

## The Maya of Bitcoin

Rajeev Dubey March 19, 2018

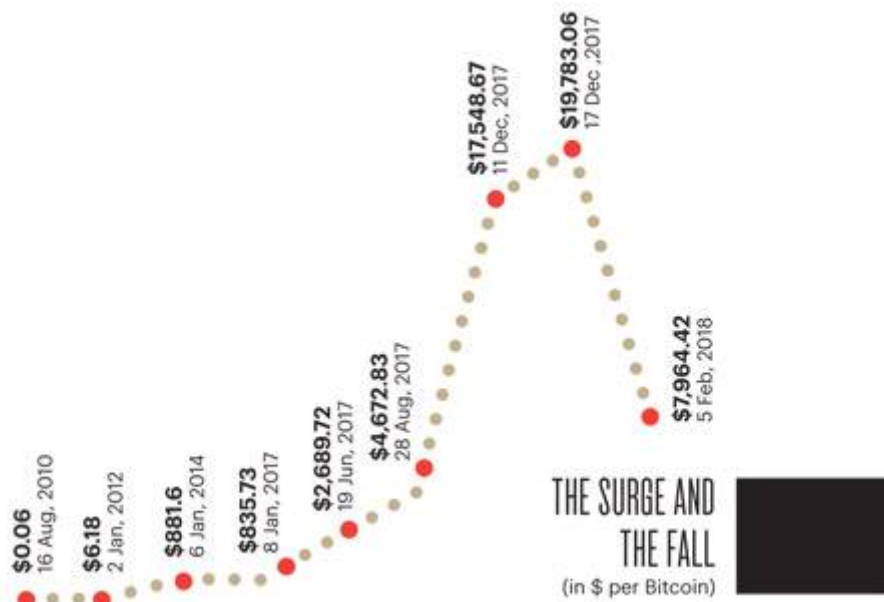
The rumblings from the Reserve Bank of India (RBI) are ominous. The banking regulator has issued four warnings against Bitcoin (BTC) and other crypto-currencies since December 2013, the last few explicitly calling it a ponzi scheme. Stock market regulator Securities and Exchange Board of India (SEBI) has made an oblique cautionary statement on the digital currency. And, after years of stony silence by the finance ministry, Arun Jaitley made a surprise declaration in Budget 2018: "Bitcoins will not be considered lawful or legal tender in India."

You would expect a nationwide clampdown after such overpowering sentiment from the regulators and the government.

Far from it.



Finance Minister Arun Jaitley



Two dozen Bitcoin/crypto trading platforms (8 large ones) are flourishing where you can buy and sell Bitcoins like you buy and sell stocks on any stock exchange. While regulation is still years behind the curve, 2-3 million investors trade between Rs 100 to 200 crore worth of crypto-currencies a day (Rs 36,500 crore to Rs 73,000 crore a year). That's \$6-12 billion in annual trading. After all, cryptos are traded 24x7, 365 days a year. Yet, crypto trading in India is minuscule compared to the daily global trade of \$4-6 billion.

At the same time, unsuspected millions are being duped by fake cryptos across the country with false promises of mind-boggling returns.

# THE JOURNEY

Illustrations by Siddhant Junde



**31 OCT, 2008**  
Satoshi Nakamoto  
(believed to be a  
pseudonym) releases  
white paper 'Bitcoin:  
A Peer-to-Peer  
Electronic Cash  
System'



