

## **CRYPTO CURRENCIES: CHALLENGES AND FUTURE IN INDIA**

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### **Abstract**

With the advancement in technology our way of doing things have changed drastically. And the major impact which we have evidenced is in the form of payments. Everything has turned digital. Especially after demonetisation. Although these were not related but online transactions have grown rapidly after 2016. And things have not stopped there. We have move towards cryptocurrencies. Especially young generation seems that it loves new inventions, cryptos are not exception. Although there is no such regulation in crypto market yet people are investing in cryptocurrencies. And after seeing the craze and number of users of cryptocurrencies Govt. of India has decided to introduced a bill on cryptocurrencies

**Keywords:** Cryptocurrency, Block chain, cryptography, decentralisation, dark web

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### **1. Introduction**

As per definition given in oxford university, “a digital currency in which transactions are verified and records maintained by a decentralized system using cryptography, rather than by a centralized authority.”

From the definition it is clear that records are not maintained by centralised authority rather than by a decentralised system and this system allows them to exist outside the government and central authorities control.

Cryptocurrency can also be referred as one of the online form of payment which can be used to exchange goods and services.

“Cryptocurrency” is derived from the encryption techniques that are used to secure the network. The process through which information(data) is converted into a code to as to prevent unauthorised access is called as Encryption.

Cryptocurrencies work using a technology called block chain technology. Blockchain refers to the system of recording the information in such a way that makes it difficult or we can say impossible to alter, hack or cheat the system. A blockchain is essentially a digital ledger of transactions that is duplicated and distributed across the entire network of computer systems on the block chain.

The goal of block chain is to allow recording and distribution of digital information but not edit the information. We can also say that it stores the information in such a way that the information stored cannot be altered, deleted or destroyed. That makes it completely secure.

### **2. Evolution of cryptocurrencies:**

Virtual coins story begins with one person: the cryptographer David Chaum. He developed a cryptographic system called e-cash in 1983. After 12 years he developed another system DigiCash, which used to make economic transactions confidential through cryptography.

However, it was for the first time in 1998 when the idea or we can say the term “cryptocurrency” was coined.<sup>1</sup>

In that year, Wei Dai was thinking for developing a new method for payment that used cryptographic system and whose main characteristic will be decentralisation.

2008	funding crisis was affecting everyone even superpower America was booming. As a result of such economic disaster the coins were losing their value rapidly.
2009	first cryptocurrency, Bitcoin was created by Satoshi Nakamoto (his identity is still secret). He was not the first person to come up with the idea of creation of cryptocurrency. Intentions behind creation of new payment was that it can be used globally, and decentralised way without any involvement of financial institutions behind it. Millions of the citizens were affected by such huge economic crisis and that was the reason that drove him to create cryptocurrency. And to make people believe and see that there is another sort of money that is not conventional one and from which one can take benefit from it.
2010	the first transaction as a result of sale through bitcoin took place. One customer swapped ten thousand Bitcoin for 2 pizzas thus giving vale in cash to the bitcoin for the very 1st time.
2011	Emerging of other cryptocurrencies viz. namecoin, litecoin and swiftcoin. Bitcoin was found indulged in a controversial claim that it is being used for the payment of drugs and guns on the dark web(this allow users to remain anonymous or untraceable)
2012-2017	steadily cryptocurrencies started gaining transactions. There was a shoot in the prices of Bitcoin. At the starting of 2012 the price of bitcoin was around \$5 which shoots up to almost \$ 1000 by 2017. The period also witness the cryptocurrency exchange mushrooms in India that includes coinsecure, zebpay,unocoin, Pocket bits and Koinex. There were 2 press releases by the RBI on cryptocurrencies. The first was on 24th of December 2013 that says: “Virtual currencies are not backed by a central bank. Their value isn't underpinned by an asset and thus a matter of speculation The second, dated February 1, 2017 repeats these concerns.” It is not wrong to assume that the boom which cryptocurrencies evidenced after demonetisation was an unplanned or we can say unintended consequence of the experiment by the govt. That time there was too much emphasis on digital payments as a result people were searching for alternatives to traditional banking and drove tech savvy customers to cryptocurrency exchanges
Oct-Nov 2017	2 public interest litigation were filed with the supreme court; one was asking for banning of trading in cryptocurrencies whereas other was for regulation of cryptocurrencies in India. A committee was formed by govt. in November to study the issues related to virtual currencies and to look for proposed actions.
Dec - 2017	the ministry of finance and Reserve Bank of India issue statement on cryptocurrencies. The ministry compares cryptocurrencies to the Ponzi They issue more such statements but the status quo remains.

