

# GAINING CURRENCY

The Supreme Court's move to lift an RBI ban on cryptocurrencies has shifted the focus to decentralised finance. These virtual currencies can change the way the banking and finance sector works



## WHAT IS BLOCKCHAIN?

A blockchain is a list of records called blocks. Each block is linked cryptographically, and it consists of a time-stamp and transaction details. When a transaction is initiated on the blockchain, millions of internet-linked computers distributed around the world verify the transaction. The verified block is linked to the chain and stored on the net for anyone to see or audit. The data on the blockchain is identified by a "public key" – but not everyone knows who holds it (much like a smart user ID). The blockchain is an immutable cryptographic chain, and it cannot be corrupted. The blockchain cuts down the "middlemen" in a transaction and makes it peer to peer. So for a simple money transfer transaction, you don't need to send money via a bank or payment gateways, you may simply pass cryptos (worth the money you want to send) to the person on the receiving end. It's a much cheaper way of money transfer than traditional channels.

## WHAT IS DECENTRALISED FINANCE?

Decentralised finance or DeFi refers to an ecosystem of financial applications built on blockchain networks. This form of finance would be open-source, transparent and would not have a central regulatory authority. Using cryptos as the underlying asset, DeFi has the potential to create new financial products and services on the blockchain.

### :: Shailesh Menon

Vibhor Jain, the founder of Chained Ventures, has been rather unlucky dealing with institutions providing financial services. In 2019, he had almost signed an agreement with Yes Bank to co-brand and distribute an all-in-one prepaid card designed by his fintech startup. The deal fell through as Yes Bank sank deeper into a pile of bad debts late last year and the Reserve Bank of India (RBI) reconstituted its board.

Undaunted, the 24-year-old businessman got into a similar co-branding deal with German payments firm Wirecard early this year. As things started to look up for Chained Ventures, Wirecard found itself embroiled in a multi-billion-euro fraud spread across continents. In end-June, Wirecard filed for insolvency.

Talking to *ET Magazine* over phone from his Delhi office, Jain says he now has enough experience to list all the problems with traditional banking and finance. Alluding to the collapse of institutions such as Punjab and Maharashtra Co-operative Bank, he says these put depositors in misery. "I wouldn't want to keep all my money in a bank." Apart from the stability issue, the



"Not accepting cryptocurrencies may damage local economies in the long run. Governments must realise that cryptos will not replace fiat currency. In fact, both can coexist"

**Changpeng Zhao,**  
CEO, Binance

current low interest on deposits also encourages people to look at other options. "I'd rather buy some stablecoins (cryptocurrencies pegged to a fiat currency), put them on the blockchain and earn 9-12% interest on my crypto-deposit."

The 24-year-old is among the several young Indians who are increasingly getting drawn to the world of cryptocurrencies and the way it can change banking and finance the way we know it today. While rumours are rife that the government is working out ways to ban cryptocurrencies (or cryptos), a clutch of tech startups and a few foreign players are laying the groundwork in India to introduce decentralised finance – or DeFi, which simply involves providing banking and financial services with cryptos as the medium of transaction. This system doesn't have a middleman or a regulator. (See box "What is Decentralised Finance"). These startups were perhaps emboldened by the Supreme Court's decision in March to overturn an RBI ban on cryptos.

The founder and CEO of crypto bank Vault, Dar-

## CRYPTOS: FACTS & FIGURES

**\$1bn**  
worth of global cryptocurrency market

**6%**  
compound annual growth rate seen in market

**1%**  
of global crypto trading volume is seen in India

**\$70-80mn**  
worth of daily trades done in Indian crypto exchanges  
**₹25,000-30,000**  
worth of average trades

**15-20 times**  
growth seen in user-base of top Indian crypto exchanges since March 2020

**9-12%**  
interest earned by Indians lending their crypto deposits

**20%**  
long-term capital gains tax on crypto earnings

Japan legalised Bitcoin and other cryptocurrencies in 2017

USA, Japan, South Korea, UK, Russia & China leads the global crypto market

Source: TechSci Research, Industry data



## ARE CRYPTOS LEGAL?

There are no laws that prohibit cryptocurrencies in India. “Cryptos are operating in a regulatory vacuum. Therefore, it is not illegal to buy, sell or deal in digital currencies,” says Mohammed Danish, an advocate and cofounder of Crypto Kanoon, a platform for blockchain regulatory news and analysis. Cryptocurrencies are not considered legal tender in India. But that doesn’t stop you from selling your old car to a friend for a few Bitcoins. “According to the Contract Act, for every commercial dealing, there has to be a consideration. But nowhere has it said the consideration has to be in a form of fiat money,” Danish adds.

