Project Report

"A descriptive study on cryptocurrency"

Submitted to

G.S. College of Commerce & Economics

Nagpur

In partial fulfillment for the award of the degree of

Bachelor of Business Administration

Submitted by

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Under the Guidance of

Dr. Aniruddha Akarte

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Academic Year 2021 – 22

G.S. College Of Commerce & Economics, Nagpur

Academic Year 2021 – 22

CERTIFICATE

This is to certify that **"Surbhi D Singh "**has submitted the project report titled **"(A descriptive study on cryptocurrency'',** towards partial fulfillment of **BACHELOR OF BUSINESS ADMINISTRATION** degree examination. This has not been submitted for any other examination and does not form part of any other course undergone by the candidate.

It is further certified that he/she has ingeniously completed his/her project as prescribed by Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.

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DECLARATION

I here-by declare that the project with title "A descriptive study on cryptocurrency "has been completed by me in partial fulfillment of BACHELOR OF BUSINESS ADMINISTRATION degree examination as prescribed by Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur and this has not been submitted for any other examination and does not form the part of any other course undertaken by me.

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INTRODUCTION

Cryptocurrency

Cryptocurrency has been in the news lately following wild price swings and with a boom in trading induced by the lockdown that meant several newcomers have started dabbling in the asset class. But the sword of regulatory uncertainty hangs heavy on the cryptocurrency market in India, what with policymakers making their discomfort with the asset quite clear through various suggestions and decisions in the past. Here's a quick history of the cryptocurrency market in India.

- **2008**: A person or a group of persons operating under the pseudonym 'Satoshi Nakamoto' publishes a paper outlining the concept of Bitcoin.
- **2010**: The first commercial transaction takes place in Bitcoin.
- **2013**: Cryptocurrency exchange Unocoin launches, making it accessible for Indians to buy and sell Bitcoin. In the same year, Bitcoin rises from $100 to $1,000. RBI issues an advisory against cryptocurrencies, warning the public against use of virtual currencies, adding that their prices were a "Matter of speculation" in the absence of backing by an asset or reserves.
- **2014-2016**: The price of the cryptocurrency remains largely sideways even as several new exchanges come up in India. Exchanges see a spike in users after demonetization.
- **2017**: Bitcoin price spikes sharply from a low of about $2,500 to a high of nearly $20,000. Search interest in bitcoin goes up 20x, according to data from Google Trends. But the regulatory cloud over cryptocurrency darkens, with the RBI and Finance Ministry cautioning the public against the cryptocurrency. The Finance Ministry compares cryptocurrencies with Ponzi schemes. A committee comprising FinMin, RBI and SEBI members is formed to look at the regulation over the asset. Two PILs are filed against the use of cryptocurrencies in the Supreme Court.

- **March 2018**: WazirX, which would go on to be acquired by Binance and become India's largest cryptocurrency exchange, commences operations.

- **April 6, 2018**: The RBI issues a circular banning all financial entities from dealing with any entity dealing in cryptocurrencies, effectively banning the asset class in India.

- **May 2018**: Several cryptocurrency exchanges approach the Supreme Court, seeking to overturn the RBI's ban on cryptocurrencies.

- **October 2018**: WazirX CEO Nischal Shetty starts #IndiaWantsCrypto campaign tweeting daily about the need for conducive crypto regulation. The campaign has been running for 971 days straight.

- **March 2020**: Supreme Court overturns RBI's ban. Interest in cryptocurrencies spikes globally following the COVID-19 lockdown and prices start rising after an initial correction. Bitcoin goes up from about USD 3,700 to nearly USD 30,000 by the end of the year.

- **2021**: Prices nearly double again, with Bitcoin topping out at nearly $64,000, before halving in price. Banks issue advisory cautioning clients against cryptocurrency citing RBI's 2018 circular. The central bank says its circular is no longer valid in light of the Supreme Court's ruling. The government says it will introduce a bill to create a sovereign digital currency and simultaneously ban all private cryptocurrencies. The recently-revived industry realizes it faces a second existential threat. - Finance minister Nirmala Sitaraman said that the government has reworked the bill that proposed to ban all cryptocurrencies, but has no plans to consider Bitcoin as an official currency in the country.

"The bill seeks to prohibit all private cryptocurrencies in India. However, it would allow certain exceptions to promote the underlying technology of cryptocurrency and its uses," the government says.

The positive Decision has taken the nation into a state of utter exuberance and hope for what is to come in the future for us. With this a upliftment of the ban, India has an opportunity to draw on India's huge population of over 300 million unbanked people. While India's counterparts around the globe are moving into Blockchain technology, we risked giving up the potential promised by co-opting Crypto.

The country is a sleeping giant with a population going up 1 billion. India has the power to change the global economy all thanks to a positive decision by the Supreme Court. The CEO of Pundi X, Zac Cheah said that India's apex court removing the Crypto ban just confirm the reality that cryptography and Blockchain are emerging innovations. India is Pundi X second largest Blockchain wallet customer. Allowing crypto currency transfers will increase our customer base and put the rising volumes of customers into the digital payment fold.

What is cryptocurrency?

A cryptocurrency is a digital or virtual currency protected by cryptography which makes counterfeiting or double-spending almost impossible. Most cryptocurrencies are decentralised, blockchain-based networks — a public database operated by a dispersed computing network. One distinguishing characteristic of cryptocurrencies is that they are usually not distributed by any central agency, rendering them potentially resistant to intervention or abuse by the government.

The term "crypto-currency" derives from the encryption methods used to protect the network. Cryptocurrencies attract scrutiny for a variety of reasons including their use for illicit activity, exchange rate fluctuations, and network flows that underlie them. They were also praised for their portability, accountability and divisibility. Cryptocurrencies are almost always intended to be free of government influence and regulation, but this core feature of the technology has come under fire as they have become more common. The currencies modelled after bitcoin are called alt-coins collectively and have often attempted to present themselves as modified or improved versions of bitcoin.

The first cryptocurrency based on blockchain was Bitcoin, which remains the most popular and valuable. Bitcoin was introduced in 2009 by a person or collective known as "Satoshi Nakamoto." As of November 2021, the combined market value of the world's bitcoins totaled over$1.03trillion . Bitcoin is one of the first digital currencies to use peer-to-peer technology to enable online transfers. Some of Bitcoin's success spawned competing cryptocurrencies, known as "alt-coins,"

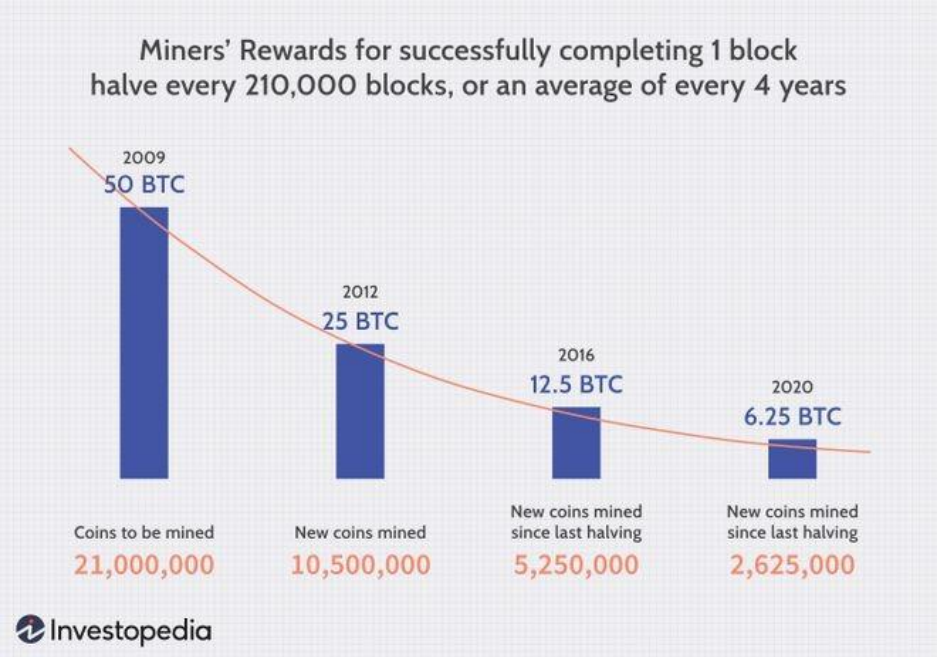
including Litecoin, Peercoin, and Namecoin as well as Ethereum, Cardano, and EOS. Today the aggregate value of all existing cryptocurrencies is around $214 billion — Bitcoin currently accounts for more than 68 per cent of the total value.

How does Bitcoin mining work and why mine Bitcoin?

Bitcoin mining is the process by which new bitcoins are entered into circulation. It is also the way the network confirms new transactions and is a critical component of the blockchain ledger's maintenance and development. "Mining" is performed using sophisticated hardware that solves an extremely complex computational math problem. The first computer to find the solution to the problem receives the next block of bitcoins and the process begins again.

Cryptocurrency mining is painstaking, costly, and only sporadically rewarding. Nonetheless, mining has a magnetic appeal for many investors who are interested in cryptocurrency because of the fact that miners receive rewards for their work with crypto tokens.

In reality, miners are essentially getting paid for their work as auditors. They are doing the work of verifying the legitimacy of Bitcoin transactions. This convention is meant to keep Bitcoin users honest and was conceived by Bitcoin's founder, Satoshi Nakamoto.1 By verifying



transactions, miners are helping to prevent the "double-spending problem. The rewards for Bitcoin mining are reduced by half roughly every four years.1 When bitcoin was first mined in 2009, mining one block would earn you 50 BTC. In 2012, this was halved to 25 BTC. By 2016, this was halved again to 12.5 BTC. On May 11, 2020, the reward halved again to 6.25 BTC.

As of February 2022, the price of Bitcoin was around $39,000 per bitcoin, which means you'd have earned $243,750 (6.25 x 43,000) for completing a block.

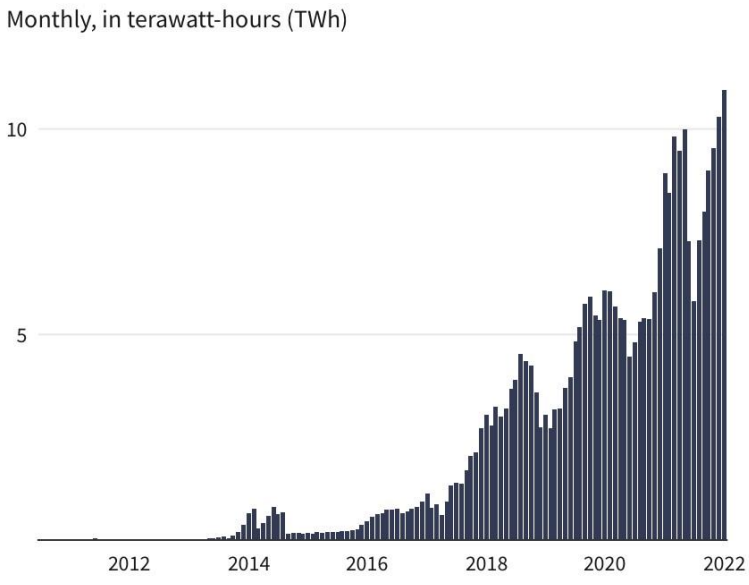
Downsides of Mining

The risks of mining are often financial and regulatory. As aforementioned, Bitcoin mining, and mining in general, is a financial risk because one could go through all the effort of purchasing hundreds or thousands of dollars' worth of mining equipment only to have no return on their investment.

One additional potential risk from the growth of Bitcoin mining (and other PoW systems as well) is the increasing energy usage required by the computer systems running the mining algorithms. Though microchip efficiency has increased dramatically for ASIC chips, the growth of the network itself is outpacing technological progress. As a result, there are concerns about Bitcoin mining's environmental impact and carbon footprint.

Bitcoin energy consumption:

Bitcoin ownership and mining are legal in more countries than not. Some examples of places where it was



illegal according to a 2018 report were Algeria, Egypt, Morocco, Bolivia, Ecuador, Nepal, and Pakistan.8 Since 2018, other countries have banned Bitcoin mining including Bangladesh, China, Dominican Republic, North Macedonia, Qatar, and Vietnam. Overall, Bitcoin use and mining remain legal across much of the globe.

Bitcoin "mining" serves a crucial function to validate and confirm new transactions to the blockchain and to prevent double-spending by bad actors. It is also the way that new bitcoins are introduced into the system. Based on a complex puzzle, the task involves producing proof of work (Pow), which is inherently energy-intensive. This energy, however, is embodied in the value of bitcoins and the Bitcoin system and keeps this decentralized system stable, secure, and trustworthy.

The top cryptocurrencies

Here are the top cryptocurrencies.

As we progress through 2022, many exciting new crypto projects are gaining momentum – which could provide profitable investment opportunities in the process.

Let’s explore the best cryptocurrency to invest in 2022, as well as how to buy crypto today – easily and safely.

1. Bitcoin (BTC)

Market cap: Over $747 billion

Created in 2009 by someone using the pseudonym Satoshi Nakamoto, Bitcoin (BTC) is the original cryptocurrency. As with most cryptocurrencies, BTC runs on a blockchain, or a ledger logging transaction distributed across a network of thousands of computers. Because additions to the distributed ledgers must be verified by solving a cryptographic puzzle, a process called proof of work, Bitcoin is kept secure and safe from fraudsters.

Bitcoin’s price has skyrocketed as it’s become a household name. In May 2016, you could buy a Bitcoin for about £370. As of Feb. 1, 2022, a single Bitcoin’s price was over £28,000. That’s growth of about

7,600%.

2.Lucky Block (LBLOCK) – Overall Best Crypto to Buy with Huge Potential

Market cap (fully diluted): over 0.67 billion

If you're wondering which cryptocurrency to buy, look no further than Lucky Block. Lucky Block is a blockchain-based lottery platform that looks to greatly improve the lotto experience whilst offering investors a way to generate a passive income stream. Built on the Binance Smart Chain, Lucky Block provides greater transparency and fairness whilst boosting the odds of winning for each entrant.

The platform just wrapped up a successful presale phase, selling out nearly two weeks ahead of schedule and raising $5.7m in the process. This prompted the dev team to list the token on Pancake Swap early to meet demand – which immediately saw the LBLOCK price rise over 230% during its first 24 hours of being listed! With 24,000+ members and counting, the Lucky Block Telegram group is a great place to network with other like-minded crypto enthusiasts.

3. **Ethereum (ETH)** – Most Promising Cryptocurrency to Buy for Smart Contracts

Market cap: over $336 billion

Ethereum is an open-source blockchain platform that offers decentralized app (dApp) developers a way to construct and host dApps that incorporate smart contracts. As noted by CoinMarketCap, ETH is the world's second-largest crypto (behind Bitcoin) and has enormous potential within the realms of DeFi and NFTs. Although the network has been plagued with high fees in recent years, the upcoming change to Ethereum 2.0 looks set to improve scalability – making ETH an exciting investment prospect for 2022.

4. **Decentraland (MANA)** – Cheap Cryptocurrency to Buy for Metaverse Exposure

Market cap: $5.02 billion

Many market commentators believe that Decentraland is the best cryptocurrency to invest in 2022 for

exposure to the metaverse. Decentraland is a blockchain-based virtual world where users can create avatars and purchase land.

5. **Shiba Inu (SHIB)** – Best Crypto 'Meme Coin' to Buy

Market cap: $ 13.88 billion

The success of Dogecoin prompted the release of many other 'meme coins' looking to capitalize on the trend, with Shiba Inu being one of the most lucrative for investors. The SHIB price rose a staggering 1055% during October 2021, although the coin's price has since plutimeted drastically. However, with the release of ShibSwap, Shiba Inu's decentralized exchange (DEX), there is now a tangible use case for the coin.

6. **Cardano (ADA)** – Great Crypto Project with Expert Development Team

Market cap: $ 31.09 billion

Cardano is another cheap cryptocurrency to buy if you're looking for an alternative to Ethereum, as this blockchain platform employs a Proof-of-Stake (PoS) algorithm to achieve consensus. This makes it a more scalable network compared to Proof-of-Work (PoW) chains whilst also being greener in the process.

7. **Binance Coin (BNB)** – Best Crypto for Long-Term Gains

Market cap: $62.79billion

As the name suggests, Binance Coin (BNB) is the native token of Binance, the world's largest cryptocurrency exchange. Users who hold BNB can get a massive reduction in trading fees whilst also benefiting from price increases. Furthermore, BNB can now be staked to generate a passive income stream or even collateral for crypto loans. Overall, BNB's price will naturally rise as the Binance exchange grow, making it a good investment for exposure to the broader crypto market.

8. **Axie Infinity (AXIE)** – Innovative Blockchain Gaming Project

Market cap: $3.14billion

Axie Infinity is another blockchain-based game that enables users to create in-game characters and complete quests. Users have pets called ‘Axies’ that can be customized and then monetized through the Axie Infinity Marketplace since they are structured as NFTs.

9. **Polygon (MATIC)** – New Cryptocurrency to Buy 2022 with Huge Scalability

Market cap: $11.75billion

Polygon is a highly-scalable blockchain platform that acts as a Layer-2 solution for the Ethereum network. As such, developers can build their apps on Polygon or even port over apps from the Ethereum network to benefit from faster speeds and lower fees.

10. **Avalanche (AVAX)** – Innovative Blockchain Platform Offering New Use Cases

Market cap: $19.91 billion

Avalanche is an exciting crypto project that uses three blockchains rather than one. Thanks to this approach, specific chains complete certain tasks, reducing the overall burden on each chain and boosting transactions per second (TPS).

11. **Ripple (XRP)** – Top Crypto Project with Large Ambitions

Market cap: $37.21 billion

Ripple is the company behind Ripple Net, a lightning-fast payments network that looks to improve traditional financial systems. Using Ripple Net, users can send cross-border payments instantly – and with negligible fees.

12. Stellar (XLM) – Exciting New Crypto Payments Network

Market cap: $4.86 billion

Stellar is an open-source protocol that enables low-cost transfers around the world. The great thing about Stellar is that it acts as an 'intermediary', allowing users to swap any two FIAT currencies quickly and easily.

13. Curve (CRV) - Most Popular Cryptocurrency to Buy for DeFi Exposure

Market cap: $1.08 billion

Curve is a decentralised exchange (DEX) hosted on the Ethereum network. Curve allows users to swap stable coins through liquidity pools, which are operated via smart contracts. Users can also stake their CRV holdings to provide liquidity – generating an impressive annual yield in the process.

RESEARCH STUDY

RELEVANCE OF THE STUDY

This study is relevant to understand deeply the impact of innovation of cryptography technique and blockchain and how it made cryptocurrency an alternative medium of exchange due to its safety, transparency and cost effectiveness. It plays vital role in financial investments nowadays and helps raising digital capital and does affects growth of economy. But it's main feature cannot be separated from the users who use cryptocurrency for their illegal transactions. There are several arguments related to the legality of cryptocurrency. To meet the current requirements of the digital era and influence decisions of the investors the purpose of this paper is to: -

- Analyzing the strengths and weaknesses of cryptocurrency.
- Analyzing the current position of cryptocurrency and its investors.
- Providing information about the economic position of the economy post introduction of cryptocurrency.
- Analyze the nature of cryptocurrency based on characteristics of money, legal perspective, economic perspective, psychological perspective, future perspective and the upcoming trends, where blockchain and cryptocurrency will take us next.

OBJECTIVES OF THE STUDY

The objectives of this study are as follows:

- To learn the impact of cryptocurrency on economy and legality.
- To study the current status of cryptocurrency and the future it holds.
- To understand the significance of cryptocurrencies according to its immense growth from past many years, it's working, it's types and the top players (E.g., Bitcoin).
- To analyze psychological behavior of individual investors towards cryptocurrencies.
- To study the factors considering risk and volatility and how it influences investors while investing
- To study the advantages and drawbacks of cryptocurrencies.
- To predict the future prospects of the cryptocurrency investment market.
- Examining the current profitability of various cryptocurrencies. Analysis helps in finding out the earning capacity and returns of cryptocurrencies.

NEED OF THE STUDY

This study will help us to gain knowledge about cryptocurrencies and it impact on individual and economy and will help us understand various topics, such as: -

- Nature of cryptocurrency, it's risk and reward as well as growth opportunities.
- And make us better understanding towards many questions like
- Will cryptocurrency have positive financial leverage on investors, business and economy?
- Should cryptocurrency be legalized?
- What is the scope of cryptocurrency?

And make us clear all angles and give exposure towards digital currency revolutions.

HYPOTHESIS

Hypothesis 1-

H0- cryptocurrency is acceptable as currency.

H1- cryptocurrency is not acceptable as currency.

Hypothesis 2

H0 - cryptocurrencies have significantly impacted the investment decisions of investors.

H1- cryptocurrencies have least impacted the investment decisions of investors.

Hypothesis 3

H0- growth and opportunisms in cryptocurrencies have overcome its risk factor.

H1- growth and opportunisms in cryptocurrencies cannot overcome its risk factor.

DATA COLLECTION AND RESEARCH METHODOLOGY

TYPE OF RESEARCH USED.

Research can be classified in many different ways on the basis of methodology of the research, the knowledge it creates, the user groups, the research problem it investigates, etc. Following is the methodology that we have used in research:

Quantitative Research:

In natural and social sciences, and sometimes in other fields, quantitative research is the systematic empirical investigation of observable phenomena via statistical, mathematical, or computational techniques. The objective of quantitative research is to develop and employ mathematical models, theories, and hypotheses pertaining to phenomena. The process of measurement is central to quantitative research because it provides the fundamental connection between empirical observation and mathematical expression of quantitative relationships.

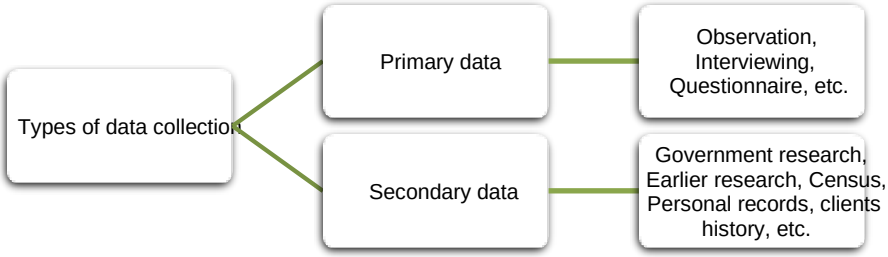
Quantitative research is generally closely affiliated with ideas from 'the scientific method', which can include:

- The generation of models, theories and hypotheses.
- The development of instruments and methods for measurement.
- Experimental control and manipulation of variables.
- Collection of empirical data.
- Modelling and analysis of data.