6 April 2018	suddenly everything changes. The RBI issued a circular preventing dealing in virtual currencies and providing services to all such entities that deals in cryptocurrencies. As a result, crypto exchange was unable to access banking services in India, and their business was crippled overnight. There was a fall in trading by 99% and by Aug 2018 95% of the jobs vanished.
15 May 2018	writ petition in the supreme court was filed by the several exchanges that were facing existential threat.
July 2019	Report was submitted by the committee recommending ban “private cryptocurrencies” in India
March 4, 2020	RBI’s banking ban on crypto was struck down by the Supreme court and termed 6th April circular unconstitutional. And one of the reason for overturning the ban is that cryptocurrencies are unregulated but they are not illegal in India. crypto market that was decaying was again jolted back to life. As a result, the price of the bitcoin jumps more than seven hundred percent between April 2020 to February 2021. However, rumours about the ban still continues.

### **3. Review of Literature**

A study conducted on cryptocurrency suggested that investing in gold is better in investing cryptocurrencies as gold is consistently giving stable returns. [1]

A study conducted on cryptocurrency to find out whether it's a boon or bane concluded that cryptocurrency has potential to replace traditional money and for that it must evolve and accept a secure network of currency exchange [2]

It was further concluded in a study that people are not willing to invest in cryptocurrencies as it lacks regulations by the govt. and regulatory authorities. [3]

One study discusses that if cryptocurrencies are present in the form of Lakshmi coins then society can be motivated to invest in the cryptocurrency which may help India to reach net platform of E-commerce. [4].

#### **1) Research Objective**

The primary objective of the study is to understand the meaning and evolution of cryptocurrencies and what are their future in India and what are the challenges before them.

#### **2) Research and Methodology**

This study is conceptual in nature and based on secondary data. And the information is based on authentic websites and sources.

### **4. Discussion**

#### **4.1 Trading**

There are so many crypto exchange platforms like Wazir X, Zebpay, Coinswitch kuber and Coin DCX GO that have made trading of cryptocurrencies very easy. The investor has so many alternatives to buy like bitcoin, etherium and dogecoin etc.

An investor can invest or withdraw money at any time on any day of the week as these platforms work on 24x7 basis. The buying and selling of cryptocurrencies is quite easier as user need to sign up on any platform and needs to complete their KYC and transfer their money on wallet and can start purchasing.

There is an option of setting pre decided limit for buying and selling of a cryptocurrency investor. There is no limit on buying of cryptocurrency. One can start with as low amount as he wants. Purchases are completed with the minutes after transferring of the amount from the wallet.

But the challenges before crypto currencies are that many of the banks are not interested to work with the crypto exchanges.<sup>1</sup>

#### **4.2 Reason to hold cryptocurrencies**

What to do with cryptocurrency is one of the important factor to consider, over the last few years the crypto market has grown exponentially but the fact is that one cannot do much with these currencies. These currencies can be compared with Gold or silver because these currencies are used for storing purposes. In fact, we can say that their accessibility is more than that of gold or silver because here one only needs a mobile and a good internet connection to purchase them.

“The purpose of Bitcoin is just like Gold, that is to store value. In fact, it is more accessible than Gold as you only need a mobile phone and internet to buy it. Gold can be liquidated more easily but, that’s what makes crypto more volatile as well,” Shetty said.

It is believed that apart from storing purposes cryptocurrencies have their own purposes. Example: Bitcoin can be seen as gold substitute whereas Ethereum can be seen as a global supercomputer substitute and can be used to run any global program by buying Ether cryptocurrency.

A coin’s value is decided by some factors:

Crypto scarcity: there is a general rule that anything that has limited quantity available will always have a greater value. Same applies to crypto currencies as well. We can say that this is among one of the reason for bitcoin’s popularity.

The world has around 21 million coins and most of them has started selling and the remaining one is becoming valuable.

If we look at Dogecoin it has no limit and that can be the reason that it might fail in the long run.

Crypto usage: the value of the coin also depends upon the usage of the coin. Some coins can be used for specific or within block chain of an ecosystem that makes it more valuable. While other coins have limited value attached to them.

#### **4.3 Benefits of cryptocurrency**

1. It gives protection from inflation: these coins are issued in limited quantity so as their demand increase their value will increase with the demand in future.
2. Decentralised: it is another benefit of having cryptocurrency, decentralisation implies that these currencies are free from monopoly of government.
3. Cost effective: this is one of the most cost effective mode of transaction and one can transfer money across borders. It removes the involvement of third party as a result of which processing fees is negligible.
4. Ease to exchange currencies: it can be bought using any currency like US dollar, European dollar, yen, rupees etc. different cryptocurrency wallet and exchange helps converting one currency into another by trading in cryptocurrency.

