

ANALYSIS OF CRYPTOCURRENCY: AN ETHICAL CONJECTURE WITH REFERENCE TO INDIAN SCENARIO

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Abstract

A cryptocurrency is a form of digital payment that does not rely on banks to validate transactions. It's a peer-to-peer payment system that allows anyone from anywhere to send and receive money. Digital currency is the future of finance. India has huge rapid growth opportunities in cryptocurrency adoption. The objective of the study is to understand the growth of cryptocurrency over the year and to compare the conventional investment avenues with the cryptocurrency and SWOT analysis for future prospective of cryptocurrency in India. In India around 20 million active users of cryptocurrency. From July 2020 to June 2021 cryptocurrency market raised 640% in India. During this period from total digital currency transactions from Southern Asia, 42% is coming from the Indian market which is about \$10 million. A comparative analysis of conventional investment avenues with cryptocurrency shows that Indian investors still prefer to invest in conventional investment avenues. The reason behind this, a lack of information, security issues, and no regulations for cryptocurrency are seen. SWOT analysis shows that in the Indian market due to a decentralized system, no mediate intervention, low transaction cost, the worldwide accessibility adoption rate is high. The major barrier for cryptocurrency's major weaknesses and threats are highly volatile market, security threats, black marketing, no regulations, threats associated with unknown identity. Still Indian cryptocurrency market is huge, and growth is high in the future.

Key Words: Cryptocurrency, Digital Currency, SWOT, finance, growth.

INTRODUCTION

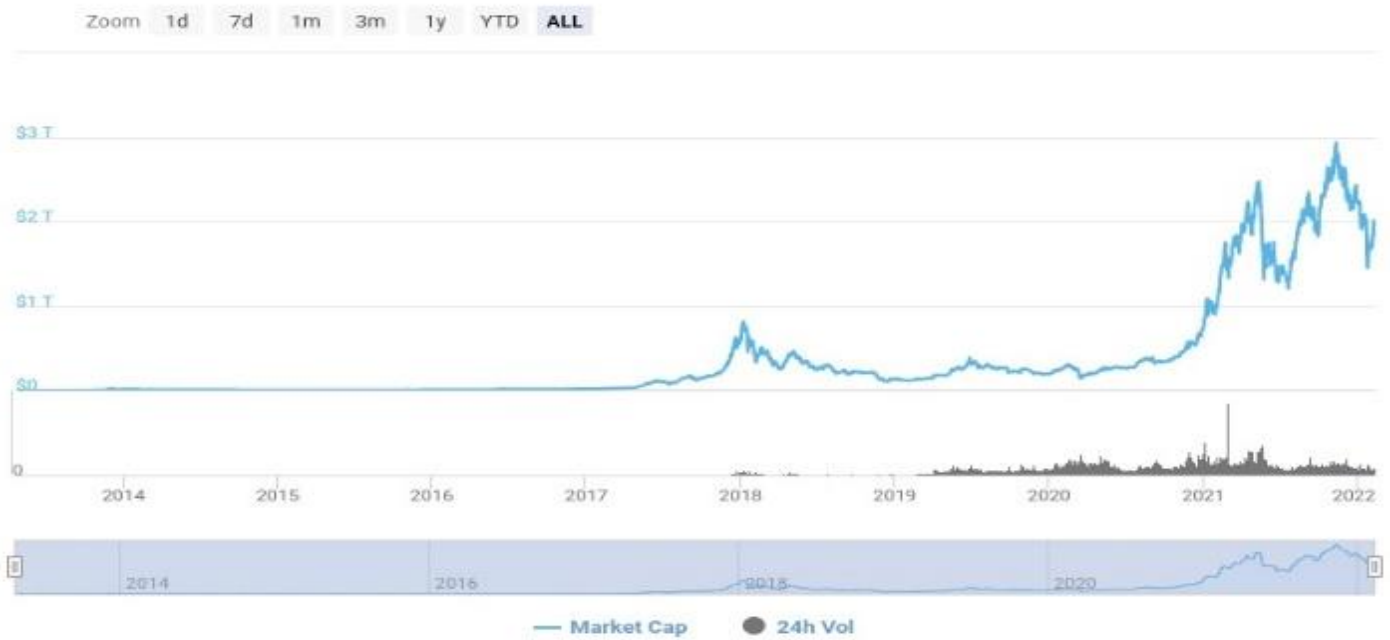
In the era of 21st-century development of information and communication technologies golden opportunities increased in the financial and business sector to take advantage of ICT. Cryptocurrencies are one type of virtual currency or digital currency in which transactions and records are maintained and verified not by centralized authority (by any government) but by the decentralized system using cryptography which is blockchain technology. At present time more than 15,000 different cryptocurrencies are in the circular. The idea of cryptocurrency was first introduced in 1989, an American cryptographer had invented digital cash, based on a "blinding" algorithm that is central to present web-based encryption. The journey of revolutionary cryptocurrencies is first introduced by the group of programmers in 2008 under the name of Satoshi Nakamoto and the first transaction was recorded on 12th January 2009. Bitcoin started gaining popularity among the investors who want to transact across the border without the intervention of centralized authority. On the other hand, cryptocurrencies like Coinbase make the transaction easy for people who have limited technical knowledge and experience to trade cryptocurrency. From the previous studies, two major terms decentralization and obscurity created awareness and popularity of cryptocurrency among people. Bitcoin is the world's largest player in the digital currency market and known as equitable means of exchange. It has a programmed supply limit of 21 million Bitcoin.

