# The Future of Cryptocurrency

Kanika Thakur<sup>1</sup>, Dr. Priya Satsangi<sup>2</sup>, Deepanshu Kumar<sup>3</sup> and Ujjwal Saxena<sup>4</sup>

<sup>1</sup>Assistant Professor, Department of Management, Dronacharya Group of Institutions, Greater Noida, U.P., INDIA

<sup>2</sup>Associate Professor & HOD, Department of Management, Dronacharya Group of Institutions, Greater Noida, U.P., INDIA

<sup>3</sup>MBA Student, Department of Management, Dronacharya Group of Institutions, Greater Noida, U.P., INDIA

<sup>4</sup>MBA Student, Department of Management, Dronacharya Group of Institutions, Greater Noida, U.P., INDIA

<sup>2</sup>Corresponding Author: priyasatsangi21@gmail.com

**Received:** 02-05-2023 **Revised:** 19-05-2023 **Accepted:** 04-06-2023

#### **ABSTRACT**

Cryptocurrency is a peer-to-peer network for exchange. It is digital and also known as virtual currency that uses cryptography a security related coding system. Most of the governments across the world are in the dilemma of making cryptocurrecy as legal. The regulation of official digital currency proposed to introduce in centralized way by various banks in an around the world. Unlike equity, this currency has no regulation regarding the trade in decentralized market due to no underlining in fundamentals and financial values. This money has a good future in terms of technological advancement in circulation and controlling of money with centralized controlling system. Central based digital currency (CBDC) is continuously doing a pilot survey from Dec 1st 2022 in major cities to exactly know the channelization if this currency.

Major dialogues are going on as decentralized currency is not safe for any country's economic system. Digital money can either be centralized, where there is a central point of control over the money supply by a central bank or decentralized where the control over the money supply is predetermined or agreed upon self-governing. The Mining of crypto currency is done through cryptography in which specialized computers are used for recording the transactions. The young Indian especially in tier 2 and tire 3 cities are inspired through this currency. Financial literacy and awareness are of paramount importance in order to have a healthy skin in the crypto game. The trading amounts to gambling might not hold much steam because success in any market depends on informed entries, caution risk-taking and strategic exits.

Bitcoin is the first and most prevalent Cryptocurrency till the date. Now in the information technology world in which we can interact with each other for exchange without a regulatory body or centralized system, Cryptocurrency is an example of digital change accepted by the people. In this paper we have analyzed the effects of crypto currency and its impact during pandemic. The whole study of this currency is divided in 7 continents and bifurcated according to legal, illegal, banned, prohibited and restricted countries according to the use. And also the initiative by the Indian government regulation related to crypto currency.

*Keywords--* Crypto Currencies, Digital Divide, Conservatisms, Cryptography, Blockchain, Pandemic, Digital Money, Virtual Money, Risk, Return

#### I. INTRODUCTION

Money as well as its circulation is the backbone for developing and developed nations. Due to the technological advancement the currency circulation plays the important role for investment. This is the only way of getting a secured and a lump sum amount after a particular span of time. Cryptocurrecy is the latest method of saving investing and spending money through digital platform. For more security and better earning this currency came into picture latterly. David chaum introduced company DG cash in 1990. He is an American computer scientist and an innovator. In his paper entitled "blind signature" for untraceable payments (1983). He discussed about the concept of Cryptocurrency in the companies. This concept took more than 20 years to become apparent. E-cash, Bmoney, bit gold and hash cash were very influential in creation of bitcoin. Bitcoin is developed by Satoshi Nakamoto in 2008, as a digital currency. This currency is circulated by the help of block chain system. Cryptocurrency is denominated by many names such as Bitcoin, Litecoin, Ethereum, Tether, USD coin, BNB, XRP, Binance USD, Cardano, Solana, Ripple, Polkadot, Dogecoin, Polygon, etc.

With the of the internet, Digital use money, electronic money, virtual money or electronic currency is used in managing, storing and transacting in a specialized device. For this purpose authentic database plays and important role to manage efficiency of the work. A centralized special computer database owned by an organization, financial institution or bank, within digital files enhances the use of this currency. Digital currencies are quite similar to traditional currencies, but not in tangible form. The transactions in this mode has minimum circulation cost in comparison to notes and coins associated with the transactions. This currency can only be used with the due permission and adhering government rules and regulations.

In 2021 a huge growth was absorbed in crypto market with approx. 10,000. Crypto currencies are information technology-based fictitious assets but the risk of cyber-attack through the cyber terrorist because all the data is stored on digital platform. Since it is regulated in decentralized form hence no one is responsible for cybercrime. Trading in this currency is a new edge for financial sector, and a chance for exponential growth in the financial market and countries economy. The use of mobiles plays a vital role in this trade by different apps. This make convenient for an individual to buy and sell with complete awareness of different apps in order to earn maximum gain. Approximately 12000 Crypto currencies are prevailing at present; this drastically grew with the addition of 1000 crypto currencies every month in and after the year 2021. Cryptocurrency is only legalized in countries like El Salvador the economy is good but crime rate is high and in Central African Republic the crime rate is high and economy is poor.