## TAXATION & CRYPTOCURRENCIES

There are no provisions in the Income Tax Act on taxability of cryptocurrencies. Therefore, the taxation will depend on the regularity of transactions and treatment in the books of accounts. “Since cryptocurrency does not fall within the definition of currency under the current statute definitions, the gains would be taxed either as income from business/profession or as capital gains,” says Riaz Thingna, director, Grant Thornton Advisory. Crypto investors will have to bear long- or short-term capital tax depending on the holding period. Long-term gains would be taxed at 20%, while short-term gains would be taxed at the individual slab rate. So, will I have to pay tax if I sell my old car to a friend in exchange for cryptocurrencies? “Well, if that is legally possible, the taxability would depend on whether the car is for personal use or business use. If the car is for personal use, the transaction will not be taxable. If it is for business use, the gains from sale of the car – value of cryptocurrency minus the cost of car – would be chargeable to tax in your hands as capital gains,” Thingna explains.

# “Wrong to Say Cryptos Have No Worth”

**Kenneth Saul Rogoff**, professor of economics at Harvard University and former chief economist of the International Monetary Fund, says governments will not allow a lot of cryptocurrency-based transactions to take place anonymously. “Betting on cryptocurrencies gaining widespread use is a bet on dystopia - a breakdown of governments worldwide,” the economist who is also a Grandmaster tells **Shailesh Menon** in an email interview. Edited excerpts:



### What is the future of cryptocurrencies?

Outside dysfunctional and war-torn states, cryptocurrencies are likely to remain on the fringes of the digital payments’ space. Governments cannot and will not allow a significant quantity of transactions to take place anonymously.

### But why are cryptos upsetting governments and central banks the world over?

If an economy ran entirely on cryptocurrencies, the government concerned would have an extremely difficult time collecting taxes, enforcing regulations and limiting criminal activity. Admittedly, we have to distinguish between transactions in regulated exchanges and peer-to-peer transactions that are more difficult to trace. But once the allure of anonymity is stripped away from cryptos, there are really no other advantages that cannot be duplicated – in principle – by other kinds of digital payment mechanisms, once payments infrastructures are upgraded.

### Detractors say cryptocurrencies have no value.

It is wrong to say cryptos have no worth simply because they don’t have backing. If a cryptocurrency were to prove uniquely valuable in making certain classes of transactions – and if its supply were limited – it can have value as a transaction medium. And if it has value as a transaction medium, it can be a store of value. But there are several important caveats. First, if there’s no anticipated transaction use, cryptos are not a good store of value either. Second, because it is always possible to create new versions of cryptocurrencies, there is really no limit to the quantity that can be created, and thus no scarcity and no value. I don’t want to overstate this limitation, though, because it can take years to adequately stress-test a new security protocol. So older generations of

crypto that have proved to be durable are more valuable for that reason – but only up to a point.

### Crypto investments are touted to be a natural hedge against poor economic growth and weak currencies.

Very low interest rates around the world have raised the demand for art, houses, stocks, precious metals, etc, and cryptocurrencies have also greatly benefited.

### Does India need cryptocurrencies?

All major countries are continually rethinking their payments mechanisms as technologies evolve. In direct answer to your question, it is not at all clear that blockchain will ever be an important part of the payments system. But it is too soon

to know. One reason why regulators have been slow to act in this space is that they want to see whether ideas from cryptocurrencies might help them see how to better protect the existing payments structures on which the global economy depends.

### Decentralised finance is becoming popular along with cryptos. Is it not a great idea?

This libertarian view is rather naïve, at least outside failed states. My sense is that most of the crypto community has completely abandoned the view that cryptos are a long-term strategy for avoiding governments. One only has to look at the recent experience of Seattle’s police-free autonomous zone to get a glimpse into such a future. And governments will always prevail when it comes to controlling the medium of exchange. As I emphasise in my 2016 book *The Curse of Cash*, a government can always shape the rules of currency competition to ensure it wins.

