

Impact of Cryptocurrency on Indian Economy

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ABSTRACT

In the financial sector, cryptocurrencies like Bitcoin have been popular in recent years. Cryptography is used to secure digital, virtual, or online currencies such as bitcoin. The financial sector has experienced tremendous change related to cryptocurrency, both positive and negative. Although the idea of cryptocurrencies is a little challenging to understand, but they are simple to use. It is seen as tough since it differs greatly from the traditional currencies that we have used for centuries. After the global financial crisis of 2008, Bitcoin was developed to function independently of governing bodies, central banks, and traditional financial institutions. Since then, the structure of Bitcoin has presented difficulties for many regulators, as the majority of them have sought to control it. As a result, some nations banned it or made it illegal, while others remained indifferent and developed methods to tax and oversee its activities. This conceptual paper looks at the many aspects of cryptocurrencies, starting with their history, types, workings, advantages and disadvantages, challenges and opportunities. The study also tries to analyse how legal Bitcoin is in India.

INTRODUCTION

Cryptocurrency comes under many names. You have probably read about some of the most popular types of cryptocurrencies such as Bitcoin, Litecoin, and Ethereum. Cryptocurrencies are increasingly popular alternatives for online payments. Before converting real dollars, euros, pounds, or other traditional currencies into □ (the symbol for Bitcoin, the most popular cryptocurrency), you should understand what cryptocurrencies are, what the risks are in using cryptocurrencies, and how to protect your investment.

A cryptocurrency is a digital currency, which is an alternative form of payment created using encryption algorithms. The use of encryption technologies means that cryptocurrencies function both as a currency and as a virtual accounting system. To use cryptocurrencies, you need a cryptocurrency wallet. These wallets can be software that is a cloud-based service or is stored on your computer or on your mobile device. The wallets are the tool through which you store your encryption keys that confirm your identity and link to your cryptocurrency.

Cryptocurrencies are still relatively new, and the market for these digital currencies is very volatile. Since cryptocurrencies don't need banks or any other third party to regulate them; they tend to be uninsured and are hard to convert into a form of tangible currency (such as US dollars or euros.) In addition, since cryptocurrencies are technology-based intangible assets, they can be hacked like any other intangible technology asset. Finally, since you store your cryptocurrencies in a digital wallet,

if you lose your wallet (or access to it or to wallet backups), you have lost your entire cryptocurrency investment.

REVIEW OF LITERATURE

Kurihara & Fukushima, 2017 explained, it is not digital cash, which has prevailed all over the world. Unlike central bank- and government-issued currency, Bitcoin can be inflated at will, the supply of Bitcoin is limited to a certain volume, which cannot be changed.

Wonglimpiyarat, 2016 highlights that there are obstacles of lawless tender where Bitcoin wants the government's legislation to boost the permissibility of this new currency. Bitcoin currency may transform the future of banking in developing countries but it is hard to substitute a cash-based society.