#### 1.2 Development of Cryptocurrency

Crypto currency gets privileged when in September 2021 El Salvador country announce that Bitcoin their legal tender for exchange or transaction. Indian government is changing their strategies continually regarding ban on trading of Cryptocurrency. Firstly in 2017 RBI warns the users of crypto market, after that in the year 2019 imposed ban on it. But Supreme Court relives the ban on crypto. Finally RBI accepts the Cryptocurrency as an asset investment and also announces they will provide digital rupee in the Indian market. In July 2022 RBI recommended a ban on Cryptocurrency because of their effect on monetary and fiscal policies. This market is growing continually with their enormous reasons like no regulatory control, money laundering, terror financing, speculation, drug transaction etc. When in parliament of India introduce a plan regarding digital assets to control over crypto. It was explosive step toward crypto market. Speculators are trying to use the credulity of the investors.

# 1.3 Denotation of Cryptocurrency

Crypto means hidden or secret and currency means a medium of exchange for goods and services with the help of coins and paper money regulated by various acts in a particular country. Cryptocurrency is digital money used in exchange process through electronic mode. It works on the record availability for making connections worldwide. The DLT (Distributed ledger technology) is used for recording the transaction which becomes the part of assets. With the help of DLT the data's of transaction are also recorded at multiple places at a particular time. The drawback is there is no central data storage system or any administration that makes the transactions authentic.

In this, tokens and coins are used for transactions and this is maintained by a wallet with sufficient amount. This works on the method of block chain including miners and mining. Miners are the recorder of the digital currency as they record and get rewarded in the form of Cryptocurrency. On the other hand mining is the process to calculate the balance of the Cryptocurrency holder with the help of special computers and highly developed software. Data and transactions are saved in many different online devices. This is done with the help of coding systems called cryptography. There are many types of Cryptocurrency in the market most popular is Bitcoin followed by Ethereum, Tether, BNB, USD Coin, XRP, Binance, Cardano, etc. these types are defined by token and it is fixed in nature for allotment. That is why the market fluctuation behaves in ascending and descending order as in the higher price leads to higher demand for that token and token availability is limited. On the other hand the low price of that token leads to the lower demands. The main reason for the use of Cryptocurrency is the privacy of the user's money from the banks, authorities, and agencies. It is a decentralized method for the control of digital money. This currency has No impact on inflation, purchasing power of the money and exchange rate. Particularly fluctuation in the foreign currency, government policies like Bank rate, repo rate, Cash Reserve Ratio, Statutory Liquidity Ratio and reverse repo rate, etc. will not impact the Cryptocurrency.

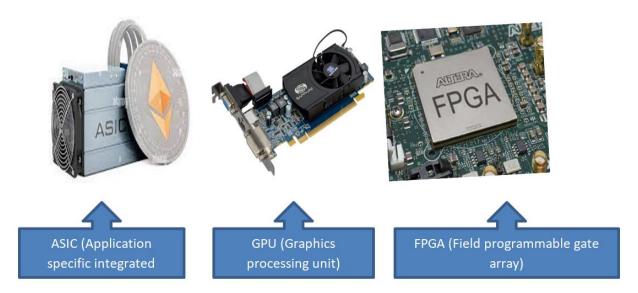
#### 1.4 Processing in Crypto

Increase in prerequisite for working proficiency and limpidity in monetary payment systems, rise in demand for settlements in developing countries, increase in data security, and improved market cap are the major factors that responsible for the growth of the Cryptocurrency market globally. Furthermore, high operation cost and lack of knowledge and awareness regarding Cryptocurrency among the folks in developing countries hamper the market growth. Additionally, increased demand for this currency in banks, financial and non-financial institutions and untapped potential that is the source of something has not been used on emerging economies is expected to provide profitable opening for the market expansion in the coming years. At the time of COVID-19, business closures hindered the delivery of new hardware and improved equipment, resulting in fewer mining operations during the pandemic crisis.

In the present scenario, Cryptocurrency is concentrating more on the hardware sector, such as ASIC (application-specific integrated circuit), Graphics processor unit and FPGA (Field Programmable Gate Array). Due to the increased need for software performance upgrades and solutions to make financial transactions more efficient, the hardware sector gained a significant portion of the Cryptocurrency market.

However, over the projection period for the Cryptocurrency market, the software segment is anticipated to develop at the fastest rate since it makes it

easier to handle the enormous amount of data being generated for insightful insights and better decisions.



#### 1.4.1 ASIC

smooth functioning in crypto is designed named as ASIC. It is a computerized device for the sole purpose of mining digital currency. The very important specification of ASIC is the individuality. For example a Bitcoin ASIC minor can only mine Bitcoin with the help of special computers that are designed to solve the mining algorithm. This process is complex as well as costly, but it increases the efficiency of mining. Since decades the general computer have been working using IC chips (integrated circuits) for example RAM. ROM, microprocessors, Cryptocurrency mining process is based on ASICs chips as it needs high proficiency for individual data mining. Originally Cryptocurrency creator's used laptops and desktop devices for mining process, but the results were not so efficient. ASICs are superior to CPUs and GPU (graphics processing units) as it uses less electricity and maximum computing efficiency. When most of devices were unable to deal with mining work, then ASIC chip capture the market.