QUANTITATIVE RESEARCH

ADVANTAGES	DISADVANTAGES
•Specific research problem •Clear independent and dependent variable •High level of reliability •Minimum personal judgement	•Limited outcomes due to structured method •Unability to control the environment •Expensive(large number of respondents)

TYPES OF DATA USED



Here, we have used both Primary and Secondary Data while conducting research.

What is primary data?

Primary data is the data collected directly by the researchers from main sources through interviews, surveys

, experiments, etc. primary data are usually collected from the source –where the data originally originated from and are regarded as the best kind of data in research.

In this project questionnaire method for survey is used for collection of primary data.

What is Secondary Data?

Secondary data is the data that have been already collected by and readily available from other sources.

Such data are cheaper and more quickly obtainable than the primary data and also may be available when primary data cannot be obtained at all.

Here various websites, books and journals are been referred for secondary data.

SWOT ANALYSIS

Bitcoin strengths: cryptocurrency can't be tracked or stolen.

Bitcoin uses blockchain (a peer-to-peer) network between the sender and the receiver. Only these two parties are involved. It's unlike any other method of transferring currency — which involves a third party, like a bank. A middleman is prohibited from Bitcoin transactions.

And since that pesky third party doesn't exist, it makes Bitcoin a tax-free currency. The government doesn't control or regulate Bitcoin.

For most Bitcoin users, this is an insane positive because it's not folly to economic turmoil. Bitcoin's worth is agreed upon by the sender and the receiver. Not an institution. Even if the economy crashes, Bitcoin can survive.

Surprisingly, this isn't why Bitcoin's popularity skyrocketed within the last few years.

The real strength is the secrecy.

Every person in the Blockchain network has a private wallet address. Trading Bitcoin is fully anonymous. It's 100 percent untraceable. Unless you decide to make your wallet address — but the majority of users don't. Because the anonymity makes your financial data fully hidden.

A unique PIN number assigned to each Bitcoin masks the identity of the seller. Once the Bitcoin is sold, the PIN changes anew. At this point, only the buyer knows the PIN. It's irreversible, unless the current owner decides to change the ownership back.

Although this means nothing can be done once the Bitcoin is sent, it also means you can't steal this currency. You can steal your physical wallet. You can steal credit card info and hijack your online bank account. But you can't steal Bitcoin.

It's because of this increased security that pushes people towards cryptocurrency.

Bitcoin weaknesses: crippling slow transactions and accessibility loss.

Bitcoin transactions aren't as fast as they were a few years ago. This is one of the downsides of Blockchain: the more people use it, the more Blockchain limits your transactions speeds.

Basically, the blocks get bigger the more it's in use. Making the whole process clunky and slow. Until this problem is resolved, it's unlikely Bitcoin currency will usurp conventional credit card usage.

The system isn't the only issue.

Don't forget about the Bitcoin wallet password problem. Since the transactions are encrypted, recovering a lost password isn't possible. You'd be surprised how often people forget their password and lose access to their Bitcoins. In fact, one man bought a few Bitcoin years ago when it was dirt cheap. Now it'd be worth millions… if only he could find his password to his wallet.

And what about the survivability of Bitcoin?

The value of Bitcoin has shifted relentlessly over the years. And despite the rocky nature, the media pushes out stories claiming Bitcoin is the future of money.

It's just like stocks, however; unpredictable and unreliable. Tomorrow, the value could skyrocket. The day after, it may plutimeted. The reliability of this currency is too questionable to replace traditional money.

Bitcoin opportunities: Safety from compromising data breaches

As a society, we're moving away from physical money in favor of cashless currencies. In fact, big names like Amazon are already accepting Bitcoin as payment for their goods. If companies the size of Amazon are recognizing Bitcoins' viability, it's safe to assume others will follow.

And what about the growing hostility between the public and the banking institutions?

People are looking for safe, secure, and practical means to avoid using banks. Data breaches, involving customer data, is consistently occurring with brands like Facebook and Wells Fargo. How long until the

breaches steal credit card info?

No one wants to find out. And others are moving towards Bitcoin. Even with the hang-ups, it's safe. Anonymous. And doesn't involve third parties.

And the opportunities don't stop there.

The blockchain is a phenomenal technology with much promise. The blocks may be able to keep data like criminal records, birth certificates, and public records private. It may pave the way for impenetrable encryption. That's something the masses are leaning towards for data protection. Also, as demand for Crypto currency grows so does the number of job roles in Crypto and Blockchain companies. The top crypto currency carrier opportunities are Blockchain engineer, Crypto research analyst, Cryptocurrency analyst, Blockchain project manager, marketing manager, Blockchain web developer, Crypto / Blockchain security architect, financial analyst, technical analyst, Blockchain attorney and legal consultant and software engineer.

Bitcoin threats: the anonymity against governments and banks.

Anonymity is a benefit. An opportunity. But it's also a problem.

In the wrong hands, anonymous buying is dangerous. Knowing the transaction is untraceable will attract the attention of criminals. Because let's be honest: the more people accept Bitcoin, the more it'll likely be used for more nefarious reasons.

It'll also be a problem for the government or law enforcement, after all. If more criminals adopt Bitcoin into their illegal purchases, law enforcement will face a challenge in finding and prosecuting these criminals.

As such, we may see more policies and laws regarding cryptocurrency. Although it may be difficult to enforce thanks to the anonymity, the government will still try.

People fear the consequences of these bills. New tech policies miss the mark. Not enough government officials understand the implications of using Blockchain and cryptocurrency. Instead of learning, they're more likely to slap on a bill and hope for the best.

Bitcoin isn't the only cryptocurrency on the market. After its rise in popularity, alternatives like Ethereum and Peercoin hit the markets. If the value of these alternative skyrockets, Bitcoin may be in trouble. To be honest, the overall value of cryptocurrency and lack of reliability is a threat to Bitcoin and its competitors.

And just because cryptocurrency appears infallible now, doesn't mean it will in the future. As more information about it surfaces, the holes will reveal themselves. People, such as criminals, will take advantage of the issues ASAP.

Also because of the decentralised state of these currencies, the path of legal recourse in these situations can be difficult to assess.

BENEFITS AND CRITICISM OF CRYPTOCURRENCIES

Benefits of cryptocurrency

Job opportunities – With many start-ups re-entering the market, competition for top talent in the area of blockchain technology and cryptocurrencies may increase. From blockchain developers to programmers, production engineers and project managers, there will be many suitors for top talent in the field of blockchain. Industry consultants, advertisers, content developers and group administrators among others will now have a major role to play in the national embrace of cryptocurrencies that will now be sought by many start-ups. The RBI will now be encouraged to help control the world of opportunities that cryptocurrencies generate. The stance made clear by the Supreme Court should that the RBI rethink its restrictive approach to cryptography and then come up with more balanced and well-thought-out rules to protect the public interest and that of other ecosystem stakeholders. The RBI can take a leaf out of its global peers, as many central banks have launched their cryptocurrencies in other countries. Nonetheless, the expectation here is that the latest measures will press for more acceptance and tighter enforcement.

Immunity from theft – At present, the financial system, and the resultant economy, is not immune to robberies or fraud. As we know the planet is becoming more vulnerable to complex leaks and hacks. With several ran software attacks, data leaks from top-notch banks and credit card companies, news headlines have been abuzz in the last few years. India was going digital at the time, the base of which was built on Aadhaar authentication, Jan Dhan accounts etc. However, the same does give rise to flaws in technology, with criminals planning to break the authentication mechanism of Aadhaar or Jan-Dhan accounts. In making cryptocurrencies all verified transactions must be deposited in a public ledger. To ensure the legitimacy of record keeping, all identities of the coin owners are encrypted. You own it because the currency is decentralised. It has no power over either the government or bank.

Accessibility – Blockchain is the reason why crypto-currency is worth something. Ease of use is the reason why there is a high demand for crypto-currency. All you need is a mobile screen, an internet connection, and you easily make payments and money transfers to your accounts. There are more than two billion people with access to the Internet who cannot use conventional forms of trade. These people are clued-in to the crypto-currency market.

Global economies – Crypto-currency presents Indians with a golden opportunity to be on par with the global economy, particularly the present burgeoning millennial generation. A cryptocurrencies-led economy is a decentralised economy. There is plenty of time and money to secure third-party approvals, and all the time and energy spent in negotiations will no longer be needed when buying, for example, a house etc. Considering some of the trailblazing and epoch-making trends of the past, including the emergence of the internet, the technological economy, the creation of Silicon Valley etc., India has just sought to balance the pace of global innovations.

Criticism of cryptocurrency

The semi-anonymous aspect of cryptocurrency transfers makes them ideal for a variety of illegal practices, such as money laundering and tax evasion. Crypto-currency supporters, though, also strongly respect their anonymity, citing privacy advantages such as protection for whistle-blowers or dissidents living under oppressive regimes. Some cryptocurrencies are more intimate.

The cryptocurrency form is not exempt from any financial and security issues. I reviewed many studies and cryptocurrency networks and even explored several markets for selling cryptocurrency to investigate the difficulties and problems that occur in this interactive phenomenon.

Money laundering – Money laundering is one danger that is highly likely to increase with the usage of VC especially with platforms that allow users to exchange virtual currency with real money. In realistic situations, the police detained a group of 14 people in Korea in 2008 for stealing $38 million from virtual currency transactions. The group translated the $38 million that gold farming produces from Korea into a paper firm in China as purchasing payments.

Black market – Perhaps one of the biggest drawbacks and security issues affecting blockchain is its potential to promote criminal activity. There are several anonymous trades on the grey and black markets denominated in Bitcoin and other cryptocurrencies. For example, Bitcoin was used by the notorious “dark web” platform Silk Road, promoting illegal drug sales and other criminal acts before being shut down in

2014. Cryptocurrencies are now highly common money-laundering devices. They unlawfully acquired money by funnelling through a "safe" conduit that conceals the origins. For examples, when a gafter wants to leave a game, he/she may want to sell the virtual currency that he/she owns by selling it in the game forums. The way payments are collected is dangerous because many fraudulent users can not complete the payment, or challenge after payment. They will then get their money back plus the virtual currency.

Tax evasion – Since national governments do not oversee cryptocurrencies, cryptocurrencies typically remain outside of their direct jurisdiction, attracting tax evaders naturally. In Bitcoin and other coins, several small companies pay workers. They do so to reduce payroll tax responsibility and to help avoid income tax obligation for their workers. Even they embrace tokens from online traders to attempt to escape selling and income tax responsibility.

No refunds – The notion of such an arbitrator violates the decentralising spirit at the heart of the new theory of cryptocurrencies. What this means is that if you're robbed in a crypto-currency deal you don't have someone to turn to. Although cryptocurrency miners play a role in cryptocurrency transactions as quasi-intermediaries, they are not responsible for arbitrating conflicts between the transacting parties. An example is to pay upfront for an item that you never get. Large payment providers such as MasterCard, Visa and PayPal also move in to help solve conflicts between buyers and sellers. Their method of paying for, or refunding, is intended to avoid vendor fraud. Although some newer cryptocurrencies seek to resolve the surrounding chargebacks or refunds problem, the solutions remain incomplete and still unproven.

Data loss – Considering a virtually uncrackable source code, impenetrable authentication protocols (keys) and sufficient security protections (which Mt. Gox lacked), keeping money in the cloud or a physical data storage unit is better than in a backpack or back pocket. Also, those who store their data in a single cloud provider will risk failure if the server is physically compromised or removed from the internet. The early advocates of crypto-currency believed that, if properly protected, digital alternate currencies agreed to help a definitive step away from traditional cash, which they find to be unreliable and potentially dangerous. All this means cryptocurrency consumers are taking reasonable and

appropriate measures to avoid data loss. For example, if their computer is lost or robbed, the consumers who store their private keys on single physical storage devices will incur a permanent financial loss.

High price and not exchangeable – The most popular cryptocurrencies, those with the highest dollar market capitalisation, have dedicated online exchanges allowing direct exchange for fiat currency. The remaining cryptocurrencies have no dedicated online exchanges. Many cryptocurrencies have few extraordinary units and are concentrated in the hands of a handful of individuals (often currency developers and close associates). For fiat currencies, they are therefore not explicitly exchangeable. Instead, before the fiat currency conversion, consumers could turn them into more widely used cryptocurrencies, including Bitcoin. These holders manage currency stocks efficiently, making them vulnerable to fluctuations in wild valuation and simple manipulation. This suppresses competition for some less-used cryptocurrencies, and thus the valuation of others.

NATURE OF CRYPTOCURRENCY

The most debatable topic regarding cryptocurrency is what should cryptocurrency be considered as? money, an asset, property or a currency? For that we must know the historical development of money, fiat currency and virtual currency.

Historical development of money and fiat currency

The historical development of money has taken place through many stages over Time. The first stage is barter system, when people exchanged and traded goods and services for other goods and services. The second stage is commodity money system, when people used commodities such as wheat, seeds, or cattle as a medium of exchange. The third stage is a metallic money system, when people used gold and silver as a medium of exchange. The metallic money system evolved over time, from weight-based, coins-based until paper-based, which was 100 percent backed by gold.

The next stage is fiat money, which then evolved into fiat currency. Fiat money has been used during the wars, when the governments needed money to pay for wars or the shortage of money. But the using of fiat money created another problem, which was hyperinflation and devaluation. Referring to Davies and Connors (2016), in 1971 when President Nixon canceled the direct convertibility of US dollars to gold, it was the end of fiat money that was backed by gold. The Central bank began issuing non-convertible fiat money and by legal tender law, people obliged to accept it as payment for goods or services and settlement of debts.

The Bank of England (2014) described legal tender as following:

Legal tender has a very narrow and technical meaning, which relates to settling debts. It means that if you are in debt to someone then you can’t be sued for non-payment if you offer full payment of your debts in legal tender. Throughout the UK, there are some restrictions when using the lower value coins as legal tender. For example, 1p and 2p coins only count as legal tender for any amount up to 20p.

There are many acceptable payment methods which aren’t technically legal tender. This is why the term “legal tender” has little use in ordinary everyday transactions. Most shops accept payment by debit or credit card, and some accept cheques and contactless payments. These are safe and convenient ways to pay, despite not being classed as legal tender.

Whether you pay with banknotes, coins, debit cards or anything else as payment is a decision between you and the other person involved in the transaction.

In addition, shops are not obliged to accept legal tender. If you hand over a £50 note to pay for a banana in your local grocery store, the staff are within their rights to choose not to accept it. Likewise for all other banknotes – it's a matter of discretion.

Thus, we can distinguish between money and currency. Money is a medium of exchange and a store of value. Gold and silver are the optimum forms of money, because they maintain purchasing power over a long time period with limited quantity. Gold and silver also have an intrinsic value. Currency normally is the notes (or paper) and coins that are issued by government or central bank as a medium of exchange. Since fiat currency is not backed by gold, it has no intrinsic value. The value is determined by supply and demand. More currency in circulation will make it less valuable.

History and development of virtual currency

The rapid deployment of internet-based commerce and mobile technology are driving changes in the global economy. The online payments systems are changing the way goods and services are paid. One of important development of economic changes is digital currencies.

Digital currencies are digital representation of value that can be redeemed for goods and services. Categorized those digital currencies based on the value can be denominated in legal tender. For example, PayPal and e-money are digital currencies that can be denominated based on fiat currency and can be exchanged in the real economy, and digital currencies that cannot be denominated in the legal tender are called virtual currencies.

Furthermore, virtual currencies, on the contrary, primarily are used in the virtual world. They have their own unit of account and cannot be denominated in fiat currency. Virtual currencies have different levels of convertibility. Game coins, for example, is only used in their virtual domain. The exchange to fiat currency outside their virtual domain is restricted. On the contrary, the convertible virtual currency allows the exchange into fiat currency and also can be used for good and services payment in the real economy.

When the convertible virtual currencies use decentralized systems, they need cryptography technique to identify and verify transactions. It is called cryptocurrencies. By using decentralized systems, they allow the peer-to-peer transaction, so they do not need the central authority for administering the systems, and the clearing process can be eliminated. The innovation of cryptocurrencies created a challenge for the concept of fiat currency.

Cryptocurrency as a nature of money:

over the time, societies discovered that money can play an efficient and effective role if it meets the requirements, such as accepted, divisible, homogenous, durable, mobile, rare and stable value. Accepted means that the money must have an intrinsic value, so it must be desired by its own sake. The requirement of accepted is complicated since current fiat money is not having an intrinsic value. It is forced by the government to be accepted through the legal tender law.

The second requirement is divisible means that money must be easily divided into small parts that people can purchase goods and services at any price. In order to be easily divided, the money must be uniform or homogenous. The next requirement is durable means that money has to be long lasting and not easily destroyed. It also must be easy to carry around. It must be rare means that the money must be relatively hard or scarce to obtain and its value must remain relatively constant over the Time.

Money can play an efficient and effective role if it meets the seven requirements. (Considering cryptocurrency represented by Bitcoin the table below show a comparison)

Seven requirements	Fiat currency	Gold (commodity)	Commodity currency	Bitcoin (cryptocurrency)
Instrinsic value	None	Yes	Yes	None
Divisible	Yes	Yes	Yes	Yes
Homogenous	Yes	Yes	Yes	Yes
Durable	Yes	Yes	Mixed	Yes
Mobile	Yes	Yes	Yes	Yes
Rare	Yes	Yes	No	Yes
Stable value*	Yes*	Yes*	Yes*	Yes*

It can be observed that Bitcoin has the same characteristics with fiat currency that fulfils six of the seven requirements. Both of them do not have intrinsic value. The stable value requirements refer to the store of

value function. All of the currency can be used as a store of value, but the value may decrease due to risk that may happen. For the durable requirements, in commodity currency is stated mixed depends on the commodity type. For example, commodities like wheat or salt are perishable through fungal, pest, water, fire, bacterial activity and are also destroyed by the process of consumption.

Despite its highly volatile price, the value of Bitcoin exists when its users have trust to use it and accept it as payment. Furthermore, Bitcoin can be adopted widely. It needs vendor acceptance, user acceptance and innovation. Hence, in terms of the nature of money, Bitcoin is accepted as money, with notes: it is trusted, accepted as payment and becomes an alternative in this current internet-fueled global market.

Cryptocurrency as a nature of property:

There are two attributes to consider something as property's:

(1) It would be desirable for a human being.

(2) It would be capable to be stored over Time.

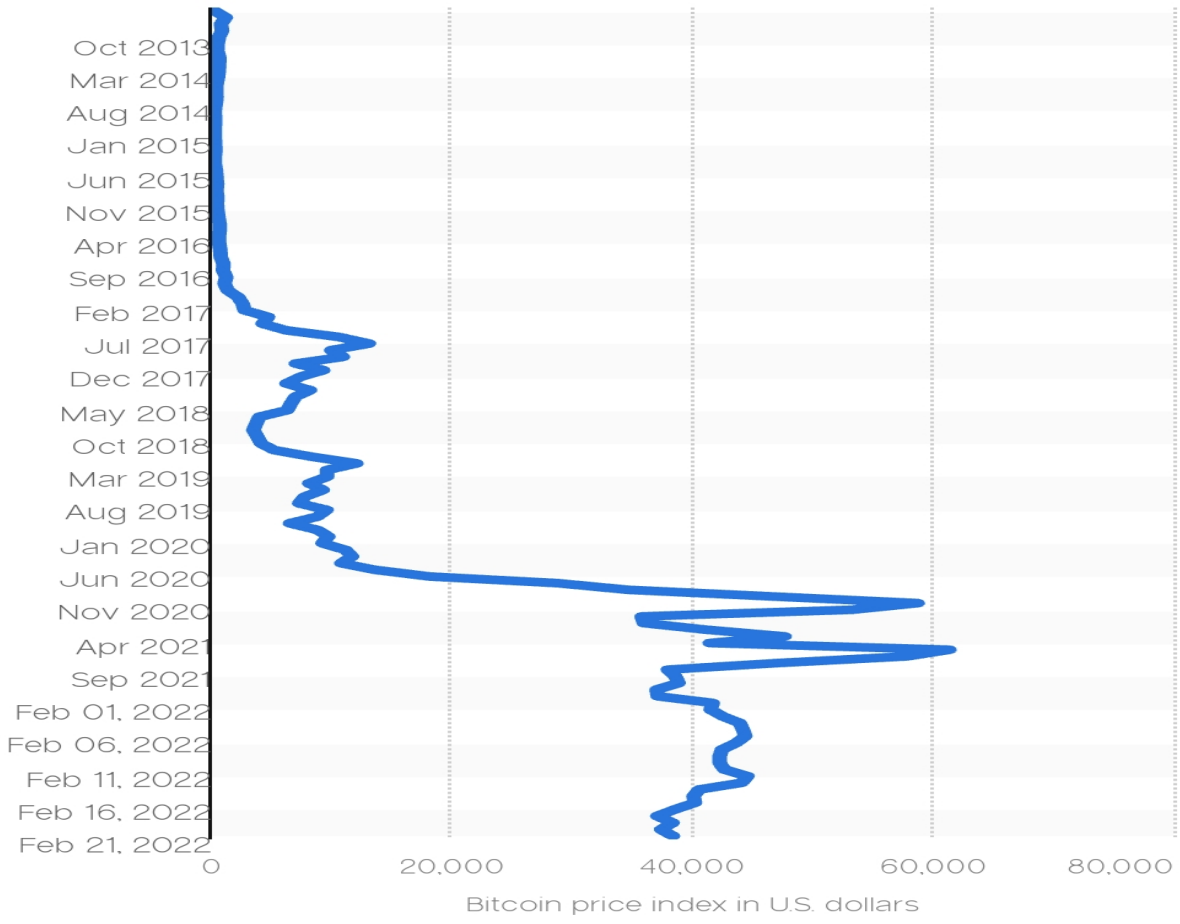
Based on the attributes above, the cryptocurrency can meet those criteria based on Bitcoin's case in economic demand (desirability). In Figure below it is shown that the Bitcoin's price surpassed the price of a troy ounce of gold. The current market capitalization of Bitcoin is over $714 b, with average volume transaction per day being 400,000. The high demand of Bitcoin indicates that Bitcoin can meet the desirability criterion. In terms of storability bitcoin is encoded within the blockchain and is entered on the distributed ledger system for example, when client A makes payment to client B. the transaction is settled by the miners to solve the cryptographic puzzle as a part of the validation process. the miners who find solution faster will receive bitcoin as a reward, the copies of transaction records will be kept in the distributed ledger that can be accessed in the network. Hence bitcoin can be considered as property

Cryptocurrency as a nature of currency:

To fulfil the characteristic of a successful currency, Cryptocurrency should have the functions as a medium of exchange, an account unit, and a store of value. The below table consists of the comparison among the currencies.

