



Investigating Bitcoin in the Indian Context

Mr. Ashok Prem^{1*}, Mr. Sunny Masand², Mr. Ashok Karnani³

^{1*,2,3}Assistant Professor-RNB Global University-Bikaner

***Corresponding Author:** Mr. Ashok Prem

*Assistant Professor-RNB Global University-Bikaner

Abstract

Bitcoin, established in 2009, has evolved into a global currency operating on a decentralized digital platform without government or central bank backing. Serving as encrypted data chunks, bitcoins facilitate the purchase of goods and services from merchants accepting this digital currency. Bitcoin transactions, involving significant computing power, move encrypted data from one user to another, confirming the spending of money. The peer-to-peer network oversees and verifies these transactions, enabling activities like hotel bookings, shopping, financial transactions, and video game purchases. This paper delves into the rise of Bitcoin in India, exploring its evolution, the advent of blockchain, and its practical applications.

INTRODUCTION

Bitcoin constitutes a complex system of concepts and technologies forming the foundation of a digital currency ecosystem. Bitcoins, as units of currency, are utilized to store and transmit value among participants in the bitcoin network. Communication within the bitcoin network occurs primarily through the internet, with the bitcoin protocol stack, available as open source software, adaptable to various computing devices. Satoshi Nakamoto, the pseudonymous inventor, introduced bitcoin in 2008 through a paper titled "Bitcoin: A Peer-to-Peer Electronic Cash System." The bitcoin network commenced in 2009, based on Nakamoto's reference implementation, subsequently revised by numerous programmers.

Bitcoin, classified as a cryptocurrency, relies on cryptography for security, with no physical representation; instead, balances are stored on a transparent public ledger. Cryptocurrencies, functioning on blockchain technology, operate in a decentralized manner without regulatory authority. The study aims to:

- Understand the concept and workings of Bitcoin.
- Examine the process of buying and selling Bitcoin.
- Analyze the pros and cons of Bitcoin in India.

WHAT IS BITCOIN?

Bitcoin is a form of digital currency, representing binary data designed for anonymity and security. Operating on cryptographic principles, it transforms data into codes. Gaurav Dahake, CEO & Founder of Bitbns, describes Bitcoin as a peer-to-peer system utilizing cryptography to secure transactions and manage the generation of additional units. Bitcoin operates on a decentralized model, not controlled by any single entity or central bank. It functions as a medium of exchange using blockchain technology.

Bitcoin transactions exist as digital entries in an online database, recorded in a public ledger, and are stored in digital wallets. Kshitij Purohit, Lead Currency & Commodities Analyst at Capital Via Global Research, emphasizes that Bitcoin is intended to serve as a means of exchange, relying on a peer-to-peer system for sending and receiving money.

Market Size of Bitcoin:

The global bitcoin market is projected to reach \$2.73 billion by 2025, with over 8,500 cryptocurrencies globally valued at more than \$2 trillion, constituting 18% of total world gold holdings. The rise of cryptocurrency is attributed to its low entry barrier and decentralized nature, making it easily replicable. Notably, the first commercial bitcoin transaction in 2010 involved the purchase of two pizzas for 10,000 bitcoins, now valued at \$400 million.

HOW TO PURCHASE BITCOIN

Select a Crypto Exchange: To buy Bitcoin, use a crypto exchange like Unocoin, WazirX, ZebPay, or CoinDCX. Choose one with user-friendly features, low costs, and strong security. Transfer bitcoins between exchanges by withdrawing from one and depositing in another.

Select a Payment Method: Fund your account using options like bank transfers, net banking, Mobikwik, cryptocurrency wallets, or UPI, depending on the exchange. Be aware of transaction fees; for example, CoinDCX

charges differently based on the funding method.

Make a Purchase: After funding, make your first Bitcoin purchase by hitting a button or entering Bitcoin's ticker symbol and the desired investment amount. Due to high initial costs, you'll own a fraction of a Bitcoin, reflecting your investment.

Choose a Secure Storage Option: Exchanges usually provide an inbuilt wallet, but consider securing your Bitcoin offline for added safety. Cold storage options, like online or offline wallets of your choice, offer enhanced security, though withdrawal may incur small fees.

HOW TO CONVERT BITCOIN INTO CASH?

Through an Exchange or Broker: Exchange Bitcoin for cash through brokers or exchanges, similar to currency exchange systems. This safe method, although slow, takes 4-6 days to transfer funds. Be aware of transaction fees that vary among brokers.

Platforms for Peer-to-Peer Communication: For quick cash withdrawals, use peer-to-peer marketplaces where you can choose payment methods. This option often provides faster transactions, lower fees, and better exchange rates. Exercise caution for scams and ensure secure peer-to-peer networks with escrow options.