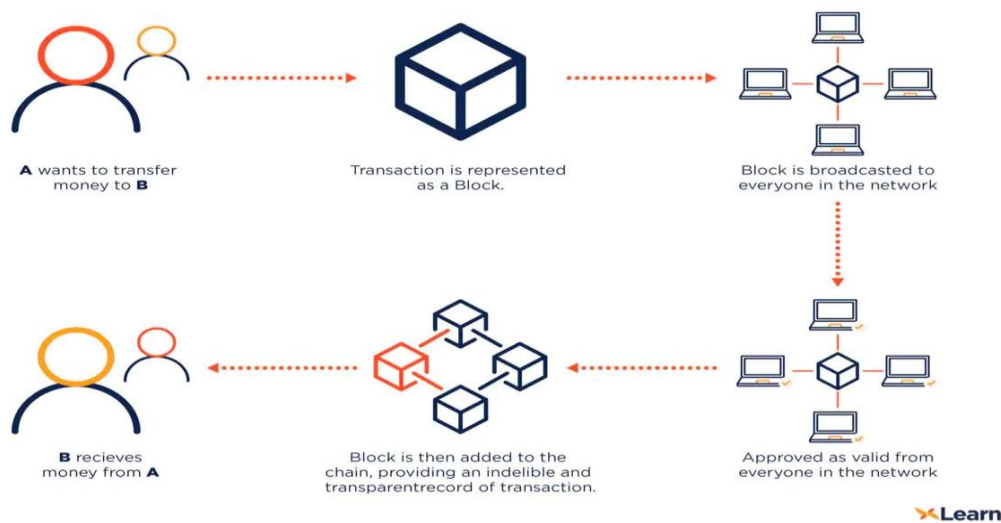
OBJECTIVE OF STUDY

- To understand the concept of crypto currency,
- To understand the working of cryptocurrency.
- To study the growth pattern of Cryptocurrency.
- To analyse the legal status, challenges and opportunities of Bitcoin in India.
- To analysis the Impact of cryptocurrency on Indian Economy

RESEARCH METHODOLOGY

This study is totally based on secondary data which is collected from various reseach journals, websides, newspaper, articles, and reports related to digital payments and baking.

WORKING OF CRYPTOCURRENCY



How Cryptocurrency transaction works

Blockchain technology, which is just a digital ledger of transactions, is what powers cryptocurrencies. A network of computer systems houses this ledger (or database). A decentralised network of computers runs a blockchain and authenticates its transactions; no single system is in charge of the ledger. In essence, Bitcoin and other cryptocurrencies are just codes that are kept on a blockchain that grows as more and more people use them.

Buying and Selling of Cryptocurrency

Buying it from someone – It usually happens in two ways

1. An exchange-facilitated transaction
2. A peer-to-peer transaction

Cryptocurrency exchanges are platforms that broker the trading of cryptocurrencies for other assets, including digital and fiat currencies. They are independent and operate just like stock exchanges do globally. Crypto exchanges operating in India include WazirX, CoinDCX, CoinSwitch Kuber, Zebpay, Bitbns, Giottus, etc.

Peer to peer (P2P) trading is the act of buying and selling cryptocurrencies directly between users without a third party or intermediary.

Mining new cryptocurrencies - Mining is a process of creating new crypto coins by solving complex mathematical equations. The transactions using cryptocurrency is complete only when a “miner” verifies the transaction as legitimate. This verification process requires miners to solve complex equations and those who do that first are paid a fraction of the transaction as a fee for their effort.

Selling of cryptocurrency in INR - The Indian exchanges allow sale of cryptocurrencies in exchange for INR as well. But many of the smaller banks that support the transactions do not have the necessary digital infrastructure to handle the volumes of withdrawal. The volatility experienced by these virtual currencies and disruption in withdrawal services is a common occurrence.

Top cryptocurrencies

Here are the top cryptocurrencies in India. The cryptocurrency hype has traveled from the west and reached India, attracting investors with its high value. Be it, seasoned investors or novice enthusiasts, everyone wants to partake in a conversation about cryptocurrencies and give opinions. While many NRIs have good knowledge about the growing cryptocurrency market, Indians need to update themselves with the market news. After the recent market dip brought by China’s crypto ban, the low crypto coin prices have caught the interest of Indian investors and skeptics. People, who were once against risking money in such a volatile market due to high prices, are now ready to make their first, albeit small cryptocurrency investment.

For you to get started, here are the top cryptocurrencies to buy and hold in May 2021. As of today, the crypto market is in recovery, which makes this an ideal time to invest.

1. Bitcoin (BTC) Price today: INR 3,246,223 For Indians, Bitcoin is synonymous with cryptocurrency. And rightfully so, because this was the first and is the highest valued crypto in the market right now. After reaching an all-time high of about \$65000 in April this year, the price started plummeting recently, thanks to Elon Musk’s tweet about Tesla not accepting Bitcoins

anymore (initially, Tesla had decided to accept Bitcoins as a mode of payment). If you have the budget, now is the best time to buy Bitcoin as the price dropped by almost 30%.