Currency characters	Fiat currency	Gold (commodity)	Commodity currency	Bitcoin (cryptocurrency)
As medium of exchange	Yes	Yes	Yes	Yes*
As unit of account	Yes	Yes	Yes	Yes*
As store of value	Yes (subject to inflation risk)	Yes (subject to commodity price risk)	Yes (subject to dilusion of quality)	No (subject to high exchange risk)

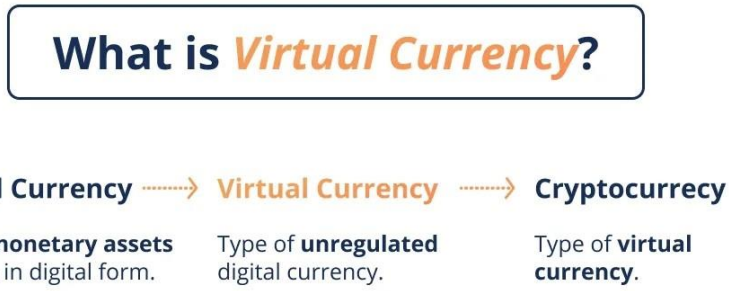
Currently, the cryptocurrency does not fully meet the three characteristics of a successful currency. A function as a store of value is limited by high price volatility. The cryptocurrency's price, in this case Bitcoin's price, is very unstable, which is much higher than the national currency. Bitcoin's price for past years. In February 2020, the Bitcoin's price reached USD 8778.47 per bitcoin. After 18 months, on October 2021, the price rocketed to USD 61,374.28 per Bitcoin. In 18 months, it reached 600 percent growth or 50 percent per month. After reaching the peak, the Bitcoin's price continued to sour down. In four months, on 22nd feb 2022, the price declined to USD 37,059.98 per bitcoin or dropped to 10 percent per month. In Figure, the high volatility of Bitcoin price is shown. Therefore, it is clear that Bitcoin does not meet the store of the value function.



The second characteristic is as unit of account functions. Bitcoin does not seem to establish itself as an account unit or a store of value. But currently, there is a piece of evidence that cryptocurrencies are used as a unit of account. The mechanism is by valuing the goods and services based on cryptocurrency exchange rate. For example, sellers who accept the cryptocurrency payment will quote a price in fiat currency, with prices in cryptocurrency based on exchange rates at a given point in Time.

The third characteristic is as medium of exchange function. Since cryptocurrency is not a legal tender, the transactions that accept cryptocurrency must involve two parties that have an agreement regarding the acceptance of cryptocurrency. Although the growth of cryptocurrency-based payments is very fast, the number and volume of transactions in cryptocurrency remain small. Indeed, the current total market value of cryptocurrency is about $83.12 billion, compared with the US currency in circulation, which is around $2.10 trillion. So, cryptocurrency does not meet the criteria as currency.

A cryptocurrency is a medium of exchange, such as the rupee or the US dollar, but is digital in format and uses encryption techniques to both control the creation of monetary units and to verify the exchange of money. So rather than being a legal currency it's a virtual or a digital currency.



Cryptocurrency as a nature of asset :

Cryptocurrencies are digital financial assets, for which records and transfers of ownership are guaranteed by a cryptographic technology rather than a bank or other trusted third party. They can be viewed as financial assets because they bear some value for cryptocurrency holders, even though they represent no matching liability of any other party and are not backed by any physical asset of value (such as gold, for example, or the equipment stock of an enterprise).

As the word cryptocurrency, and the other terminology employing ‘coin’, ‘wallets’ in the original white-paper proposing the supporting technology for Bitcoin (Nakamoto 2008) all suggest, the original developers consciously attempted to develop a digital transfer mechanism that corresponded to direct transfer of physical cash used for payments or other financial assets—such as a precious metal and ‘bearer bonds’—that like cash also change hands through physical transfer.

What about the arrangements used for financial assets recorded in digital form (such as bank deposits, equities or bonds but not bearer bonds or bank notes)? Ownership arrangements for these assets depend on the information system maintained by a financial institution (commercial bank, custodian bank, fund manager) deter- mining who is entitled to any income or other rights it offers and has the right of sale or transfer. Originally these systems were paper based, but since the 1960s they have utilized first mainframe and more recently computer systems. If there is a short- coming in their information system, for example a breach of security that leads to them or loss or failure to carry out an instruction for transfer, then the financial institution is legally responsible for compensating the owner of the asset.

In the case of cryptocurrencies, it is the supporting software that both verifies ownership and executes transfers. There is no requirement for a ‘trusted third party’. This approach though requires a complete historical record of previous cryptocurrency transfers, tracing back each holding of cryptocurrency to its initial creation. This historical record is based on a “blockchain”, a linking of records (“blocks”) to each other in such a way that each new block contains information about the previous blocks in the growing list (“chain”) of digital records. So that every participant in the cryptocurrency network sees the same transaction history, a new block is accepted by agreement across the entire network.

The applications of this technology are not necessarily finance-related; it can be applied to any form of recordkeeping; however, if the block refers to a financial transaction, then each transaction in the blockchain, by definitions, includes information about previous transactions, and thus verifies the ownership of the financial asset being transferred. Falsifying ownership, i.e., counterfeiting (which, one could imagine, is easy, as digital objects can be easily duplicated by copying), is impossible because one would have to alter preceding records in the whole chain. Since records are kept in the network of many users’ computers, a “distributed ledger”, this is rather unthinkable.

There is a substantial computer science literature on the supporting cryptocurrency technologies, including on the security of public key cryptography, efficient search tools for finding transactions on the blockchain, and the 'consensus' mechanisms used to establish agreement on ledger contents across the network. Commentators expect new more efficient approaches will replace the mechanisms currently used in Bitcoin and other cryptocurrencies.

This though would not affect our definitions of cryptocurrencies (as an asset and some technology which verifies ownership of the asset), which is independent of any particular technological implementation.

Cryptocurrencies can be seen as part of a broader class of financial assets, "crypto-assets" with similar peer-to peer digital transfers of value, without involving third party institutions for transaction certification purposes. But What distinguishes cryptocurrencies from other crypto-assets? This depends on their purpose, i.e., whether they are issued only for transfer or whether they also fulfil other function. Within the overall category of crypto assets, we can follow by distinguishing two further sub-categories of crypto-assets, on top of cryptocurrencies:

1. Cryptocurrencies: an asset on a blockchain that can be exchanged or transferred between network participants and hence used as a means of payment—but offers no other benefits.

Within cryptocurrencies it is then possible to distinguish those whose quantity is fixed and price market determined (floating cryptocurrencies) and those where a supporting arrangement, software or institutional, alters the supply in order to maintain a fixed price against other assets (stable coins, for example Tether or the planned Facebook Libra).

2. Crypto securities: an asset on a blockchain that, in addition, offers the prospect of future payments, for example a share of profits.

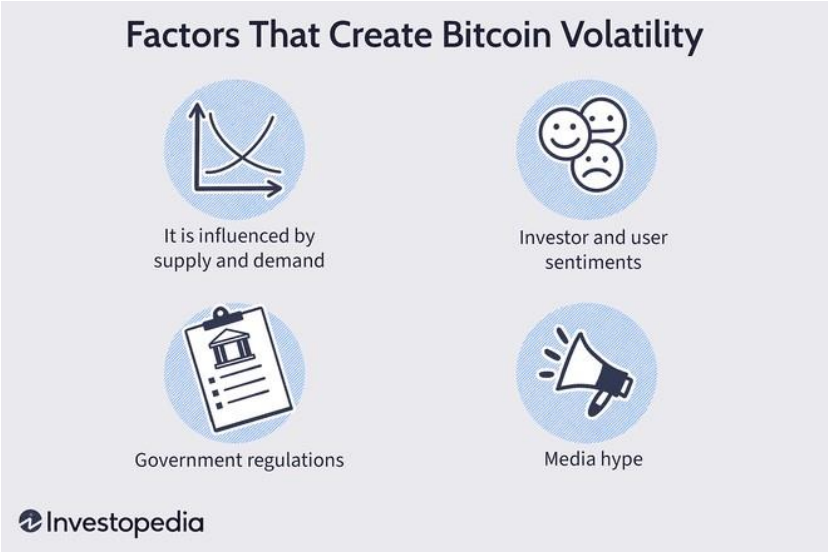
3. Crypto utility assets: an asset on a blockchain that, in addition, can be redeemed for or give access to some prespecified products or services.

A further distinguishing feature of crypto securities and crypto utility assets is that they are issued through a public sale (in so called initial coin offerings or ICOs). ICOs have been a substantial source of funding

for technology orientated start-up companies using blockchain based business models. These classifications of crypto assets are critical for global regulators, since they need to determine whether a particular crypto-asset should be regulated as an e-money, as a security or as some other form of financial instrument, especially in relation to potential concerns about investor protection in ICOs.

UNSTABLE AND VOLATILE NATURE OF CRYPTOCURRENCY:

There are several reasons why Bitcoin has such a volatile price history.



Supply and demand:

Supply and demand influence the prices of most commodities more than any other factor. Bitcoin's market value is primarily affected by how many coins are in circulation and how much people are willing to pay. By design, the cryptocurrency is limited to 21 million coins—the closer the circulating supply gets to this limit, the higher prices are likely to climb. It is difficult to predict what will happen to prices when the limit is reached.

Investor Actions

As the most popular cryptocurrency, Bitcoin demand increases because supply is becoming more limited. Long-term, wealthier investors hold their Bitcoins, preventing those with fewer assets from gaining exposure. According to the National Bureau of Economic Research, one-third of all Bitcoins were held by the top 10,000 investors at the end of 2020.1 Brokers and other financial institutions are working

desperately to get approval from the Securities and Exchange Commission for Bitcoin-backed securities—the number held by institutions and large investors will continue to rise as more securities are designed.

Sometimes accounts that hold large amounts of a coin start selling, leading to a crash in prices. These accounts are called Whales, for they have a large holding and can influence the market if some of them come to an understanding.

Bitcoin in the News

Because news and media outlets are businesses that need content for their readers and viewers, they omen present information and predictions from "experts" that are not always verified by evidence other than opinions.

Bitcoin Regulation

Rumors about regulations tend to impact Bitcoin's price in the short term, but the significance of the impacts is still being analyzed and debated. Government agency views of cryptocurrency can also affect Bitcoin's price. For example, the Internal Revenue Service (IRS) considers Bitcoin a convertible virtual currency because you can convert it to cash. The IRS also considers Bitcoin a capital asset if it's used as an investment instrument.

Additionally, if you mine a Bitcoin, you are required to report it as income based on the coin's market value on the date you receive it.

Gold vs. Bitcoin: Which Is Better?

As cryptocurrency is considered as virtual currency, property, an asset and money does it possess better investment option than gold? As a means of exchange, gold has been used for a very long Time. As such, it is a reasonably stable commodity, as far as price, demand, and supply go. Likewise, fiat currency has been around for some Time—while exchange rates between countries fluctuate and are somewhat volatile, their values are to a point predictable based on the issuing country and the economic circumstances it faces.

Gold has dominated the economies and markets for thousands of years as a means of exchange and holding wealth. Bitcoin was launched in 2009 and only achieved widespread recognition several years later. Other key differences can provide clues into which one you might want to include in your portfolio.

Regulation

Gold's established system for trading, weighing, and tracking is pristine. It's very hard to steal or fake; it's also highly regulated. In many countries, you cannot cross borders while carrying gold without regulatory permission.2 When investing in gold, you'll generally only be able to purchase it from registered dealers and brokers; one caveat is that you should only buy physical gold if you can safely store it.

Bitcoin is also difficult to steal and fake, thanks to its encrypted and decentralized system. It is generally legal to use across the borders of different countries, with a few exceptions. However, the regulatory infrastructure that could exist to ensure that users are safe is not yet in place—the anonymous nature of cryptocurrency also makes it challenging to regulate.

Utility

Gold has historically been used in many applications—currency, luxury items, specialized applications in dentistry, electronics, and much more. This cross-functional utility has given gold its ability to maintain value when other asset values fall.

Bitcoin is limited in its utility. It is currently only used as a digital currency and a speculative investment. However, there is an emerging financial technology whose concept is to use cryptocurrency for financial transactions called decentralized finance. Bitcoin has utility in this emerging tech as a form of lending, borrowing, and possibly more. It also has the potential to be involved in nearly as many applications as gold—but following the same line of thought, it has just as much potential to become useless and invaluable.

Liquidity

One primary concern for investors looking toward Bitcoin as a haven is its liquidity. Cryptocurrencies are generally very liquid assets; however, this may not always be the case. There are Times when it might be more liquid than other assets and Times when it isn't.

For example, if you had several hundred Bitcoin, you might have a hard Time liquidating them if you wanted to get out of cryptocurrency in a hurry—exchanges such as Coinbase only allow for $50,000 liquidation of cryptocurrency per day.3 If Bitcoin's price is higher than the daily limit allowed by your exchange, you'll only be able to do it in smaller increments. If you don't own many Bitcoins, it might be a much more liquid asset for you. Additionally, if the market swings wildly and many investors begin selling their Bitcoin, its price would drop dramatically in response.

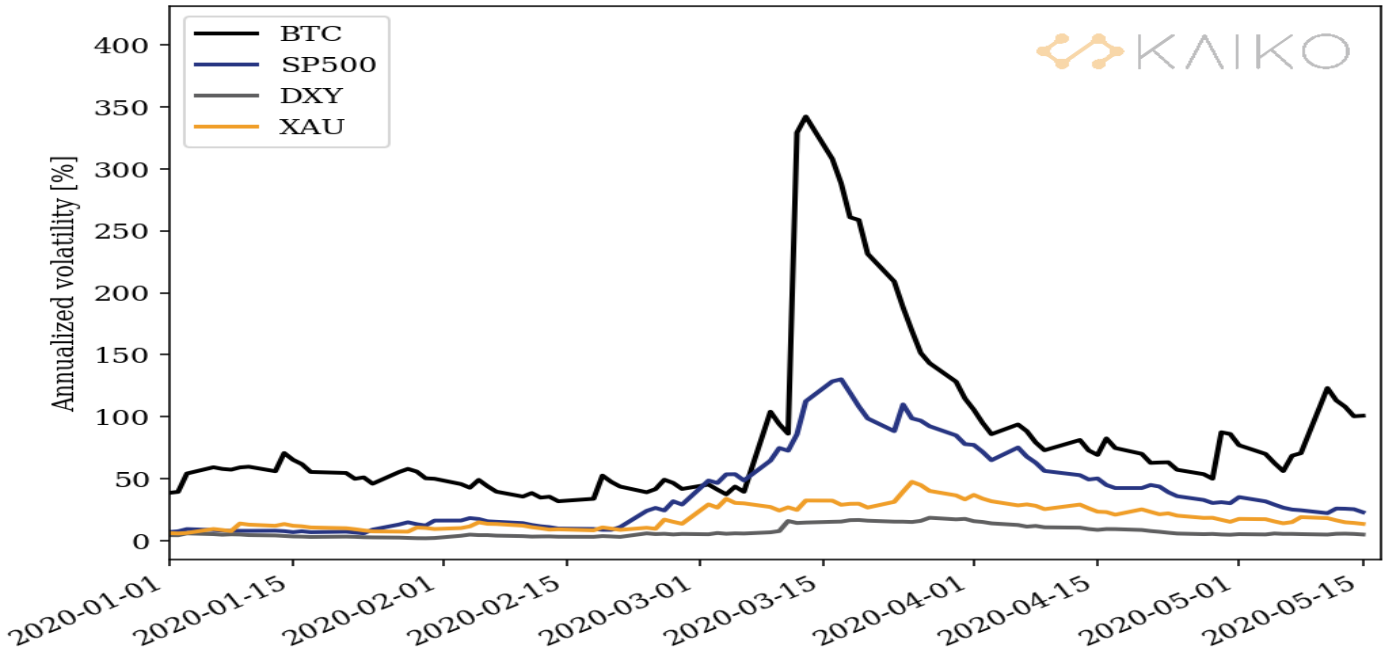
Volatility

Bitcoin has historically proven to be subject to the media effect, investor sentiment, regulatory actions, and hype.

News from the digital currency sphere could prompt investors to panic and make quick decisions, quickly sending Bitcoin's price upward or downward. This volatility is not inherent to gold for the reasons mentioned above, making it perhaps a safer asset.

In recent years, several alternative cryptocurrencies have been launched which aim to provide more stability than Bitcoin. These coins are called "stable-coins" because their prices are pegged to fiat currency or another stable asset. For instance, Tether is linked to the value of the U.S. dollar.

Whether Bitcoin is a better investment than gold boils down to your investment goals, whether you enjoy speculating, your risk tolerance, and how much capital you can stand to lose if the market turns. A financial advisor can help you create investing goals and decide whether Bitcoin is a good investment for



you. Here's a general comparison between the four asset types is shown in Below diagram. As expected, Bitcoin has the highest volatility, followed by the S&P 500, Gold (XAU)and then the DXY (U.S. Dollar Index which measures the strength of the dollar relative to a basket of currencies). So, Investment in which asset better depends upon your risk tolerance, investing strategy, how much capital you have to use, and how much you can tolerate losing. Bitcoin or any other cryptocurrency or ICO's is much more volatile than gold, making it a riskier investment than gold.

RISK AND REWARD NATURE OF CRYPTOCURRENCY:

Following details shows the rewarding nature of cryptocurrency:

- $1,635 billion is the estimated market capitalization of all cryptocurrencies. Bitcoin's market cap of $674 billion (Rs 50,57,561 crore) is more than three Times India's most valuable company Reliance Industries (market cap Rs 14,11,500 crore).
- Rs 1,000-1,500 crore is the combined daily turnover of crypto trading in India. This is less than 1% of the Rs 2,00,000 crore daily trading volumes of stock exchanges in India.
- 10-12 million is the estimated number of active investors and traders in cryptos in India. This is 16-20% of the 60 million active stock investors and traders in the country.
- 24x7 trading takes place in the cryptocurrency market. The market is open even on Sundays and holidays, unlike the stock and bond markets in India that open at 9 am and close at 3.30 pm and are closed on weekends.
- 40-50% was the decline in crypto prices after Elon Musk tweeted that Tesla won't accept payments in Bitcoins and expressed concern over the environmental impact of crypto mining.

Crypto prices have zoomed in the past 12 months, churning out mind-boggling returns for investors. Even after the recent decline, the price of a bitcoin is nearly 400% of what it was a year back. Some smaller coins like the Dogecoin is trading at 140 Times its June 2020 level while Matic Network has risen by over 7000%.

These 10 cryptocurrencies are among the most traded coins. Find out what makes them Tick.

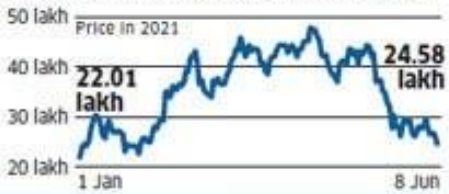
BITCOIN

PRICE
₹24.58 lakh

1-YEAR RETURN
283%

MARKET CAP
$674 billion
₹50,57,561 crore

The world's first cryptocurrency is also the largest. This bluechip is acceptable in many countries, institutional investors are showing interest and there is also a bitcoin futures market. The limited supply–there are only 21 million Bitcoins–makes it even more valuable.



₹10,000 invested on 1 Jan 2021 is now worth **₹11,165**

ETHEREUM

PRICE
₹1.87 lakh

1-YEAR RETURN
1,040%

MARKET CAP
$313 billion
₹23,46,588 crore

Created in 2015, Ethereum is the second-largest cryptocurrency. Some analysts say the Ethereum tech is superior and predict that its market cap could exceed Bitcoin's. A Goldman Sach's report says "Ethereum provides a way to create new applications on its platform".

₹10,000 invested on 1 Jan 2021 is now worth **₹34,140**

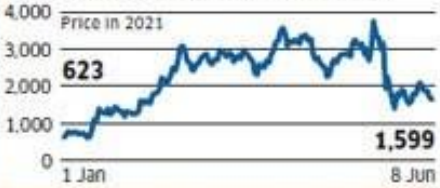
POLKADOT

PRICE
₹1,599

10-MONTH RETURN
604%

MARKET CAP
$22 billion
₹1,71,208 crore

Created in 2017 by a co-founder of Ethereum, this crypto project focuses on enterprise and business-to-business financial applications. It is aimed at a fully decentralised web, where users get control over their privacy and personal data rather than large corporations.



₹10,000 invested on 1 Jan 2021 is now worth **₹25,677**

CHAINLINK

PRICE
₹1,673

1-YEAR RETURN
441%

MARKET CAP
$11.8 billion
₹88,502 crore

Chainlink has strategic partnerships with top tech companies. After a successful funding program last year, it has doubled its team and bagged new contracts in insurance and games. Chainlink was among the 100 most promising technology pioneers of 2020.

₹10,000 invested on 1 Jan 2021 is now worth **₹18,818**

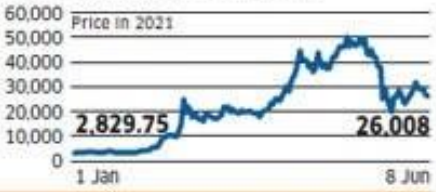
BINANCE COIN

PRICE
₹26,008

1-YEAR RETURN
2,165%

MARKET CAP
$60 billion
₹4,49,419 crore

Launched by the Binance Crypto Exchange, this altcoin can be used to buy other crypto-currencies. Users get a discount in transaction fees on the Binance Exchange. BNB can be used to pay crypto credit card bills and merchants can take BNB as a payment.



₹10,000 invested on 1 Jan 2021 is now worth **₹91,908**

CARDANO

PRICE
₹113.10

1-YEAR RETURN
1,733%

MARKET CAP
$53 billion
₹4,02,017 crore

There was a sharp uptick in price after this crypto announced its ability to create smart contracts for the Decentralised Finance sector. Its developers are working towards full decentralization, which could be a big trigger for a breakout in the crypto valuation.

₹10,000 invested on 1 Jan 2021 is now worth **₹86,148**

DOGECOIN

PRICE
₹24.32

1-YEAR RETURN
14,185%

MARKET CAP
$48 billion
₹3,61,367 crore

This crypto was in the doghouse for a long time before tech mogul Elon Musk showed extraordinary interest in 2021. In a tweet, Musk called himself "dogefather", which sent its price zooming in May. The price later fell, but is still 140 times its June 2020 level.