BITCOIN MINING

Bitcoin mining involves solving complex mathematical problems with specialized machinery to validate transactions, enhance network trust, and secure the payment system. Mining generates blocks in the blockchain, and powerful computers, known as mining machines, perform this process.

IS BITCOIN LEGAL IN INDIA?

While Bitcoin isn't legal tender in India, investing in cryptocurrencies is not illegal. The lack of regulatory coverage has led to financial irregularities, and potential solutions include government instructions to banks for tax deductions on cryptocurrency investments.

PROS AND CONS OF BITCOIN

Pros:

- Minimal transaction costs compared to traditional online banking.
- 24/7 accessibility to money without time constraints.
- Quick transaction processing through blockchain technology.

Cons:

- High volatility may lead to substantial losses.
- Lack of literature for analysis, making investments highly speculative.
- Absence of regulations, exposing investors to fraud and illegal activities.
- Cybersecurity threats pose risks, and recovery from cyber-attacks is challenging.

CHALLENGES FACING BITCOIN TODAY

Since its inception, Bitcoin's extreme volatility has posed challenges. The price may surge to a million dollars or drop to zero, making it popular among investors but risky. Reports suggest users lose money through exchanges and mining losses, and even smart wallets on exchanges can be hacked. The lack of accountability raises concerns about market behavior, leading to issues like smart contract hacks and scams that may erode trust in Bitcoin.

Bitcoin's classification as intangible property subjects it to capital gains taxes, adding complexity for investors. The blockchain technology's 1 MB data block limit causes processing delays as transactions increase. The absence of permanent rules in the Bitcoin market, coupled with its association with money laundering on the Dark Web, adds to regulatory uncertainties.

FUTURE OF BITCOIN IN INDIA

Bitcoin is gradually gaining traction in India, particularly among millennials in tier 2 and tier 3 cities. Despite dominance by men, women's participation in crypto trading has surged. The tech-savvy Generation Z and millennials, distrustful of traditional banking, are major investors, facilitated by peer-to-peer networks. The government's evolving stance from outright prohibition to potential regulation indicates growing acceptance of cryptocurrencies.

BITCOIN REGULATION POLICY IN INDIA

Bitcoin's regulatory status in India remains uncertain, as there is no specific regulation or law in place. The government sought opinions on regulating, prohibiting, or self-regulating cryptocurrencies in 2017. The lack of clarity persists despite rapid crypto investments, raising questions about the government's approach.

BITCOIN REGULATION OFFICIAL DIGITAL CURRENCY BILL 2021

The proposed Official Digital Currency Bill 2021 aims to create a framework for the Reserve Bank of India to issue an official digital currency while intending to ban private bitcoin. However, specific exclusions are provided to support Bitcoin's core technology and purposes. The government's shift from prohibition to regulation suggests an anticipation of favorable legislation for limited crypto investment and trade.

IS BITCOIN TAXABLE UNDER GST?

Cryptocurrency, including Bitcoin, falls under the GST regime in India. While GST is levied on all supplies, cryptocurrency transactions are subject to tax. However, due to the unique nature of cryptocurrency, its taxation and implications under GST require careful consideration.

IMPLICATIONS OF INDIAN DOMESTIC TAX LAW

Income from Bitcoin transactions, whether capital or revenue, is not taxable in India for transactions between non-residents. However, transactions with Indian residents are taxable, following the "Deduction of tax at source" criteria under Section 195 of the Income-tax Act. Capital gains tax may apply based on the holding duration, and mining Bitcoin may be considered tax-free.

CONCLUSION

Rather than banning Bitcoin, efficient regulation could harness its potential, preventing frauds and unauthorized usage. India's understanding and utilization of this evolving technology will play a crucial role in the global landscape. While Bitcoin may not be the future global currency, its survival depends on effective regulation, providing potential gains but posing risks for investors. Awareness and cautious approaches are essential in navigating the complex landscape of cryptocurrency.

REFERENCES

1. <https://www.researchgate.net/publication/353887034>
2. http://ijrar.com/upload_issue/ijrar_issue_20543250.pdf
3. https://www.researchgate.net/publication/324770908_The_Growth_of_Cryptocurrency_in_India_Its_Challenges_Potential_Impacts_on_Legislation
4. <https://timesofindia.indiatimes.com/blogs/voices/the-evolution-of-cryptocurrencies-in-india-and-what-the-future-looks-like/>
5. <https://gadgets360.com/finance/bitcoin-price-in-india-today-inr>