



# IMPACT OF CRYPTOCURRENCY IN INDIA

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## ABSTRACT

Digital currency that you cannot touch but can store is known as crypto currency. It is a type of electronic money. A currency that is based on a computer algorithm is known as a crypto currency. It has no owner and is a free money. There is no single authority in charge of this currency. Like the rupee, dollar, euro, and other currencies, this one is typically not run by a state, nation, organization, or government. It is a form of digital currency that employs cryptography. Generally speaking, it can be used to pay for any kind of commodity or service. Numerous businesses have created their own currencies, frequently referred to as tokens, which can be exchanged for the specific product or service that the business offers.

Block chains are a type of technology that is used by crypto currencies. Block chains are a decentralized technology that manages and records transactions and is distributed across numerous computers. The security of this technology is one of its appeals. Because they were created as peer-to-peer systems, crypto currencies do not have a central authority to mediate transactions. This Paper examines public perceptions of crypto currencies, examines whether they are seen as secure investments, and examines their potential application in India as well as their benefits and drawbacks.

## Introduction

One of the sectors with the quickest growth in the present decade is crypto currency. Every internet user in the globe now has a wealth of opportunities thanks to digitalization and information technology. It is not incorrect to claim that the emergence of crypto currency was solely driven by the internet, the digital online world, and technology. People today are so digitally savvy that they prefer to do all of their business online, including shopping, restaurant ordering, service requests, meetings, and even cash withdrawals from ATMs. People already accept digital currency, which the government regulates through UPI, credit cards, and debit cards. And in the world of digital currencies, crypto currency is merely an increment in value.

When Satoshi Nakamoto created the first crypto currency in 2008 with only a small number of coins, the market capitalization was 829 billion dollars. On December 20, 2021, the total market capital for crypto currencies was 2.19 trillion dollars. Crypto currencies are a type of investing tool because they have the potential to provide incredible returns.

Using everyday language Crypto currency is a type of digital coin that can be traded online and has a variable value. With the aid of cutting-edge computers and cryptography, digital currency is mined. Decentralized and entirely reliant on supply and demand, crypto currencies are priced higher when many investors buy the same coin and lower when investors sell it. The crypto currency with a market share of more than 40% in this sector and high popularity among crypto enthusiasts is bitcoin. The top 5 coins with a high market cap are Ripple, Bitcoin, Ethereum, Salona, Binance, and Binance. In this sector, there are two main currency types: bitcoin and altcoin. In addition, we can distribute this altcoin in three sections.

### 1 SFig coin

A swig coin is one that tracks reserve assets like the US dollar or other precious metals. Due to the fact that it tracks the specified assets, it is a fig coin. Tether is a coin that tracks the value of the dollar. 1 tether is equal to 1 USD.

### 2 Tokens

Tokens can be used to assets, securities, or applications; some applications require a particular token for transactions. There are security tokens that are comparable to equity shares in this setting, as well as assets tokens that represent assets like paintings, houses, or other items (ICO).

### 3 Crypto currency

Is primarily utilized as money. Bitcoin, Lit coin, and meme currencies like Doge coin and Shibasaur..

## Objectives of the Study

1. To understand the concept of crypto currency and legal status in India
2. To study the advantages and drawbacks of Digital currency
3. To study the future of crypto currency in India
4. To study about the consumer awareness of crypto currency in India.