2. Ethereum Price today : 158,130.49 Ether, introduced in 2015, is presently the second-biggest digital currency by market value behind bitcoin, but it lags by a substantial margin behind the dominant cryptocurrency. Effective January 2020, the market value of ether is around 1/10 the size of bitcoins. Ethereum is focused on realistic smart contracts for the digitalisation of transactions used by several companies. Ethereum is a decentralized computing framework that enables the construction and running of Smart Contracts and Decentralized Applications without any third party interruption, theft, power or intervention. On Ethereum, the programs run on the platform-specific cryptographic token, ether.

3. Binance Coin Price today: INR 31,390 As per market capitalization, Binance Coin is the third-largest cryptocurrency, the first two being Bitcoin and Ethereum. In 2017, Binance Coin was launched by one of the world's largest cryptocurrency exchanges Binance, as a utility token. Hence, the pricing of this crypto coin depends on its utility on the Binance platform. In simple terms, if more people use Binance Coin to trade other crypto

4. Ripple: Launched in 2012, Ripple helps banks to real-time settle cross-border trades for end-to-end transparency and lower costs. With its new business model, Ripple has seen success; it remains one of the most appealing digital currencies for mainstream financial institutions finding ways to revolutionize cross-border payments. This is also the world's third-largest cryptocurrency by overall market value at this time. Ripple had a market cap of \$9.2 billion as of January 8, 2020, and a stock of \$0.21 per token.

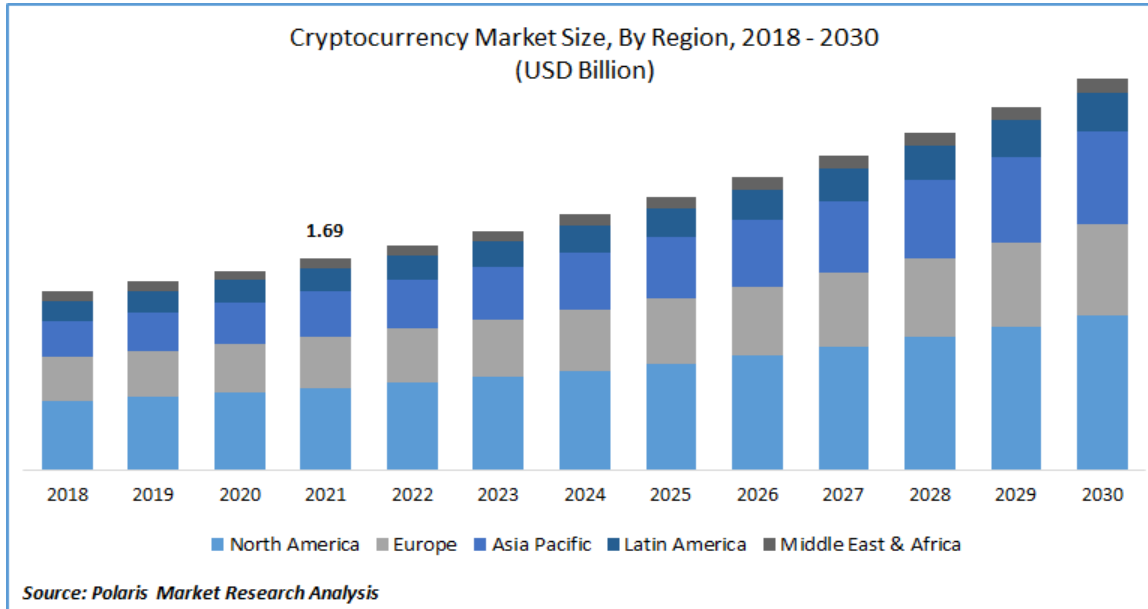
5. Dogecoin (DOGE) Price today: INR 31.605 It is baffling how a crypto coin that started out as a meme is now a leading player in the market. Unofficially endorsed by the "Dogefather" Elon Musk, Dogecoin is a cheaply priced cryptocurrency with immense growth expectations. Though the market crash had stumped the price of Dogecoin, it is still the fourth-largest cryptocurrency as per the market cap.