**12 JAN, 2009**  
First Bitcoin  
transaction takes  
place



**JUN 2011**  
Wikileaks begins  
accepting Bitcoins  
for donations



**FEB 2013**  
Coinbase reports  
selling \$1 million worth  
Bitcoins in a month at  
over \$22 per BTC

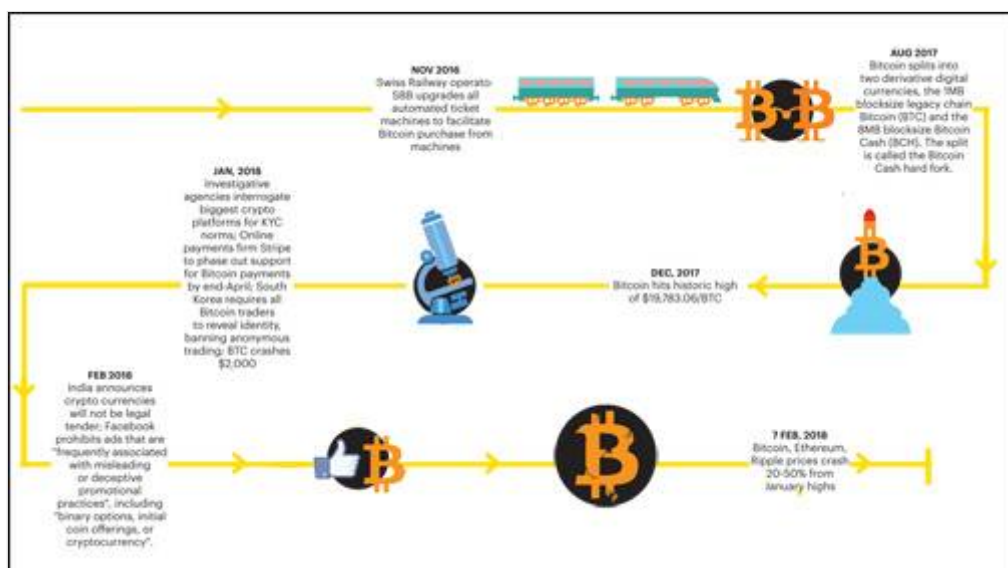
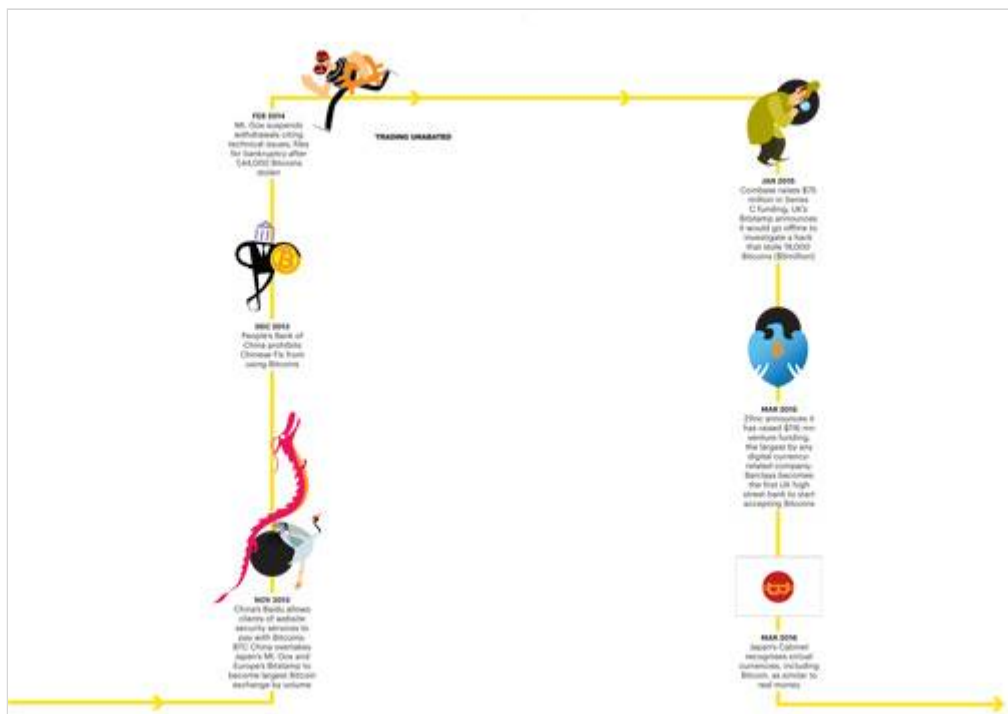
PHOTOGRAPH BY BANDREP JONCH



**JULY 2013**  
Kenya pilot links  
Bitcoin with  
M-Pesa



**JUN 2013**  
US Drug  
Administration  
lists 11.02 Bitcoins  
as seized assets;  
Thailand declares  
Bitcoin illegal



Therein lies the dilemma, the debate and the lazy disposition of regulators.

