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The Evolution of Cryptocurrency in India: Assessing Opportunities and Emerging Challenges

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ABSTRACT

The evolution of cryptocurrency has transformed the global financial system, introducing a decentralized, transparent, and secure digital payment mechanism. In India, the rise of cryptocurrencies has generated both opportunities and challenges for policymakers, investors, and regulators. The technology behind cryptocurrencies, particularly blockchain, offers the potential to improve financial inclusion, enhance transaction efficiency, and foster innovation in the financial ecosystem. However, the lack of regulatory clarity, high volatility, cybersecurity concerns, and potential misuse for illicit activities pose significant threats to economic stability. This study explores the trajectory of cryptocurrency adoption in India, emphasizing the technological foundations, socio-economic implications, and policy responses. The analysis highlights how India's cautious yet progressive stance—through initiatives such as the Reserve Bank of India's (RBI) pilot Central Bank Digital Currency (CBDC)—may influence the country's long-term digital financial architecture. By assessing the dual nature of cryptocurrency as both an opportunity and a risk, this paper contributes to a broader understanding of how emerging economies can leverage digital innovation while ensuring financial security and regulatory balance.

Keywords: Cryptocurrency, Blockchain, Financial Inclusion, Regulation, RBI, India, Digital Currency, Economic Policy

1. Introduction

Money has always been an integral part of human civilization, evolving from barter systems to coins, paper notes, and eventually to digital transactions (Narayanan et al., 2016). In recent decades, rapid developments in information and communication technology (ICT) have reshaped economic interactions and introduced new forms of financial instruments. One of the most disruptive innovations in this domain is *cryptocurrency*, a decentralized digital currency that uses cryptographic techniques for secure transactions and operates without the direct control of central banks (Nakamoto, 2008).

Cryptocurrencies emerged after the 2008 global financial crisis, when distrust in centralized financial institutions led to the search for alternative, decentralized systems (Baur, Hong, & Lee, 2018). Bitcoin, the first widely, dominant and recognized cryptocurrency, paved the way for thousands of other digital assets such as Ethereum, Ripple, and Litecoin. These currencies rely on blockchain technology—a distributed ledger that records and verifies transactions across a network of computers—ensuring transparency and immutability (Tapscott & Tapscott, 2017).

In India, cryptocurrency adoption has followed a complex path marked by enthusiasm from investors and caution from regulators. The Reserve Bank of India (RBI) initially expressed concerns about the risks of cryptocurrencies, including volatility, potential for money laundering, and consumer protection issues (RBI, 2021). In 2018, the RBI imposed a blanket ban on the transactions which was crypto-related but later overturned by the Supreme Court of India in 2020 (Supreme Court of India, 2020). Since then, cryptocurrency trading and investment have grown exponentially, with millions of Indian users engaging through exchanges such as WazirX, CoinDCX, and ZebPay (Chakraborty & Sharma, 2022).

The increasing interest in cryptocurrencies is driven by multiple factors. First, digital literacy and internet penetration have expanded significantly, creating a large base of potential investors (Statista, 2023). Second, the perception of cryptocurrencies as high-return assets has attracted both institutional and retail investors (Kshetri, 2021). Third, blockchain's promise of financial inclusion and efficient cross-border transactions has aligned with India's broader digital economy goals (Mehta & Patel, 2022).

Despite these opportunities, the challenges are equally substantial. Cryptocurrency markets are highly volatile, often experiencing dramatic fluctuations that can wipe out investor wealth within hours (Baur et al., 2018). The lack of comprehensive regulation also creates uncertainty about taxation, legality, and consumer rights (Kumar & Sharma, 2023). Moreover, the potential misuse of cryptocurrencies for illicit transactions—including money laundering, tax evasion, and financing of terrorism—raises security and ethical concerns (IMF, 2022).