Growth and future trend of Cryptocurrency

The global cryptocurrency market was valued at USD 1.69 billion in 2021 and is expected to grow at a CAGR of 7.2% during the forecast period. The substantial growth is attributed to the increasing demand for platforms to enable the trading of such currency. These platforms perform the task of intermediary between the seller and buyer and earn money through commissions and transaction fees

The worldwide cryptocurrency market is significantly impacted by the growing number of users of cryptocurrencies. The total number of cryptocurrency users worldwide hit 106 Mn in January 2021, according to crypto.com (a supplier of crypto exchanges). The increase in bitcoin exchange service providers, the adoption of DeFi, and the growing acceptance of cryptocurrencies by financial institutions worldwide are all factors contributing to the rise in cryptocurrency users.

For instance, in March 2021, Morgan Stanley, an American investment bank, started to offer access to bitcoin funds to its wealth management clients. This enabled the company to improve its offerings. A significant amount of funds that are being raised by various venture capital firms in the market are expected to offer lucrative growth opportunities.



Similarly, in October 2021, CoinSwitchKuber (crypto exchange platform) raised over USD 260 million through investors such as Andreessen Horowitz & Coinbase Ventures. Additionally, the growing number of developments by the key market player is anticipated to boost the cryptocurrency industry's growth.

Regulation of Cryptocurrency in India

The Reserve Bank of India (RBI) warned that cryptocurrencies and virtual currencies are not recognised as legal money in India in 2017. However, there was no virtual currency restriction. Cryptocurrency trading, mining, holding, transferring, and use are punishable in India with a monetary fine or/and a term of imprisonment up to 10 years, according to a 2019 RBI statement. Additionally, the RBI stated that it may eventually introduce the digital rupee as legal money in India. In 2020, the Indian Supreme Court lifted the RBI's ban on cryptocurrency.

In the Union Budget for 2022–2023, the Government of India stated unequivocally that any transfer of virtual currency or cryptocurrency assets will be subject to a 30% tax deduction. Virtual goods and cryptocurrencies used as gifts will be taxed in the recipient's hands. The Reserve Bank of India (RBI) suggested a ban on cryptocurrencies in July 2022, citing their "destabilizing effects" on the nation's monetary and fiscal stability.

Challenges of Cryptocurrency

Cryptocurrency has a volatile nature and is speculative. High investment quantities cause market volatility, which causes price fluctuations and the potential for significant losses for investors.

- 1. Reliability and Security:** Because cryptocurrency is a digital method of exchange, it has become a popular platform for hackers, financing terrorism, and drug trade. Because it leads to a decreased sense of security and a lack of dependability, this has increased peoples' fatigue to a

greater degree. For instance, thieves utilised the Wannacry virus to demand Bitcoin ransom payments.

2. **Absence of a regulatory framework:** The Indian government's approach to cryptocurrencies is one of wait and see. Lack of regulatory authority has raised the likelihood of fraud, endangering investor protection and the flow of money throughout the economy.
3. **Flood of Advertising:** Because speculation is viewed as a quick method to make money, there has been an explosion of advertising in the cryptocurrency market. It is feared that these initiatives may deceive young people through "overpromising" and "non-transparent advertising."
4. **Issues with the Stock Market:** According to the Securities and Exchange Board of India (SEBI), it has no authority over cryptocurrencies "clearing and settlement" and is unable to offer counterparty guarantees like it can for stocks. Furthermore, neither a money, a commodity, nor a security have been used to characterise cryptocurrencies. Since cryptocurrency is built on blockchain technology, scalability is still a significant issue. Because of the append-only data storage mechanism used by blockchain technology, which prevents data from being updated and is limited due to rising demand.
5. **Money laundering:** Due to the ease with which one can transmit money from one country to another without being held accountable, there is a significant chance that people will begin investing in this practise. Rising crypto currency markets have the potential to tip the Indian economy's circular flow of money out of balance. The process of creating cryptocurrencies differs greatly from the way the economy produces regular money. For instance, only the RBI is allowed to create cash in India, and only if the Minimum Reserve System is up and running. As a result, supply and demand are in balance. Cryptocurrency, on the other hand, is encrypted and secured rather than dependent on the rules of financial institutions, which makes it challenging to raise the money supply above a set algorithmic pace.
6. **Ombudsman absent:** Consumers are exposed to transactional and informational risks because there is currently no venue where they can go for support or a way to get their complaints addressed in relation to crypto assets.