Bitcoin presents one of the trickiest regulatory challenges in recent times. Investors and millennials love it. Regulators hate it. And governments remain wary of its avatar as a currency as it challenges the might of the sovereign itself. This is clearly a historic tussle between the principles of free market and the universal expectation of regulatory oversight.

There's need for a middle ground, but that's the toughest part. Depending on which part of the world you look at, it's either a currency, a financial instrument or a commodity/asset class. That's precisely why countries and regulators around the world have failed to tame it, despite their best attempts. Regulators lob the ball at each other. They do not take that call, anyways. Governments do.

In April, Bitcoin is making history. In April 2017, Japan started accepting Bitcoins as a legal payment method. "We are (seeing) new type of compliance and governance now," says Kouhei Kurihara, President, Tokyo Chapter of Government Blockchain Association. In the US, states form their own laws. New York has issued Bitcoin licences. In Germany, its a financial instrument. Meanwhile, Canada launched exchange traded funds on Bitcoins/cryptos. In Switzerland, you can pay taxes with Bitcoins. The Japanese and the South Koreans are the world's biggest investors in crypto-currencies while the Chinese are the world's biggest miners. In India, there are telltale signs that rattled regulators and

the government remained clueless for at least five years about the gaping need and the expanse and spread of Bitcoins and crypto-currencies. They buried their heads in the sand, wished away the Bitcoin phenomenon and issued warnings to cover their flanks. The RBI declined comment on the subject. SEBI and the commodities regulator, Forward Markets Commission (FMC), did not respond to Business Today's queries. "...the government is in consultation with SEBI and RBI. Bitcoin may not be a systemic risk in India but there has to be a law to take action," SEBI Chairman Ajay Tyagi said at an event. The government has tasked a committee headed by the Economic Affairs Secretary to examine virtual currencies. The report is awaited. Niti Aayog Vice Chairman Rajiv Kumar says: "Banning (Bitcoin) doesn't help because it's beyond the government's ambit. Trading should be looked at by Sebi because it's the regulator. People must be smoking something if they are dealing in crypto-currencies."

Bitcoin's imminent death has been predicted for years. Yet, it has not just survived-but thrived. Thanks to the wild returns delivered. Depending on the lens you look at it from, it can be a punter's delight or an investor's nightmare. A BTC traded at around \$1,000 at the beginning of 2017. It skyrocketed to an all-time high of \$19,783.06 on December 17, 2017. Since it's not backed by any asset or sovereign guarantee, the BTC gyrates wildly. It can soar or slide as much as 40 per cent within hours. A BTC is currently ruling at \$9,624. "It's a volatile asset. Those who can't take risks shouldn't get into Bitcoins," says Saurabh Agrawal, CEO and Co-founder, Zebpay, India's largest crypto platform.

While Bitcoin remains the king of the crypto world, there are many other contenders. This includes Ethereum (Ether), the next most popular crypto currency, Ripple, Bitcoin Cash and Litecoin. All of them take their cues from the BTC price and sync accordingly. Despite the emergence of 1,800 new cryptos since Bitcoin, its global marketcap is still nearly half of all cryptos traded. Ether accounts for 15 per cent.

A supply cap of 21 million BTC by founder Satoshi Nakamoto explains the astounding rise in prices. Some 16.9 million have already been mined. In contrast, there are 98 million Ethers already in circulation at \$686.13 apiece.

## **TRADING UNABATED**

Jamshedpur-based Abhijit Kumar is a blockchain enthusiast and crypto trader and investor. He isn't worried about fluctuations. He caught the trend in December 2016 and is an early investor with 2.46 BTC. "I liked and loved the technology. I believe in Bitcoin as it is run by a community, not a government. After learning the truth about SIP, mutual funds and LIC, I was sick and tired of their tactics to make money. So I switched."

It is because of investors like Kumar that two dozen Bitcoin/crypto platforms have gained ground in the regulatory vacuum. Others are being set up. At an RBI meeting of crypto platforms, there were 40 representatives at hand. The largest, Zebpay, began operations three years ago and it claims nearly three million users. Of these, three-four lakh are active users (those who trade at least once a month). "When price is on the rise, we see new investors. Now educated investors are also getting in. Going forward, people will invest in other cryptos as well," says Agrawal, who now also offers Ether, Ripple, Bitcoin Cash besides Bitcoin. Zebpay says nearly `100 crore worth of trading takes place on its platform every day.