From a policy perspective, India's approach to cryptocurrency has evolved from outright caution to gradual exploration of regulated alternatives. The introduction of the *Digital Rupee* (CBDC) by the RBI in 2022 marked a strategic step toward integrating blockchain technology within a controlled monetary framework (RBI, 2022). The government's intent to introduce the "Cryptocurrency and Regulation of Official Digital Currency Bill" reflects its effort to balance innovation with security and regulatory oversight (Ministry of Finance, 2023).

Globally, countries have adopted diverse approaches to cryptocurrency regulation. While nations like Japan and Singapore have embraced digital assets through well-defined legal frameworks, others such as China have imposed outright bans (OECD, 2023). India's middle-ground strategy—neither fully accepting nor completely rejecting cryptocurrencies—illustrates the challenges of governing technological innovations in a rapidly digitizing economy.

Theoretically, cryptocurrencies can contribute to India's financial ecosystem by enhancing transparency, reducing transaction costs, and promoting financial inclusion, especially among unbanked populations (Sahoo, 2020). However, their decentralized and pseudonymous nature poses monitoring challenges for regulators. Therefore, designing an effective regulatory framework that encourages innovation while safeguarding financial stability remains a pressing task (World Bank, 2022).

This study aims to explore how cryptocurrency has developed in India by focusing on a few key objectives. **First**, it traces the global and national history and technological growth of cryptocurrencies. **Second**, it examines the opportunities that cryptocurrencies create for India's financial and technological sectors. **Third**, it identifies the main challenges such as regulatory uncertainty, price instability, and cybersecurity risks. **Fourth**, it suggests policy measures to help integrate cryptocurrencies into India's formal economic system. Using existing theories and data, this paper explains how India can handle both new innovations and government rules in the digital currency field.

The study adds to the ongoing discussion about the future of digital finance in developing countries, highlighting the importance of maintaining a balance between modernization and financial stability (BIS, 2023).

The paper is divided into seven sections: the first is introduction the research topic, the second reviews the related important literatures, the third explains the research methodology used, the fourth presents data results and discussion, the fifth provides the benefits and drawbacks of cryptocurrencies, sixth discusses the Cryptocurrencies Journey in India and the last section provides conclusion.

2. Review of Literature

2.1 Global Studies on Cryptocurrency Evolution and Adoption

The emergence of cryptocurrency has transformed the global financial landscape by introducing a decentralized form of digital value exchange. The concept of cryptocurrency was first introduced by *Satoshi Nakamoto* in 2008 through the publication of the Bitcoin white paper, which proposed a peer-to-peer electronic cash system that operates without the need for a central authority (Nakamoto, 2008). Since then, researchers and economists have explored the dynamics, challenges, and implications of digital currencies on monetary systems, investment behavior, and financial innovation. Several studies have emphasized that blockchain, the underlying technology behind cryptocurrencies, enhances transparency, reduces transaction

costs, and eliminates intermediaries (Yermack, 2017; Narayanan et al., 2016). According to *Catalini and Gans (2016)*, blockchain serves as a distributed ledger that enables verifiable, tamper-resistant transactions, potentially redefining trust mechanisms in financial systems. Similarly, *Böhme et al. (2015)* argued that blockchain-based currencies have the potential to disrupt traditional banking structures, although scalability and regulatory risks remain significant barriers.

From an investment perspective, cryptocurrencies have attracted both retail and institutional investors due to their high volatility and speculative returns. Studies such as *Baur, Hong, and Lee (2018)* and *Dyhrberg (2016)* highlight that Bitcoin exhibits properties similar to both gold and traditional financial assets, acting as a hedge or diversifier during periods of financial instability. In contrast, *Corbet et al. (2019)* found that cryptocurrencies remain too volatile to serve as safe-haven assets in the long term.