An integrated chip with circuits for the purpose of

The minor review and verifying the transaction time to time with the purpose to create new block which adds data and block chain. Basically it is an application specific integrated circuit used in computerized devices with the only purpose of mining variation in Cryptocurrency like Bitcoin etc.

#### 1.4.2 GPU

The unique benefit of graphic processing technology which is also called as GPU that is graphic processing unit was first use by the gaming industry. The

process of transforming, clipping, rendering engines and lightning was done by the single chip processor. GPU did not make much place into crypto mining till 2010. As of mining was not easy because of specialized graphic card which was not successful in solving crypto puzzle. In comparison to CPU, GPU mining is simplified and the complex crypto equations are solved more efficiently. Miners, due to ease of maintenance and up gradation choose GPU instead of CPU

#### 1.4.3 FPGA

Field Programmable Gate Array (FPGA) is a chip in which Meta data storing capacity is high as compared to GPU and ASIC. It is ideal for wide variety of application related to storing high volume processing. Due to economic factor the most understandable cryptographic algorithm are implemented through FPGA.

## II. CRYPTO MARKET SHARE

Market in crypto assets known as MICA proposed landmark licensing for maintaining financial stability so as to protect the investor's assets in European commission I European union markets MICA become law for crypto assets. The EU consist 27 countries which promote democratic values and it world's most powerful trade block. The NTF (non-fungible token) are cryptographic asset working on block chain with unique identification code. The market size in globalized scenario of Cryptocurrency is projected to reach dollar 4.94 billion by 2030. The compound annual growth rate is 12.8% as it valued to dollar 4.49 billion in 2020. The virtual currency

exist digitally which have no central issuing and regulations. The authentication of transactions is only done through block-chain technology.

There are over 10,000 crypto currencies as of early 2022 but it is the impression of that top 20% crypto currencies dominance the market share up to 90%. Earlier people used to invest in gold, share markets, land, etc.to protect their money against inflation or purchasing power of the money reduction at global level. Over the past few years ago, more people found Cryptocurrency to be a better alternative asset compare than traditional assets. And our digital divide (who know to use the computer with internet) population also will be increasing day by day.

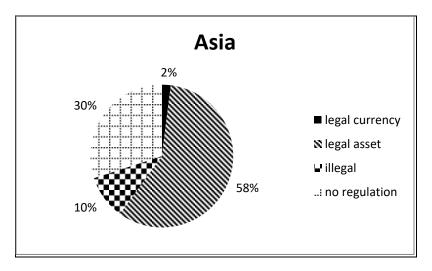
Every country has its own legislative and monetary decision on Cryptocurrency. Every nation has regulated the use of it as a legal, illegal, no regulation in this regards or legal but not in banking system. Apex regulatory bodies in dilemma to dealt with this technological development at the beginning. In country point of view it is an economy destruction sign if they adopting Cryptocurrency as a legal tender on the other hand technical advancement. The dominance in crypto market is taken by Asia pacific from the year 2020 to 2022 and it also expected for its retention in the future. A healthy competition is seen with the increase the number of Bitcoin exchange across Asia.

#### 2.1 Worldwide Impact of Cryptocurrency

The Cryptocurrency is the result of financial innovation. Due to its accessibility it is the advance stage technological cultural and social progress. It has become the mark of great potential economy. The algorithms play a vital role in different type of cryptocurrencies, as Bitcoin be the most popular. There are many other currencies that include stable coins and issued.

Digital assets governed by cryptographic methods are called cryptocurrencies. Different cryptocurrency subtypes exist. The most well-known cryptocurrency is arguably Bitcoin (BTC), although countless more have appeared over time. Naturally, stable coins are also included here, which are digital currencies whose value is tied to things like fiat money, debt paper, or commodities like gold.

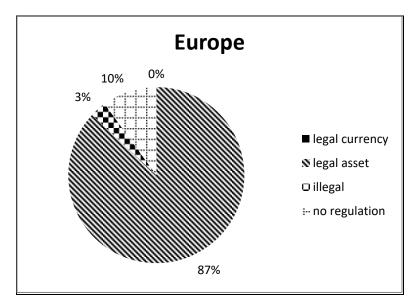
It's crucial to take a moment to calm yourself and realize that the larger impact of cryptocurrencies goes beyond daily price swings when cryptocurrency prices are correcting and the fear and greed index rebounds. Blockchain technologies, which underlie use cases for cryptocurrencies, are developing at an exponential rate. The enormous economic influence of cryptocurrencies on the world economy spans industries, transcends borders, and goes beyond what was previously unthinkable.