₹10,000 invested on 1 Jan 2021 is now worth **₹5.72 lakh**

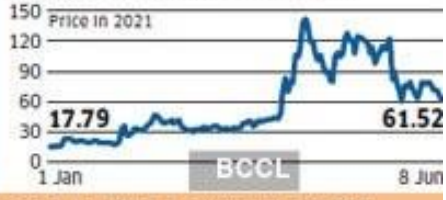
RIPPLE

PRICE
₹61.52

1-YEAR RETURN
362%

MARKET CAP
$43 billion
₹3,25,390 crore

Ripple has had a rollercoaster ride in the past few months. An ongoing lawsuit against Ripple Labs had already led to uncertainty when it was announced recently that co-founder and former CTO Jed McCaleb had reduced his holding by 400 million coins in May.



₹10,000 invested on 1 Jan 2021 is now worth **₹34,578**

So, the tick in all these cryptocurrencies is the reward in form of return they-are offering to investor.

So, what is the problem?

Well, we've probably already noticed by now that cryptocurrency doesn't come for free, and it's not always straightforward, at least not for people who don't have a background in the type of technology that cryptocurrency uses. Cryptocurrency is not infallible either, despite what some crypto-enthusiasts may have we believe.

2019 alone saw several major cryptocurrency scams, resulting in more than $4.26 billion that had been stolen from crypto users, exchanges, and investors. These scams include, but are not limited to:

- A $40 million hacking of one of the world's biggest cryptocurrency exchanges
- A three-year phishing scam resulting in more than $100 million in stolen cryptocurrency.

The takeaway here is that both supposedly secure institutions, such as large exchanges, and individuals are being targeted by crypto thieves and scammers.

The U.S. Federal Trade Commission offers some words of warning about cryptocurrency on its website. Remember:

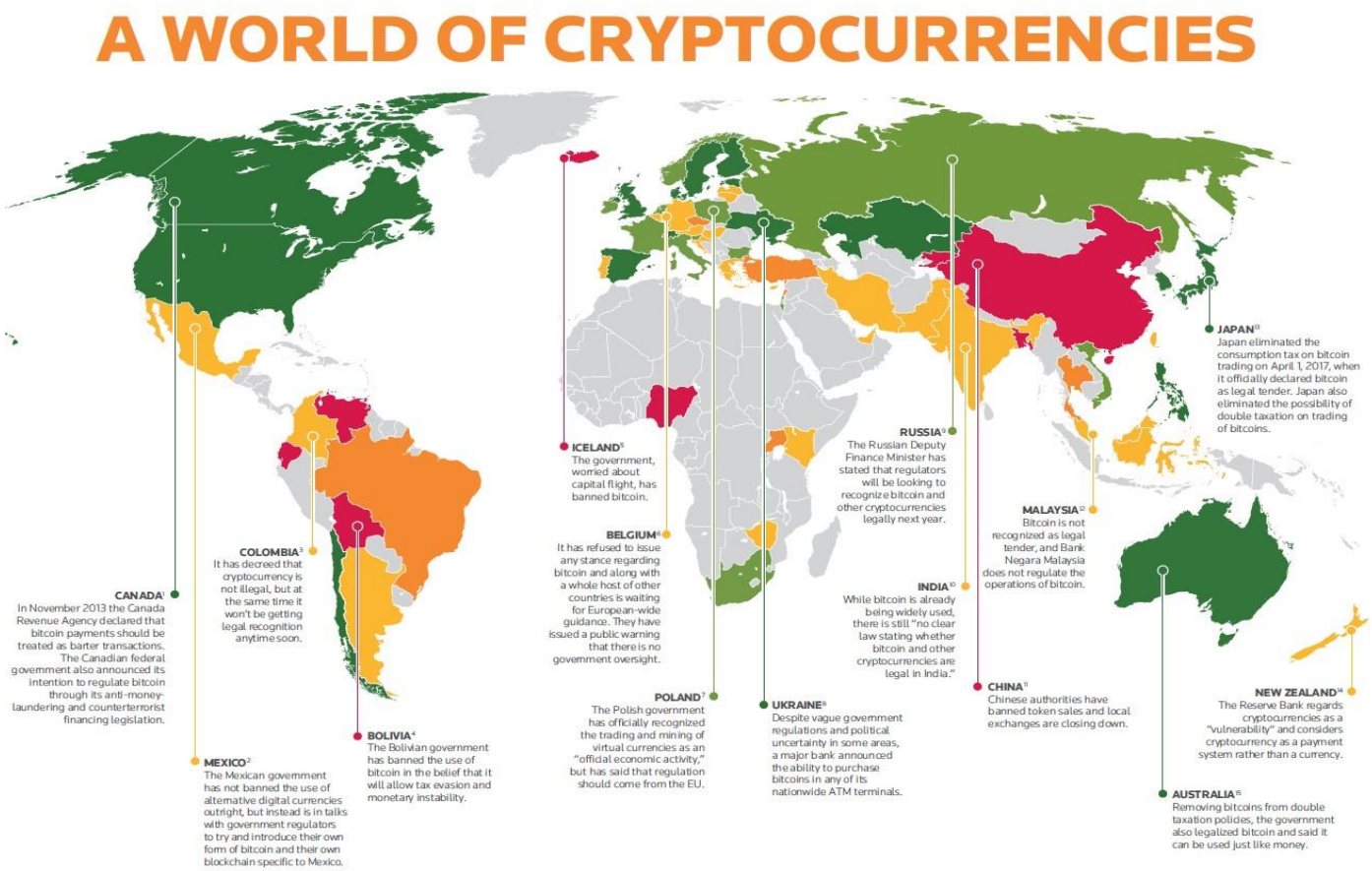
- Cryptocurrency is not backed by a government. While this is the appeal for many, it also means that your cryptocurrency does not have the same protections as the money in your FDIC-insured bank account. If your cryptocurrency is stolen, for example, or the crypto business you are working with shutters and you lose all your money, there is very little you can do to recoup losses. Likewise, the transactions you make with cryptocurrency don't have the same protections as U.S. dollars.
- The value of cryptocurrency changes all the Time. We mentioned this above as a risk for investing in cryptocurrency. Cryptocurrency value can fluctuate from hour to hour. The value of Bitcoin, for example, fluctuated wildly in 2019, and dropped 8% in one day that June. When a cryptocurrency's value drops, there is no guarantee that it will return to its higher price.
- Scams abound. Some reports will have you believe that cryptocurrency is the silver bullet of your financial woes, but just like with any get-rich-quick scheme, if it sounds too good to be true, it probably is. Scammers frequently offer investment or business opportunities related to cryptocurrency that promise (1) you'll make money, (2) you'll make money fast, and/or (3) you'll get free money. These are all red flags. If someone promises you a way to make a lot of money in a short amount of Time, always proceed with caution.

The risks associated with cryptocurrency multiple when you add in a loan element. Risks increase even further when you don't understand the underlying technology of cryptocurrency. Cryptocurrency loans can also be straight-up scams, along with fake cryptocurrencies, fake cryptocurrency websites and mobile apps, and email phishing scams.

DIFFERENT PERSPECTIVES OF CRYPTOCURRENCY

The innovation of cryptography technique and blockchain has made cryptocurrency an alternative medium of exchange due to its safety, transparency and cost effectiveness. But its main feature cannot be separated from the users who use cryptocurrency for their illegal transactions. There are several arguments related to the legality of cryptocurrency. The purpose is to analyses the nature of cryptocurrency based on characteristics of legal perspective, economic perspective, social perspective, psychological perspective and future perspective

LEGAL PERSPECTIVE: every country in the world has taken two bitcoin and cryptocurrencies in its own wat. Broadly speaking we can categorize the type of responses as per below



- Global advocates countries in the green color such as USA, Canada, Ukraine, Australia are pioneer nations whose governments have taken steps to promote cryptocurrencies.
- Developing countries such as Russia and Poland have taken steps to bring cryptocurrencies at par with fiat but there are still some barriers.
- Fence - Sitters Government such as India, Mexico and Belgium that have not called individual trading into questions or that have stopped short of giving any legal or regulatory protection to users of cryptocurrencies.
- Hostile Countries such as Brazil that have taken the step to curtail cryptocurrencies but stopped short of banning individual trading or exchanges.
- Banned government such as China, Iceland and Bolivia that have outlawed cryptocurrencies, within their borders, with a few threatening punitive sanctions to individuals using them.

LAWS RELATED TO CRYPTOCURRENCY IN INDIA

Guidance should be taken from other jurisdiction that have already had extensive discussions and workshops on this subject while evaluating the legal approach on cryptocurrency. The U.S. The Uniform Law Commission has drafted legislation on the issue, the 'Uniform Regulation of Virtual Currency Businesses Act' ('ULC Model Law'), after reviewing the opinions of policymakers, members of the public, non-profit groups and leading leaders of the industry. Crypto assets are a common phenomenon rather than a regional authority, thus, making global precedents easy to apply to the Indian context.

The Prevention of Money Laundering Act (PMLA) is the definitive Indian law on KYC/AML (Know your customer/

Application lifecycle management). Crypto-asset undertakings may be brought under the PMLA as any entity that is a 'bank company, financial institution, intermediary or a person carrying on a designated business or profession.' In any event, the RBI has the power to prescribe enhanced or simplified measures under the Prevention of Money Laundering (Maintenance of Records) Rules to verify the identity of the client. Consideration of the type of customer, corporate arrangement, complexity and importance of the transactions concerning the potential risk of money laundering and terrorist funding.

The RBI will adopt a risk-based strategy and mitigate money laundering issues while preventing a full ban on funding these businesses. This will require accountable and reputable businesses to work in a controlled manner. The RBI Circular might not be appropriate for that approach. A new regulatory system will require responsibilities for crypto asset companies, such as financial adequacy, audits and monitoring. A proposed licensing system will help to better safeguard customer safety.

Payment and Sealement System Act, 2007 – PSS Act Sections 10, 18, and 38 grant the RBI the authority to create rules, directions, and guidance. That is, for example, the control the RBI uses to enforce the Master Directive on Prepaid Payment Instruments. By this legislation, cryptocurrency trading sites can also be put under a licensing regime under the PSS Act. The guidelines released by the Department of Banking Regulation (DBR), RBI, on Know Your Customer (KYC)/Anti-Money Laundering (AML)/Combating Terrorism Financing (CFT) shall extend mutatis mutandis to all agencies that issue PPIs and their employees. This solution will require suitable exemptions in the RBI Circular, as RBI-regulated organizations are currently totally barred from dealing with, or encouraging, virtual currency trading under the circular.

Non-Banking Finance Companies (NBFC) – It puts crypto-asset market operation into a well-established regulatory framework, which requires licenses, financial adequacy, KYC / AML laws, audits, reports and other consumer-focused criteria. The business of an NBFC is defined in Section 45-I of the RBI Act. An NBFC is defined as a variety of categories of 'financial institutions' excluding undertakings of mainly buying or distributing products or delivering services and businesses collecting deposits as their main business. This provision grants the RBI the authority to designate any class of entities as NFBCs, with the prior approval of the Central Government. The RBI and the Central Government can, therefore, consider NBFCs to be notifying entities carrying on 'crypto-asset business activities'.

Consumer Protection Act, 2019 – Under Section 30A of the Consumer Protection Act, the National Consumer Disputes Redressal Commission has the authority to make regulations "to provide for all matters for which coverage is required or expedient to give effect to the provisions of this Act." The

Consumer Protection Act 2019 protects consumers from 'unfair trade practices,' 'deficiencies' in facilities and 'defects' in goods. The word 'unfair marketing practices' requires a false or misleading advertisement. Hence, the National Commission is open to developing laws (e.g., establishing a regulatory regime) taking into account the crypto-asset industry's specific consumer security issues. We suggest this path should also be considered. As a result, customers have redress under the Consumer Protection Act, 2019 where every crypto-asset company renders misrepresentations to customers or offers defective services.

Foreign Exchange Management Act,1999 – FEMA notes that 'international currency' is any currency other than Indian currency. The currency of India is limited to any currency expressed in Indian rupees. Consequently, if any crypto-asset can be used to "build a financial risk," it will amount to "international currency." The RBI may control the drawing of these FEMA crypto-assets such that only 'registered persons can trade in foreign currency. This would have the benefit of having an increasingly well-established regulatory framework for those concerned with these forms of crypto-assets since they will be subject to all the protections that apply to approved persons. Since certain crypto-assets are called 'goods' under FEMA, the regulatory consequences under FEMA (e.g., export compliance) will flow accordingly. However, the RBI did not explain the classification of crypto-assets under FEMA, which confused the issue. The RBI can determine to amend the rules and guidelines on the sale and import of products to clarify their operation concerning crypto-assets.

Information Technology Act, 2000 – Any providers of virtual currencies get information and details about their customers. Platforms that allow credit card transactions in virtual currency must also recognize these laws when processing information about credit cards. These data must be maintained and stored with strict levels of

confidentiality and security. Otherwise, the Virtual Currency provider can violate data protection and security laws. The Information Technology Act reads with the Rules on Information Technology, 2011 requires that all those responsible for using data follow strict rules. Such laws require the fact and intent for which the information is gathered, the creation and dissemination of privacy policy and the safeguarding of data. It establishes relatively strict cybersecurity standards for every organizational entity managing confidential personal data, and the Central Government that, if it seems appropriate,

recommend clear additional steps for crypto-asset business activities. A new Data Privacy Bill is set to be adopted, and when enacted, the same safety requirements will also be recommended under this Law.

Credit Information Companies Regulation Act – There is some suggestion that due to its tremendous growth, the Credit Information Companies Regulation (CICRA) Act, which became law in India in 2005, is likely to be extended to cryptocurrencies. Since cryptocurrency networks are ubiquitous for many activities such as processing, distributing, redeeming, trading, and exchanging cryptocurrency values, the specifications of the CICRA Act may be implemented. According to this Act, Indian individuals' credit details must be obtained in compliance with such legislation as set out in this Act. In the case of illegal data them, organizations which collect financial information may be held liable. Offshore financial transfers are very common in today's cyberspace, so taking into account the vast amount of persons involved with them, these activities are useful for the security of the individual's concerned personal data.

Prize chits and Chits Fund Act – Both the Prize Chits Act and the Chit Funds Act,1982 refer to the idea of

'monies'/'money' and 'cash' in the terms 'prize chit,' 'chit' and 'capital exchange scheme' in their meanings. Since crypto-assets are not technically 'money' under Indian law, these meanings must be revised to include the word 'valuable item' (as used in Section 2(c) of the Prize Chits Act, so that, among other valuable items, the aims of these Acts can be applied to the crypto-asset schemes.

Taxation laws – In the virtual currency business taxation legislation ranges from country to country. Many countries place taxes on income produced by virtual currency transactions and some others have only proposed taxation legislation. In India, where RBI notifies any such law, any trade therein would be subject to the Foreign Exchange Management (FEMA) Act, 1999. Crypto-asset-related transaction taxes would fall generally into two headings: Goods and Services Tax (GST), and Income Tax. The Crypto like bitcoins is called a capital asset if bought for profit. Any income resulting from a bitcoin trade shall be treated as a capital gain.

ECONOMIC PERSPECTIVE

Cryptocurrency has an impact on economies. That's why some are afraid of it and some welcome it. Although crypto currencies are considered a form of money the internal revenue service (IRS) treats them as a financial asset or property. And, as with most other investment, if you reap capital gain in selling or trading crypto currencies, the government wants a piece of the profit. On May 20, 2021, the U.S. Department of the treasury announce a proposal that would require taxpayers to report any crypto currency transaction of an above $10,000 to the IRS.

According to the Crypto industry there are be as many as 20 million Crypto investors in India this is equal to the number of investors, we have had in the capital market including mutual funds for over two decades right until the Covid pandemic. The total investment is estimated at around US$6 billion this is our industries estimates. The budget has not even put out any official number on the size of the industries or trading volume. The finance minister Nirmala

Sitharaman decision to impose a 30% tax on profit from Crypto transaction and 1% tax deduction at source TDS was seen as legalizing crypto currency in India, it also open the door to the deliberate and cynical attempt by the Crypto industry to mislead the global founders of crypto exchanges, miners, influencer and public relation PR companies are out in force declaring that a decision to take equal legalizing Crypto specially since it was accompanied by their announcement that the RBI will launch its digital currency this year . Here's the list of countries implicating taxes on cryptocurrency:

Crypto currency and the government of different countries have an interesting relationship. It makes sense that the government would be uneasy about mainstream acceptance of a currency. For starters, there are the anxieties that government official must have about ceding monetary control and fiscal policy to an algorithm. Then there is the extreme volatility of the crypto currency markets plus their association with dark money. However, the relationship is changing over Time. On its side, the government is tolerating a gradual yet substantial induction of crypto currency into conventional financial services. On a crypto currency market side, the exchange started pairing crypto currency to Fiat currencies such as US dollar. The increasing presence of bitcoin in finance is also evident in bitcoin futures contract which are traded on major institutional exchanges like the Chicago Mercantile Exchange and the Chicago Board Option Exchange. The regulators central bank and federal judges all continue to have different opinion of

whether crypto currency should be considered as currency or a commodity. Nevertheless, all seem to agree that the profit acquired through trading and using it should be taxed.

But the real questions are does the taxation on crypto currency is a move toward transparency? The first crypto currency Bitcoin was introduced in 2009 as a peer-to-peer cash system. It was designed to be easy to use, easy to store and anonymous. Your virtual wallet and a bitcoin in it were as untraceable as the contents of a Numbered Swiss bank account. It wasn't long before government observed a surge in money laundering using crypto currency. Tax authorities, too, were bound to make a note that invisible wealth is difficult or impossible to tax. Today most crypto currency transaction is transparent. Crypto currency exchanges impose anti-money laundering requirements on bitcoin trader to avoid drawing regulators and tax officials. Clearly the days of anonymous crypto currency transaction were at an end. It is possible that the federal or agency based its list of recipients on customer data acquired from Crypto currency exchange Coinbase. The government want to make sure that it has been said that there are 10 crore investors in the Crypto trade in India, so they want to see whether it is ten or one crore, they want to see whether the profits are declared whether they are real or just drutimed up to build up the market. They want to get into the market, understand how it works and also want to improve the opacity and bring transparency to the transactions.

Different economies' approaches to taxing crypto

	Regulatory framework	Legal tender/illegal	Classification for tax purposes	Tax implications
U.S.	No centralized framework	Not legal tender	Property (capital asset)	Taxed as capital gains; rate varies from 10–37%
Canada	Regulated under securities law	Not legal tender	Commodity/security	Transfer of crypto attracts capital gains tax
U.K.	No specific regulatory framework	Not legal tender	Property (classified as "tokens" in taskforce report)	Taxed as capital gains
Japan	No specific regulatory framework	Legal tender	Defined as "crypto asset" (under Payment Services Act)	Gains categorized under "miscellaneous income"; rate varies from 5–45%
Australia	No, but government planning to establish one soon	Not legal tender	Asset	Taxed under capital gains/income tax, depending upon circumstances
Singapore	Not at present, but currently in progress	Not legal tender	Capital asset	No tax, as there is no capital gains tax in the state
South Korea	No specific regulatory framework	Not legal tender; however, exchanges are monitored	Undefined	No tax; crypto not considered to be a currency or a financial asset
China	Yes	Not legal tender; even exchange/trading is banned	"property"	Treated as property transfer income
India	No; but regulations are expected soon	Not legal tender	Capital asset	Gain arising on transfer attracts capital gains tax
EU	Yes, see "Markets in Crypto-Assets Regulation"	Legal tender (subject to country specific stance)	Regulation is inclusive of 27 definitions of crypto assets, each with a distinctive characteristic	Varies from country to country
Mexico	Yes	Not legal tender at present, but the government plans to make it legal tender soon	Capital asset	Attracts capital gains tax
Switzerland	Yes	Not legal tender	Property/asset	Exempt from tax (though taxable in some cases)

Bloomberg Tax

Past examples suggest countries that welcome crypto networks reap economic benefits through innovation, investment, jobs and taxes. Business benefits of adopting crypto as a digital asset include access to new demographics and technological efficiencies in treasury management.

SOCIAL PERSPECTIVE

Critiques emphasize cryptocurrencies are not exempt from frauds and scandals. For example, several

millions in Bitcoin from the Japanese platform Mt. Gox in 2014 and $50 million in Ether during the Decentralized Autonomous

Organization (DAO) attack in 2016 were stolen. Moreover, cryptocurrency payments, being largely unregulated, do not restrict any purchases, including those illegal. Researchers provide summary data showing that, at least in the beginning of the Bitcoin era, most transactions were used for drug purchases. They estimate that about 46 % of Bitcoin transactions are associated with illicit activities, but that the illegal share of Bitcoin activity declined over Time with the emergence of more opaque cryptocurrencies. On top of that, users appear unprotected as payments are omen irreversible, and an erroneous transfer cannot be cancelled, unlike credit card payments.

On the positive side, the development of the cryptocurrency market contributes to the dynamics of access to finance. The advent of the blockchain technology allowed entrepreneurial teams to raise capital in cryptocurrencies and fiat money (which has to be exchanged into a cryptocurrency) through the issuance of digital tokens (Initial Coin Offerings, ICOs) and the development of ‘smart contracts. Tokens give their buyers a right to use certain services or products of the issuer, or to share profits, in which case they resemble equity. Special crypto-exchanges then serve the secondary market for tokens.

Cryptocurrencies, which underlie the ICO procedure, are claimed to provide much more equitable and democratic access to capital as well as greater efficiency, compared to fiat money, allowing peer-to-peer transactions and avoiding the inter- mediation of banks. This is normally done via an ICO, and could be a relevant opportunity for small business, which omen experience a gap in funding and miss competences to relate with professional investors. It also reports ICOs are a potential route for low-cost finance for MSE’s.

Will cryptocurrencies favor a process of “democratization” of funding? This has been widely discussed by practitioners and investors, with a great variety of views. For example, The World Economic Forum White Paper (WEF 2018), claims that cryptocurrencies and blockchain technologies could increase the worldwide trading volume, moving to better levels

of service and lower transaction fees. To this extent, the contribution by Ricci (2020) in this special issue

considers the geographical net- work of Bitcoin transactions in order to discover potential relationships between Bit- coin exchange activity among countries and National levels of economic freedom. The study shows that high levels of freedom to trade internationally, that guarantee low tariffs and facilitate international trade, are strongly connected to the Bitcoin diffusion. On the one hand, the freedom to trade internationally could increase the foreign trade through the use of alternative payment instruments capable of reducing transaction costs (like cryptocurrencies), on the other, low capital controls could encourage the use of cryptocurrencies for illegal conduct, such as money laundering.