In the context of technological innovation, *Tapscott and Tapscott (2018)* describe blockchain as a foundational technology driving the "Internet of Value," facilitating decentralized governance, smart contracts, and new business ecosystems. *Gans (2019)* further emphasizes the role of digital currencies in enhancing financial inclusion, particularly in developing economies where access to traditional banking remains limited. However, global research also reveals persistent challenges in the adoption of cryptocurrencies. *Mougayar (2016)* and *Arner et al. (2017)* discuss how the absence of a clear regulatory framework creates uncertainty regarding consumer protection, taxation, and anti-money-laundering (AML) compliance. *Foley, Karlsen, and Putniņš (2019)* estimated that a substantial share of Bitcoin transactions in the early years was majorly linked to illegal activities, underscoring the dual-use nature of digital assets. More recent studies, such as *Sahoo (2022)*, note a shift toward mainstream legitimacy as major economies explore central bank digital currencies (CBDCs) and regulatory harmonization through initiatives like the Financial Action Task Force (FATF) guidelines.

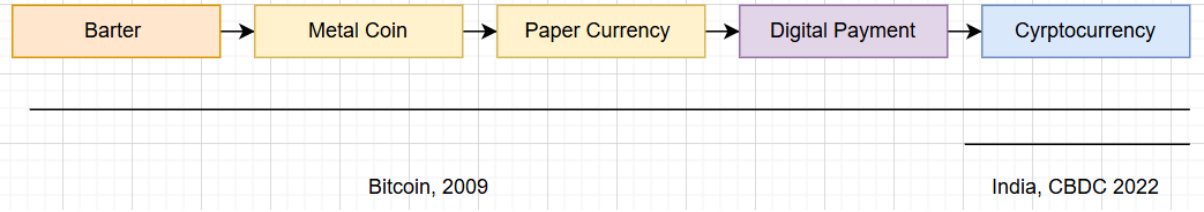
The COVID-19 pandemic further accelerated digital transformation, increasing cryptocurrency adoption for remittances, investments, and cross-border payments (Auer et al., 2022). According to *the Bank for International Settlements (2021)*, over 85% of central banks globally are now engaged in CBDC research or pilot programs, reflecting a new stage in the evolution of digital money. Thus, global literature underscores a dual narrative cryptocurrencies as both disruptive innovation and regulatory challenge.

2.2 Indian Context: Growth, Regulation, and Policy Perspectives

In India, cryptocurrency has evolved from a niche technological curiosity to a rapidly expanding investment trend. The initial adoption phase (2013–2017) was primarily driven by young, tech-savvy investors and early fintech entrepreneurs (Sarkar & Singh, 2020). However, the Reserve Bank of India's (RBI) circular in 2018, which prohibited banks from facilitating cryptocurrency transactions, created a period of uncertainty (RBI, 2018). This regulatory stance was later overturned by the Supreme Court of India in March 2020, marking a turning point in the Indian crypto ecosystem (Supreme Court of India, 2020). Empirical studies highlight that India's growing internet penetration, digital literacy, and fintech innovation have contributed significantly to cryptocurrency awareness (Aithal & Aithal, 2021). According to *Kshetri (2021)*, India has one of the largest potential markets for digital currencies, yet its regulatory environment remains ambiguous. *Nasscom (2022)* estimated that the Indian cryptocurrency market could reach USD 241 million by 2030, supported by the expansion of blockchain-based startups and decentralized applications. Despite its potential, regulatory hesitations persist. *Sahoo and Mohapatra (2022)* observed that the absence of clear tax policies, coupled with fears of capital flight and misuse for illicit transactions, has limited institutional participation. The introduction of the 30% tax on virtual digital assets (VDAs) in the Union Budget 2022 marked India's first concrete attempt to recognize and regulate crypto trading (Ministry of Finance, 2022). Yet, researchers such as *Garg and Singh (2023)* caution that high taxation and lack of clarity in crypto definitions could stifle innovation and push transactions underground. From a socio-economic perspective, *Chatterjee (2022)* and *Rastogi (2023)* emphasize that cryptocurrencies can enhance financial inclusion by offering alternative financial instruments to unbanked populations, particularly in rural areas. However, issues like cyber-fraud, volatility, and investor protection remain significant barriers. Furthermore, the Indian government's introduction of a Central Bank Digital Currency (CBDC) the Digital Rupee — represents a parallel path toward digitizing money while maintaining regulatory oversight (RBI, 2023).