### What does this trend of countries, including India and China, having their own digital currency signify?

Central banks around the world are looking hard at instituting retail digital currencies that allow ordinary people to hold claims directly on the central bank. It is too soon to tell what model will work best. Both China and India are far ahead of the US in digital payments, and although there is no possibility whatsoever of challenging the dollar’s supremacy in the near term, the fact that the USA has been so slow to move in the space could ultimately be problematic. The India Stack has been a huge innovation, and allowed it to have, by some measures, broader financial inclusion than the US. China’s nascent digital currency framework is designed to be very gradual, in the first instance replacing most cash. But they do not intend to replace bank accounts.

shan Bathija, says DeFi is “a well-paved super highway, without any speed limit” that can achieve any banking or finance-related objective with cryptos as the base asset. Startups like Vault, Nuo Network and Cashaa and crypto-exchanges such as CoinDCX and WazirX have started offering “bank-like” products such as saving accounts as well as credit, payments and remittances options. However, the base currency they use are top line digital currencies such as Bitcoin and Ethereum and stablecoins such as Tether and USDCoin.

Bathija says the crypto network is already doing the basic functions of a traditional banking system that stores money, facilitates payments and gives credit. “Credit – which involves loans on one side and interest on the other – is also happening in smaller measures.”

A crypto savings account deposit can earn interest of 8-13% per annum. Buying



“A traditional bank helps you store money, facilitate payments and get a credit. The crypto network is already doing these”

### Darshan Bathija,

founder and CEO, Vault

and lending using certain cryptos can give returns of up to 20%. But, experts warn, lending lesser-known cryptos on relatively unestablished DeFi protocols could be risky. It is pretty much like trading weak fiat currencies on not-so-secure exchanges, they say. Vault’s “savings account” yields 8% on crypto deposits. “Interest will go up once there is more demand for cryptos,” Bathija adds.

Sumit Gupta, founder and CEO of CoinDCX, an exchange that offers crypto-lending opportunities, says: “The industry is trying to set up a basic infrastructure for DeFi currently. We’re solving problems related to tech-adoption now. Cryptos will get a boost once all elements of DeFi are in place.”

No doubt people like Jain of Chained Ventures are interested. Thousands of Indians weary of getting 3-4% interest on savings bank deposits are looking at bet-

ter “banking options” in the world of decentralised finance – where there are no central banks or governments meddling with the natural flow of money.

Some like Prashant Aduarty, the COO of alcohol delivery app Hipbar, see cryptos more like an asset than a currency. “I am just trying to sweat my crypto assets a bit, by lending them out and earning a fee for it. Last six months, I pocketed 9-11% gains. That apart, I am also getting some capital appreciation as my dollar-linked stablecoin is gaining strength over the rupee.”

Stablecoins like USDCoin are pegged to the dollar, while the value of Bitcoin and Ethereum, among others, is based on the demand-supply dynamics.

There is a niche global market where some cryptos can be used for liquidity pooling or leverage trading. This route, mostly used by hedge funds and others, gives crypto holders space to generate

## 2019: A YEAR OF CRYPTO HEISTS

**\$70,000**

worth of cryptos stolen from Italy-based Altsbit

**\$500,000**

worth of cryptos stolen lost from Vietnam-based Vindax

**\$49 mn**

worth of Ethereum stolen from South Korea-based Upbit

**\$30 mn**

worth of cryptos lost from Japan’s Bitpoint

**\$5 mn**

worth of cryptos lost from Singapore’s Bitrue

**\$9.5 mn**

worth of Ripple lost from UK-based Gatehub

**\$40 mn**

worth Bitcoins stolen from Binance

**\$7 mn**

worth of cryptos hacked from Singapore’s DragonEx

**\$13 mn**

of cryptos lost from South Korea’s Bithumb

## “Cryptos are Entirely Useless Products”

**Subhash Chandra Garg**, former finance secretary who is now advisor to the CM of Andhra Pradesh, had led the committee that in 2019 recommended banning of cryptocurrencies. He says blockchain-driven currencies will cease to exist in five years. In an interview with **Shelley Singh**, Garg insists these are risky and speculative assets not backed by any government authority and people should be protected from cryptocurrencies. Edited excerpts:



**In 2019, you led a committee that recommended banning cryptocurrencies. Your main objection is that cryptocurrencies are not backed by a government?**

Any currency represents a kind of purchasing power. It has to be issued by a relevant authority and tightly controlled. If a private individual issues a currency tomorrow, it will have no value. Likewise, if cryptocurrency is used as currency, you are usurping a value for private gain. The issuer of a cryptocurrency gets a valuable currency – rupee, dollar, etc – but the buyers get unofficial, speculative, risky, valueless currency. That has to be avoided. You can't allow private currency in digital or crypto form.