The present scenario of crypto currency in Asia, is been analyzed and presented in the pie chart that shows 58% of this currency is legally used for asset building in the year 2021-2022. Only 2% has allowed as legal currency. There are no rules and regulations formed for the 30% of the Asian countries .Finally in Asia 10% countries have declared this as illegal. The decision on governing the operations of a region is another most crucial aspect in growing the business by doing research and being more

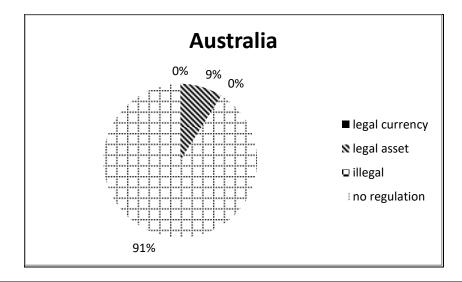
secured in obtaining new market and customers. The existence of crypto currency lies in the investments and mining business for IT specialist, Data scientist eventually by increasing block chain system. Once the governments of various countries give more assurance towards the legalization the better it becomes to transfer the money with authentication. The protocol is taken by all the countries regarding the legalization among the Asian countries. Till date only 58% crypto market envelope,

access to high quality rise discovery information which is crucial for addressing and growing need of transparency and to help offer comprehensive view of the market. In this respect the Asian countries with all the precautions and increase security must legalize this currency so as to get the money into circulation.



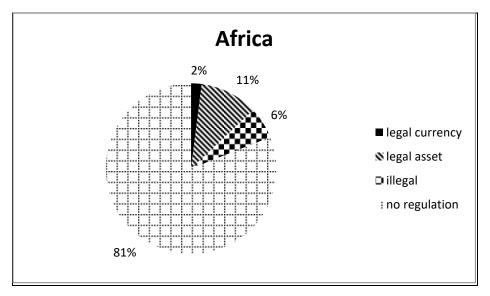
The governments of these countries have examined and reported the current situation of crypto currency in Europe. In the year 2021–2022, 87% of the cryptocurrency market in Europe would be utilised lawfully for asset construction, according to an analysis and pie chart of the market situation. Only 0% is recognised as legal tender. For the 10% of European nations, there are no established laws and regulations. Finally, 3% of the countries in Europe have deemed this illegal. Another key factor in expanding a business by conducting research and feeling more confident in getting new markets and clients is the choice of how a region will be governed. Cryptocurrency was created by the mining

and investment activities of IT professionals and data scientists, who finally expanded the block chain system. The better it is to transmit money with identification, the more the governments of various nations will guarantee its legalisation. All nations adhere to the procedure when it comes to legalising among the European nations. Only 87% of the crypto market is now covered, making it difficult to fulfil the growing need for transparency and provide a full picture of the market. Access to high quality rise discovery information is therefore essential. In order to put the money into circulation, the European nations must legalise this currency while taking all necessary steps and stepping up security.



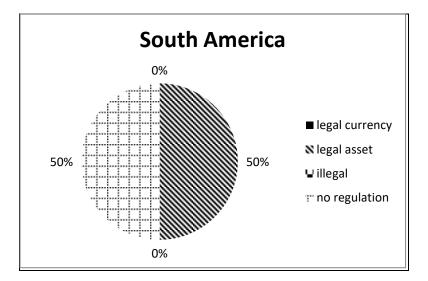
9% of this currency will be utilised lawfully for asset construction in the years 2021–2022, according to an analysis and pie chart of the current crypto currency situation in Australia. They have never been accepted as legal tender. For 91% of the Australian nations, there are no rules and regulations in place. This has not been deemed illegal by any nations. The choice of how to manage a region's operations is still another key factor in expanding a firm by conducting research and feeling more safe in acquiring new clients and customers. Cryptocurrency is a result of IT specialists' and data scientists' mining operations and investments, which eventually led to the development of the block chain

system. The better it is to transmit money with identification, the more the governments of various nations will guarantee its legalisation. All nations adhere to the procedure when it comes to legalizing between Australian nations. Only 9% of the market is now covered by cryptocurrency, making it imperative to have access to high-quality rise discovery information in order to fulfill the growing need for transparency and to provide a full picture of the market. In order to get the money into circulation, the Australian countries must legitimize this currency while taking all necessary steps and stepping up security.



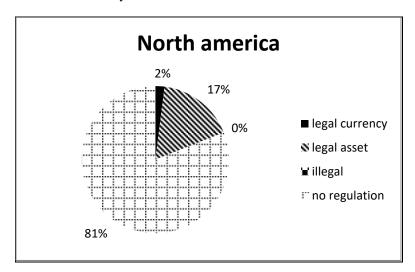
The current scenario for cryptocurrencies in Africa is analyzed and displayed in a pie chart. This indicates that 11% of this currency will be legally used for wealth accumulation in 2021-2022. Fiat currency is only 2%. 81% of African countries have no rules or regulations. Finally, in Africa, 6% of countries declare it illegal. Choosing to lead the local business is another important aspect of gaining the confidence to grow the company and attract new markets and customers through research. The existence of cryptocurrencies lies in the investment and mining Business. IT specialists, data scientists, and eventually lead to the proliferation of blockchain systems.