Academic discussions in India increasingly focus on striking a balance between innovation and regulation. *Anand and Sharma (2023)* suggest a "sandbox" regulatory approach to allow experimentation with blockchain applications under controlled environments. Similarly, *Sharma and Tandon (2022)* advocate for a multi-stakeholder framework that includes government agencies, fintech startups, and consumer associations to build a sustainable digital currency ecosystem.

Figure 1, Historical Evolution of money to cryptocurrency



This figure 1, shows how money has changed over time, leading to today's cryptocurrency. In the beginning, people used barter, where goods were exchanged directly. Later, metal coins were created to make trade easier. After that, paper money became common and was used for many years. In recent decades, digital payments started, allowing people to send money online. The newest form is cryptocurrency, which exists only in digital form. Bitcoin, the first major cryptocurrency, was introduced in 2009, and India launched its digital currency (CBDC) in 2022.

3. Research Methodology

This study uses a descriptive and analytical research design to explore how cryptocurrency has evolved in India and what opportunities and challenges it presents. The descriptive part explains patterns and structures of the crypto market, while the analytical part helps in understanding policies, market behavior, and new trends (Kothari, 2004). The study mainly depends on secondary data, gathered from trusted national and international sources such as the World Bank, IMF, BIS, RBI, and the Government of India. Academic materials were also taken from databases like Scopus, Elsevier, Springer, and MDPI, providing information about market growth, regulations, and social impacts (Baur et al., 2018; Corbet et al., 2019).

A mixed-method approach was used: descriptive analysis to show trends and statistics, and content analysis to study policies and reports (Neuendorf, 2017).

The study focuses on the period 2009–2025, covering the journey from Bitcoin's origin to India's CBDC launch. However, it is limited by the use of secondary data, which may not fully reflect real-time market developments (Foley et al., 2019).

4. Result and Discussion

The US subprime crisis in 2008 and subsequent worldwide recession led a decline of the investors' confidence in traditional asset classes such as gold, silver, oil, and foreign currencies and Cryptocurrencies emerged as an alternative asset[1]. The story of modern cryptocurrency began in 2008 with the publication of a white paper by Satoshi Nakamoto[2] was published by one or more pseudonymous developers under the name Satoshi Nakamoto. In this paper, the concept of Bitcoin and the complete functioning of how it will work was given. Bitcoin transactions commenced in January 2009, when the currency was initially utilized as open-source software. Later on by 2011 few other cryptocurrencies, such as Swiftcoin and Litecoin also made their appearance. Around this time the public Bitcoin exchanges were also established to provide facilities to market participants such as trading, information generation and price discovery. In late 2012, WordPress became the

[1] https://www.harvardgeo.org/history-of-cryptocurrency/
[2] Nakamoto, Satoshi. "Bitcoin: A Peer-to-Peer Electronic Cash System." 2008.

first major business to accept payments in Bitcoin[3]. The next five years witnessed a boom in the demand for Bitcoin and the price of it, which was $5 in 2012, gradually climbed to more than $900 by the end of 2016. Again, the price of Bitcoin was around $1,000 in early 2017, reached $2,000 in mid-May, and then hit a record high of $19,345.49 in December. The price of Bitcoin reached another historical and all-time high of over $68,000 in November, 2021, but continues to decline amid speculations of control and regulation by central governments in 2022. According to the latest data, the price of one bitcoin in May 2022 was around $31,650[4]. By the end of May 2022, the total value of all cryptocurrencies currently in existence exceeds $2.14 trillion and has approximately 200 million users. Its popularity and prevalence can be estimated from the fact that the market value of digital assets of $2.14 trillion is more than the gross domestic product of Italy and Canada.