The reward system for cryptocurrency 'miners' creates an incentive to leverage on computing power, increasing the consumption of energy. For example, Bohme et al. (2015) note that computational efforts of miners are costly, mainly because the proof-of-work calculations are "power-intensive, consuming more than 173 mega- watts of electricity continuously. For perspective, that amount is ... approximately $178 million per year at average US residential electricity prices." The sustainability topic is raised in this special issue by Vaz and Brown (2020). They posit that there are significant sustainability issues in the cryptocurrency development exceeding potential benefits, that are captured typically by a few people. But now, many cryptocurrencies have signed up to be 100% powered by renewable energy by 2030. Cryptocurrency Candela insists all its mining is solar-powered. They plan to encourage people to sell their home's excess solar power to neighbors. Ethereum, the world's most popular blockchain program, is close to adopting proof of stake for transactions. Proof of stake is regarded by many as blockchain's answer to its energy-intensive processes, ditching mining to approve transactions. Ethereum's proof of stake is due to come on stream in February 2022. The blockchain world will be watching intently; success will change blockchain's energy demands. A Bloomberg report estimates proof of stake could reduce Ethereum's energy footprint by 99%.

The use of blockchain offers far-reaching possibilities for social impact, including:

- Transparency
- Supply chain management
- Digital identity
- Personal data protection

- Legitimacy
- Compliance
- Trust

Big tech companies keep their algorithms secret, whereas blockchain's selling point is openness and irrefutable record keeping. Some technologists claim blockchain and cryptocurrencies can realign capitalism thanks to blockchain's alternative trust-based, peer-to-peer systems.

On a macro level, more than 1 billion people worldwide do not have access to a bank account because centralized systems at banks exclude them. Cryptocurrencies have allowed the unbanked to pay for items digitally and to become more connected members of society. There are many new potential customers for businesses or people to be paid or taxed digitally.

On a micro level, Pool Together is a blockchain-based lottery and savings protocol based on the premium bonds model. People deposit money and are entered into a weekly prize drawing. More importantly, anyone can quickly check who won and easily withdraw their deposit at any Time.

Cryptocurrencies make it easier for people in different countries to pay each other, negating financial borders currently controlled by banks and governments. Emergency aid, welfare, fines, and many more financial areas are open for development.

Added flexibility is being built into blockchain, too. Smart contracts interact with blockchain to allow for complex transactions. A smart contract executes an action once certain conditions are met by reading external information. Uses include paying out a winning bet, voting, or monitoring supply chains.

PSYCHOLOGICAL PERSPECTIVE

A couple of years ago, the word 'cryptocurrency' would have conjured up images of a secretive, underground currency and yet today we see the biggest financial institutions and news outlets in the world dedicating space to it. Examining the psychology around crypto currency can reveal how and why it has

become the phenomenon it is today.

Psychological needs:

People's behavior can be explained in part by their underlying psychological needs. For example, people have an inherent need to belong, to be free, to be in control – and so on. But those needs are not evenly distributed – each of us has a slightly different pattern of needs that guides our decisions. Those of us who have a particularly strong drive to belong may be more interested in the sense of identity and group membership that investing in crypto gives us. There is an exclusive culture that surrounds crypto. For those people, crypto not only offers financial opportunities, but it also gives you access to the conversation and the identity of being a crypto investor.

Others are drawn to crypto for different reasons. Where some people want to fit into the crowd, others prefer to set themselves apart. And – while Crypto currencies have the attention of major financial institutions – they are not yet considered 'mainstream' and so crypto investors can continue to view themselves as radical.

Risk appetite

Levels of risk appetite can also help to explain why people are flocking to crypto right now. Those of us with a higher appetite for risk and excitement may be drawn to crypto due it's volatility and the potential that it holds for higher returns. It provides instant gratification compared to more traditional, 'boring' investments like ISAs or bonds.

Cognitive biases

Crypto-excitement may also be driven by the availability bias. This is the cognitive heuristic that makes us pay attention to things that come more easily or vividly to mind. It's why we are more afraid of shark attacks than we are of car accidents, and demonstrates our limited capacity to deal with probabilities.

In the case of crypto, stories of people who made a life-changing fortune investing in crypto dominate the headlines and our social media feeds. We see these seemingly average people become millionaires and we think that could have been me.

This illusion of obtainable opportunity is a major attraction of crypto currency. For young people in the

current economic climate, it is difficult to envisage making significant wealth. Achieving financial freedoms that previous generations might have taken for granted – like being able to buy a home – seem out of reach.

In this context, the stories that we hear about crypto are making financial freedom feel more possible, encouraging young people to invest.

So, what, Crypto currency hits a number of psychological hot buttons – it manages to bridge our needs for control and belonging by being a hot Ticket into a seemingly exclusive group. It offers the potential for rewards that will draw in those who are looking for excitement. And it manages to perpetuate the story of those rewards across news outlets and social media globally.

There is a lesson here about all new technologies that offer something exciting, and how a rounded understanding of our psychology can explain why those technologies suddenly become cultural phenomenon.

Social media plays into it

From celebrities who invest in bitcoin, to a highly-engaged bitcoin community on Twitter, TikTok and Reddit, social media feeds into bitcoin's popularity.

"Suddenly, there's like a new way to see, finance and to have an identity of yourself as an actor in like the financial space," says Lana Swartz, assistant professor of media studies at the University of Virginia and author of "New Money: How Payment Became Social Media," tells CNBC Make It.

These social platforms can also drive behaviors, according to Utpal Dholakia professor of marketing at Rice University, who studies consumer financial decision-making. Research has shown that when people talk about their investments in online social environments, they tend to become more risk-seeking in the types of investments they make, he tells CNBC Make It.

"The same dynamic applies to a lot of investment decisions which are being made right now," Dholakia says.

The volatility can be exciting

Many smart investors, from Kevin O'Leary to CNBC's Jim Crafter, have likened buying bitcoin to going to Vegas.

Berkshire Hathaway CEO and chairman Warren Buffett has been a longtime critic inflation of bitcoin, saying that "cryptocurrencies basically have no value" and are a "gambling device."

And as with gambling, "some people certainly enjoy that thrill," Dholakia says.

Checking the price of stocks regularly is an activity that could get boring, says Tom Mavis, professor of marketing at New York University's Leonard N. Stern School of Business. "With something like bitcoin, it's exciting because there's constantly something happening," he says. "You can check it 10 Times a day and the price can vary wildly."

Also, many young people especially, who have grown up with video games and social media, are conditioned to want instant gratification and fast-paced cycles, Swartz says. Being drawn to high-risk high-reward investments like bitcoin "makes perfect sense," she says.

FOMO

People get excited by the prospect of bringing a new, potentially life-changing, technology into the world. And with bitcoin bulls predicting the crypto's price could go as high $200,000 over the next decade, and with mainstream financial businesses from Paypal to Square getting into bitcoin, it's hard not to fear missing out.

Add to that the viral stories about people who have had success with bitcoin: There are enviable windfalls, from instant bitcoin millionaires to stories like the "Bitcoin Family," a Dutch family of five who liquidated their assets in 2017 in exchange for bitcoin (when bitcoin was priced at $900), moved into a van and traveled the world.

"People focus more on the upside than the downside," says Meyvis. So it's easy to get swept up in the possibilities that could come from bitcoin.

Herding behavior

Three features distinguish cryptocurrency markets: investors are non-institutional, risk (volatility of returns) is high, and the fundamental value is unclear. Under these conditions behavioral biases should be even more pronounced than in traditional asset markets. In this special issue Haryanto et al. (2020) study the disposition effect and the herding behavior in the cryptocurrency realm by investigating the trading

behavior at a crypto-exchange: they find a reverse disposition effect in bullish periods where the Bitcoin price increases while a positive disposition effect is observed in bearish periods. They also find that in different market conditions herding moves along with market trend (in the bullish market a positive market return increases herding, while in the bearish market a negative market return has the same effect). The reverse disposition effect in the bullish market indicates investors exhibit more optimism and expect returns to further grow, which is consistent with the exponential price growth in a bubble in the absence of a clearly defined fundamental value. This lack of clarity regarding the fundamental value is also supported by the asytimetric herding behavior: when the price grows in a bullish market, investors look at other market participants to see whether others also think the price will continue to grow (similarly but with the opposite sign for the bearish market).

People with a cause.

These are the people belonging mostly to developed countries going out of their ways to use Bitcoin. They want it to be successful, much like the people who are buying electric cars and want the world to go green. According to a survey carried out by 2gether, most of such users are involved in white-collar work with an advanced academic background. These buyers of Bitcoin are mostly making use of the cryptocurrency to make payments for traveling and eating out.

Next is the category of people belonging to countries with high rates of inflation. In such countries, people view Bitcoin as a store of value like gold and property. A trailer of this theory was seen during the COVID 19 pandemic when the US started printing more currency notes to inject into the economy. The investors anticipated an increase in inflation in the US. As a result, Bitcoin prices hit a historic 250% price gain at the end of 2020.

It has been noted that in developing countries, the adaptation of Bitcoin is higher than in developed countries. In many countries, Bitcoin is also being used by investors as a hedge against political and economic instability. Nigeria and Columbia are amongst the list of countries where Bitcoin trading is the highest. Since the rate of Bitcoin is independent of any government, it is considered a haven asset. According to a survey, inhabitants of Venezuela and Zimbabwe usually invest in Bitcoin to protect their

savings and access and sell their savings wherever and whenever they want to.

It provides hope

"Money is a technology that allows us to imagine futures," Swartz says.

The bitcoin excitement, particularly among young people, illustrates that people feel "locked out of the ability to have the kind of assets that would let them generate any form of wealth," Breton says.

Millennials, those born between 1981 and 1996, controlled just 4.6% of U.S. wealth through the first half of 2020, according to data from the Federal Reserve.

"When we look at the fever around bitcoin, we really need to see it like in part as a demonstration of the fact that this is happening because there are not reliable, non-speculative mechanisms whereby people who don't already have access to a chunk of wealth could produce wealth over Time," he says. "And that's a real indictment of the way things are currently set up for younger people."

FUTURE PERSPECTIVE AND THE UPCOMING TRENDS (evolution and future it holds)

It's clear that cryptocurrencies are an important and rising element in today's digital economy. At the Time of writing, the market capitalization of the top 10 cryptocurrencies in the world was around $8.69 billion and growing. But why have so many people invested their belief (and perhaps more importantly, their money) in digital currencies that have little-to-no intrinsic value and no state to back them up?

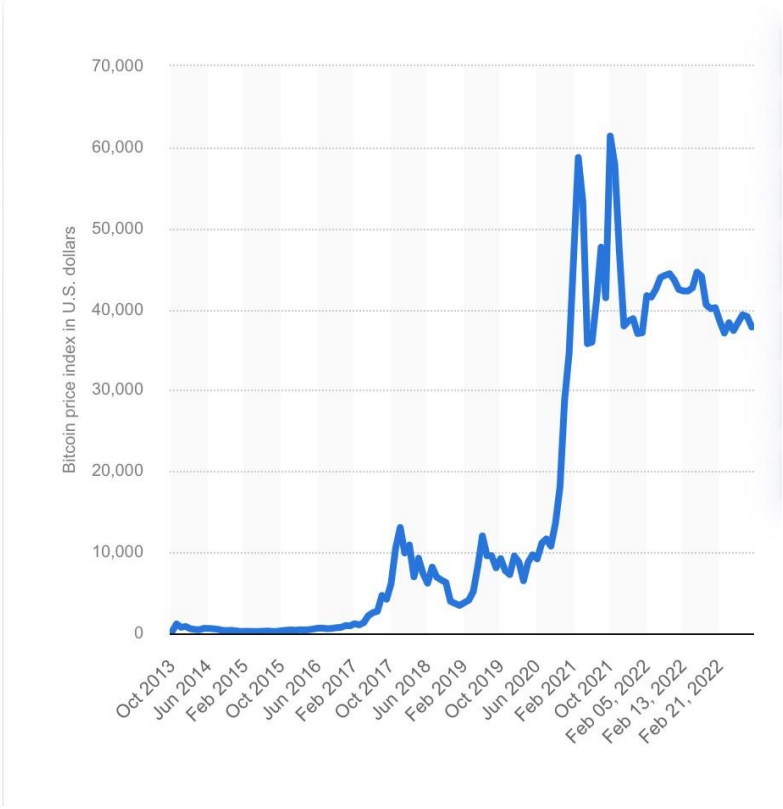
In the wake of the 2008 financial crisis, the trust in banks, financial institutions and governments has melted away amongst the populations of Europe and the USA; this is especially true amongst the younger, more tech-savvy demographic. It is from amongst this group of people that Bitcoin emerged. A central tenet of cryptocurrencies is to avoid using banks or established financial institutions to route money or accept payments. This cuts out the need for banks as third-party guarantors of transactions, and limits the ability of governments to interfere or regulate payments.

A side effect of removing third-party guarantors from payments is that the new payment method must be decentralized and trust-free. In such an environment, it is considerably easier to conceal one's identity; indeed, declining to reveal personal information becomes the norm.

Inevitably, by providing a means of making payments secretly and without government interference cryptocurrencies have become popular with providers of illicit products and those who would rather operate under a cloak of anonymity.

Finally, the growth of cryptocurrencies has been fuelled significantly by the activities of speculators, who can harness the volatile prices that cryptocurrencies omen exhibit to make large profits. Following are the graphs of few cryptocurrencies showing immense growth from the Time they were launched.

Bitcoin: Bitcoin (BTC) price again reached an all-Time high in 2021, as values exceeded over 65,000 USD in February 2021, April 2021 and November 2021.

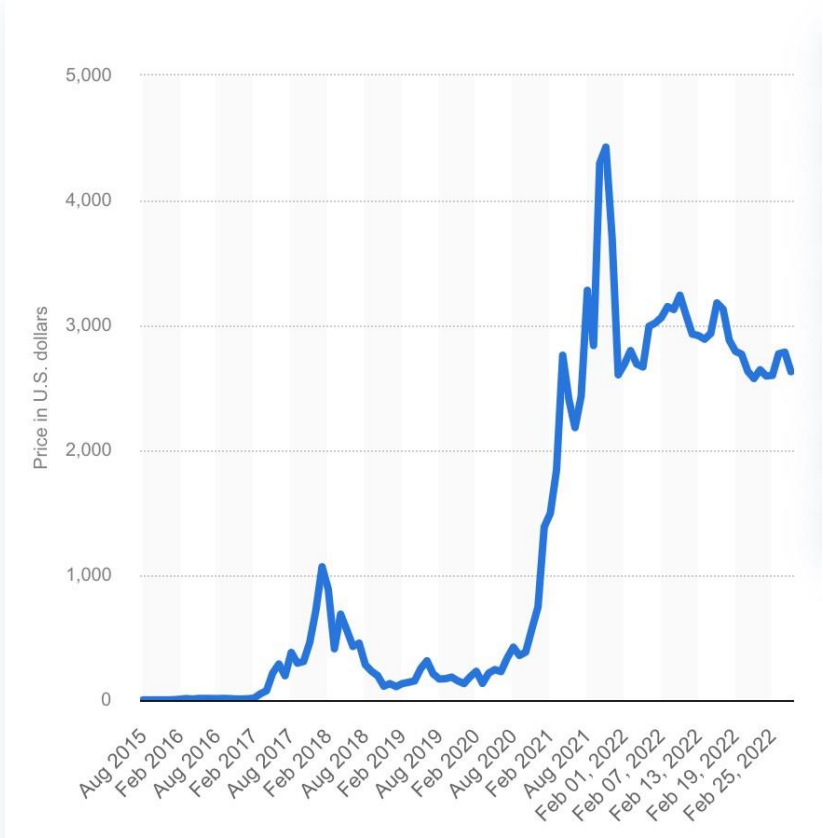


Litecoin : The cryptocurrency was valued at more than 184 U.S. dollars per coin during August 2021, a price that was nearly two Times higher than in November 2020. Litecoin's price was relatively volatile in recent years, revealing high price swings between months.

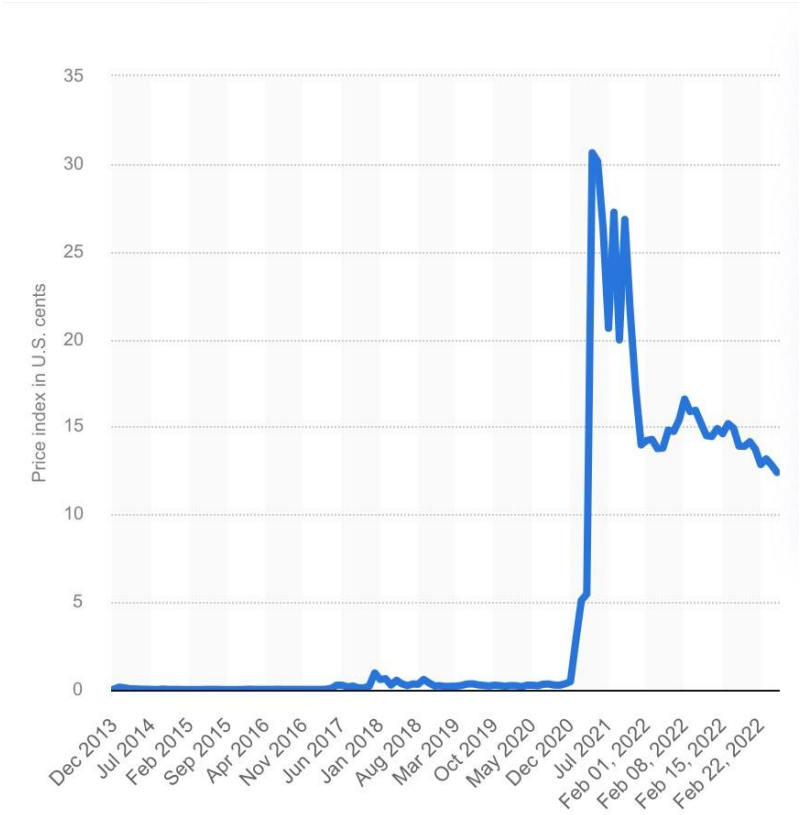
Ethereum : The Ethereum (ETH) price in USD soared to new heights in November 2021, reaching over 4,800 U.S. dollars. Much like Bitcoin (BTC), the price of ETH went up in 2021 but for different reasons

altogether: Ethereum, for instance, hit the news when a digital art piece was sold as the world's most expensive NFT for over 38,000 ETH – or 69.3 million U.S. dollars.

Dogecoin : The price of the cryptocurrency based on the famous internet meme soared to new heights in early 2021, with growth rates exceeding those of Bitcoin. Between January 28 and January 29, Dogecoin's value grew by around 216 percent to 0.023535 U.S. dollars after continents from Tesla CEO Elon Musk. The digital coin quickly grew to become the most talked-about cryptocurrency available: not necessarily for its price - the prices of Bitcoin (BTC),

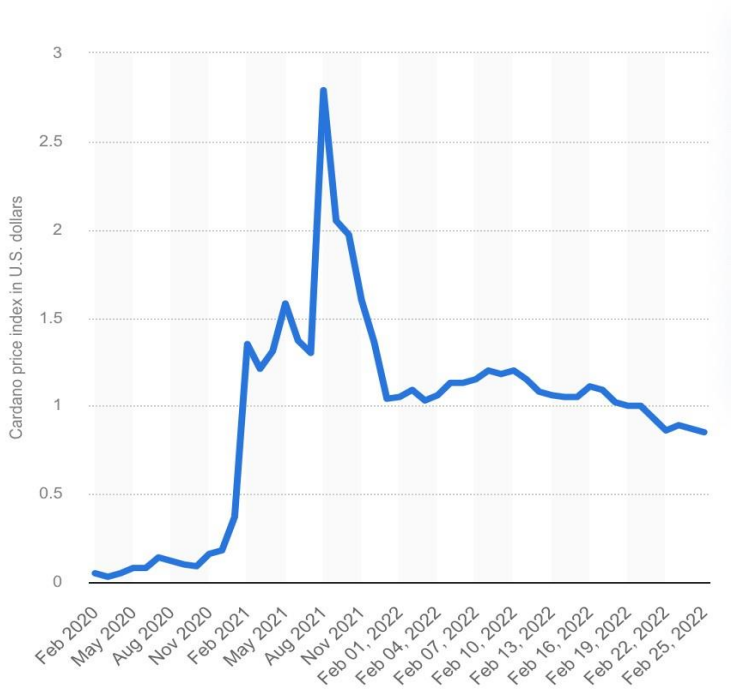


Ethereum (ETH), Ripple (XRP) and several other virtual currencies were much higher than that of DOGE - but for its growth.

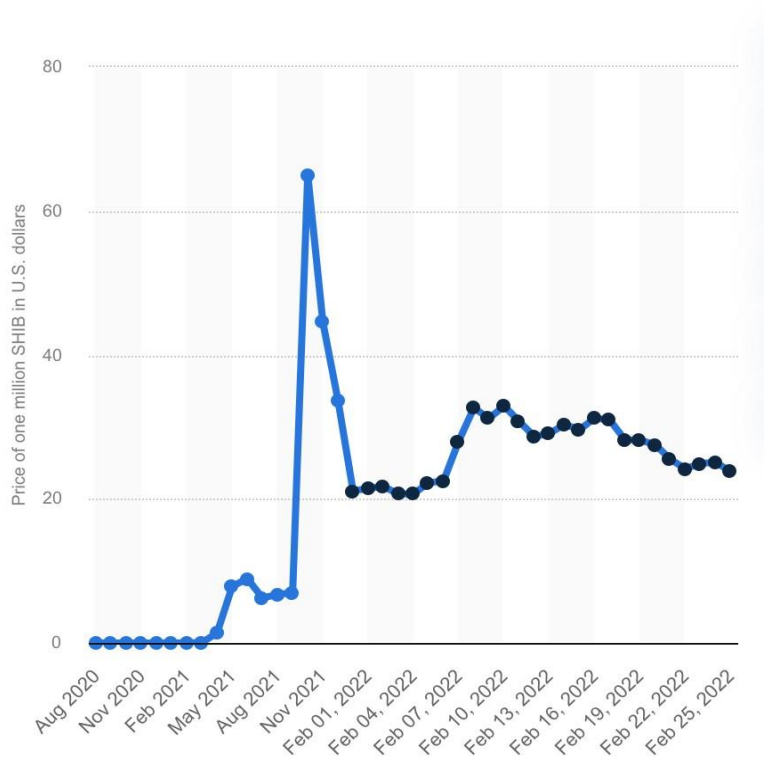


Cardano : Swiss cryptocurrency Cardano (ADA) witnessed a price surge of nearly 100 percent in seven days in early

February 2021, amid high interest from investors. One reason for this interest is the digital coin's close relation to Ethereum (ETH), as mathematician Charles Hoskinson co-founded both virtual currencies. Also, like Ethereum, ADA has an open-source format, meaning anybody can develop this currency further.