### Literature Review:

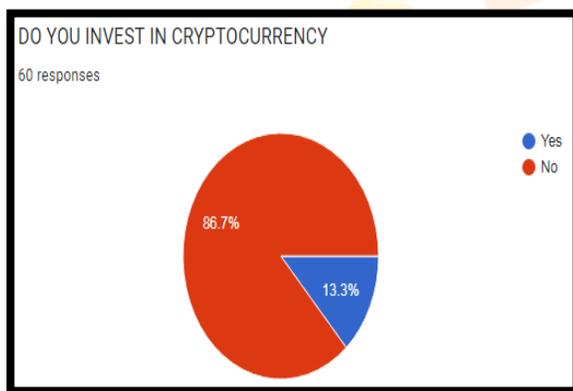
1. Dourado, Eli & Brito, Jerry. (2014) in their article Crypto currency examines the issues that have previously hindered digital money as well as the technological advancement that has made it viable. It talks about the Byzantine Generals Problem and the twofold payment problem. The study comes to the conclusion that although crypto currency is a remarkable technical achievement, it is still an experiment in money. Even if crypto currencies are still around, they might not completely replace fiat money.
2. Chan, Stephen; Chu, Jeffrey, Nadarajah, Saralees and Osterrieder, Joerg (2017) in their study Analysis of Cryptocurrencies Using Statistics analysed the statistical characteristics of the biggest cryptocurrencies (as measured by market capitalization), with Bitcoin serving as the most noFig example. The paper describes cryptocurrency exchange rates in relation to the dollar by fitting parametric distributions to them. Returns are demonstrated to be obviously non-normal, but no one distribution is found to match all of the examined crypto currencies well. We discover that the generalised hyperbolic distribution provides the best fit for the most well-known digital currencies, such as Bitcoin and Litecoin, while the normal inverse Gaussian distribution, generalised t distribution, and Laplace distribution provide good fits for the smaller digital currencies. The findings are crucial for risk and investment management.

3. Kristoufek(2013) who examines the connection of Google Trends data and Wikipedia activity to the price of bitcoin. The function of money and regulation from a perspective suggests Lemieux (2013) examines why it is not in the interests of governments for Bitcoin to be widely accepted. It would result in a loss of control, which would make carrying out monetary policy challenging or even impossible. This might drastically alter how states finance themselves. Lemieux claims that it is extremely doubtful whether the regulatory environment would permit further development of Bitcoin. He goes so far as to say that the regulatory state might just end the experiment. Although it would be extremely difficult, if not impossible, to destroy the Bitcoin network technologically, regulation can be used to influence the exchange points for fiat money and bitcoins.

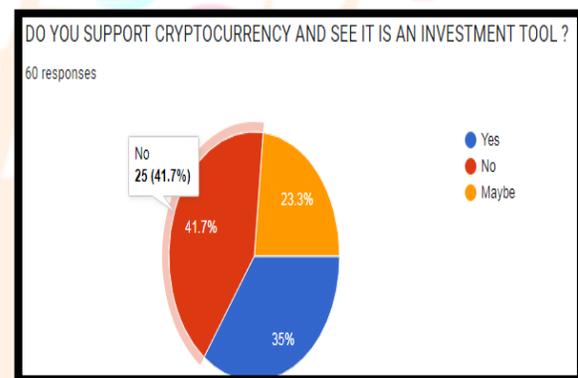
## RESEARCH METHODOLOGY

Primary and secondary sources of information were used for the current study. Referring to various sources such as journals, newspaper articles, websites and statutory reports. Primary information was collected by administering questionnaire to the online Google form serving in different working people. The sample size was set at 60 individuals.

## Data Analysis



**Fig:- 1**



**Fig:- 2**

Fig number 1 shows that 86.7% people are not investing in crypto, only 13.3 percent are investing! That means people are still not aware of this investment.

Fig number 2 shows that 41.7% of people are not supporting it and it is not as popular as traditional investment yet! 35% are supporting it, and 23.3% are still skeptical.

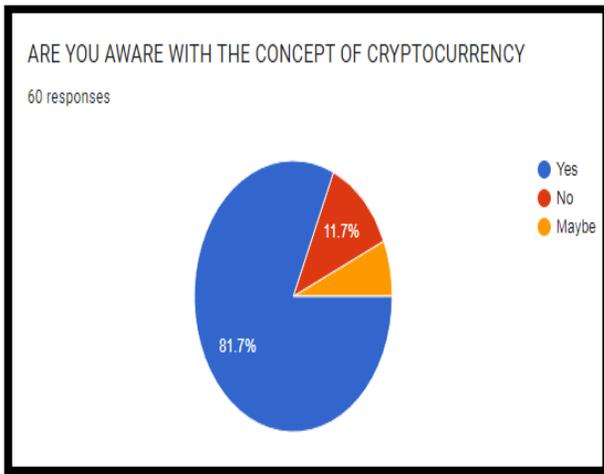


Fig . 3

Fig no 3 shows that 81.7% of people are aware of crypto, they know it very well! 11.7% of people still do not know much about cryptocurrency.