There are a large number of registered cryptocurrencies in the market today, but only a few of them are active and more influential. According to the data, from January 2009 to May 2022, approximately 19,818 cryptocurrencies are present on 526 exchanges[5]. The market capitalization of this industry is highly sensitive to market fluctuations and is often driven by the value and performance of major digital currencies. The popular and dominant cryptocurrencies are Bitcoin, Ethereum, Tether, Cardano and Binance Coin. The top 20 cryptocurrencies cover approximately 90% of the total cryptocurrency market, with Bitcoin alone accounting for the largest share at approximately 42%. Bitcoin is the world's largest player in the digital currency market with its programmed limited supply of 21 million Bitcoins. Its popularity as a means of exchange shows tremendous growth and by May 2022, there were more than 19 million Bitcoins in circulation with a total market capitalization of approximately $546 billion[6]. The following presents the list of top cryptocurrencies in the world and their total market capitalization as of May 29, 2022:

Table 1

Top 10 cryptocurrencies in the world and their total market capitalization as of May 29, 2022:

Cryptocurrency Name	Price ($)	Market Capitalisation ($)
Bitcoin (BTC)	29,445	561 Billion
Ethereum (ETH)	1,812	219 Billion
Tether (USDT)	0.999	72 Billion
USD Coin (USDC)	1	53 Billion
Binance Coin (BNB)	305	49 Billion
XRP	0.389	18 Billion
Binance USD (BUSD)	1	17.98
Cardano (ADA)	0.4811	27 Billion
Solana (SOL)	44.91	15 Billion
Dogecoin	0.8269	10.96 Billion

[3] History of Cryptocurrencies, HarvardGEO, History of Cryptocurrencies | Cryptocurrency Investing (harvardgeo.org)
[4] https://coinmarketcap.com/currencies/bitcoin/
[5] Historical Snapshot - 29 May 2022 | CoinMarketCap
[6] https://coinmarketcap.com/currencies/bitcoin/

5. Benefits and Drawbacks

5.1 Benefits of Cryptocurrency

Transactions: One of the advantages of cryptocurrency transactions is that it does not require any third party or intermediary, which reduces the service charges to a great extent. With the help of cryptos, one party or person can make his currency payment or currency transfer to another party or person easily and directly. These are based on a peer-to-peer networking structure, allowing for greater clarity in establishing audit trails and less confusion about payment obligations. It also makes it easier to establish accountability in that both parties involved in the transaction know about themselves.

Immunity from centralized monetary authorities: Its feature of decentralized from government or controlling authorities makes it most popular reason to trade among parties. It is generally not controlled or regulated by any central authority unlike fiat currencies and hence is not much influenced by the internal macroeconomic policies of the government and any monetary authority.

Transaction Fees: In this system, data miners receive compensation from the cryptocurrency network itself in exchange for producing Bitcoin and other cryptocurrencies through rigorous number crunching, so transaction fees typically do not apply. But the involvement of third-party management service for maintaining the cryptocurrency wallet may result into some out-of-pocket fees. But these costs are comparatively much lower than the transaction fees charged by traditional financial systems. Cryptocurrency transactions are mostly unrecognized as legal tender at the national government level, due to their functioning and technical characteristics and therefore not subject to any transaction fees or other charges imposed by specific country.

Strong security mechanisms: Under this system, the entire ledger is tied to a strong encryption network (known as blockchain) and the same processes of cryptocurrency transactions protect against all kinds of frauds, account tampering etc. It is nearly impossible to reverse the transaction once a cryptocurrency transfer is authorized. This has been done for defense against fraudulent transactions. Therefore, it requires a specific agreement between the parties regarding refunds or some return policy in the event of a mistake.

More confidential transactions: In traditional monetary payment systems, information in the transaction chain can be unmasked at any point but cryptocurrency transactions keep payments confidential and avoid the risk of identity and accounts theft. Every transaction is a unique exchange made between the parties on certain agreed upon terms.