As governments of different countries give more security to legalization, it becomes more appropriate to transfer money using authentication. This protocol has been adopted by all countries regarding legalization between African countries. With just 11% of cryptocurrency market turnover to date, access to high-quality discovery information is essential to meet the growing need for transparency and provide a comprehensive view of the market. In this regard, African countries should legalize this currency, taking all precautionary measures and increasing security in order to put it into circulation.



The current scenario for cryptocurrencies in South America is analyzed and displayed in a pie chart. This indicates that 50% of this currency will be legally used for wealth accumulation in 2021-2022. No country recognizes it as legal tender. 50% of South American countries have no rules or regulations. After all, no country in South America made it illegal. Choosing to lead a regional business is another way to grow your company through research and gain the confidence to attract new markets and customers. It's an important aspect. The existence of cryptocurrencies lies in the investment and mining business of IT specialists, data scientists, and eventually lead to the proliferation of blockchain systems. As

governments of different countries give more security to legalization, it becomes more appropriate to use authentication to transfer money. This protocol has been adopted by all countries regarding legalization between South American countries. With just 50% of cryptocurrency market turnover to date, access to high-quality discovery information is essential to meet the growing need for transparency and provide a comprehensive view of the market. In this regard, South American countries should legalize this currency, taking all precautionary measures and increasing security in order to put it into circulation.

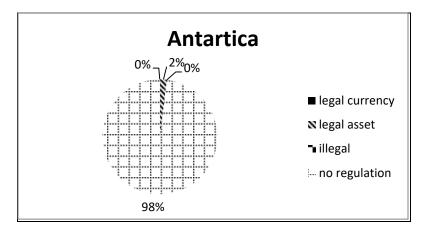


The current scenario for cryptocurrencies in North America is analyzed and displayed in a pie chart. This indicates that 17% of this currency will be legally used for wealth accumulation in 2021-2022. Fiat currency is only 2%, 81% of North American countries have no rules or

regulations. After all, the North American nation didn't make it illegal. Choosing to lead a regional business is another important way to grow your company through research and gain the confidence to attract new markets and customers. It's the side. The existence of

cryptocurrencies lies in the investment and mining business of IT specialists, data scientists, and eventually leads to the proliferation of blockchain systems. As governments of different countries give more security to legalization, it becomes more appropriate to use authentication to send money. This protocol has been adopted by all countries regarding legalization between North American countries. With just 17% of

cryptocurrency market turnover to date, access to highquality discovery information is essential to meet the growing need for transparency and provide a comprehensive view of the market. In this regard, North American countries should legalize this currency, taking all precautions and increasing security to put the money into circulation.



The data for Antarctica in relation to cryptocurrency is very ambiguous so it was difficult to pave the way for the authentication regarding its being a legal currency, legal for asset, illegal and having no regulation till date.

#### 2.2 Survival of cyptocurrency

Substantial fluctuations are been observed in the legal aspects of crypto currency among all seven continents. This data is mainly affected by the year 2017 to 2022, although this currency concept started in 2009, but it started taking pace in the year 2017. The remarkable change of hike in this currency is seen during the pandemic year 2020-21. Despite of significant advancements, this is highly controversial. On latest research display there are 111 states where Crypto currencies are recognized by law and legalized. A virtual currency subset is "crypto currency" as an internet based which is validated by cryptography for ownership.

It is possible to forecast that when cash enters the market, there will be a significant movement in the Cryptocurrency market. According to some analysts, Blockchain technology may be used to float this currency on the Nasdaq, which would support its adoption as a replacement for fiat money. With the help of peer-to-peer technology, Bitcion's and decentralized currency collaboratively enables the network to carry out the complete task just like as in currency. In other words according to some analyst, the prediction s can be made that cash joins the market; there will be large shift in crypto. This currency may float on the Nasdaq, which would further add legitimacy to blockchain and its uses as

an alternative to standard currency. Bitcion is a decentralized currency using peer to peer technology that allows the network to jointly perform the entire task such as currency.

# 2.3 Awareness of Crypto in Youth

Crypto has strong appeal on minorities and young people Cryptocurrency has pierced young Indians through electronic devices, especially in tier-2 and tier-3 cities, not only because of lack of regulations but also because of the quick-and-easy returns displayed by the various digital currencies. Profuse advertisements of Cryptocurrency exchanges featuring prominent personalities, during the recently concluded Men's T20 Cricket World Cup broadcasts, had injected a sense of euphoria among people about this new asset class. A blanket ban on private crypto currencies will not only jeopardize crore of investments but also risk the fate of hundreds of employees working in these companies.