Shiba inu : Memecoin Shiba Inu saw its price grow by more than 300 percent within one and the same month, marking a trading fury reminiscent of Dogecoin in early 2021. Indeed, the SHIB coin ranked as one of the biggest crypto in the world based on 24h trading volume in October 2021 - with trading activity being almost as high as that of Ethereum.



Cryptocurrencies like bitcoin are not localized to a particular country or region. Due to its decentralized nature, bitcoin's circulation has largely circumvented regulatory oversight or monetary policy that traditionally is enforced upon private currencies and e-money.

For new technology enthusiasts and those who want to build a world outside the control of state machineries and regulatory authorities, cryptocurrencies are revolutionary – for some, even the basis for a post-capitalist future in which nations have withered away.

For governments and central banks, its very design undermines notions of National sovereignty and how fiat money function.

Meanwhile, unregulated exchanges are also expanding incredibly fast. Mature blockchain start-ups are gaining market share and a new crypto services industry is taking shape as part of the evolution towards Web 3.0, or the next literation of the Internet premised on decentralised tenets.

New consumer products range from DIY index fund creators, bitcoin derivatives, crypto wallet-cum-

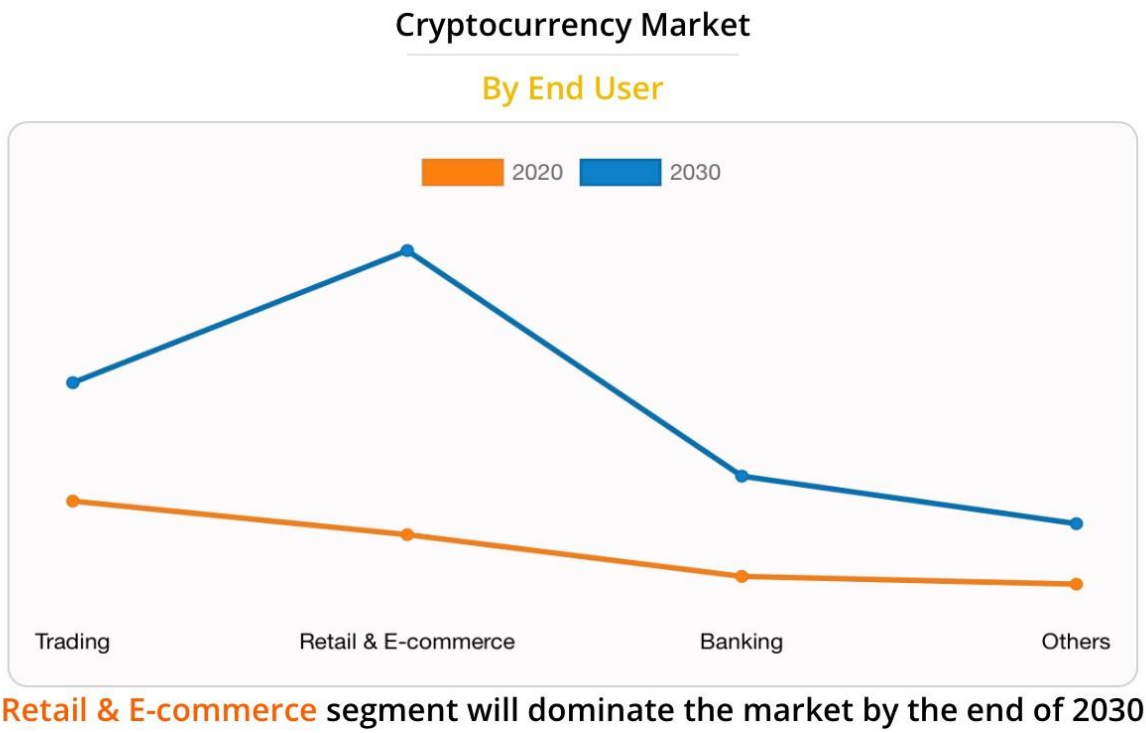
domain registrars, decentralised exchange aggregators, interest-earning savings accounts, to dividend reinvestment plans.

If the industry is able to move beyond the current phase of speculation and volatility, and build more institutional structures, crypto assets have the potential to play a pivotal role in underpinning a new financial architecture.

But some technology experts warn that for all the promise of new cryptographic systems, it could take between five to ten years to "harden". For any country that decides to transition, a substantial amount of risk is inevitable.

Cryptocurrency Market Outlook – 2030

The global cryptocurrency market size was valued at $1.49 billion in 2020, and is projected to reach $4.94 billion by 2030, growing at a CAGR of 12.8% from 2021 to 2030. Increase in need for operational efficiency and transparency in financial payment systems, rise in demand for remittances in developing countries, increase in data security, and improved market cap are the major factors that drive the growth of the global cryptocurrency market.



Moreover, high implementation cost and lack of awareness of cryptocurrency among the people in developing nations hamper the cryptocurrency market growth. Furthermore, increase in demand for cryptocurrency among banks, and financial institutions and untapped potential on emerging economies are expected to provide lucrative opportunity for the market expansion during the forecast period.

The hardware segment acquired major cryptocurrency market share owing to rise in need for upgrading the performance of the software and to enhance the efficiency of financial payment tools. However, the software segment is expected to grow at the highest rate during the cryptocurrency market forecast period, as it facilitates to manage the massive volume of data being generated for meaningful insights and better-informed decisions.

By region, the cryptocurrency market was dominated by Asia-Pacific in 2020, and is expected to retain its position during the forecast period. Owing to increase in number of Bitcoin exchange across Asia, which bring a certain healthy competition and maturity to the cryptocurrency industry. Chinese banks are hiring blockchain experts as the government pushes the use of the technology behind bitcoin to increase transparency and combat fraud in its financial sector. These factors drive growth of the cryptocurrency market in the region.

COVID-19 Impact Analysis

The COVID-19 pandemic has a negative impact on the cryptocurrency market, owing to the level of stability in cryptocurrency has significantly diminished while the irregularity level significantly augmented and cryptocurrencies became more volatile, which is set to decline the demand for cryptocurrency during global health crisis. Moreover, cryptocurrency exhibits a low level of regularity compared to international equity markets, which further declines the demand for cryptocurrency tremendously during the pandemic situation.

Top Impacting Factors

Rise in Need For Transparency in the Payment System

The cryptocurrency market is expected to witness promising growth in the coming years, owing to improved data transparency and independency across payments in banks, financial services, insurance, and various other business sectors. The use of crypto currency across banking industries provides various benefits such as sending and receiving payment transparently and storing customers detail information securely for next purpose.

For instance, PayPal is an American-based company, operating in an online payment systems. It entered into the cryptocurrency market on October 21, 2020 and announced that customers will be able to buy and sell Bitcoin and other virtual currencies using their PayPal accounts. In addition, Mastercard with the partnership of Island Pay launched the world's first CBDC-linked Card on February 10, 2021. Thus, number of such developments across the major players drives the growth of the market.

Furthermore, innovative blockchain distributed technology protocols are expected to replace the need for certain organisational solutions and allow diverse players to share payment transparently across the company. Such systems bring transparency to supply chains, helping in elimination of environmental crimes and others. This boosts the adoption of cryptocurrency in the future.

Untapped Potential on Emerging Economies

Developing economies offer significant opportunities for cryptocurrency to expand their business by offering easier access to capital and financial services. Bitcoin, the most famous of these cryptocurrencies, has already permitted many people and companies to develop and flourish, as their source of income. The economy is slowly shiming to adapt to these needs and cryptocurrencies have a great potential in satisfying them.

Evolving demographics, rise in consumerism and openness toward new technologies such as IoT, Blockchain, and others provide lucrative opportunities for cryptocurrency across developing nations.

According to Oxford Business Group,

Nigeria is the leading country for Bitcoin and cryptocurrency adoption due to use it as a means of sending remittances.

In addition, the central bank of Philippines approved 16 cryptocurrency exchanges. This leads to the fact that the country is becoming one of the world's largest adopter of cryptocurrency Furthermore, rise in smartphone penetration in Latin America and Africa enables mobile payment service providers to offer sophisticated services on mobile phones. This is considered as an important opportunity for the growth of the market.

T**he** world **h**ad moved toward making a virtual world a reality, by introducing:

The metaverse

the metaverse refers to a 24/7 online world, inhabited by economies that incentives a new network of creators and infrastructure providers. Crypto games like The Sandbox and Decentraland offer early visions of how a creator-led, crypto- and NFT-powered economy could function. So, here's what you can do in the metaverse today.

- Build, explore and play in virtual worlds.
- Meet people from anywhere for work or play.
- Create a 3D avatar that looks like you … or not.
- Invest in virtual land, NFTs or tokens.

If crypto isn't your thing, you could invest in the equity of virtual reality and metaverse companies. Meta is one company being big on the future of virtual and augmented reality – an analyst on Seeking Alpha estimates that the company will have spent $70 billion on the concept between 2014 and 2023. Virtual reality and metaverse stocks, as well as private investments, are also on the table.

According to a comprehensive research report by Market Research Future (MRFR), "**Global Metaverse Market** information by Component, by Platform, by Technology, by Application, by End Users, by Region – forecast to 2030" market touched USD 21.91 billion in 2020 and growing at a whopping CAGR of 41.7% from 2021 to 2030.

Eminent Industry Players Profiled in Metaverse Market Are:

- Facebook, Inc
- Tencent Holdings Ltd
- ByteDance Ltd
- NetEase Inc
- Nvidia Corporation

- Epic Games, Inc
- Roblo Corporation
- Unity Technologies, Inc
- Lilith games
- Nextech AR solution corp.

Where Could Blockchain Lead Us in the Future?

Work has already started at the top levels of power. The Blockchain for Social Impact Coalition non-profit is helping the United Nations examine the use cases for blockchain solutions. The coalition wants to mesh together government agencies, NGOs, and more in a bid to fulfil the United Nations Sustainable Development Goals (SDGs)

Fintech and financial services could support current systems or replace them with blockchain technology.

Tech start-up Worldcoin wants to scan people's eyes in return for cryptocurrency. Iris recognition backed by blockchain could provide a globally secure, irrefutable online digital identity.

Blockchain can reduce costs and abolish traditional financial services barriers with borderless payment systems quicker than the current systems. People are also studying how artificial intelligence and the internet of things (IoT) blend in with blockchain. The truth is that, as with the internet, humans don't truly understand where blockchain technology may lead.

NFTs are one of the more creative waves of the future of money. Although most people still see very little value in the existence of NFTs, by 2026, Gartner predicts that NFT gamification, or GameFi – which takes video game elements such as point scoring and applies blockchain tech, so users can trade or swap game assets – will have the ability to propel an enterprise into the top 10 of highest value companies.

We will need to prepare for the future and make adequate accommodations to safeguard our global financial positioning. We also have to become independent and reduce our dependency in situations like the 2008 financial crisis or the 2020 COVID-19 crash. Cyberwar fare also poses a sizeable threat in our rapidly digitizing country. A decentralized financial platform could help resolve such issues and have an

added advantage as these platform networks will not be blocked by any single state or country in Times of National distress or conflict. The other advantage here would be that if we could create our own social networks on Ethereum, it would help build a decentralized ecosystem, which has its own positive effects.

INVESTMENT IN

CRYPTOCURRENCY

INTRODUCTION

When it comes to cryptocurrencies, one of the biggest challenges for investors is not getting caught up in the hype. Digital currencies have quickly risen to prominence in the portfolios of many retail and institutional investors. At the same Time, analysts have continued to caution investors about the volatile nature and unpredictability of cryptocurrencies. This are the same factors to consider before investing in cryptocurrency:

Consider Why You Are Investing in Cryptocurrency

Perhaps the most fundamental questions you should ask yourself before making a cryptocurrency investment is why you're doing it. There are myriad investment vehicles available, many of which offer greater stability and less risk than digital currencies.

Are you interested simply because of cryptocurrency's trendiness? Or is there a more compelling reason for an investment in one or more specific digital tokens? Of course, different investors have various personal investment goals, and exploring the cryptocurrency space may make more sense for some individuals than for others.

Get a Feel for the Industry

It's essential for investors—particularly those who are new to digital currencies—to develop a sense of how the digital currency world works before investing. In addition, it's important to explore blockchain technology to get a sense of how this aspect of the cryptocurrency world works.

Join an Online Community of Cryptocurrency Enthusiasts

Because the digital currency space is such a trendy area, things tend to change and develop quickly. Part of the reason is that a robust and very active community of digital currency investors and enthusiasts are communicating around the clock.

Get plugged into this community to learn about the buzz in the cryptocurrency world.

Read Cryptocurrency White Papers

More important than word of mouth, though, are the specifics of a digital currency itself. When you're

considering an investment, take the Time to find the project's white paper. Every cryptocurrency project should have one, and it should be easily accessible (if it's not, consider that a red flag). The white paper is a development team's chance to lay out the who, what, when, and why of their project. If the white paper feels incomplete or misleading, then it might speak to fundamental issues with the project itself.

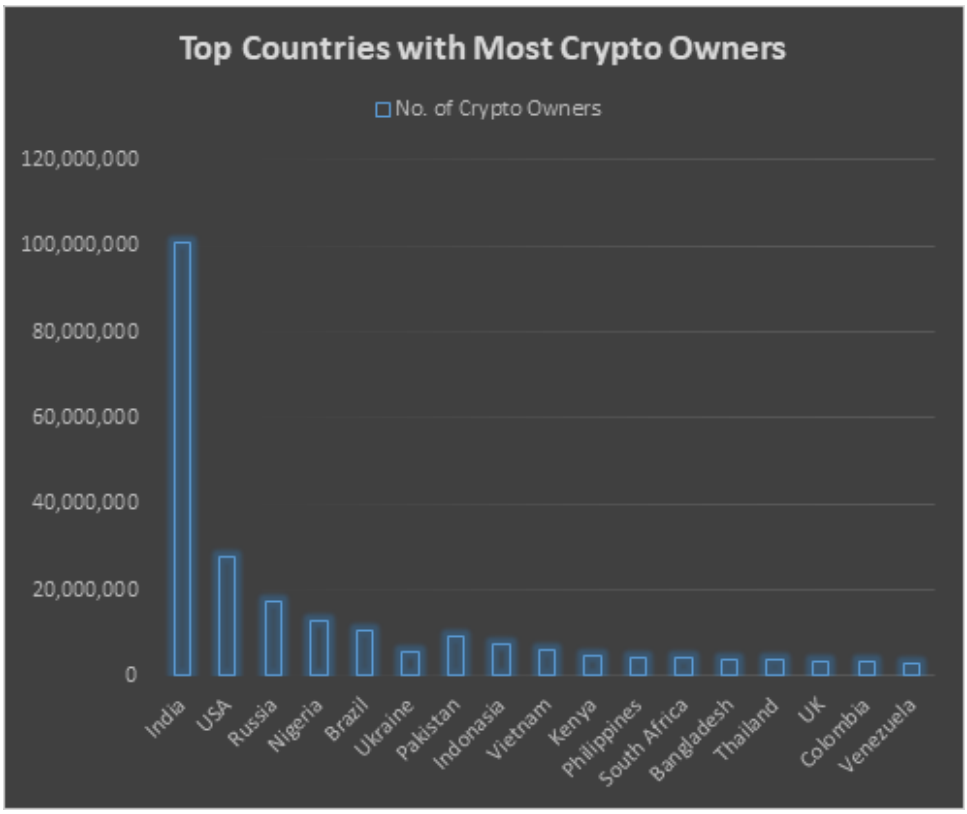
Timing Is Key

After diligent research, you have likely developed a feel for the cryptocurrency industry and may have determined one or more projects in which to invest. The next step is to Time your investment. The digital currency world moves quickly and is known for being highly volatile.

On one hand, buying into a hot new currency before it explodes in popularity and value may prompt investors to move equally quickly. In actuality, though, you're more likely to see success if you monitor the industry before making a move. Cryptocurrencies tend to follow particular price patterns. Bitcoin omen leads the way among digital currencies, which tend to follow its general trajectory.3 News of an exchange hack, fraud, or price manipulation can send shock waves through the cryptocurrency sphere, so it's important to watch out for what's going on in the space more broadly.

Finally, remember that digital currencies are highly speculative. For every overnight bitcoin millionaire, many other investors have poured money into the virtual-token realm only to see that money disappear. Investing in this space means taking a risk. By doing your homework before making an investment, you help give yourself the best chance of success.

There is huge number of traders trading in cryptocurrency worldwide and the most contributing country is India. Buyers are aggressively accumulating more and more Bitcoins and altcoins. This is the driving factor that has propelled the price growth of the digital coin.



Top 5 countries with most cryptocurrency holders are the following,

India 100 million

USA 27 million

Russia 17 million

Nigeria 13 million

Brazil 10 million

According to Triple-A, India has more cryptocurrency holders than any other country, i.e., more than 100 million. The key industry players feel that India is a tech and economic power that will emerge as a key player in crypto and Blockchain adoption.

According to Sumit Gupta, CEO and co-founder of cryptocurrency exchange CoinDCX, cryptocurrency has "now classified itself as a macro asset class for investments that can't be ignored.

"It will further lead greater mainstream acceptance than ever before," Gupta had told IANS.

A report published by Chainalysis shows that in past year, Vietnam, India, and Pakistan are the top countries in global crypto adoption. Here is a list of top 10 countries of crypto adoption in last year.

1)Vietnam. 5)Kenya. 9)Togo

2)India. 6) Nigeria. 10) Argentina.

3)Pakistan. 7) Venezuela

4)Ukraine. 8) USA

Whereas According to data from National stock exchange NSE there are 1.2 crore active investors in India a country of 138 crore people. In short, more people are investing In crypto currency than stock market or banks because crypto currencies allow you to be your own bank, which includes the responsibility of keeping your investment secure. Understanding it in a broader way here is a comparison between stock market versus crypto currency:

INVESTORS IN CRYPTOCURRENCY vs STOCK MARKET

Stocks and cryptocurrencies are dramatically different investment assets. While both are generally liquid assets that belong in the speculative side of your portfolio, the similarities end there. These are very different types of securities and belong in very different parts of your portfolio.

However, a few of the most important differences are:

Diversity

Both stocks and cryptocurrencies offer thousands of potential investment opportunities. At the Time of writing, the combined listings of the New York Stock Exchange and NASDAQ alone offered more than 6,000 potential companies in which to invest. At the same Time, various cryptocurrency marketplaces offer between 10,000 and 12,000 potential cryptos. (This number changes rapidly.)

However, these markets are not necessarily as diverse as they appear. At any given Time somewhere between 55% and 70% of the entire cryptocurrency market is Med up in Bitcoin. That one asset dominates this market in a way not seen among stock exchanges, where almost any company can be a

potentially valuable investment.

That said, stock markets shouldn't get too proud of this distinction. While no one stock dominates its market, there are similarities in the FAANG stocks. These five companies (Facebook, Apple, Amazon, Netflix and Google) make up roughly one-fifth of the entire S&P 500. It isn't the dominance of Bitcoin, but investors should be aware of similar market capture dynamics.

Volatility

Cryptocurrency is likely the single most volatile asset in which you can invest. This is true of both individual assets and the market at large. Whether you have purchased Bitcoin or an altcoin (slang for literally every other asset on the cryptocurrency market), crypto is a roller coaster. Assets can triple in value and then lose it all within the span of a single day. Investors can make a fortune that way, to be sure, but many more lose their shirts.

Individual stocks almost always have far less volatility than cryptocurrency, but they're still not stable. In fact, until crypto came along shares in a single stock were generally considered the most volatile investments you could make. However, despite the random walk of individual assets, the stock market as a whole tends to be generally stable and predictable. It generally moves slowly, so much so that big changes in the stock market as a whole make the news.

If you want a stable asset, an S&P 500 index fund is usually a safe bet. If you want a speculative asset, an individual stock is a good choice. If you want an extremely volatile asset, crypto can serve that role well.

Profit Source

You can generally profit off of stocks in two ways. First, you can make capital gains by selling your shares to another investor for more than you paid. Second, you can hold the stock and collect dividends if the company behind the stock chooses to make dividend payments.

From Time to Time a company may buy back its own stock, creating a more guaranteed form of capital gains.

You can only collect profits off cryptocurrency through capital gains. While utility tokens offer a

complicated series of software solutions, ultimately any crypto on the market can only be turned into dollars by selling it to another investor. (Furthermore, despite nearly 10 years' worth of industry-wide development, at Time of writing no utility token has turned its software into a marketable product.

This makes cryptocurrency somewhat more speculative than stocks tend to be. A pure cryptocurrency, ultimately, is only worth what the next investor is willing to pay for it. There is no underlying asset to influence or stabilize that value. This means that cryptos are subject only to technical analysis. Stocks, on the other hand, have an grounded asset in the form of the company behind the shares. This creates room for fundamental analysis on a stock's value, as you can evaluate what the underlying company is worth regardless of market dynamics.

Trading & Regulation

Like all securities, stocks are some of the most heavily regulated assets that you can trade. The SEC monitors public shares closely and does the same for the markets on which those shares are traded.

Investors trade most stocks on a handful of large, centralized exchanges. Almost all stock trades in the United States, for example, are conducted on the New York Stock Exchange and the NASDAQ. Any given stock will only be listed on one exchange at a Time. While you can trade shares privately, this is relatively rare and typically done only with unlisted and "penny" stocks.

Cryptocurrencies do not yet have any kind of centralized exchange system. Instead, a network of hundreds (if not thousands) of independent companies run their own small exchanges where individuals trade cryptocurrencies among themselves. Although a few more popular cryptocurrency exchanges dominate coverage, there are no truly dominant players in this market.

This means that cryptocurrency is traded among individuals. Unlike the formalized stock exchange system, in which shares are traded through a third party known as a clearing house, most, if not all, cryptocurrency is traded directly between the buyer and seller. (Note – It is possible that this may change, as this market changes rapidly.)

Scams

Cryptocurrency remains largely an unregulated asset class, as bodies like the Securities and Exchange Commission and the IRS decide specifically how to govern it. This has led to a surge in potential assets for investors to explore, which can be fantastic for aggressive portfolios.

However, it has also come at a cost. Estimates suggest that roughly a third of all new cryptocurrencies introduced to the market are fraudulent in some way. Most are either traditional pump-and-dump schemes or cash-grabs for an asset that will never be released.

Investors have also omen been bitten by loose enforcement of existing regulations in this market. It has become common for popular voices in the crypto community to swing the price of individual assets with a single tweet or Reddit post. This kind of behavior happens comparatively infrequently on the stock market, as doing so with a regulated asset is a felony.