5.2 Drawbacks of Cryptocurrency

Cybersecurity Issues: As a digital technology, the problem of cybersecurity breaches in cryptocurrency trading can be a very serious problem. There is evidence that many ICOs (Initial Coin Offerings) have been violated and investors have lost millions of dollars. Therefore, there is requirement of continuous maintenance of the basic security infrastructure in order to mitigate this risk.

Price Volatility: Huge price volatility and intrinsic valuation of cryptocurrency is a huge problem in this market which characterizes the entire ecosystem of cryptocurrencies as a bubble. There is a possibility that as its adoption increases, consumer confidence will increase and volatility will reduce.

Market Regulation: The risk of investing in this market is substantial without Government regulation, legal support and complete adoption of this technology. There are some other concerns with this advanced technology which are mostly of a logistic nature. For example, as technology improves, changes in protocols become necessary from time to time, but these can take a long time and disrupt the normal flow of operations.

Data Storage Security: Cryptocurrency is an intangible currency that cannot be kept in a physical wallet. It is a digital currency which is in digital form and thus subject to storage problem. It is stored in a digital wallet which is operated with a key. It is almost impossible to recover the user account data in case someone forgets password of the crypto wallet due to the strict locks of the blockchain encryption and thus poses a serious threat to the users.

Governance Challenges: One of the major issue related with cryptocurrencies is its legal status. It varies from country to country and their regulation methods are constantly being amended due to changes in the views

and approaches of governments and central banks. Very serious concerns about cryptocurrencies are related to the ability of the local Governments to generate revenue and conduct the monetary policy operations by the central banks. The problem becomes even more complex if the use of cryptocurrencies becomes much larger than the use of national currencies. National currencies are indirectly supported by the nation's total productive assets and productive capabilities, which support public confidence and the credibility of the national currency. But control over cryptocurrencies is governed by a fixed computer algorithm that is defined at the time the cryptocurrency is created and cannot be changed by the government. This decentralized nature of cryptocurrency prevents any country from shooting down its network and changing its technical regulations.
Anonymity: Due to the anonymity of cryptocurrencies, they have become a haven for few people and businesses to engage in money laundering and drug trafficking and to hide their illegal and illicit activities. This anonymity further increases the problems faced by governments in the identification and imposition of tax on income and transactions.

6. Cryptocurrencies Journey in India

In India the payment through cryptocurrencies were started in 2012 for small-scale transactions, and have since become a popular means of payment in the country. First in 2013, an old-era colonial pizza shop in Worli, Mumbai, accepted the payment in Bitcoin. It soon came into notice of Government and as early as in 2013, the R.B.I. issued a circular letter to warn public and traders against the use of cryptocurrencies, citing lack of regulation and operational, financial, risks related to security. However, despite warnings its adoption and transaction volumes in India increased significantly after November 2016 when the high-value currency notes were demonetized and the government also pushed the public for digital payments. With gold and silver being seen as easy target by government officials people looked at Bitcoin as a safe haven during demonetization. At that time people converted cash into Bitcoin by paying a very high premium. Bitcoin prices began to rise and weekly Bitcoin trading volume almost doubled. Due to the high costs of remittance by traditional banks, people have also increased their inclination towards cryptocurrencies because here the consumer costs are equal to zero. It must be noted that India is one of the largest remittance receiving markets in the world with a total value of over $87 billion and for this a user typically pays around 15% in bank fees and conversion charges[7].
Despite RBI circular, large amounts of cryptocurrency transactions on exchanges continued. RBI and the Finance Ministry again clarified in 2017 that cryptocurrencies are not legal tender in India. Ironically, this was also the time when the RBI started considering a dormant proposal to introduce its own cryptocurrency 'Lakshmi'. At the same time two Public Interest Litigations were filed in the Supreme Court, one asking to ban cryptocurrencies transactions in India, and the other proposing to regulate them. The government later on constituted a committee to study the issues related to digital and virtual currencies and to propose an action plan.
There are several examples of proposals to ban cryptocurrencies in India. The Central Board of Digital Tax (CBDT) submitted a draft plan in March 2018 to the Finance Ministry for banning virtual currencies and after a month, the RBI issued a circular to restrict banks and other financial institutions from providing financial services to exchange centers related to virtual currency. This notice was completely different because the earlier warnings did not contain any instructions or process of any legal action against cryptocurrency transactions. This circular meant that cryptocurrency exchanges could not access any banking services in India, which further had a very serious impact on the operations of these exchanges. During this period, people cashed out their crypto investments in large amounts due to fear of losing access to banking facilities.
Meanwhile, an important event regarding crypto transaction regulation took place in March 2020 with the Supreme Court ruling on a petition filed by the Internet and Mobile Association of India (IAMAI) and crypto exchanges lifting the ban on cryptocurrency trading imposed by the R.B.I. However, the R.B.I. has maintained