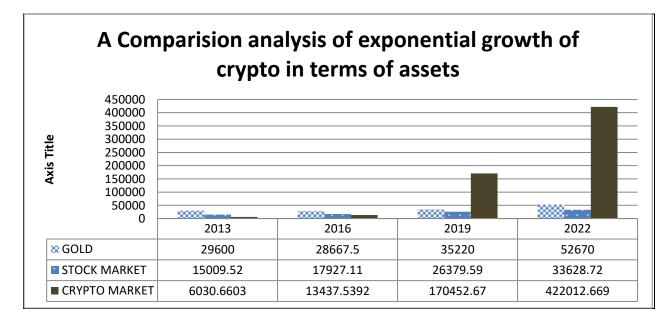
Youth interested in crypto because of tax saving for an example if a person want to invest in stock market, fixed deposit, recurring deposit, land investment or any other investment government have prescribed tax rate for each and every amount received by the investor. If a person investing in Stock market then it is regulated by security exchange board of India (SEBI). If anyone wants to make money by investing in land then national real estate development council (NAREDCO) regulating it. And anyone wants to invest in RD and FD then it is regulated by RBI. Only crypto investment not regulated by any regulatory authority in India and also at international level. In ICC men's world cup 16 October to 13

November, 2022 private digital currency (Cryptocurrency) promoted by the advertisements. Block chain is technical development promoted by the Cryptocurrency also plays a vital impact on youth. Because youth also want to do ethical advancement in technical field like cryptography and block chain.

#### 2.4 Risk and Return for Investment

Investment is the base for overall financial planning. Each and every person wants to play safe when it comes to investment. Risk and return are the major factor for any type of investment. Widespread truth related to investment is low risk leads to low return although high risk for high return. Risk is divided in two section systematic risk and unsystematic risk. Both the causes

involved in any investment like stock market, gold, money market, land, Cryptocurrency, bonds, etc. The investment in Crypto currencies like Bitcoin, Ehereum, Tether, USD coin, BNB etc. are the currencies which are not backed up by tangible security and real assets. This is a trade between the consenting parties and tracked on digital leaders with no broker. Investing in this currency can take many forms for example directly in the Cryptocurrency, invest in Cryptocurrency companies (like Robinhood market inc., PayPal holding inc., micro strategies inc.), etc. the coin names and the coin types are two different aspect in crypto market the major type available in the market as of now depending utility, transaction, governance, platform, security token etc.



Bank bazar data for 24 karat gold (average annual price)

Dow Jones data for Industrial Average stock market (average closing price)

Statista data for Crypto market (average of 5 Cryptocurrency-Bitcoin, Ethereum, Tether, USD coin, BNB)

There had been substantial fluctuations in the legal aspects of crypto currency among all nations. This data is mainly affected by the year 2013 to 2022, although this currency concept started in 2009, but it started taking pace in the year 2017. The remarkable change of hike in this currency is seen during the pandemic year 2020-21. Despite of significant advancements, this is highly controversial. On latest research display there are 111 states where cryptocurrencies are recognized by law and are legal. A virtual currency subset is "crypto currency" as an internet based which is validated by cryptography for ownership.

# III. FACTORS AFFECTING CRYPTOCURRENCY MARKET

#### 3.1 Payment Related Features

- Legal protection for payments in the case of payments by UPI, credit cards, debit cards and bank drafts provides us transactions record by banks. That record provides us legal protection and in case of crypto no transaction record and also not any legal protection avail by the user.
- Revocable step for transaction Once the payment done in crypto market no back step for the payer. On the other hand banks are liable to deal with type of problems if customer notify to the bank within 24 hour.
- Information detail about transaction Crypto currency's transaction recorded on public ledger with the help of Blockchain technology. In which

https://doi.org/10.31033/ijemr.13.3.14

details about payer and payee wallet addresses and transaction amount. These details can use by the miner for particular speculation purpose. On the other hand transaction by bank is secured between user and the bank.

#### 3.2 Investing Parameter for Cryptocurrency

- Buyback process Usually traditional currencies are backed by a government and central bank of that country like dollar conversion into rupee or in any other currency however in case of Cryptocurrency government and central bank nor tied for this condition.
- Protection Regarding Cryptocurrency if money stored in the "online wallets" then it has a huge risk from hackers although in bank account has security and assurance by government and central bank.
- Market fluctuation Cryptocurrency market fluctuating drastically for example in 2022 market stared with 31 lakh and at the end value remains 13 lakh (data from gadgets360.com).it mean ups and down in the market have does not depend on the direct factors unlike stock market.
- **Evidence** No validate history or record regarding investment in crypto market.
- Assurance No one can takes guarantee regarding higher return and secured investment. If someone trying to manipulate the investor that's leads to a scam or fraud.
- Variation in Cryptocurrency Different Cryptocurrency has different value in the market. A proper review and research is needed before investing in any Cryptocurrency.