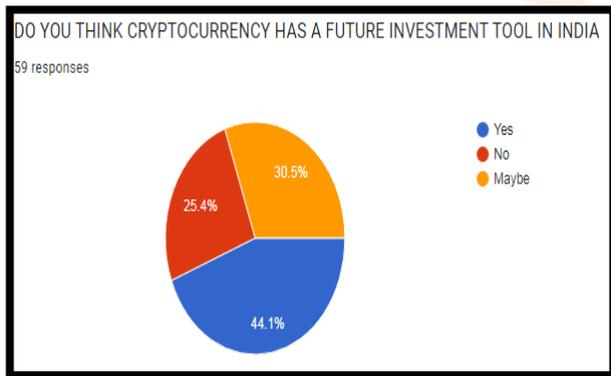
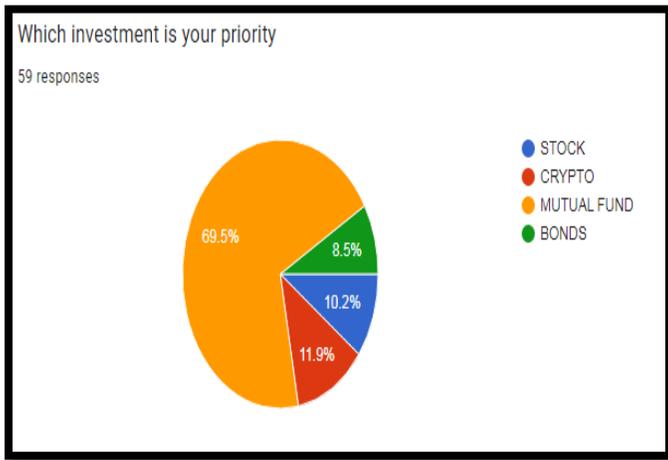


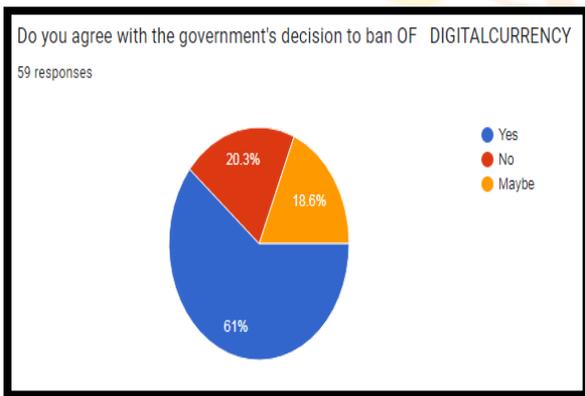
Fig. 4

59 people responded in which bitcoin is most favored by 44.1 % people consider crypto as future investment of India ,that it is slowly becoming popular 25.4% people did not believe, 30.5% people feared It is clear whether crypto will be popular or not.



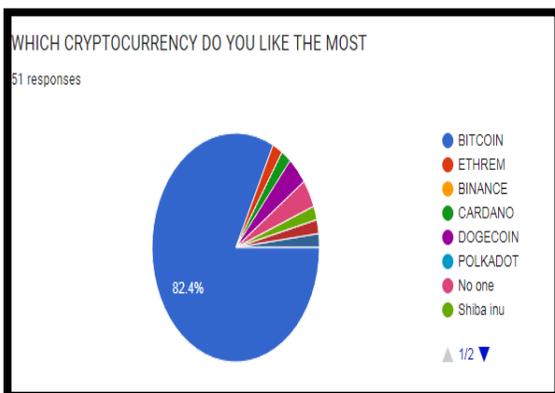
**Fig 5**

In Fig No. 5, 69.5% people preferred mutual funds as the top investment, 11.9% preferred crypto, 10.2% stock markets and 8.5 cents preferred bonds.