**But can we afford to ignore cryptocurrency?**

When everything is getting digitised, currency should too. The day is not far when digital currency will come into being. But cryptocurrency is not the only option. Blockchain is one, the other is demat currency or database currency.

**In demat currency, the old structure and problems remain. Cost of transferring money is expensive. Cryptocurrencies allow a better transfer system.**

This is a good question. In fact, cryptocurrencies were born out of a desire to make international payments for goods and services frictionless and costless. The Unified Payments Interface – which the government, central bank and NPCI brought about – is a frictionless, instantaneous transfer system that is virtually costless. So you don't need a cryptocurrency for domestic money transfers.

International transfers require similar integration of databases. Suppose there is a super NPCI that can bring Indian banks and, say, banks in West Asia together. You don't need cryptocurrencies for that either. What you need is to create an integrated digital database.

So cryptocurrencies are not the answer for that. In fact, these are not being used for payments but as an asset, an investment vehicle. That is why we suggested that cryptocurrencies are crypto assets. You can securitise commodities.

But there is no case for these as currencies.

**So you believe its risks are far more than the benefits?**

It is all risk and no benefit, or very little benefit.

**Would monetary policy could go out of the government's hands if cryptocurrencies are allowed?**

A monetary authority maintains the value of currency by controlling the issuance. RBI does not issue currency haphazardly, but in a well-calibrated way. The moment a private party can issue a currency, monetary policy goes for a toss.

**But if cryptocurrency is pegged to, say, the Indian rupee, it will become valid.**

Facebook said we will come up with a cryptocurrency, Libra, whose value will be maintained in terms of the global currency basket. It has not been able to issue it for over a year now. Libra's value will have to change only according to the basket's value else people will lose faith in it. The issuing entity will have to manage the value by buying more dollars at the market rate. It will be very costly. If Facebook charges money to cover its losses, then it takes away the potential advantage

of costless transfers. A few years ago, there were over 6,000 cryptocurrencies. Today, there are over 2,000. 75% of the value of those is only in Bitcoin. That is why cryptocurrencies have no future. These are entirely useless products.

**But a lot of money is going into cryptocurrencies? Some people see it as a hedge against inflation.**

It is speculative. It has no connection with inflation. The cryptocurrency balloon is going to burst. I don't think it will last more than five years. What it will leave behind is good momentum for Blockchain technology, which is useful for certain transactions – like foreign trade, settlement, cheque settlement among bankers. Cryptocurrency is a nine days' wonder.

revenues. The returns are also in the form of cryptos and have to be routed through a crypto exchange to get an equivalent amount in rupees. This routing through blockchain technology, say these traders, makes cryptos safe, public and traceable. But cryptos are still not legal tender in India.

There is a narrow elbow room to move cryptos in India, says Raghu Mohan, the cofounder and CEO of innovation management firm Lumos Labs, so there is no easy pathway for DeFi here. A fairly reliable banking system, robust digital banking options and government's anti-crypto stance are hurdles. “That apart, DeFi developers suck at user experience and are unable to make the process easy-to-understand and seamless,” Raghu adds.

Almost all crypto experts agree. “It is a complex system,” says Daniel Hwang, head of ecosystem development at Terra, a South Korea-based firm specialising in crypto-based payments. “DeFi developers have to create applications that hide the complexities. But for this, there has to be regulatory friendliness.”

Several countries like South Korea, the US and Japan have payment apps that work on the crypto blockchain. When a user pays using her payment wallet, the money is converted to cryptos. The receiver receives cash. The use of blockchain brings down the cost of money transfer to just about 0.50% of the amount; traditional remittance channels charge 4-6%.

“A lot of vendor and freelancer services payments are made using cryptos and DeFi pathways these days,” says Sowmay Jain, the 22-year-old CEO of DeFi pathway aggregator Instadapp. “You can build any financial product around DeFi.”