THE CRYPTOCURRENCY MARKET

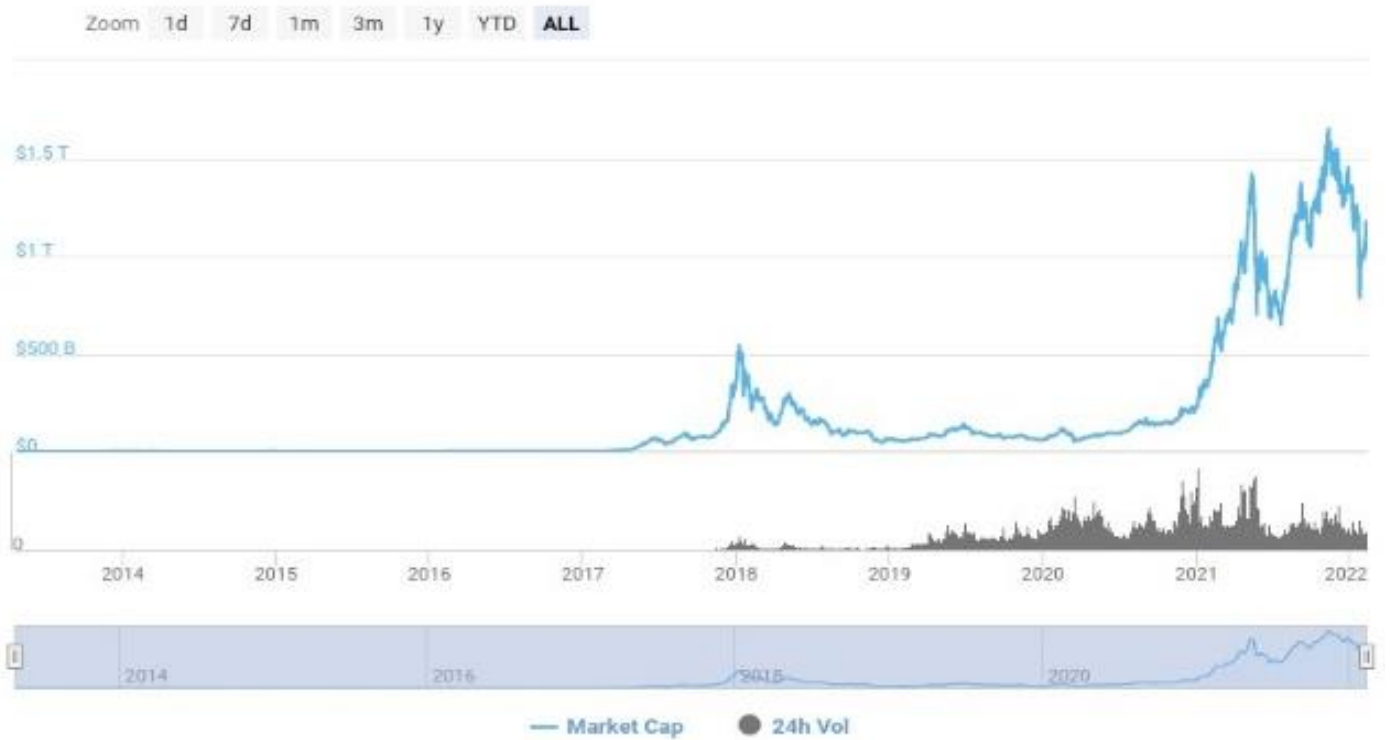
❖ The Global Scenario

As of now from January 2009 to February 2022 around 17,503 cryptocurrencies are trading in 456 exchanges with a market capitalization of \$1,952,445,226,218. Approximately 20 top cryptocurrencies cover around 90% of the total cryptocurrency market in which the dominant power of Bitcoin is 41.7% and Ethereum is 17.9% of the total cryptocurrency market.

Total Cryptocurrency Market



Total Cryptocurrency Market Capitalization (without Bitcoin)



Total Cryptocurrency Market Capitalization (Bitcoin Dominance Chart)



THE TOP CRYPTOCURRENCY OF 2022

No.	Name	Market Price (at present)	Market price (when launched)	Market Cap	Growth % from 2009 To 2022
1.	Bitcoin (BTC)	\$38,000	\$500(2016)	Over \$730 billion	7,600%
2.	Ethereum (ETH)	\$2,700	\$11 (2016)	Over \$327 billion	25,000%
3.	Binance coin (BNB)	\$377	\$0.10 (2017)	Over \$63 billion	3,77,000%
4.	Cardano (ADA)	\$1.05	\$0.02 (2017)	Over \$35 billion	5,150%
5.	Solana (SOL)	\$100	\$0.77 (2020)	Over \$33.5 billion	13,000%

❖ **The Indian Scenario**

The population of India is to be estimated at around 1,40,791,245 as of February 2022. According to IMF India has the fastest-growing emerging economy. More than 55% of the total population are internet users in India. India accepting technological advancement more rapidly. Bitcoin and other cryptocurrencies are steering in India for a long time. At present time around 20 million people in the country are in India and become part of the Indian investment reservoir. In budget 2022-23 government of India imposed a 30% tax on income brought out from cryptocurrency to introduce a digital Rupee.

History of cryptocurrency in India:

2008: Introduced first the concept of cryptocurrency in the world.

