revolutionary change in the Indian financial system. It has the potential to revolutionise traditional banking and financial services as a central bank digital currency (CBDC). This blog will explore the possible ramifications of the digital rupee, looking at its advantages, difficulties, and consequences for the financial industry forward.

The Reserve Bank of India is leading the digital rupee program, which aims to improve the security and efficiency of financial transactions. In contrast to physical currency, the digital rupee is issued, managed, and utilised digitally, providing benefits including lower going expenses, greater transparency, and improved security.

Recognising the Digital Rupee: The Reserve Bank of India (RBI) issues the digital rupee, which is an electronic version of the Indian rupee. It is legal tender that serves the same purpose as actual money but has a number of extra advantages.

⁴⁹⁶ Nikhil Deshlahra, 'Digital Currency In The New Era For India: A Social Study' (2025) 13.

Komal Ahuja, 'Legal Framework for Regulating Virtual Assets and Cryptocurrencies: The Case of India's Evolving Regulations'.

Greater Access to Finance: By increasing access to financial services, the digital rupee can contribute to economic growth and poverty reduction.

Lower Transaction Expenses: It improves payment efficiency and reduces transaction costs by doing away with middlemen like banks.

Enhanced Protection: The digital rupee can reduce the danger of fraud and counterfeit money.

Improved International Payments: It promotes trade and lowers costs by enabling quicker and more effective international transactions.

4.1 Effect on Conventional Banking Services

Banking Transactions: The digital rupee may make banking transactions safer and more efficient.

Payment Systems: It has the potential to completely transform payment quick and easy transactions.

Cost Reduction: Banks may see a decrease in operating expenses, especially in areas like distribution, security, and cash handling.

Customer Experience: The customer experience could be greatly enhanced by quicker and more effective services.

4.2 Possible Effects on Conventional Banking

Traditional banking may undergo a number of changes as a result of the digital rupee's adoption, including:

Increasing Competition: Non-bank financial institutions and fintech firms that provide digital payment services may present a bigger threat to traditional banks.

Decreased Demand for Physical Cash: As the use of digital currencies increases, there may be less of a need for cash, which could lead to adjustments in banking procedures.

New Revenue Opportunities: By creating financial products linked to the digital rupee and digital payment systems, banks can take advantage of new revenue streams.

4.3 Financial Services Affected

Financial Inclusion: People without bank accounts may be able to access the official financial system thanks to the digital rupee.

Credit & Lending: With quicker processing and improved tracking, it could simplify the distribution of credit.

The digital rupee has the potential to streamline investing and wealth management procedures.

Changes in Regulation and Compliance: With the introduction of the digital rupee, financial institutions may need to adapt to new rules.⁴⁹⁷

5. CHALLENGES AND RISKS ASSOCIATED WITH DIGITAL CURRENCY

Problems

Regulatory issues may need to be resolved for e-Rupee to succeed because digital currencies, including e-Rupee, are still a relatively new and complicated technology. Though there have been suggestions to completely ban them, India has not yet established clear regulations on the use of digital currencies. Enough digital infrastructure, instruction, and rules are necessary for the adoption of a digital currency in order to guarantee its security, dependability, and usability [21]. It is crucial to thoroughly evaluate the possible dangers and difficulties connected to digital currency, including

5.1 Lack of digital literacy

In 2021, India came in at number 73 out of 120 nations in terms of digital literacy. The primary cause is the continued lack of high-speed internet access in many Indian rural areas. As a result, residents of those regions encounter difficulties in utilising the benefits of the digital revolution. For India to achieve its goal of promoting digital currency, this problem must be resolved.

5.2 Problems with scalability

India's digital economy is growing quickly, and the country has a large population. One

⁴⁹⁷Krify.Co/the-Impact-of-the-Digital-Rupee-on-Indias-Financial-Landscape'.

significant issue is scalability, since networks may find it difficult to handle high transaction volumes at once. Upgrades to the network and new technology can help with this problem. Scalability and the ability to manage massive volumes of user accounts and transactions are essential for the design.

5.3 Security and privacy issues

A central record of all transactions is maintained by the RBI. Centralised data may be used for other reasons by authorities. There is a high risk of cyber security and a high frequency of cyberattacks in India. Cyberattacks and the possibility of digital thefts could rise as a result of the implementation of digital currency. Threats to cyber security will thus always be the main issue. The design needs to incorporate strong security features including encryption, multifactor authentication, and real-time monitoring and alerting.