5. Secure and private: cryptocurrencies give topmost priority to privacy and security. These are based on block chain technology that use different mathematical puzzles that are hard to decode which makes it safer than ordinary electronic transactions.

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#### **4.4 Disadvantages of cryptocurrency**

1. Risk of data loss: since these are highly secured, if any user forgot their private key of their wallet there is no way of getting back their money.
2. Illegal transactions: because of their high security it is hard for govt. to track the transactions. It has also find out in past that people were using their illegal money to hide their sources.
3. Power lies in few hands: cryptocurrencies are known for its decentralised feature but still power lies with the creators and miners. These people can manipulate for swing in prices. Risk of manipulation is always there.
4. There is no refund or cancellation: in case of any dispute between the parties, or if someone mistakenly send money to someone else the coin cannot be retrieved.
5. High consumption of energy: mining of cryptocurrencies requires advanced computers and plenty of energy making it highly energy intensive.
6. Vulnerable to hacks: although cryptocurrencies are secure but it is not same with the exchanges. Most of the exchanges store the data of the user to figure their identification correctly this data can be stolen by the hackers

#### **4.5 Challenges before cryptocurrencies in India**

It is not wrong to say that crypto industries are at very initial stage in India. Major challenge before industries are poor infrastructure as a result of which exchange have to face inability in executing orders, and sometimes have to face server crashing and more.

Another challenge is that UPI transaction also doesn't work for the cryptocurrencies. So these are some challenges that user must keep in mind while investing in cryptocurrencies.

The other option of dealing in crypto currencies are P2P transactions that means person to person transactions and works as its name suggests. In P2P transactions user needs to search or find an interested seller or buyer with whom they can directly exchange the crypto. However, this is not easy as it seems. Especially when there are so many hypes about cryptocurrencies.

#### **4.6 Future of cryptocurrency in India**

RBI imposed ban on banks and other private financial institutions for providing services to any person or institutions dealing in cryptocurrencies in 2018. However last year supreme court overturned the RBI's order. As a result, some of the uncertainties has cleared about the legality of the cryptocurrencies and has contributed towards the rapid rise in the trading volume of the cryptocurrency. Notably, within the week of the decision of the supreme court trading volume in popular cryptocurrency exchange platforms such as WairX grew multi-fold times.

Other popular platforms like Coinswitch Kuber, zebpay, coin Dcx and buyucoin facilitate retail trading in cryptocurrencies. Coin switch kuber and coin dcx have managed to achieve unicorn status as their valuation crossing the \$1-billion recently

The users who have invested in bitcoins enthusiastically are seeing the rise in the prices of cryptocurrencies as they are of the belief that cryptocurrencies are viable alternatives for fiat money like dollar and rupees. Especially when El Salvador became the 1st country to use bitcoin as legal tender, so they seeing upside to the prices of cryptocurrencies and some of the users who are

attracted towards the cryptocurrency are of the view that their supply is limited by design hence their value is hard to fall and are of the view that it can replace fiat currencies.

However, there are sceptics that believe that scarcity is not the sole reason for any asset to be accepted as fiat money. they also believe that it is very hard in real world to purchase and but through these currencies.

India is in dire need to propose a bill on cryptocurrencies especially when the number of cryptocurrencies users exceeds 10crores whereas crypto platforms claims that there are 2 crores users in the country. Whatever the case may be but users number are large enough that it should not be banned.

And it seems government has dropped the idea of banning the cryptocurrencies in India. As recently govt. has announced that soon it's going to introduce a bill on cryptocurrencies and it will be treated as commodities. As per the sources government focus would be on the end use of the assets for regulatory purposes. It is also expected that bill outlines the tax treatment for such assets so that it can be clearly classified in the books of account.

Cryptocurrency bill may work as a game changer for the country. It may create innovation for large scale innovation and applications may be created where digital assets can be created. After the pandemic the government is also looking for more sources of revenue and some of it may be filled through the direct or indirect revenues generated through regulation of crypto. It may also make India an innovative powerhouse in digital assets.

There is a time in introduction of a new bill. But one thing is quite sure and that is cryptocurrency future is bright in India as without regulation the number of users exceeds crores and after regulation the number of users is going to increase.

## **5. Conclusion**

Although there is no bill on cryptocurrency still there are more than 10 crore active users of cryptocurrencies out of which 2 crores are from India only. India is the country to have highest number of cryptocurrency users. After knowing the number of users and seeing the craze among the youngsters govt. has decided to introduce a bill on cryptocurrencies. Finance minister announces 30% tax on digital transfer although the bill on cryptocurrency is yet to be passed and consultation matters are still going on. But the picture will get clear once the bill gets introduced.

## **6. Limitations of the Study**

The primary limitation of the study is that it is based upon secondary data and literature review.

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