2010: First commercial transaction take place in Bitcoin.

2013: Unocoin cryptocurrency exchange first launches Bitcoin accessibility for the Indian market.in the same year, RBI issued advisory and warning the public against the buy or sell of digital currency and added their prices as speculation matters.

2014-16: The prices of cryptocurrency are becoming larger, and many other exchanges came up in India.

2017: The Finance Ministry and RBI cautioning people against cryptocurrency and a committee of Finance Ministry, RBI and SEBI formed for making regulation over cryptocurrency assets.

2018: Binance became the largest cryptocurrency exchange in India. Government-issued circular of banning cryptocurrency in India. Exchanges approached the supreme court for removing the ban, they also started a campaign around 971 days.

2020: Supreme court overturned the ban in India and due to COVID- 19 the prices of Bitcoin started rising from \$3,700 to \$30,000 just in one year

2021: The price of cryptocurrencies doubled this year; Bitcoin price came up to \$64,000.

2022: In budget 2022-23 government had announced a 30% tax on income from cryptocurrency. But no clarity is on the ban on the regularization of cryptocurrency. It is also announced that RBI will launch its digital currency by the end of this financial year.

According to analysis in India cryptocurrency market raised around 640 percent from July 2020 to June 2021. During this period 42 percent of transactions of South Asia came from the Indian cryptocurrency market which was valued at more than \$10 million. This indicated a more developed Indian market. At the same time, India, which has a young and tech-savvy populace, was second only to Vietnam in terms of retail crypto adoption in the region.