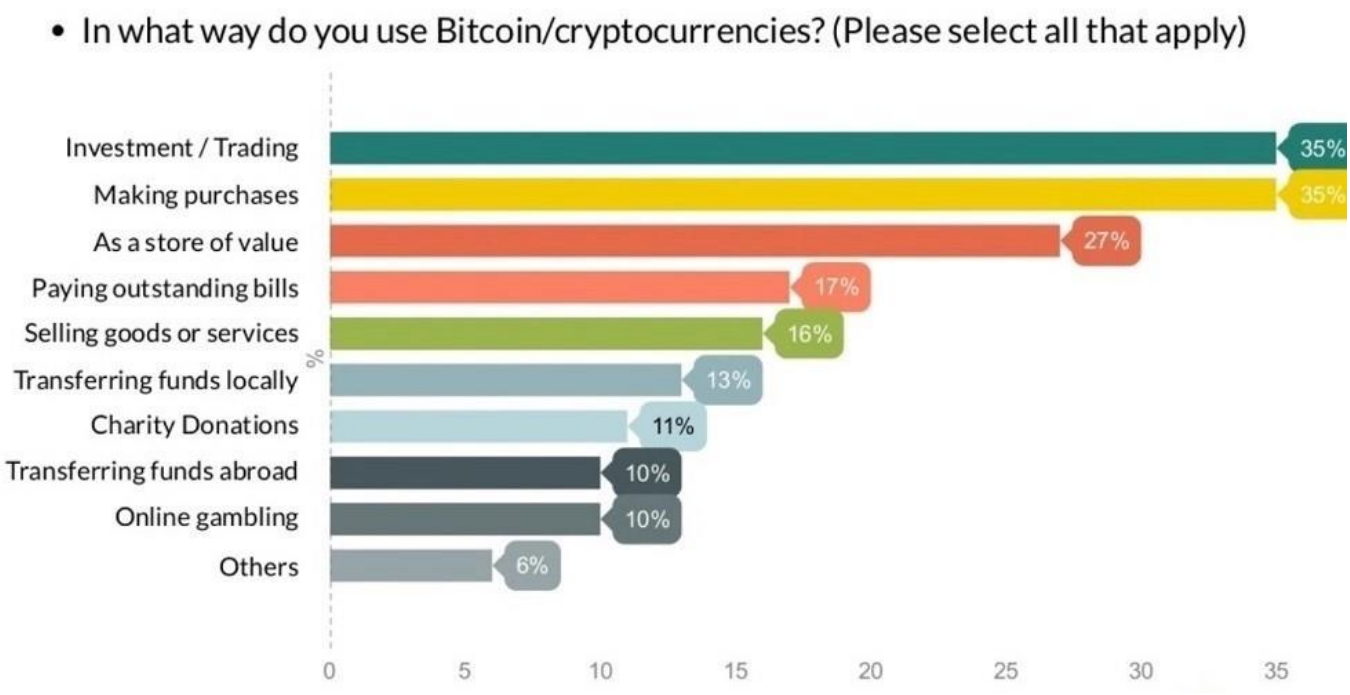
The Boaom Line

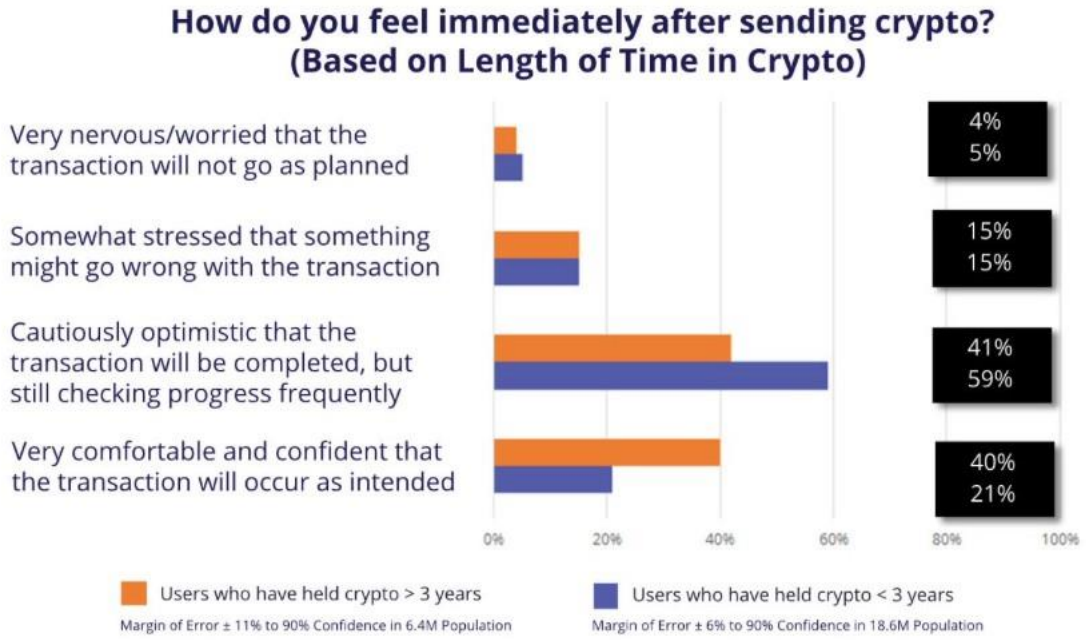
So, which asset should you invest in? Cryptocurrency is an exciting, boom-and-bust asset that has attracted an enormous amount of interest in a short Time. If that interests you, invest only with the most speculative segment of your portfolio, money you're comfortable losing. Individual stocks are linked to the performance of an underlying company, which grounds the stock's price. These are still volatile and risky assets, but not nearly to the same degree as cryptocurrencies.

Everyone has their own preferences and thought process while choosing an asset to invest. Here are some challenges while buying cryptocurrency.

CHALLENGES IN CRYPTOCURRENCY

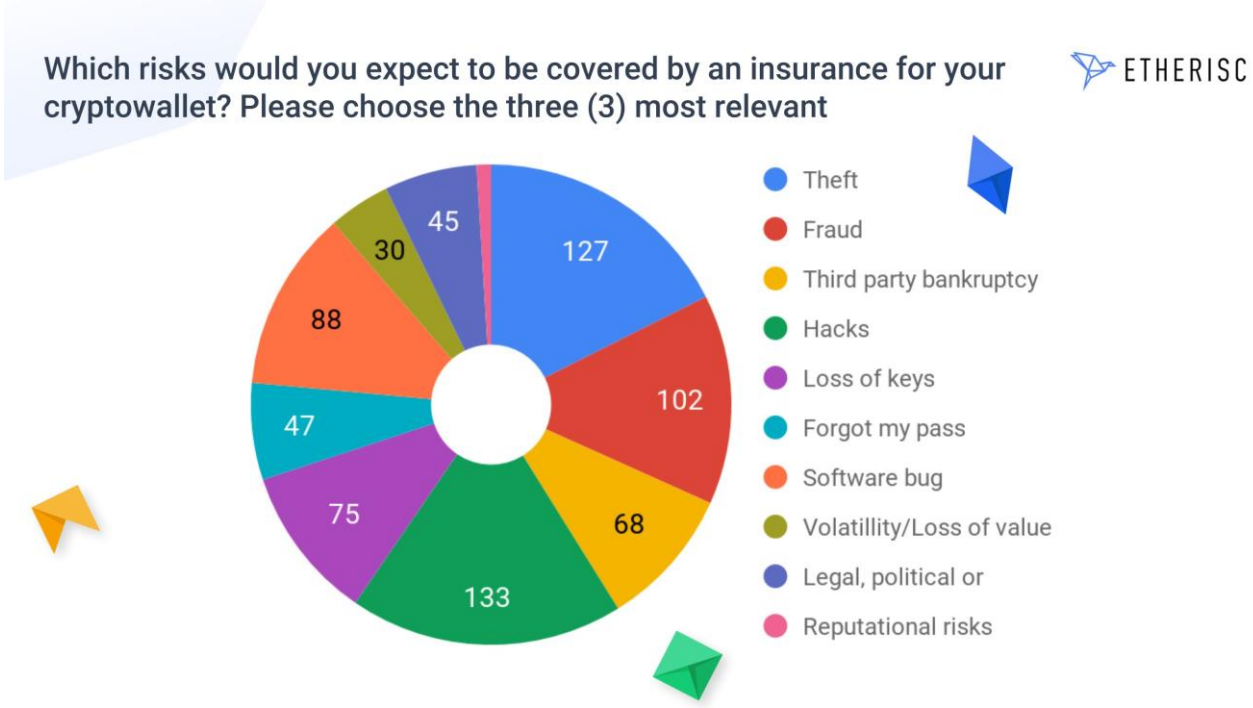
The unstable value of bitcoin remains a major concern for most respondents, along with the excuse "I don't know how to spend the cryptocurrencies". There are several usages of cryptocurrency people choose to perform the below graph explain the following:





Still Too Afraid to Trade?

One reason for cryptocurrency users not using it for payments is that some people are still nervous about completing transactions. According to the survey, only about 25% of people who sent coins to someone else in 2018 felt “very comfortable” immediately after sending. The majority of users, about 58%, felt only cautiously optimistic. The remaining 17% of users felt some level of anxiety, including 5% who were very nervous about the transaction not going as planned. This sensation seems to pass with experience, as 40% of users who acquired their first crypto over three years ago marked themselves as being very comfortable, while only 21% of users who have held coins for less than three years felt the same.



Asked to freely write what other challenges they have experienced sending and receiving crypto, people mainly complained about confusing and high fees as well as long and uncertain conformation Times. Problems with address formats and buggy wallets were additionally a common issue. Software bugs, loss of keys, and third-party bankruptcy completed the list of the main dangers.

As Hugo Wegbrans, Chief Broking Officer Europe, Middle East & Africa at Aon, said during the panel

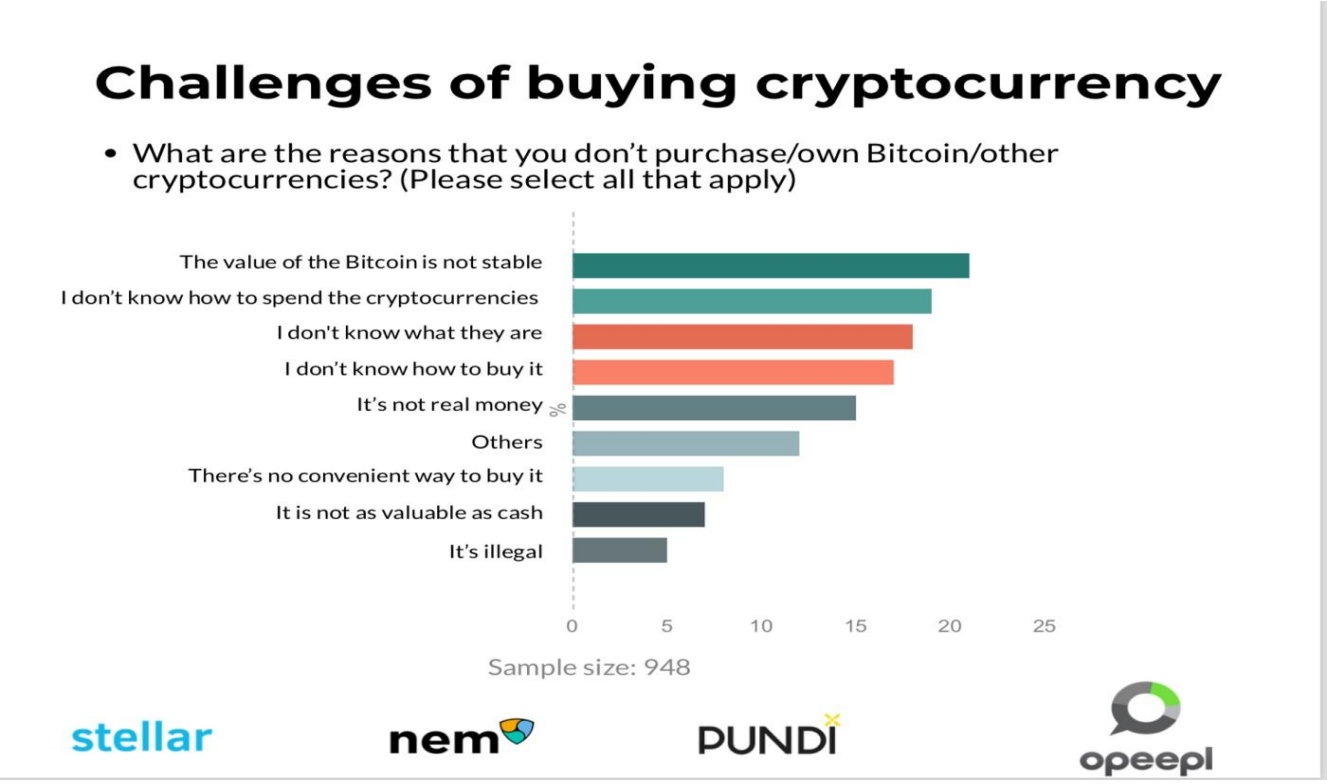
discussing insurance for cryptocurrencies at the D1Conf:

“There’s a lot of misunderstanding outside of the cryptocurrency community. There’s a big education gap, and it’s a big problem. It might come as a surprise, but no one understands cryptocurrency, which is part of the reason why there are only a few investments.”

But real questions arise, why people don’t invest in cryptocurrency?

‘Volatility’ and ‘don’t know how to spend’ are the major challenges of purchase

When it comes to the reasons that people who don’t want to purchase bitcoin or other cryptocurrencies, 21% of them said ‘the value of the Bitcoin is not stable,’ 19% said they don’t know how to spend the cryptocurrencies, 18% indicated that they don’t know what the cryptocurrency is and 17% of the respondents said they don’t know how to buy it.



As we all know apart from all this challenges people prefer crypto currency as a medium for their investment , it opens gate for many opportunities and provide immense growth.

OPPORTUNITIES IN CRYPTOCURRENCY

Cryptocurrency returns are much higher than stock markets. Cryptocurrency showed the top performing asset class of 2020-21 with 800% return whereas traditional stock markets showed returns of as low as 10% per year. “Cryptocurrencies are the new gold rush,” according to Forensic & Crypto Expert Abhinav Soomaney, who adds that crypto coins and tokens giving mammoth returns enticing masses to invest in them and creating substantial demand.

NFTs

Non-fungible tokens (NFTs) are unique digital tokens in the blockchain network. NFT markets are booming currently and all major celebrities and brand companies are interested in the same hence here are some tips for an easy NFT investing experience:

NFTs can be purchased from websites like opensea.io, solanart.io, Axie Marketplace and many others.

Ethereum is the most accepted crypto by NFT providers hence ETH purchase is a must which is available on cryptocurrency exchanges like Coindcx and Wazirx where one can purchase cryptocurrencies in exchange for their fiat currencies.

The value of an NFT is based on what someone is offering to pay for it. So, demand drives prices. Hence it is advised that one should do their own research before investing in such collectables.

ICOs

An ICO (Initial Coin Offering or Token Sale) is a type of fundraising where in exchange for money (Bitcoin, Ethereum, or fiat currency) investors receive tokens (coins). Projects that launch an ICO promise an investor that tokens will have value and can be used after the ICO.

People can track upcoming ICOs using ICO Drops which is an independent database/site created that

segregates ICOs into three useful lists active ICOs, Upcoming ICOs, and Ended ICOs for everyone who is interested in ICOs and wants to stay current on the topic.

Cryptocurrency investing has many features like P2P trade, yield farming, staking and lending, and mining. One should do their own research before investing in tokens, coins or NFTs. The first cryptocurrency- Bitcoin solved the problem of double spending, similarly other coins have a variety of use cases. People should research the token and coins before considering investing in the same.

“The future holds a lot of surprises but a little glimpse is in the form of cryptocurrencies and blockchains along with Metaverse and NFTs. Many countries are considering turning cryptocurrencies into legal tender or starting a central bank digital currency (CBDCs). Crypto debit cards and ATMs are also upcoming and being widely used in many parts of the world. The next big change in the world will be led by blockchain technologies and cryptocurrencies, and NFTs, Metaverse will have a major role to play,” shares Soomaney.

DATA ANALYSIS AND INTERPRETATION

DATA ANALYSIS.

Analysis of data is a process of inspecting, cleaning, transforming, and modelling data with the goal of discovering useful information, suggesting conclusion, and supporting decision making.

The process of evaluating data using analytical and logic reasoning to examine each component of data provided… Data from various source is gathered, reviewed and then analyzed to form some sort of finding or conclusion.

Why do we analyze data?

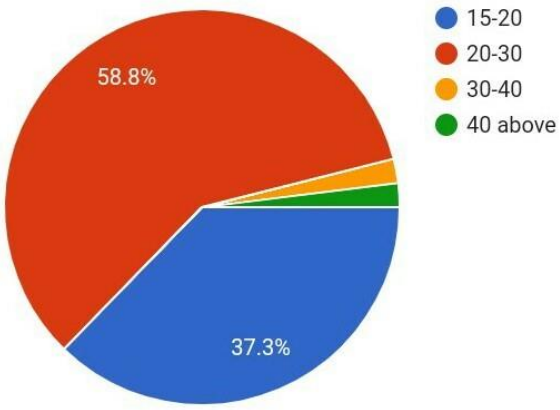
The purpose of analyzing data is to get usable and useful information. The analysis, irrespective of whether data is quantitative or qualitative, may:

- Describe and summaries the data.
- Identify relationship between variables.
- Compare variables.
- Identify difference between variables.
- Forecast outcomes.

The research method used was survey through questionnaire.

A sample size of 50 people was taken.

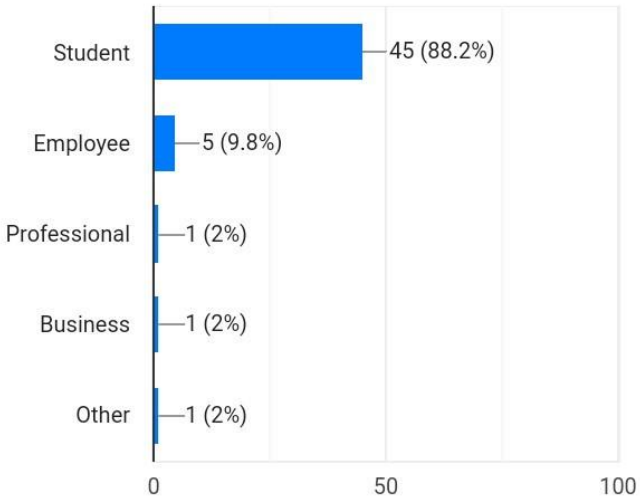
Q1) Age -



Interpretation – Almost 95 % of the people in the sample were between the age of 15-30 years.

This states that most of the people were from the young generation.

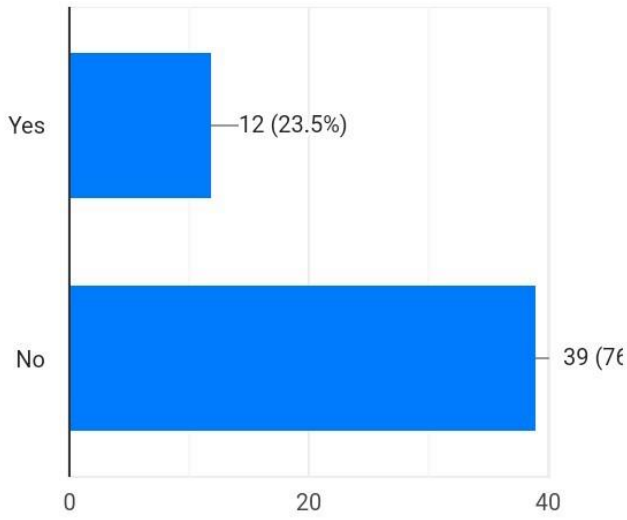
Q 2) **Occupation -**



Interpretation - Out of the sample of 50 most of them were students and some working employees.

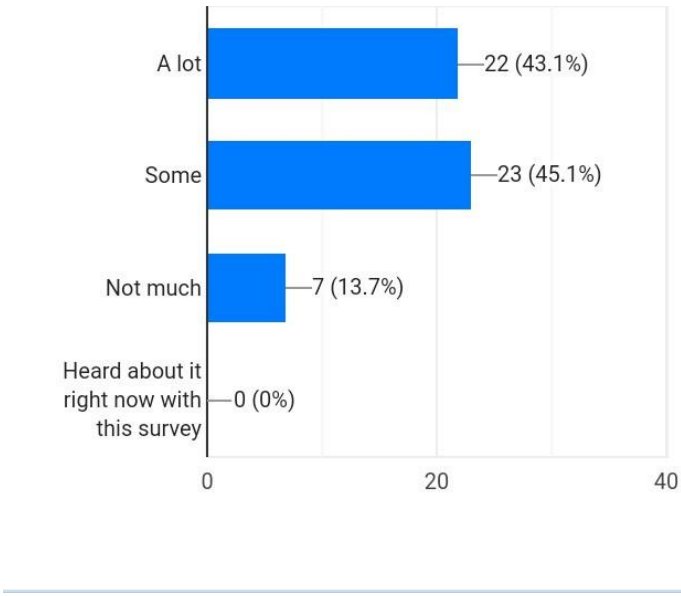
Small part of the sample was from the category of business, professional and others. 3)

Q3. **Do you own cryptocurrency ?**



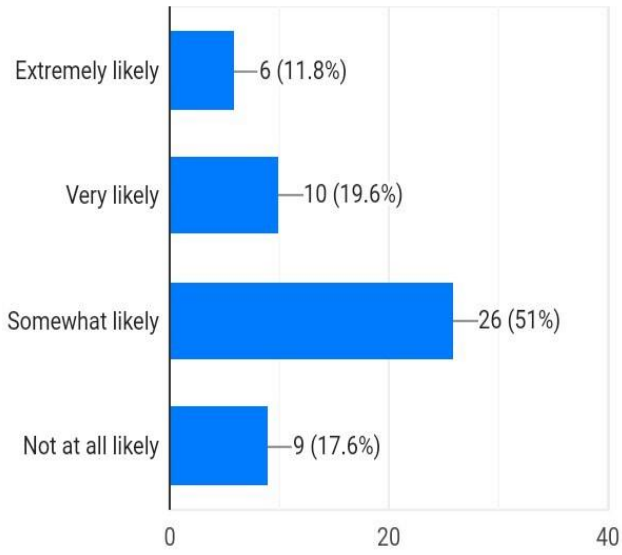
Interpretation – As most of the people from the sample were learning student's majority of them did not own any type of cryptocurrency, yet there are some who did own cryptocurrency.