DeFi enthusiasts claim the system can solve a lot of problems that centralised finance and fiat currency cannot. DeFi-based financial products can reach unbanked denizens faster, remove the needs for an intermediary and eliminate bureaucracy.

“DeFi can even help the traditional banking system to upgrade its services,” says Hemanth Kumar, CEO of Pontis, a plug-and-play DeFi solutions provider. “But from a regulatory point of view, cryptos and DeFi face huge risks. The government should not try to ban cryptos now. They should regulate it like the US, Japan and South Korea.”

Crypto exchanges in India saw a tidal wave of new customer sign-ups since April. Experts say investors flocked to cryptocurrencies in the hope that these would be a natural hedge against weak economic growth and an infirm currency. “A good number of them are just speculators,” says Kishorkumar Balpalli, a Bengaluru-based wealth manager.

Ashish Mehta, cofounder of crypto exchange DigitX, says it is also an alternative asset class like gold or silver.

There are over 20 exchanges in India that accept trades across all major cryptos. These enablers log \$75-80 million worth of trades every day – up from \$3-5 million a day in January. Even though the business looks good for now, exchange owners are a worried lot as prospects of a cryptocurrency ban looms large. The government is still sitting on the draft Banning of Cryptocurrency and Regulation of Official Digital Currency Bill, 2019, drafted by an inter-ministerial committee headed by former finance secretary SC Garg. The bill recommends a complete ban on cryptos issued by private parties. It also proposes that dealing in cryptos



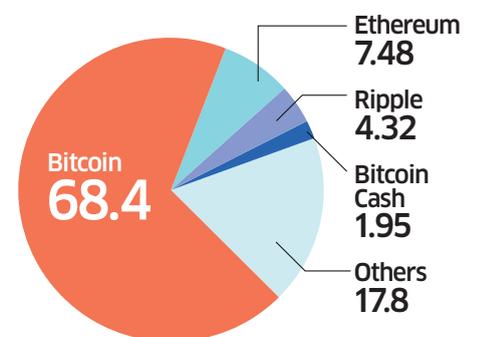
### PRICE TREND OF TOP CRYPTOS

Crypto	Price per unit (\$)	% change YoY*
Bitcoin	10,296	28.5
Ethereum	351.3	100.6
Ripple XRP	0.2	-4.2
Bitcoin Cash	225.7	1.7
Litecoin	46	-18.4
Binance Coin	27.3	74.3
Monero	103	82.7
Dash	67.6	-2.9
USDTether	1	-0.4
USDCoin	0.9	0.1

\* As on October 1

Source: YCharts, CoinGekko

### MARKET SHARE Share (%)



Source: TechSci Research, CoinGekko

be made a criminal offence – punishable with a 10-year jail sentence and fine upto Rs 25 crore.

“Most governments do not understand how cryptos work and how these can be tapped for good,” says Changpeng Zhao, CEO of Binance, one of the largest crypto exchanges in the world. “Banning cryptos is not the right choice. Not accepting cryptocurrencies may damage local economies in the long run. More so because several progressive governments are supporting cryptos now. Governments

must realise that cryptos will not replace fiat currency; both can coexist.”

A ban is not a viable or practical option, says Nischal Shetty, founder and CEO of crypto exchange WazirX. “Crypto is just one part of a broad-based technology. Now how can you ban a technology? If you miss technology in its evolving phase, we will be left behind.”

Gupta of CoinDCX also says cryptos can coexist with fiat currencies. “Cryptocurrency will be more of a storer of value.”

Value is the most debated aspect of cryptocurrencies. Several finance professionals and

economists point to the fact that there is no “underlying value” in cryptocurrencies. “It is an absurd idea to invest in cryptos – which is just a code with numbers and hash,” says one.

However, Ashish Singhal, founder and CEO of cryptocurrency exchange app Coinswitch-Kuber, says it is a code that is “equal for all – and it does not differentiate between rich and poor.”

“If codes have no value, then Google and Uber are worthless.” ■

(With inputs from Shelley Singh)

shailesh.menon@timesgroup.com



**“The industry is trying to set up a basic infrastructure for DeFi. Cryptos will get a boost once all elements of DeFi are in place”**

**Sumit Gupta,**  
founder and CEO, CoinDCX