REVIEW OF LITERATURE

Here an attempt is made to briefly review the work undertaken and methodology employed. The review of selected studies are as follows:

Vries (2016) attempted to analyze the future growth and Bitcoin with SWOT analysis technique, concluded that cryptocurrency is revolutionizing the digital currency market with free flow of trading system with no fees. Technological advancement at rapid change is the main reason for the continuously increasing market of digital currency. At the same time, cryptocurrencies are not going to replace traditional currency. Some recent events and movements also influence that Bitcoin can contribute to a shift in economic paradigms.

Billah et al. (2019) had tried to focus on SWOT analysis of contemporary model and halal alternative paradigm. And concluded that digital currency is the new dimension of the global economy. In a short period of time, digital currency won the heart of global investors. Future potential is the weakness of the cryptocurrency movement.

Mirzayi et al. (2017) had presented the strength and weaknesses and examined the future threats and opportunities of Bitcoin with SWOT analysis. The study concluded that advancement of technology and openness to accept Bitcoin circulation and government intervention by creating law are future strengths of digital currency.

Skrypnik et al. (2019) had proved that in the coming future digital currency will rise and will become self-regulating electronic money with slight changes in mechanism I am functioning of the digital currency market. The SWOT analysis had proved that the cryptocurrency market has a large number of opportunities and strengths with the rapid growth of capitalization and great interest of people.

Amrind et al. (2019) attempted to review the previous research on cryptocurrency adoption. The objective of the present study is to identify current and future challenges of cryptocurrency adoption. The results concluded that cryptocurrency adoption is scalable throughout the research period and the result of SLR there is furthermore scope on factors influencing cryptocurrency.

OBJECTIVES OF THE STUDY

The present study focuses on the following objectives:

- To understand the concept and growth of cryptocurrency and bitcoin over the years.
- To compare cryptocurrency with other means of investment.
- To Analyze the future prospective of cryptocurrency with SWOT analysis.

COMPARISON OF CRYPTOCURRENCY WITH OTHER MEANS OF INVESTMENT

In India generally, people opt for investment options where they can get maximum return in the specific time frame and with minimum risk involvement. There are abundant conventional investment options are available such as shares, stocks, mutual funds, bonds, fixed deposits, precious metals, etc. In India slowly and gradually investors are accepting the idea of digital currency. Comparative analysis of conventional investment means of investment versus cryptocurrency are as follows:

Cryptocurrency vis-à-vis Shares and Stocks:

Stocks have the ownership interest of the business. The profitability of stocks depends on the future success of the company. The high Volatility rate is related to the stocks. The profit is completely dependent on the business, buying more stocks means more ownership of the company. Cryptocurrency on the other hand relies on sentiment increase in the price of cryptocurrencies. Cryptocurrencies are more volatile than stocks. Investors who want to leave their money alone and do not want to access them. In stocks the longer you put the more you get. Cryptocurrency is suitable for short-term investors who can leave their money waiting for its recovery of it. Cryptocurrency is the subject of months or weeks rather than years.

Cryptocurrency vis-à-vis Precious Metals

Precious metals such as gold, jewellery, and other items are highly regulated assets and the value of this is highly dependent on the market. Whereas regulation of cryptocurrency depends on country to country. Precious metals can be used in physical many applications such as currency, electronics, luxury, and many more, this wide range of applicability maintains the value of the asset when the market falls.

Cryptocurrency has limited utility. It is used only as a speculative and digital currency. Due to changing financial scenario cryptocurrency utility of digital currency emerging in lending, borrowing, and many more. On the other hand, the liquidity of cryptocurrency and precious metals depends on the market and type of asset. For investors who can quickly move in or out without losing value. Precious metals are a better option that allows reallocating portfolios in fluctuating market situations. The risk involved with precious metals is portability, import taxes, and the need for security. Cryptocurrencies are not physically transferred which makes it easy for the investor.