### 3.3. Digital Literacy & Blockchain

Digital literacy has emerged as a new essential life skill and is now, according to the World Economic Forum, a component of the twenty-first-century toolkit, while numeracy and basic literacy are still essential to learning. Digital literacy has also emerged as a new essential life skill. Beyond just basic literacy, digital skills are now necessary for every citizen of the world to communicate, find work, receive a comprehensive education, and interact socially. Over 90% of professional roles across all sectors in Europe demand a fundamental understanding of digital technology. In light of the Covid-19 pandemic, it is more crucial than ever for nations to adopt digital technologies and the skills that go along with them. Digitalization is now a problem that affects all actors and sectors, not just one particular one. In that sense, "the future is already here"; building a digitally literate workforce will be essential to assuming leadership roles globally. For global development programming to be successful and for the world to move toward a free, sustainable, and equitable future, it will be crucial to meet digital demands and support global digital transitions. The ability to access technologies and the necessary digital skills will be essential for a country's development, security, and inclusion in a world that is going online more and more.

A Blockchain is associated to disperse database that maintains a continuously increasing list of ordered records called blocks. These blocks are connected through the use of cryptography. Each block holds a cryptographic hash of the preceding block, transaction data, and a timestamp. A protocol for a peer-to-peer electronic cash system was likely designed by Satoshi Nakamoto in response to the 2008 global financial industry meltdown. This protocol served as the basis for the distributed ledger technology known as blockchains. Blockchain functions somewhat like a global ledger or spreadsheet. It operates on computers given by volunteers all around the world and lacks a central database. Because a blockchain exists on the network rather than within a single organisation, anyone can examine it at any moment. Blockchain employs public and private keys along with encryption to provide a semblance of virtual security. Using a blockchain, one can securely transfer money to another person without going through a bank or other financial institution. The term "distributed ledger technology" is frequently used in the financial services sector to describe blockchain technology. Furthermore, some people believe that blockchain will be a more trustworthy database than their current ones. Some people think blockchain technology may replace the outdated technology used by the banking sector as digital money becomes more commonplace and more people around the world are estimated to hold smartphones. The development of broadly accessible digital financial products could be facilitated by this new alliance in financial technology. Governments are beginning to take cryptocurrency

Governments are beginning to take cryptocurrency seriously. Bitcoin and other virtual currencies should be properly classified as commodities, the U.S. Commodity Futures Trading Commission ruled in 2015.

#### IV. CONCLUSION

In the present scenario the use of Cryptocurrency is becoming more prevalent but looking at the risk factor the security as well as the vigilance towards the technological advancement is required. Technological advancement lead to high risk factor that is why a team of expert is required to monitor the activity happening at regular interval. Government Of various continents should actually think upon the measures that can actually help this currency grow and become legalize in near future as it enhances global economic growth. Investors should be extra careful and take utmost precautions about monitoring

the transactions at regular interval in order to solve the purpose of gaining through this currency.

Investors are also advised to consider the subsequent tips to identify and avoid investment frauds. Firstly, Investors should always look closely at content, analyze founding dates, consider quality of engagement, and take steps to identify fake accounts. Pay close attention to domain names and learn various methods to protect the online accounts so that investors don't accidentally do business with fraudulent companies. Scammers often refers to or post positive but false testimonials claiming to have been written by satisfied customers. However, many times the ratings are not from satisfied customers, but from scammers. Learning the ways to protect themselves from NASAA Informed Investor Advisory on social media, online trading and investing plays an important role. Finally, learn more about investment fraud warning signs.

This currency is basically affected by digital divide and conservatisms. Till date not all countries government, corporate bodies, individual, etc. are in the framework of accepting crypto market. It is because of the lead in the digital currency market, cyber-attack and the risk of fraudulent market is higher than in traditional currency. Exploration of cryptomarket in the new edge era where is the world looks up to. It is estimated that in 2022 approx. 10,000 more cryptocurrencies have entered in the market, but the maximum market is captured by the bitcoin.

The topic of regulating crypto assets would be discussed in G20 meetings, according to Finance Minister Nirmala Sitharaman, who stated this on 11 February 2023. This is because a consensus perspective needs to be created on the subject."Crypto relies less on human participation and is mainly tech-driven. We are advising all countries that if regulations need to be created, more than one nation cannot do so independently. In order for a Standard Operating Procedure (SOP) to be effective, we are addressing everyone. "All of them are therefore up for discussion. After delivering her speech to the RBI board in New Delhi, Sitharaman told reporters that the G20 diaAccording to the worldwide scenario, the market for cryptocurrencies, which was valued at \$1.49 billion in 2020, is expected to increase to \$4.94 billion by 2030, expanding at a CAGR of 12.8% between 2021 and 2030. Now governments and central banks of all the countries are also accepting it day by day. Every country is upgrading their infrastructure for digital currency usage by the world. But financial risk is getting higher than before because in decentralized format is hard to detect roots for the fraudulent cases. Technology is a blessing as well as a curse for us due to technological advancement. We are improving our self but also facing a lot issues in security. As a result, businesses and the resulting economic activity, voyage to those countries that are actively stimulating to their blockchain ecosystem. Cryptography uses huge amount of electricity for mining the cryptocurrency's transactions. Mining is the only way of completing the block for a connecting chain for their crypto records. To conclude we would like to lay emphasis on cryptocurrency being legalize and create awareness among general public. More vigilance required so as to get right benefits and to make money in the future.