IMPACT OF CRYPTOCURRENCIES ON THE INDIAN ECONOMY

Cryptocurrency is the new buzzword in the Indian market. A number of startups have cropped up throughout the country, allowing the average citizen to start investing and trading in **crypto coins**. According to the latest report, the popularity of cryptocurrency in the country can be evaluated from the fact that India already has the highest number of crypto owners in the world at 10.07 crore. India's population, especially the youth, is driving crypto growth rapidly. Following are the five significant impacts cryptocurrencies will have on the Indian economy:

1. **Transparency improvement:** Cryptocurrency enhances transparency where every transaction can be traced back to the source. Additionally, blockchain, the technology on which cryptocurrency is based, is immutable. This means that transaction histories are permanent and unalterable. This can help bring down corruption significantly as the data cannot be altered by any means.

2. **Employment growth:** The crypto industry currently employs about 50,000 individuals. As per a report, the industry is poised to see massive employment opportunities, pegged at over 800,000 by 2030. India already has a strong talent pool of Fintech professionals and IT experts. Additionally, the talent is available at cost-effective rates. With the rise of the cryptocurrency market, we can see India becoming a major hub and global destination for the cryptocurrency market. This will help create ample job opportunities in the BFSI, IT, customer support and service, and many other industries. In today's times, the cryptocurrency market continues to lead to improving the employment rate across the nation.
3. **Boost to the FinTech sector:** As mentioned earlier, India already has a strong base of IT professionals. The collaboration of IT and the financial sector can bring endless possibilities in terms of business opportunities and overseas cash influx. Additionally, with the government bringing strong regulatory measures and creating laws for an official digital currency, it will attract huge foreign investments. This will provide a huge boost to the FinTech sector and propel the Indian economy forward.
4. **Enhance digital payments:** Cryptocurrency transactions are both time and cost-effective. The transactions are carried out between the sender and receiver without the need of a third party, making the transactions instantaneous. Additionally, the transaction charges levied by intermediaries like banks and payment gateways are eliminated. This helps bring down the cost of the transaction, helping save money on each transaction. Thus, cryptocurrency transactions can significantly enhance digital payments, bringing down the time and cost of each transaction.
5. **Achieve the goal of Atmanirbhar Bharat:** With the government proposing the creation of a single, officially-recognized cryptocurrency, the dependence on third-party, private, and foreign-based cryptocurrency will be eliminated. Currently, popular cryptocurrencies like Bitcoin, Ethereum, Dogecoin, and others are foreign-based. The official cryptocurrency will be completely developed in the country and will forgo the need to depend on other cryptocurrencies. Investors, traders, and other individuals will have a single cryptocurrency for their needs and help the government fulfill their goal of 'Atmanirbhar Bharat' in the cryptocurrency sector.

CONCLUSION

The **cryptocurrency** market cannot be ignored, and the possibilities are endless. Even the government has acknowledged the potential of **cryptocurrency** as a means of payment, thereby proposing a bill to issue and regulate **cryptocurrency** in the country. In the future, we can see **cryptocurrency** becoming the primary player fueling the country's economy.

If you want to be future-ready and learn about the next-age technologies that will drive the Fintech sector and possibly the Indian economy, you should consider enrolling in world-class **FinTech Certification programmes**, such as the [PG Certificate Programme in Fintech Technologies](#) from IIM Nagpur. The course will provide in-depth knowledge about advanced technologies like blockchain, artificial intelligence, big data, and **cryptocurrency** – the future of Fintech in India, opening up new avenues of attractive career opportunities

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