5.4 The risk of alternative payment methods

e-Rupee will compete with other digital payment choices, including bank-based digital payment systems and established cryptocurrencies, in terms of usability, support system, creative method, and low transaction fees. The populace of India is multilingual and well-rounded. The architecture should be able to handle multiple languages and offer users who may not speak English well an easy-to-use interface. In India, where consumers are price sensitive, high transaction costs are likely to turn them off. The architecture ought to provide low transaction costs in order to promote adoption and use. There are a lot of unbanked and underbanked people in India, and using incentive systems could encourage the use of digital currencies. Techniques like transaction or referral rewards must be incorporated into the architecture.

5.5 Issue with Digital Currency: Legal Danger in the Growth of CBDCs

The emergence of Central Bank Digital Currencies (CBDCs) marks a turning point in the evolution of money from paper-based to digital

forms. Global use of digital currencies backed by sovereigns is causing legal systems to consider the ramifications of this paradigm change. Although CBDCs offer real-time settlements, financial inclusion, and efficiency, they also present a number of legal and regulatory issues. From privacy concerns to cross-border jurisdictional issues, the possibility of conflicts raises important questions about how legal systems should change to address the dangers that come with this digital transformation.

5.6 Legal Risks Associated with the Growth of CBDCs

1. Privacy and Surveillance Issues

The possible degradation of financial privacy is one of the most important legal issues pertaining to CBDCs. Governments may have previously unheard-of access to data on citizens' spending patterns because transactions are documented on centralised ledgers. Particularly in democracies where the right to privacy is safeguarded, as it is under Article 21 of the Indian Constitution following *Puttaswamy v. Union of India*, this presents constitutional issues. A major legal battlefield will be striking a balance between the protection of individual privacy rights and transparency for regulatory scrutiny.

2. Disputes across borders and jurisdiction

Transactions across borders could be drastically changed by CBDCs, which could circumvent traditional correspondent banking systems and the SWIFT network. Complex legal issues pertaining to jurisdiction, contract enforceability, and conflict of laws are raised by this. When parties to a transaction are from different countries with different legal frameworks for digital currency, disputes may occur. To govern CBDC interoperability and conflict resolution, international agreement or treaties are desperately needed.

3. Protection of Consumers and Legal Action

The interaction between consumers and the digital currency system may be controlled by

technology companies or commercial banks when it comes to CBDCs. In the event of fraud, breakdown of the system, or incorrect transactions, liability could become a murky legal issue. Adequate security for customers is required, together with unambiguous procedures for settlement and grievance. Legislators will have to either update current consumer protection legislation or develop new frameworks specifically for digital finance.⁴⁹⁸

6. INDIAN DIGITAL CURRENCY'S FUTURE

India is moving towards money digitisation even though its culture includes appreciating the touch, feel, and appearance of cash. Before the conclusion of the current fiscal year in March 2023, the Reserve Bank of India plans to launch a digital currency. Although that currency is now nameless, its function is to offer nearly all of the capabilities that cash already offers, albeit in a digital format.

These days, every digital transaction leaves a trace and an audit trail. Each time a credit or debit card is swiped, details about the user's location, identity, and purchases is known. A cash transaction settles at the time of the transaction, which is another way that it differs from a digital one. This agreement is known as "delivery-versus-payment." However, with today's digital transactions, payments are made when the transaction is settled, which happens a while later. The need for a dispatch-versus-payment scenario, where the customer holds off on paying until delivery is certain, is arguably one of the main reasons why individuals still prefer using cash.

Of the fact, most future-oriented views don't fully align with the idea of having both digital and physical cash in circulation at the same time. The Reserve Bank's planned digital money is significant and unique because of this.

6.1 Digital Money Is Not the Same as Private Crypto

The first distinction is that the digital currency issued by the central bank (CBDC) will not be the same as Bitcoin, Ethereum, and other cryptocurrencies, which are not recognised as legal tender in the majority of nations, including India, and are hence not equivalent to sovereign currencies. In contrast to a private digital currency, a central bank digital currency can be used to balance payment obligations with assurance.

Second, neither the ownership nor the amount of private digital currencies (assets?) in circulation are clearly defined. The creators of Ethereum, Ripple, Bitcoin, and other platforms are only speculated about. Because of this, there is no assurance that the value recorded in a private digital currency will always be paid for or that it will remain constant. In comparison, a digital currency issued by a central bank that is usually supported by a sovereign nation is different.

Although the Reserve Bank of India has not yet provided a definition, I think it will define private cryptocurrencies as an asset comparable to stock. It would also include new cryptocurrency goods like nonfungible tokens.