[7] India received $87 billion in remittances in 2021: World Bank - The Hindu

its strong stance against cryptocurrencies and has repeatedly stressed that they pose a serious threat to the macroeconomic and financial stability of the country.

Cryptocurrency trading has seen rapid growth since the Reserve Bank of India (RBI) lifted restrictions in March 2020 and Indian crypto exchanges have witnessed a steady increase in user numbers and daily trading volumes. According to Nischal Shetty, founder of WazirX, despite legal ambiguity and huge price fluctuations of cryptocurrency in India, the number of crypto owners has reached almost two crore. This number is 2.74 crore in America, followed by Russia (1.74 crore) and Nigeria (1.30 crore). As far as the number of crypto owners as a percentage of the total population is concerned, India ranks fifth with 7.30%. One of the reasons behind the rise of cryptocurrency and crypto-based companies these days is that these companies have made crypto investment easy and accessible to individuals by using modern technology and their efficiency.

Crypto Bill:

Many countries from time to time raised serious concerns about potential threat of cryptocurrencies with respect to financial stability and consumer protection. To regularize and regulate this industry, the Government of India introduced "Cryptocurrency and Regulation of Official Digital Currency Bill" in 2021. Its main objective was to create an institutional and operational framework for official digital currency to be issued by the R.B.I. Other aims were to promote the underlying technology and facilitate trading of selective cryptocurrencies and imposing restrictions on private cryptocurrencies in India. Finally in Budget 2022-23, a crypto tax regime was introduced for the first time and the government has announced a flat 30% tax on income and a 1% Tax Deducted at Source (TDS) on digital virtual assets, primarily crypto.

7. Conclusion

In India, despite its popularity and widespread trading, the status of cryptocurrency still remains unclear and is constantly evolving. It is highly debated topic but it is clear that cryptocurrency is not a legal tender. Legal tender means it is accepted by law in settlement of debts and payments which is not there in India. Just as gold and diamonds, despite being valuable, are not legal tender, similarly private cryptocurrencies will also never be legal tender. On the other hand 'Digital Rupee' issued by Reserve Bank of India qualifies to be a legal tender in India.

The crypto-tech industry which includes crypto applications in trading, P2P payments, remittances, etc. has experienced high growth rates and is said to have huge potential for the future. According to a NASSCOM report[8], "the Indian cryptocurrency market has been growing rapidly over the past few years and is expected to reach $241 million by 2030 in India and $2.3 billion globally by 2026. Additionally, it has the potential to create more than 800,000 jobs by 2030". According to research by crypto exchanges, investors from tier-2 and tier-3 cities are among the most enthusiastic investors in crypto. New crypto users are mostly under the age of 35 and have at least a bachelor's degree. Retail investors aged 25 to 40 are spending lakhs on trading in cryptocurrencies every day in India, according to two top exchanges in the country.

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