Coinsecure, which began operations in January 2015, claims to be the first real-time Bitcoin exchange in India. The company, co-founded by Benson Samuel and Mohit Kalra, was dabbling in Bitcoin mining between 2011 and 2013. Coinsecure claims daily transactions of around Rs 25 crore per day. It has 2 lakh registered users, of which about 40,000 trade every day. "Most platforms are brokers. They buy from one and sell to another. We're a realtime trading exchange," says Samuel.

Unocoin, set up in December 2013, claims 1.1 million customers. It handles trading of \$0.5 million to \$1 million per day.

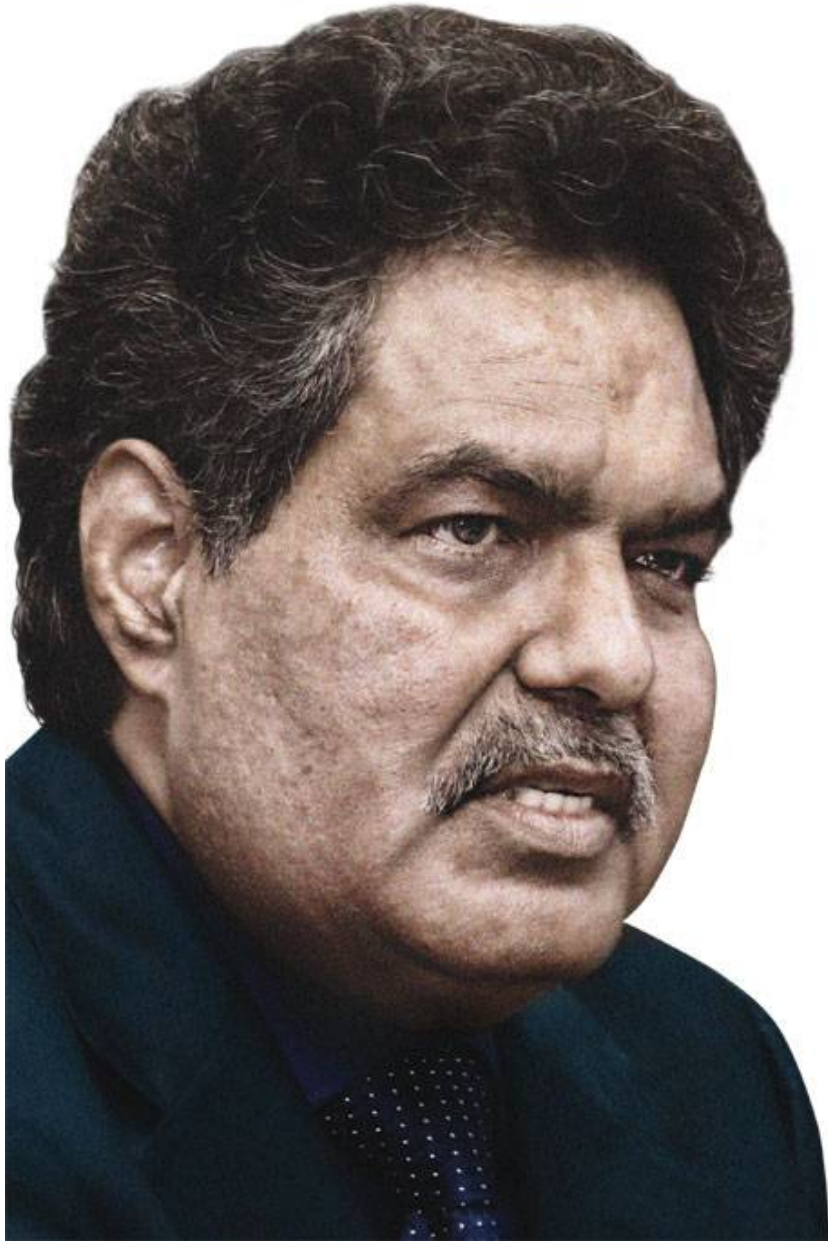
## **ALWAYS A CURRENCY**

Nearly a decade ago, on October 31, 2008, Satoshi Nakamoto (widely believed to be a pseudonym) released a nine-page white paper 'Bitcoin: A Peer-to-Peer Electronic Cash System' on bitcoins.org (the domain itself was registered on August 18, 2008). He described it as a revolutionary technology: "A purely peer-to-peer version of electronic cash would allow online payments to be sent directly from one party to another without going through a financial institution." The paper gave birth to the world's first decentralised, peer-to-peer payment system

That paper aimed to change the world, and it did. It had conceived Bitcoin as a currency to challenge sovereign currency regulators, to rebel against banks, as well as those who had established a vice-like grip over the world's money transfer mechanism, imposing usurious charges for movement of money. And it succeeded.