Cryptocurrency vis-à-vis Mutual Fund

Mutual funds are professionally managed tool that pools the savings of investors to buy securities and assets which can be invested in equity, debt, etc. based on the investor's investment objective. Mutual funds are regulated by the capital market regulator SEBI. Mutual funds offer a stable return. Prices of cryptocurrency are highly volatile the prices of cryptocurrencies fall or rise in a very short period. An investor with the stable aim of getting a stable return on their risk tolerance power in long term can invest in a mutual fund. And investors having short-term speculative motives can choose cryptocurrencies.

Cryptocurrency vis-à-vis Bond

Bonds are a loan from individuals to companies or the government. The major risk associated with the bonds is that if the company will go for bankrupt or dissolves, investors stop getting interested as well as the principal amount. Cryptocurrencies have a large alternative store of value and speculative value. Prices of bonds are seeing decreasing with very low yields associated with them. Bonds have fixed yields, and this is a very low level. With the zero inflation rate bonds value is less than it, the real rates of bonds are negative. Cryptocurrency's potential asymmetric returns become more intriguing as in the long run it is practically impossible to lose all investors' money. Traditional flat-denominated debt like bonds has a comparable downside asymmetric return.

Cryptocurrency vis-à-vis Fixed Deposits

Fixed deposits are always being supported by the government of India. With a long-term investment plan till maturity fixed deposits are a good investment avenue. Fixed deposits have less market volatility. Cryptocurrencies have drastic market volatility and easy quick decision making. Investors can exit immediately when the market is highly volatile and going down in cryptocurrencies. In fixed deposits, less effort of mining is required as compared to cryptocurrencies. Cryptocurrencies require more time and attention from investors.

SWOT ANALYSIS OF CRYPTOCURRENCY IN INDIA

Cryptocurrencies are coming with the biggest technological revolution globally. Cryptocurrency is based on blockchain technology which promises to deliver cryptocurrencies over the internet. With the help of technology, India can grab the biggest economic advantage with digital currency. The RBI had banned cryptocurrency in 2018 from all regulated banks to report all cryptocurrency transactions as frauds. In 2020 supreme court turnaround this. After this digital currency become a feasible option for investment in India. In India, 7.30% (based on Statista and Hootsuite study) out of 100 million people are users of cryptocurrency. In Union Budget 2022-23 government announced a 30% tax on income transfer from digital currency. Loss cannot be set off against any other income. Except for acquisition cost, no other deduction is allowed. The gifting of digital currency also carries tax in the receiver's hand. This analysis attempted to identify the factors which influence the cryptocurrency market. The prices of cryptocurrency are dependent on the demand and supply relationship, attraction towards digital currency. For getting a better understanding of cryptocurrency SWOT analysis method recognize strengths and opportunities for the future and also identify weakness and threats that arise from the emerging cryptocurrency environment.

Strengths and Opportunities of Cryptocurrency System

STRENGTHS	OPPORTUNITIES
<ul style="list-style-type: none"> ▪ Decentralized system ▪ Open source ▪ Store of value ▪ Easy and quick transfer ▪ Low transaction cost ▪ No, mediate institute ▪ Worldwide accessibility 	<ul style="list-style-type: none"> ▪ Globalize market ▪ Redistribution of money ▪ Can reduce systematic risk ▪ Possibility of entry of new business models ▪ Automation (smart contracts)

The above table shows the strengths and opportunities of the cryptocurrency system or cryptocurrency market. The strength of the digital currency market includes a decentralized system which means cryptocurrencies are not regulated by any government or bank or not by any

centralized authority. Cryptocurrency is based on open source and the other side its store's value for example if it lasts for 3 years it will be +495.06%, if it lasts for 5 years it will be +3702.89% and if it lasts for 7 years it will be +8076.71%. Transactions are quite easy as they are based on the internet and quick. There was low transaction cost bearing by investors as compared to traditional investment avenues. There is no mediate agent, institute, or company involved in it. Cryptocurrencies have a worldwide acceptability feature. The cryptocurrency includes opportunities such as globalized market opportunities with growth and adaption ratio it can become a global reserve currency. Cryptocurrencies are more efficient than the current prevailing financial system. As cryptocurrency is not controlled by any centralized authority entry threshold is tiny. Cryptocurrencies can reduce the systematic risk of investors. Top of cryptocurrencies network can allow investors to reduce bureaucracy and can increase the efficiency of trade. Different new business models can come future for example payment of real digital currency in gaming instead of game points, paywall functions, etc.