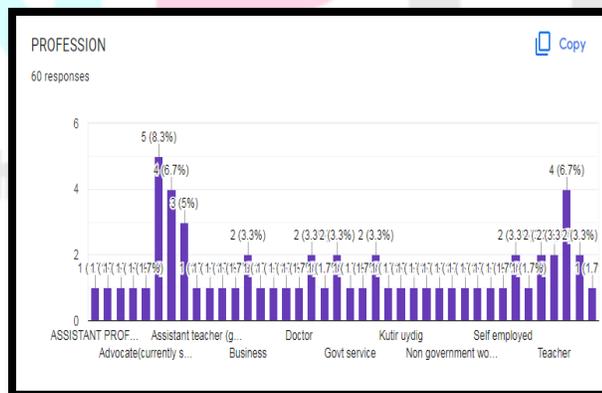


**Fig 6**

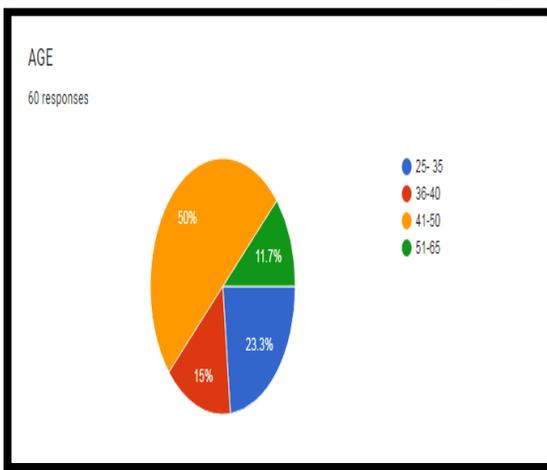
61% people accepted the ban as correct, 20.3% did not accept the ban, and 18.6% did not respond.



**Fig No. 07**



**Fig No.08**

**Fig No. 09**

## A rising Crypto-market in India

The Hon'ble Supreme Court of India, in its order dated 4<sup>th</sup> March, 2020 marked the re-birth of Crypto-trading in India after the RBI Circular dated 6<sup>th</sup> April, 2018 had virtually showed crypto-trading the exit door.

With the SC's order inculcating positive sentiments amongst the Indian market players, performance and trends in the crypto-industry, amidst the struggling economies has been rather noteworthy- Several reports and numbers suggest that local crypto-trading, especially on peer-to-peer exchanges has peaked, with several old and new crypto-exchanges being launched, re-launched as a direct impact of the Supreme Court Order. Further, Bitcoin trading volumes in India have surpassed the spike of December' 17, when the digital currency was enjoying an unprecedented bull run globally.

The SC order has also set the stage for several global players to establish crypto-currency exchanges in India. For instance, the global crypto currency exchange aggregator Coin switch is reportedly launching a crypto trading app for Indian users under the name and style of Coin switch Kuber.

Having said so, it cannot be overlooked that the Indian framework still lacks a sound and definite regulatory backing for the crypto-industry. This absence of regulatory framework or even a definite classification as money, commodity or goods has resulted in risk averse entities continuing to voluntarily following the ban imposed by RBI. Market players and related stakeholders have also expressed concerns rising due to absence of any framework at all. While the global stocks have had to bear the brunt of falling prices and reducing volumes during the initial stages of the lockdown, trading volumes in crypto-currencies, on the contrary have increased manifold. However, the increase in value has also featured its (in)famous significant volatility- as per latest exchange rates on Coin Desk, the between the 6 month's period from 1<sup>st</sup> January, 2020 to 30<sup>th</sup> June, 2020, the value of one Bit coin has ranged USD 10,367.63 to USD 4,944.70. As on 2<sup>nd</sup> July, 2020, the value of 1 bit coin is equivalent to USD 9,240.87 ~ INR 690,418.30. Similarly, in the first 6 months of calendar year 2020, the value of one Ethereum has varied from USD 284 to USD 107.90, currently standing at USD 230.70 ~ INR 17,183.28.