Nakamoto outlined the following 'properties' in his new electronic cash system that has no trusted third party: Double-spending is prevented with a peer-to-peer network; No mint or other trusted parties; Participants can be anonymous; Proof-of-work for new coin generation also powers the network to prevent double-spending. When BTC first transacted on January 12, 2009 (programmer Hal Finney received 10 Bitcoins from Nakamoto), it was already a rage among crypto fans. By February 2011, it achieved parity with the US dollar. Capitalising on that legitimacy, it rose 30 times in just four months that year.

Bitcoins are fundamentally different from banks. While banks have a centralised ledger, Bitcoins have a decentralised ledger across all computers globally that gets updated every 10 minutes. All this is achieved using cryptography and hashing technology. For validating new transactions, the computers are rewarded with new Bitcoins - it's called mining and is the process of updating Bitcoins ledger (blockchain). As users increase, mining gets tougher. The technology was rewarding 50 Bitcoins every 10 minutes around 2010. Then it became 25 every 10 mins in 2012. Today, it's 12.5 per 10 minutes and by 2020 it will go to 6.25 BTC/10 mins. This requires faster processors and hence more and more power. Whoever validates it the fastest earns the new BTCs. And since prices were on the rampage, mining was becoming profitable. "When I started, I could mine from laptops. That's not possible any more." says Mohit Kalra, CEO & Co-founder, Coinsecure. How do you trust transactions? Most companies seek the blockchain trail from between 3-6 sources. Maximum affirmations of a trail make it the most trusted transaction in the blockchain.



Ajay Tyagi, chairman, Sebi

## **A QUESTION OF LEGITIMACY**

While Bitcoin rose relentlessly over the past five years, it was attracting millions of investors. Yet, neither the government, nor the regulators prevented its spread nor regulated its operations. As a result, Bitcoin and crypto platforms have not just flourished but gained legitimacy from the inaction. Wide-eyed investors continued to pour in hard-earned money in the hope of a quick buck. "Right now, a lot of regulatory authorities are looking into it. Since 2013, every year RBI has issued a warning. This is the maximum they can do. It's definitely not illegal," says Coinsecure's Samuel.

While the government is still to decide the status of Bitcoins and cryptos, it has explicitly declared it's not legal tender. That implies Bitcoins can't be used as currency. "Since December 24, 2013, the government and the Reserve Bank of India have maintained the

same stand on Bitcoins and other forms of virtual currencies. Through multiple notifications, the two parties have notified the public time and again that Bitcoins will not be considered lawful or legal tender in India," Finance Minister Arun Jaitley said in his Budget speech. "These are things we already knew. The government has not taken a view on whether these are legal or illegal," says Ajeet Khurana, Head, Blockchain & Cryptocurrency Committee, Internet and Mobile Association of India (IAMAI). "The government has chosen not to ban. We see this positively. If people still want to participate, we will come out with a framework."

Jaitley also coined a new term: crypto assets. Perhaps, an indicator of the government's line of thinking that trading on Bitcoins/cryptos may be allowed either as an asset class (such as real estate) or as a financial instrument (like share trading). "It's an asset class and trading class kind of commodity," says Coinsecure's Benson Samuel.

Meanwhile, trading platforms are grappling with allegations of a 'Bitcoin bubble'. "It cannot entirely be a bubble either because people now know how it works," says Samuel. Others are more guarded. "We can't say whether it's a bubble or not. It's for countries to do the research. We provide trading," says Unocoin's co-founder & CEO Sathvik Vishwanath.