Weakness and Threats of Cryptocurrency System

WEAKNESS	THREATS
<ul style="list-style-type: none"> ▪ Highly volatile currency ▪ Immaterial currency ▪ Security threats ▪ Less reliable ▪ Possibility of hacking ▪ Scams ▪ Energy consumption 	<ul style="list-style-type: none"> ▪ Speculative motive/ black market ▪ Low adoption due to lack of knowledge ▪ Legal framework (Banned in different countries) ▪ Competitive technological environment. ▪ The collapsing concern of cryptocurrency ▪ KYC (Threats associated with unknown identity)

The above table shows the threats and weaknesses prevailing in the current cryptocurrency system. Major weakness includes the highly volatile market of cryptocurrency. The prices of digital currency are changing within a very short period. Cryptocurrencies cannot be seen or touched. Hackers can break the system of blockchain which will lead to fake virtual currency, or they can steal virtual currency just with one click. Cryptocurrencies are not reliable for adoption for some users as they have lack information. Cryptocurrency based on blockchain technology carries the risk of breakage by hackers. Many scams are related to cryptocurrencies, In Korea 2008 group of 14 people stealing 38 million from cryptocurrency were arrested. Cryptocurrencies are working through the internet it is a high energy consumption source. Threats related to digital currency include: first investors speculative motive as prices of digital currency are highly volatile speculators take advantage of this situation and within a short period. The popularity of cryptocurrency increasing rapidly leads to black marketing of cryptocurrency in the digital online platform. On the other side some countries do not support digital currency they banned the trading of digital currency in their country. Unlimited numbers of digital currency will create a competitive environment. With this there may be a risk of collapsing of digital currencies are also related as they are not based on demand and supply that will lead to inflation and economic issues that increase the collapsing concern of cryptocurrencies. Like Opening an account on social media is not authenticated same as creating an account on a digital currency platform is not authenticated. Users can create multiple accounts or can use unknown identities for illegal work. There is no way to identify the authentication of users.

CONCLUSION

India is rapidly increasing the digital currency trading market. As data shows in India there are around 20 million active users of cryptocurrencies. The growth analysis of cryptocurrencies shows that the adoption process of cryptocurrency is high in a global world. The Indian ratio of adoption is also high, as the government of India gives a green signal for cryptocurrency users by imposing a 30% tax on income arising from digital currency. There is lack of information or knowledge is the key threat identified to the Indian market for cryptocurrency adoption. In India, the market of cryptocurrency increased by 640% from July 2020 to June 2021. A well- regulated user-friendly policy can help India to become a faster cryptocurrency hub. India had traded more than \$10 billion during the pandemic situation, which is 42% of total Southern Asia's total cryptocurrency investment. From this, it is said that India has a more mature cryptocurrency market. SWOT analysis shows that major strengths are decentralized market, no intervention of intermediaries, easy and quick transfers, and worldwide accessibility with nominal transaction cost. Major weaknesses are such as security concerns, scams and hacking issues, non-materialistic, high volatility, and less reliability. The bigger opportunities are welcoming cryptocurrencies such as globalized market, reduction in systematic risk of users, new market opportunities, and redistribution of money. The major threats which reduced the adoption of digital currencies are such as black marketing, low adoption due to lack of knowledge, collapsing concern, illegal in some countries, competitive technological environment, and threats associated with unknown identity. Moreover, the comparative analysis of cryptocurrency with conventional means of investments shows that India still investor prefer conventional investment avenues such as bonds, shares, stocks, precious metals, mutual funds, etc. as they are more informative of these avenues, they have lack cryptocurrency

information. The cryptocurrency market is highly volatile. The explosion of advertisements, lack of information, lack of security is the major issues in India for expanding the cryptocurrency market.

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