In another milestone, a report by Dune Analytics suggests that June trading volume on decentralized exchanges set a record high of \$1.52 billion, up 70% from May'20.

### Crypto-lending

Of the developments we discuss in this Note, the most recent one is 'crypto-lending'. Marking the most direct nexus with mainstream finance, Crypto-lending allows borrowers to use their crypto assets as collateral to obtain a fiat or sFigcoin loan, while lenders provide the assets required for the loan at an agreed-upon interest rate. This can also work in the reverse, where borrowers use fiat or sFigcoins as collateral to borrow crypto assets.

Available on centralized as well as decentralized platforms, Crypto-lending is conceived as a massive opportunity for crypto markets and users, which have traditionally had two options regarding how to use their crypto: hold or trade.

Quite evidently, centralized lending platforms act more like traditional fintech companies that happen to work with crypto currency, and follow traditional processes like KYC norms. As such, interest rates are determined by the company, which often include notably higher returns for lenders of crypto assets like Ether ([ETH](#)) and Bitcoin ([BTC](#)). Whereas, decentralized governance system determines the interest rates, these decentralized platforms have variable interest rates determined by supply and demand for an asset on the platform, as a result of which the decentralized platforms tend to see high sFigcoin interest rates (7%–15%) and lower rates for crypto assets like ETH and BTC (0%–1%), while centralized platforms offer more favorable rates for those crypto assets (2%–6%).

While lending would be the most basic utilization of this lending arrangement, another significant benefit is that of ‘rate arbitrage’ – it refers to the process of taking out a digital currency loan from one lending source, which has a low interest rate, and then reinvesting that same crypto sum elsewhere to earn a higher rate of interest

### **What will be the effects of a ban on cryptocurrencies?**

A ban will deprive India, its entrepreneurs and citizens of a transformative technology – as foundational as the internet itself – that is being rapidly adopted across the world, including by some of the largest enterprises such as Tesla and Mastercard. It will overnight erase enormous amounts of wealth held in cryptocurrencies by over fifty lakh Indians and deprive them of one of the greatest wealth-creation opportunities of the next decade.

Banning crypto currency, and not regulating it, will likely create a parallel economy where its illegitimate uses (such as for illicit trade or money laundering) will increase and legitimate uses will be abolished. This is what happened when the RBI imposed a banking ban on crypto-businesses in 2018- the largest crypto-startups in the country shut down. And all trade in crypto currencies moved away from responsible and sophisticated crypto-exchanges that followed safeguards such as extensive know-your-customer or KYC checks on traders, anti-money laundering measures and maintaining transaction records. Instead, over-the-counter platforms sprung up on Telegram channels that deal in cash and maintain no records.

There is a fear that traders may purchase crypto currencies using unaccounted money and use it for illicit transactions. This fear remains even if crypto currencies are banned. Any person can purchase crypto currencies over the internet in any case. However, since crypto currency create a public record of every transaction, it is in fact useful to prevent and trace crime. For example, using the crypto currency transaction trail, the FBI was able to [uncover](#) and take down a child-pornography website called ‘Welcome to Video’. The FBI was also able to trace the transaction to the site operator by tracing his personal phone number and email address. Merkle Science, a Singapore-based start-up founded by Indians, assists law enforcement agencies and regulators to investigate illicit crypto currency transactions and conduct diligence on the good practices adopted by crypto exchanges.