6.2 India's Retail Banking

As legal tender, the e₹-R could take the shape of a digital token. Intermediaries, like as banks, will distribute it, and it will be issued in the same denominations as coins and paper money. Through a digital wallet provided by the participating banks and kept on mobile phones and gadgets, users will be able to conduct transactions using e₹-R, the RBI said. There are two types of transactions: peer to peer (P (person to person) and P2M (person to merchant). Using QR codes that are posted at merchant sites, customers can pay retailers. Qualities of physical currency, such as trust, security, and settlements finality, would be available with the e₹-R. It will not accrue interest, just like cash, and can be changed into other currencies, such as bank savings.

⁴⁹⁸ Md Asrafu Haque and Mohd Shoib, 'e₹—The Digital Currency in India: Challenges and Prospects' (2023) 3 BenchCouncil Transactions on Benchmarks, Standards and Evaluations 100107.
'Digital Currency Dispute: Legal Risk in the Rise of CBDCs - NM Law'.

6.3 Money's Mobility

In India, money can now be sent digitally in a variety of methods, depending on the goal of the transaction. The speedier money flow that digitisation promotes is actually quite beneficial for the Indian economy, which is one of the most exciting features of the payment system's digitisation and the emergence of true digital currency. An economy's dynamism is gauged by its velocity, or the rate at which money moves through the system. Economic growth increases as velocity increases.

quicker money moves, the better, and if speed is the aim, digitisation is the way to go if India wants to become a superpower with a high GDP. More recent digital forms that are convenient, safe, secure, and simple to use.⁴⁹⁹

6.4 Provider of Economic Prospects for Nations

During the G20, payments made internationally have become a major subject of focus. In its "G20 Roadmap for Enhancing Cross-Border The payment method," the Financial Stability Board (FSB) recognised that numerous central banks are creating a CBDC to investigate potential solutions to address international trade that are hindered by stringent compliance checks and complicated processes, as well as their reliance on the liquidity and time zones of the correspondent bank.

Financial institutions that the RBI has identified can use CBDC to simplify procedures and lower counterparty risk. All things considered, a successful CBDC use-case is anticipated to further speed up the transaction and settlement process.⁵⁰⁰

7. CONCLUSION

The present study analyses India's digital currency future with a particular emphasis on the Central Bank Digital Currency (CBDC). It examines the design and user experience of the Indian CBDC ecosystem, talks about the advantages of CBDC, and contrasts the Indian

CBDC with retail CBDCs throughout the world. The document also describes the core system, core infrastructure, processing infrastructure, and end-user interface services, as well as the roles and functions of the CBDC framework. Potential retail and wholesale use cases for CBDC are highlighted, along with potential obstacles and ways to overcome them. In the conclusion, the influence of CBDC on international trade and important factors to increase adoption and usage are covered.

7.1 Concluding remarks regarding India's virtual currency future

India had a notable surge in digital payments, with record-breaking UPI and card transactions in 2022 amounting to INR 149.5 trillion, which included INR 126 a trillion in value along with 74.05 billion transactions in volumes.

REFERENCES:

1. Dr Pradipta Mukhopadhyay, 'A Case Study on Digital Currency with a Special Reference to India' [2021] International Journal of Advanced Research in Science, Communication and Technology 727.
2. Peterson K Ozili, 'Central Bank Digital Currency in India: The Case for a Digital Rupee' in Kiran Mehta, Renuka Sharma and Poshan Yu (eds), Advances in Finance, Accounting, and Economics (IGI Global 2023)
3. <<https://services.igi-global.com/resolvedoi/resolve.aspx?doi=10.4018/978-1-6684-8624-5.ch001>> accessed 18 April 2025.
4. 'A 2025 Overview Of What You Need To Know About The Digital Rupee'.
5. 'Reserve Bank of India'.
6. Nikhil Deshlahra, 'Digital Currency In The New Era For India: A Social Study' (2025)
13. Komal Ahuja, 'Legal Framework for Regulating

⁴⁹⁹ 'The Future of Digital Currency in India | GLG'.

⁵⁰⁰ 'RBI to Launch Retail Digital Rupee'.

⁵⁰⁰ 'The Rise of Digital Currencies: Opportunities for Economies'.

Virtual Assets and Cryptocurrencies: The Case of India's Evolving Regulations'.

7. 'Krify.Co/the-Impact-of-the-Digital-Rupee-on-Indias-Financial-Landscape'.

8. Md Asrafal Haque and Mohd Shoaib, '₹—The Digital Currency in India: Challenges and Prospects' (2023)

BenchCouncil Transactions on Benchmarks, Standards and Evaluations 100107.

'Digital Currency Dispute: Legal Risk in the Rise of CBDCs - NM Law'.

9. 'The Future of Digital Currency in India | GLG'.

'RBI to Launch Retail Digital Rupee'.

'The Rise of Digital Currencies: Opportunities for Economies'.