#### REFERENCES

- [1] Dr. Anil Kumar V.V & Swathy. P. (2019). A study on opportunities and challenges of cryptocurrency in india with special reference to bitcoin. *International Journal of Research and Analytical Reviews*.
- [2] Mr. J.P.Jaideep & Mr. K.Rao Prashanth Jyoty. (2019). A study on cryptocurrency in india boon or bane. *Journal of Emerging Technologies and Innovative Research*, 6(2).
- [3] https://rbi.org.in/Scripts/BS\_SpeechesView.aspx? Id=1196#:~:text=As%20discussed%2C%20crypt ocurrencies%20are%20not,by%20any%20financi al%20sector%20regulator.
- [4] https://www.researchgate.net/publication/328446 982 Cryptocurrencies Final 2018.
- [5] https://www.researchgate.net/publication/324770 908\_The\_Growth\_of\_Cryptocurrency\_in\_India\_I ts\_Challenges\_Potential\_Impacts\_on\_Legislation.
- [6] https://www.researchgate.net/publication/316656 878\_An\_Analysis\_of\_Cryptocurrency\_Bitcoin\_a nd\_the\_Future.
- [7] https://en.wikipedia.org/wiki/Cryptocurrency.
- [8] https://economictimes.indiatimes.com/news/economy/finance/88-street-vendors-regularly-repaying-pm-svanidhi-loans/articleshow/92757240.cms.
- [9] https://cryptonews.com/guides/countries-in-which-bitcoin-is-banned-or-legal.htm.
- [10] https://www.coindesk.com/policy/2022/02/21/ma king-sense-of-indias-new-crypto-rules/.
- [11] https://www.moneycontrol.com/news/trends/features/top-5-crypto-trading-apps-in-india-2022-8239941.html.
- [12] https://www.forbes.com/advisor/in/investing/best-cryptocurrency-exchanges/.
- [13] https://www.statista.com/global-consumer-survey.
- [14] https://coinmarketcap.com/.
- [15] https://theanchor.io/.
- [16] https://www.worldometers.info/geography/.
- [17] Blog.ipleaders.in/cryptocurrency-legal-aspects.

[18]	https://timesofindia.indiatimes.com/readersblog/t
	hewordsmith/cryptocurrencies-young-india-and-
	regulations-39500/.

- [19] https://earthjustice.org/features/cryptocurrency-mining-environmental-impacts#:~:text=Top%2Ddown%20estimates%20 of%20the,in%20the%20U.S.%20in%202021.
- [20] https://unctad.org/news/how-blockchain-can-power-sustainable-development.
- [21] https://www.imf.org/en/Blogs/Articles/2022/09/0 1/reimagining-money-in-the-age-of-crypto-and-central-bank-digital-currency.
- [22] https://www.ndtv.com/business/whats-the-stance-of-global-lenders-like-imf-and-world-bank-on-cryptocurrencies-2583015.
- [23] https://www.imf.org/en/News/Articles/2022/02/0 9/sp020922-the-future-of-money-gearing-up-for-central-bank-digital-currency.
- [24] https://www.lemonde.fr/en/economy/article/2022/05/27/bitcoin-ethereum-why-young-people-aregetting-caught-up-in-cryptocurrency-fever\_5984864\_19.html.
- [25] https://www.investopedia.com/terms/a/asic.asp#:
   ~:text=An%20application%2Dspecific%20integra
   ted%20circuit%20(ASIC)%20is%20an%20integra
   ated,mine%20a%20specific%20digital%20curren
   cy.
- [26] https://www.researchgate.net/publication/355068 315\_Analysis\_of\_Return\_and\_Risk\_of\_Cryptocu

- rrency\_Bitcoin\_Asset\_as\_Investment\_Instrument/link/615c6ea4fbd5153f47e489ec/download.
- [27] https://www.sciencedirect.com/science/article/abs/pii/S1057521922001776.
- [28] https://www.macrotrends.net/1358/dow-jones-industrial-average-last-10-years.
- [29] https://www.bankbazaar.com/gold-rate/gold-rate-trend-in-india.html.
- [30] https://www.exchangerates.org.uk/USD-INR-exchange-rate-history.html.
- [31] https://portal.ct.gov/DOB/Consumer/Consumer-Education/Cryptocurrency-Risks.
- [32] https://www.cavendishprofessionals.com/technol ogy-insights-podcast-3/.
- [33] https://en.wikipedia.org/wiki/Blockchain#:~:text=based%20distributed%20blockchains.-,Types,consortium%20blockchains%20and%20hybrid%20blockchains.
- [34] https://www.csis.org/analysis/digital-literacy-imperative#:~:text=Digital%20literacy%20has%2 0become%20indispensable,open%2C%20inclusive%2C%20and%20secure.
- [35] https://www.csis.org/analysis/digital-literacy-imperative#:~:text=Digital%20literacy%20has%2 0become%20indispensable,open%2C%20inclusive%2C%20and%20secure.
- [36] https://www.reuters.com/world/india/g20-exploring-cryptocurrency-regulation-indias-finance-minister-says-2023-02-11/.