RBI governor Urjit Patel



The Ministry of Finance established a panel -with officials from the RBI, SEBI, Ministry of Electronics and Information Technology and finance ministry -that called exchanges and invited regulations. The data was submitted to the ministry.

"An RBI inter-disciplinary committee

asked for feedback about six-seven months ago. We gave our feedback," says Unocoin's CEO Vishwanath. Meanwhile, Income Tax authorities sent lakhs of notices to crypto investors to explain their source of income and declare their crypto earnings. In February, government investigative agencies interrogated almost all major Bitcoin and crypto trading platforms for traders' KYC details. "In a few cases the cyber cell has taken data," says Kalra.

But a few banks, particularly HDFC Bank and ICICI Bank, have begun a unilateral clampdown, asking platforms to freeze or shut their current accounts. Yet, other banks continue to allow it. "When the underlying activity is legal, not allowing legal methods to transact amounts to abuse of power," says IAMAI's Ajeet Khurana. Platforms say such disruption has hurt their business by 20-50 per cent. Fearing delinquencies, global banks such as Citigroup, JP Morgan and Lloyds Bank in the UK and US have banned purchase of cryptos on credit cards. Citi and HDFC have banned it in India too.

## **PIT STOP: SELF REGULATION**

Crypto platforms always feared that the blurring lines between 'unregulated' and 'illegal' would invite an investigative onslaught or a regulatory clampdown. "The question of legality continues to exist. But we believe it's an unregulated market. We believe our regulation is good," says Zebpay's Agrawal. RBI warnings are always for the customer, asserts Coinsecure's Kalra. "No warning has said that we can't set up an exchange or a wallet," says Kalra. "Bitcoin is so disruptive. It's very difficult for any government to come out with regulations. Unofficially, bureaucrats and department officials have told us what to do," adds Kalra.



Saurabh Agrawal, CEO and Co-founder, Zebpay

"The RBI doesn't recognise us. They had meetings with us a few months back. We interact with the ministry of finance. They don't ask us to give any reports," says Agrawal.

However, with the growing public scrutiny, crypto platforms decided to create a self-regulatory authority in 2016-Digital & Blockchain Foundation Assets Foundation of India (DABFI). "We talk to each other in the industry for governance. We follow everything that banks do in terms of KYC and transparency," adds Benson Samuel of Coinsecure.

DABFI has morphed into IAMAI where the representatives of the crypto platforms are also joined by an RBI representative, besides those from the Niti Aayog and SEBI. All exchanges/platforms submit their revenue, profits, sales and inward and outward remittances to the RBI every year.

Zebpay, for instance, engaged law firm Nishith Desai & Associates which recommended self-regulation: "Nishith Desai suggests we follow KYC norms just like the banking system. Also, an anti-money laundering policy, audit by third parties, proof of reserves of BTC/cryptos with the exchange. It has also recommended minimum capital guidelines of Rs 50 crore for Bitcoin/crypto exchanges," says Zebpays Agrawal.

"All transactions are via bank accounts. No cash is used. We have a ceiling of a maximum transaction of five Bitcoins per person per day," says Unocoin's Vishwanath. To prove legitimacy, Coinsecure's Kalra even points out that the platforms actually pay GST on transaction fees: "We pay income tax and GST. At 18 per cent of all fees (0.4 per cent of transaction fees from buyers and sellers). We collect customer's KYC."

"The adoption rate is rocketing. Crypto-currencies are also beginning to be understood by regulators. There is no chance of them being extinguished unless the internet turns off or every government in the world bans crypto (impossible)," says Michael Gord, founder & CEO of Ontario-based MLG Blockchain Consulting.

## **THE BAN CLUB**

Nakamoto's remarkable invention has sharply polarised the financial world into Bitcoin/crypto-currency lovers and haters. For every Japan that has legitimised it, there's a China that has banned it. For every Canada that has allowed trading, there's a South Korea that has disallowed it. Fence-sitters, such as India, that let it take root are coming into their own.



Sathvik Vishwanath, co founder and CEO, Unocoin

Bitcoin is still to recover from the twin blows during January and February, when, within days, South Korea banned it and India declared it 'not legal tender'. Soon after, Facebook issued a new advertising policy banning ads for "financial products and services that are frequently associated with misleading or deceptive promotional practices, such as binary options, initial coin offerings and crypto currency". Now, Google has also announced that it is changing its financial services advertising policies, effective from June 1, 2018. It will not allow advertisements about crypto-currencies across any of its platforms.