Issuing a digital official currency is a good idea for India. However, issuing a digital official currency but excluding other ‘private crypto currencies’ is not a good idea. Imagine it is the year 1993 and the government is concerned about the use of the internet by terrorists to send emails. To address this, the government builds its own email service. Had things played out in this manner, we would have lived with a singular email application and would not have benefitted from Yahoo mail, Hotmail, Rediffmail, and Gmail. This would have also prevented the creation of various internet-based applications such as social media (Facebook), chat services (WhatsApp), video steaming (Netflix) and e-commerce platforms (Flipkart) that were built privately on top of the internet. And, India would have cut herself off from the global digital infrastructure for e-mail communication. If the existing 1500 cryptocurrencies are the various applications of the internet, then an RBI-backed cryptocurrency will be akin to a local area network or a home wifi – limited in its potential and not inter-operable with other applications being built, and not allowing other developers to innovate on top of it. It is risky

to reduce the potential of all cryptocurrency applications to their use as currency; much like it would have been to reduce the internet down to email.

Further building an RBI-issued digital currency will be a multi-year project. To create a digital currency, tender it out, pilot it and eventually build it out on a pan-India level will take time. A few other countries that have declared their intention of building out centrally backed cryptocurrencies are merely evaluating these decisions from a policy standpoint or running pilots. For example, China has been running pilots since 2017. Hence, while India should pursue its ambition of having a digital currency, this project will not fill the vacuum left by a ban on “private cryptocurrencies” today.

Some state governments have already implemented blockchain based projects that do not require cryptocurrencies.

### **why do we need cryptocurrency?**

As discussed above, these projects are akin to building a local area network or a home wifi, and not the internet. Such localized projects can and should co-exist with other private innovation. Further, such projects, whether it is the ‘digital Rupee’ or state-run land records management, will require the government to build the entire infrastructure at its own cost. When these projects use an existing privately-built crypto currency network, the infrastructure is already built and can be used on a pay per use model. It is relatively easy to replace the infrastructure and move to a better service. Should such government services be operated on privately operated infrastructure? Yes, many government applications operate on the open internet. Additionally, the true potential of this technology is realized when it is used in a decentralised fashion. When centralised (i.e., when it is run by the government or an organisation on its own infrastructure), the records are only as safe as the central server is. A decentralised project on the other hand does not have a single point of attack and is considered highly secure.

Additionally, private blockchains are like centralized databases that are not interoperable. They will only result in isolated silos of information or data which will not be able to interact with each other. However, a public blockchain infrastructure will also offer interoperability.

Cryptocurrencies have an inherent utility as a technology. People also buy them to use them as a monetary asset, and demand and supply determine their value. Now this is similar to buying land – you can buy land to use it (build a house etc) or invest in it. Likewise, people invest in cryptocurrencies. These investments are used by cryptocurrency developers to fund further development of their projects. Given the tremendous potential of this technology, investments here will reap high returns. Taking a note of this companies such as Tesla are investing their treasury reserves in to bitcoin.

Interestingly, cryptocurrencies have delivered the highest returns on investments in a ten-year period than any other asset class in a lifetime. This is also to say that a critical mass of investors believe in the potential of the underlying technology.

Yes, cryptocurrencies can be volatile and open to speculative trades. There have been reports of frauds and market manipulation. However, such activity can be regulated through licensed intermediaries. For instance, certain countries only allow sophisticated investors (having a threshold net worth) to invest in cryptocurrencies.

Some cryptocurrencies such as bitcoins require a high amount of energy for ‘mining’ them. However, cryptocurrency mining activity in India is negligible. Electricity supply issues and unfavourable weather conditions make India an unfeasible market for cryptocurrency mining. India had also reportedly banned the import of a specific component of cryptocurrency mining equipment called ‘application-specification integrated circuits’ or ASIC. This is probably why cryptocurrency trading is far more popular in India than cryptocurrency mining.

## **Crypto and 2020- Trends to look for**

In light of the discussion above, noFig events, trends and developments expected in 2020, that are likely to shape the crypto-industry are-

### **1. Halvening of Bitcoins**

Occurring almost every 4 years, the Bitcoin Halvening, expected to come up soon is a key aspect of the bull case for Bitcoin in 2020. Bitcoin Halvening is a process whereby the number of new Bitcoin generated around every ten minutes is cut in half. David Steen[17], analyses that past halving events have shown that a price increase is bound to occur after each halving. In fact, technical analysts suggest thresholds as high as \$50,000 - \$250,000 by considering past growth cycles fuelled by halving events.