Q4. How much, if at all have you heard or read about cryptocurrency like bitcoin and ethereum?



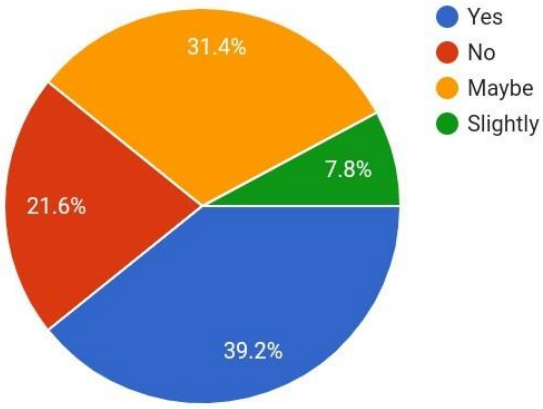
Interpretation – Majority of the people from the sample are aware about the concept of cryptocurrency and have good knowledge about it as most of them are learning students and people of the current generation.

Q5. How likely are you to invest in cryptocurrency this year?



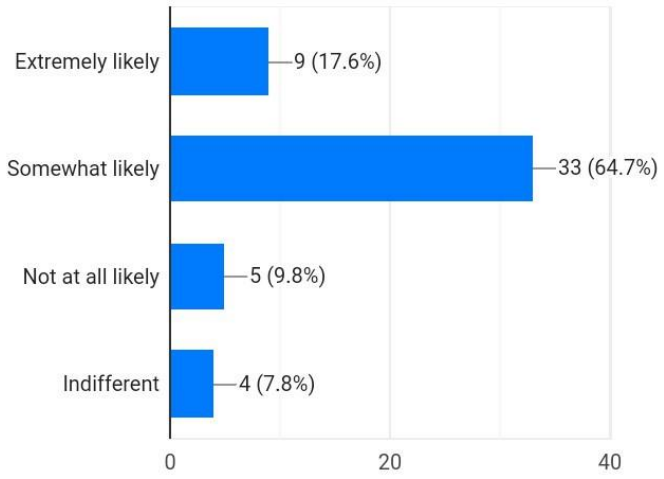
Interpretation- Most of the people are somewhat likely to invest in cryptocurrency this year and considering the decision of buying cryptocurrency.

Q6. If you are a regular investor or want to start investing ,does the introduction of cryptocurrency have impacted your decision Of investment?



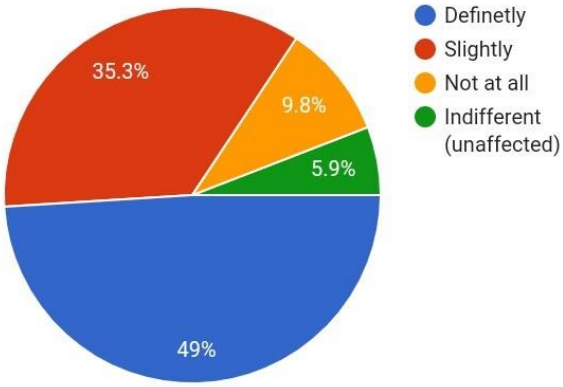
Interpretation - The introduction of cryptocurrency have impacted differently on different people regarding their investment decisions.

Q.7) **Cryptocurrency is still in its infancy stage and may undergo many changes in the near future which makes it extremely volatile. How likely would this affect your decision to use cryptocurrency?**



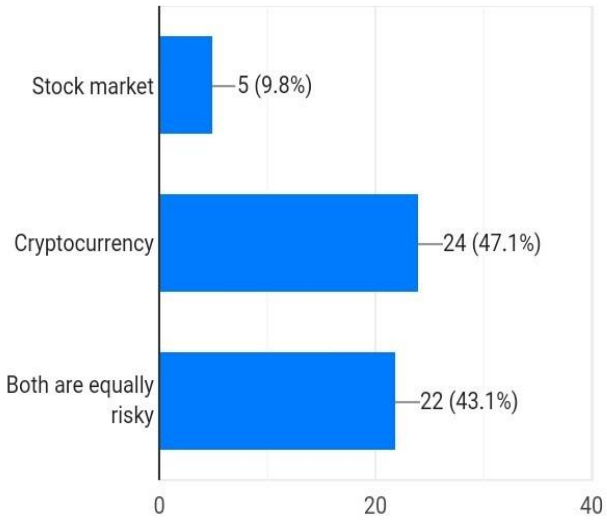
Interpretation – The extreme volatile nature of cryptocurrency has affected the decision of investment in cryptocurrency of most of the people.

Q8. **Unlike other currencies, cryptocurrency requires much less fees to operate. Would this increase your interest in using cryptocurrency**



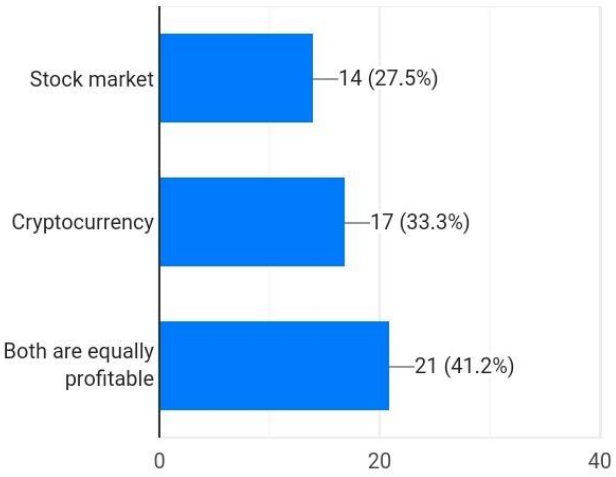
Interpretation – To knowing about the low cost investment requirements of cryptocurrency have increased the interest in investment in cryptocurrency of majority of the people.

Q9. **In your opinion which is more risky ,investing in stock market or investing in cryptocurrency ?**



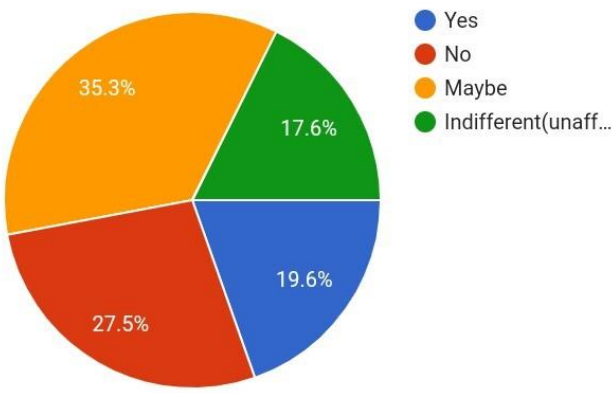
Interpretation – Majority of the people believe that cryptocurrency is more riskier to invest in than stock market.

Q10.Which is more profitable , investing in cryptocurrency or investing in stock market ?



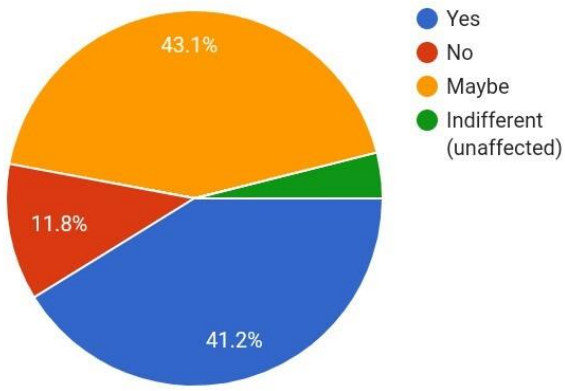
Interpretation - The profitability comparison of cryptocurrency does not seem to give concrete biased results ,rather both of them are considered profitable according to the survey results.

Q11.Cryptocurrency have no tangible form, does that diminish the value that you perceive about cryptocurrency?



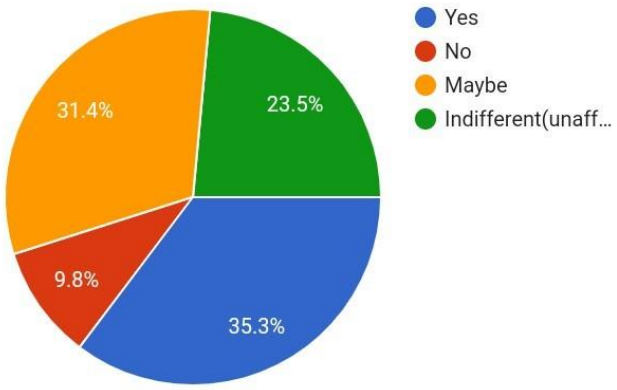
Interpretation – The intangibility of cryptocurrency did not affect strongly to majority of the people and had mixed results.

Q.12 **If cryptocurrency providers created tangible coins or notes for its users with banks and ATMs readily available but remained non-government regulated. would this increase your interest in cryptocurrency?**



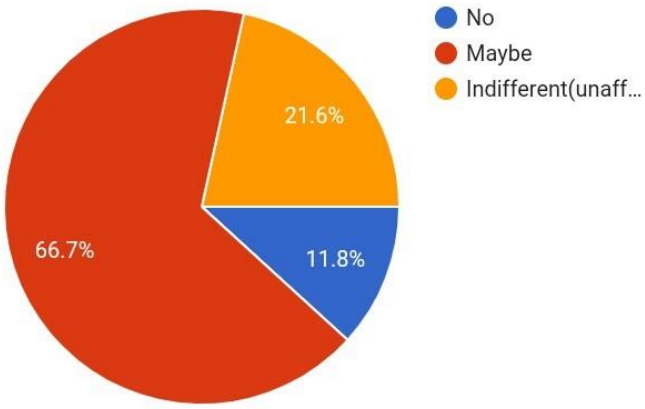
Interpretation- Most of the people are unsure about their interest in cryptocurrency even if it gets in tangible form and some of them are definite about their increment in interest due to cryptocurrency's tangibility.

Q.13) **Cryptocurrency is Non-government regulated which offers users more freedom. would this increase your interest in using cryptocurrency?**



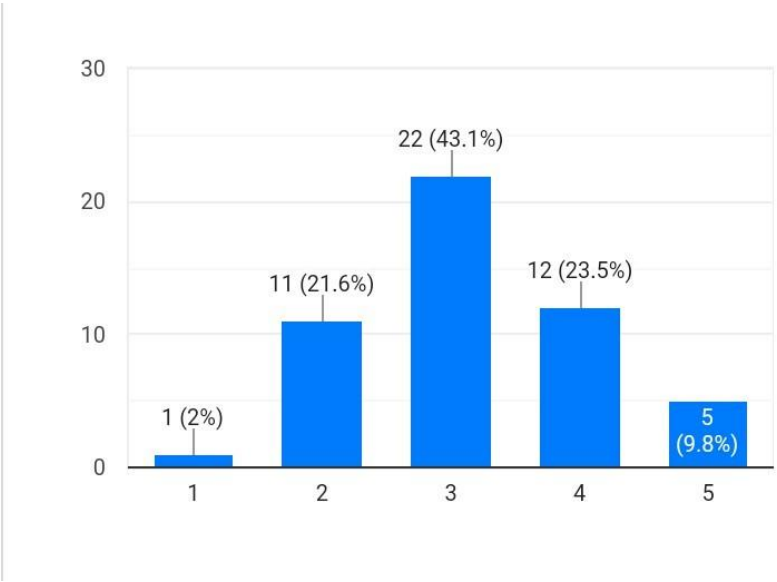
Interpretation – Freedom in investment and less government regulations attracts people to invest in cryptocurrency and increase their interest.

Q.14) **If cryptocurrency is government regulated but remained intangible, would this increase your interest in using cryptocurrency?**



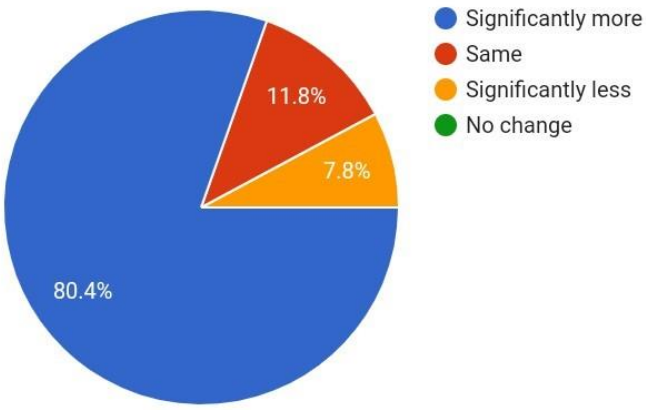
Interpretation – There is no concrete or strong opinion about government regulation on cryptocurrency impact on people of the sample.

Q.15) **How do you think cryptocurrency have impacted the economy of India?**



Interpretation – On a scale from 1-5 where 1 being most negatively impacted and 5 being the most positively impacted, the results are mostly neutral and indicate, cryptocurrency have not drastically impacted the economy of India.

Q.16) **In five years, do you think cryptocurrency will be worth more or less than it is today?**



Interpretation – 80% of the people believe that in the next five years cryptocurrency will be worth significantly more than it is today.

Hypothesis analysis

Testing of Hypothesis

Hypothesis 1-

H0- Cryptocurrency is acceptable as currency.

H1-Cryptocurrency is not acceptable as currency.

According to the study here H1 stands true and verified as cryptocurrency legally speaking does not fulfil the fact of being a currency. though it is acceptable as virtual currency or digital currency.

H0 stands nullified as per the study, from a legal perspective, terms of currency are referred to unit of account and medium of exchange that are issued and dominated exclusively by monetary authorities (or central bank) and associated with the power of sovereignty wherein the value and the credibility of a country's currency are linked with the country's ability to support the currency. In terms of the legal perspectives, cryptocurrency does not meet the criteria as currency.

Hypothesis 2

H0 - cryptocurrencies have significantly impacted the investment decisions of investors.

H1- cryptocurrencies have least impact on investment decisions of Investors.

According to the data collected and research analysis ,here H0stands true and verified as the introduction of cryptocurrency and changes in its nature have clearly shown significant impact on the investment decisions of the investors .

H1 stands nullified as the statement that cryptocurrency had least impact on investors stands to be proven false clearly as per the data collected.

Hypothesis 3

H0 - growth and opportunities in cryptocurrencies can overcome its risk factor.

H1 - growth and opportunities in cryptocurrencies cannot overcome its risk factor.

According to the study, here H0 seem to stand true as despite of being high volatile in nature large number of people choose to trade in cryptocurrency. For example, India is already experiencing massive crypto currency adoption over the past few years. Since the 2020 digital currency boom Indians have pumped up their investment on virtual tokens, putting the country at the second spot after Vietnam.

H1 stands nullified as introduction of metaverse - virtual reality is giving vision for future opportunities and then past performance tell it all.

CONCLUSION

• The innovation of cryptography technique and blockchain has made cryptocurrency an alternative medium of exchange due to its safety transparency and cost effectiveness. Some nations are taking step to promote Cryptocurrencies by introducing regulations while other wants to ban it. Cryptocurrency and the Government of different countries have an interesting relationship. Nevertheless, all seems to agree that the profit acquired through trading and using it should be taxed. But it's main feature cannot be separated from the users who use cryptocurrency for their illegal transactions. Crypto networks reap economic benefits through innovation investment jobs and taxes. Business benefits of adopting Crypto as a digital asset include access to new demographic and technology efficiency in treasury management.

• It's clear that cryptocurrency is an important and rising element in today's digital currency. Many Cryptocurrencies is showing immense growth from the time they were launched but for those speculators who can harness the volatile prices. The world has moved toward making a virtual world a reality by introducing metaverse and a decentralised ecosystem, NFTs and ICOs.

•" Money is the technology that allows us to imagine futures ", Swartz says. By providing a means of making payment secretly and without government interference. Cryptocurrencies have become popular . For example, Bitcoin, from the time it was launched and now trading at $36,337,691,721 USD.

•The word “cryptocurrency” would have conquered of images of a secretive underground currency and yet today we see the biggest financial institution and new outlets in the world dedicating space to it. But the major concern for most respondents is the unstable value of cryptocurrency, how to spend them, nervous about completing transaction, software bugs, loss of keys and third-party bankruptcy.

•There are several reasons why Bitcoin has such a volatile price history due to supply and demand, investors actions, Bitcoin in the news and Bitcoin regulation but still around 20 million people of India are trading in cryptocurrency. The factors that influence them are Cryptocurrencies being highly liquid asset, hype, stable-coins as their value linked to fiat currency or another stable asset, higher growth and reward. But the risk associated with it drive other people not to choose Cryptocurrencies as their asset rather choose gold or other stock market instruments.

• Cryptocurrency creates job opportunities, provide immunity from theft, accessibility, and help be on par with the global economy but it's benefits are limited to its drawbacks,. The semi anonymous aspect of

cryptocurrency transfers makes them ideal for a variety of illegal practices such as money laundering, black market, tax evasion, no refunds, data loss, high price and not exchangeable. But still people are being part of cryptocurrency as there is increase in need for operational efficiency and transparency in financial payment system, rise in demand for remittance in developing countries, increase in data security and improve market cap are the major factor that drive the growth of the global cryptocurrency market.

• The global cryptocurrency market size was valued at $1.49 billion in 2020 and it's projected to reach $4.94 billion by 2030 growing at a CAGR of 12.8% from 2021 to 2030.

• Many Cryptocurrencies are giving unexpected returns such as, Bitcoin (BTC) Market cap: $723 billion. Bitcoin's price has skyrocketed as it's become a household name. In May 2016, one could buy a Bitcoin for about $500. As of May 1, 2022, a single Bitcoin's price was over $38,000. That's growth of more than 7,500%. Ethereum (ETH) Market cap: $333 billion. Both a cryptocurrency and a blockchain platform, Ethereum has also experienced tremendous growth. From April 2016 to the beginning of May 2022, its price went from about $11 to over $2,700, increasing almost 25,000% and other Cryptocurrencies like Tether, Binance coin, ripple, dogecoin, solano, Cardano, avalanche etc. Has High earned

FINDINGS

- As per the nature , Cryptocurrency is acceptable as money . It fulfils requirements like being divisible, homogeneous, durable, mobile, rare , Stable value but not intrinsic value. It is trusted , accepted as payment and becomes an alternative in this current internet fuelled global market .
- It is accepted as financial asset , because they bear some value for cryptocurrency holders.
- It is accepted as property , as it would be desirable for a human being and capable to be stored over Time.
- Cryptocurrency is not acceptable as legal currency but a digital currency, as a successful currency need to fulfil characteristic of being unit of account , medium of exchange and as a stored value. Being subject to high exchange of risk it does not follow the last element.
- Cryptocurrency vs gold : investment in which asset better depends upon your risk tolerance , investing strategy , how much capital you have to use , and how much you can tolerate losses. Cryptocurrency or ICOs is much more volatile than gold , making it a riskier investment than gold.

Risk and reward nature : even after recent decline , the price of a Bitcoin is nearly 400% of what it was a year back. Risk factor cannot be ignored either. Scams, frauds, tax evasion ,etc. plus the loan element and not having knowledge about underlying technology multiplies the risk.

- Furthermore , increase in demand for cryptocurrency among banks, and financial institutions and untapped potential on emerging economies are expected to provide lucrative opportunity for the market expansion.

▪ The growth in cryptocurrency has already started, world has moved toward making a virtual world a reality, by introducing Metaverse, ICOs, NFTs and creating a decentralized ecosystem.

▪ Investing in Cryptocurrency vs Stock market: cryptocurrency is an exciting, boom and bust asset that has attracted an enormous amount of interest in a short Time. If that interests you, invest only with the most speculative segment of your portfolio, money you are comfortable losing. Individual stocks are linked to the performance of an underlying company, which grounds the stock’s price. These are still volatile and risky assets, but not nearly to the same degree as cryptocurrency.

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Annexure

Cryptocurrency survey

Cryptocurrency is a type of digital currency that generally only exists electronically. There is no physical coin or bill unless you use a service that allows you to cash in cryptocurrency for a physical token.

Name *

Short answer text

Age *

- 15-20
- 20-30
- 30-40
- 40 above

Do you own cryptocurrency? *

- Yes
- No

Occupation *

- [ ] Student
- [ ] Employee
- [ ] Professional
- [ ] Business
- [ ] Other

How much,if at all have you heard or read about cryptocurrencies such as Bitcoin or ethereum? *

- [ ] A lot
- [ ] Some
- [ ] Not much
- [ ] Heard about it right now with this survey

How likely are you to invest in cryptocurrency this year ? *

- [ ] Extremely likely
- [ ] Very likely
- [ ] Somewhat likely
- [ ] Not at all likely

If you are a regular investor or want to start investing ,does the introduction of cryptocurrency have impacted your investment decision? *

- ◯ Yes
- ◯ No
- ◯ Maybe
- ◯ Slightly

Cryptocurrency is still in its infancy Stage and may undergo many changes in the near future which makes it extremely volatile. How likely would this affect your decision to use cryptocurrency? *

- ☐ Extremely likely
- ☐ Somewhat likely
- ☐ Not at all likely
- ☐ Indifferent

Which one do you think would be more profitable ? *

- [ ] Stock market
- [ ] Cryptocurrency
- [ ] Both are equally profitable

Cryptocurrency has no tangible form ,does that diminish the value that you percieve about cryptocurrency? *

- ◯ Yes
- ◯ No
- ◯ Maybe
- ◯ Indifferent(unaffected)

Unlike other currencies ,cryptocurrency requires much less fees to operate . Would this increase your interest in using cryptocurrency ? *

- ◯ Definetly
- ◯ Slightly
- ◯ Not at all
- ◯ Indifferent (unaffected)

In your opinion ,which is more risky – investing in stock market or investing in cryptocurrency ? *

- ☐ Stock market
- ☐ Cryptocurrency
- ☐ Both are equally risky

If cryptocurrency providers created tangible coins(or notes)for its users with banks and ATMs readily available but remained non government regulated. Would this increase your interest in cryptocurrency? *

- Yes
- No
- Maybe
- Indifferent (unaffected)

Cryptocurrency is non government regulated which offers users more freedom . Would this increase your interest in using cryptocurrency? *

- Yes
- No
- Maybe
- Indifferent(unaffected)

If cryptocurrency is government regulated but remained intangible ,would this increase your intrest in using cryptocurrency? *

- ◯ No
- ◯ Maybe
- ◯ Indifferent(unaffected)

How do you think cryptocurrency have impacted the economy of India ? *

	1	2	3	4	5	
Negatively	◯	◯	◯	◯	◯	Positively

In 5 years ,do you think cryptocurrency will be worth more or less than it is today? *

- ◯ Significantly more
- ◯ Same
- ◯ Significantly less
- ◯ No change