Bitcoins price fell from a historic high of \$19,783 on December 17, 2017, to a low of \$7,178 per BTC, before recovering to above \$9,000. Average daily transactions have dropped from over 0.4 million when the price was at its peak to less than half, at around 0.2 million now. The last time it was trading such numbers, Bitcoin was priced at barely \$500. "The beauty of cryptocurrencies is that they are regulator proof. No government can prevent the rise of cryptocurrencies. They would need to literally shut down the internet to do so," says Thomas Glucksmann, APAC Business Development, Gatecoin.



Warren Buffet

## INDIA'S BITCOIN

Banking regulators worldwide loathe crypto-currencies because they could undermine their position as the sole issuer of sovereign currencies. Thus, Bitcoins/crypto-currencies in India will likely be defined as an 'asset'. But that would be playing with fire. First, Bitcoin was always intended to be a currency. Second, they are already integrated into the formal system as a mode of payment and are being freely used as currencies. Hence, they ought to be defined as currencies and treated like one-with adequate restrictions. After all, the RBI is mulling its own blockchain-based currency 'Lakshmi'. "The need of the hour is to introduce the law in the shortest possible timeframe with the implementation of artificial intelligence and machine learning algorithms," says Prity Khastgir, CEO at Tech Corp International Strategist.

In most countries, the debate around the nature of Bitcoin starts at defining what kind of an animal it is. In India too, the prospective regulation has fallen through the cracks between the RBI, SEBI and FMC.



Janet Yellen, Former Chair of the Federal Reserve

But the biggest reason why a middle ground is needed is the fear that disallowing Bitcoins/cryptos will move them to the dark web—a bigger regulatory headache. "Bitcoin is a Trojan horse. Attempt to extinguish it will only serve to make it stronger. Bitcoin will survive for as long as the internet survives," says Brett Russell, author of 'Understanding Bitcoin in 46 seconds'.

Can a regulatory clampdown migrate bitcoin trading to the dark web? "One needs to be extremely smart to be on it. The FBI and regulators have been sifting through the dark web. Those into it are not a mass number," says Coinsecure's Samuel. Such fear of the dark web invites all the arguments that are favoured for the sin economy: 'If you can't ban it, legalise it'. For India, that's better late, than never.

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## THE ICO MUDDLE

Initial coin offerings have raised over \$3.7 billion, worrying regulators globally

Bitcoins and cryptos are not the only enigma for the world's regulators. They have another headache to deal with—Initial Coin Offerings (ICOs). Some fear this may be akin to the housing bubble of the US where tier upon tier of investing options were built on crumbling underlying assets which eventually brought the whole market crashing down.

ICOs are essentially IPOs of two kinds: One, that raises funds for a new crypto-currency on the lines of a Bitcoin or Ripple. These offer digital tokens to investors at a fixed price that can be swapped for the new crypto-currency at a future date once it gains in popularity.

The second kind are those that use the proceeds of the ICO to start up a company. These digital tokens promise exchange with equity during angel, venture capital or private equity funding in the future. Or, when the company goes for its own initial public offering.

These crypto-tokens issued via the ICOs are traded on independent exchanges which makes them transferable.

In November, 2017, European Securities and Markets Authority warned about a 'high risk of losing all capital' on ICOs. Earlier, the Securities Exchange Commission of the US had also alerted investors against ICOs being endorsed by celebrities once Paris Hilton and boxer Floyd Mayweather flooded Twitter with their own.

While companies going for IPOs have to get approvals from the stock market regulators, ICOs have nothing more than a business plan to offer. Yet, global ICO funding, especially in the US and Europe, has already crossed \$3.7 billion in three years.

People's Bank of China (PBC), has barred companies from raising funds via ICOs, calling it illegal. PBC also clarified that digital coins and trading platforms are banned from converting coins with Yuan and vice versa. On 30th January, the US SEC moved court to block 'decentralised bank' AriseBank after it said it raised \$600 million through the world's biggest ICO ever.

India's markets regulator SEBI has yet to decide on allowing ICOs as a means for raising funds.