### **2. Introduction of Facebook’s Libra**

As discussed earlier, roll-out of Facebook’s Libra is expected to have a significant impact on the crypto-industry. While it is difficult to predict whether Libra will witness field-success, it is likely that Libra will heavily-stimulate the crypto market, as it proceeds to introduce 1/3 of the world to digital currencies.

### **3. Increasing Crypto-friendly Regulations**

Governments around the world are now aware that turning a Neslon’s eye to the fast-paced crypto-industry would only pull them down in the global race; and as such, crypto-friendly laws are increasingly being introduced in several economies, aiming to achieve an optimal trade-off between risk protection and innovation adaptation that cryptos bring.

## **CONCLUSION**

Crypto currency especially Bitcoin offers a new, effective and attractive model of payment methods that can boost companies and operators revenues. It also provide alternative method of payment, apart from real money, that enable users to make financial activities such as buying, selling, transferring and exchanging easily. Cryptocurrency can bring more positive changes to e-Business and e-Payment sector. However cryptocurrency doesn’t get that much of trust yet. Many concerns, challenges and issues are existing in many cryptocurrency platforms. Until cryptocurrency is being well regulated and controlled, users need to take

extra precautions of using such virtual money. So the lack of legislations is considered as the main concern in cryptocurrency systems. The silence of the RBI on the regulatory status of Bitcoins may prove to be damaging. An industry has grown around Bitcoins in India- traders, exchanges and merchants who accept payments in Bitcoins. Bitcoins have already gained wide acceptance around the world- hence banning them would not be an option in India. Instead, this industry would need to be regulated. The sooner this is done, the better.

All having being said, it is expected that with sufficient regulatory breaks and relaxations, cryptos will indeed see some interesting trends in 2020 and the near future. While its volatility may raise some concerns, recent mutated adoptions of cryptos are expected to take care of the same. arlier this week, the Supreme Court of India annulled the Reserve Bank of India (RBI) circular which aimed to curb cryptocurrency trading. The RBI is now planning to file an appeal because it is concerned that cryptocurrencies “put the banking system at risk”, reported The Economic Times.

Just last night the RBI took control of Yes Bank, the country's number four lender. That's the second bank in six months after the central bank stepped in over PMC Bank last September.

On April 6, 2018, the RBI issued a circular preventing bank from providing services to cryptocurrency exchanges. The tokens themselves are not banned. This led to the closure of several exchanges, accounts of some were frozen, and others shifted base out of the country.

In its Wednesday ruling, the Supreme Court said that the RBI ban was invalid. The court made three points. Firstly, in the last five years the central bank has not found that cryptocurrencies adversely impacted RBI regulated entities. Secondly, the RBI has not prohibited cryptocurrencies themselves.

And thirdly, an inter-ministerial committee considering legislation was of the opinion that a ban might be too extreme. Instead, the committee said the more likely regulatory route would be to classify tokens as securities and regulate exchanges. The RBI had previously sent out several circulars advising Indians to refrain from investing in crypto, citing high price volatility and a threat to the existing banking system. Another concern is anti-money laundering compliance.

At present, India does not have precise regulations in place for virtual currencies. In fact, a draft bill is proposed to ban crypto trading in India, but is yet to be Fig in the parliament.

As India is witnessing a booming crypto industry, several players are showing interest in investing and offering services for investors in the country. In that effort, cryptocurrency app Crypto Wire has launched a dedicated index for Indian investors. Named IC15, the first such index in the country will monitor the performance of the 15 most-traded crypto coins in the world. The company says it intends to create awareness about crypto and its underlying blockchain technology among investors. The launch has come at a time when there are some efforts from authorities to set rules to regulate the new industry as it unfolds.

The crypto bill, called the Cryptocurrency and Regulation of Official Digital Currency Bill, 2021, was expected to get Parliament's approval this winter session but it could not be done. The Reserve Bank of India (RBI), which is not excited about the private crypto coins, has said it is working to launch its own cryptocurrency.

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