# CRYPTOCURRENCY IN MODERN DAYS: PROSPECTS AND CHALLENGES

# Sarada Prasad Datta\* Bijoy Pal\*\*

**Abstract:** Cryptocurrency is a non-regulated form of currency that has gained popularity due to its potential to disrupt traditional financial systems and provide greater financial inclusion. The cryptocurrency market is much more volatile and riskier than traditional markets, and there are various risks associated with it, such as hacking and fraud. The lack of clear guidelines and regulations from governments and financial institutions are the major challenges for the cryptocurrency market. Despite the challenges, the cryptocurrency market has the potential to revolutionize the financial landscape. This paper examines the overall impression of Cryptocurrency in the market, including the lack of clear guidelines and regulations from governments and financial institutions and tries to explore the prospects, risks and drawbacks of crypto market, including the impact on market stability and innovation.

Keywords: Cryptocurrency, Risks, Challenges, Prospects,

#### Introduction

Cryptocurrency is a digital currency that is not regulated by any centralised bank or any institution. The emergence of cryptocurrencies has revolutionized the world of finance, introduced numerous possibilities and shaken up traditional systems. In modern times, understanding the level of awareness surrounding cryptocurrencies and exploring their potential prospects has become increasingly important. The cryptocurrency market has been one of the most

dynamic and volatile markets in recent times. The market has experienced a rapid expansion due to the emergence of new digital currencies and the widespread adoption of digital technology. While this growth presents exciting opportunities, it also brings along challenges and uncertainties that can make navigating the market a complex task. With cryptocurrency commonly known term is Dark cloud cover for trading on crypto currency. The Dark Cloud Cover is a

<sup>\*</sup> Associate Professor, Department of Commerce, Gour Mohan Sachin Mandal Mahavidyalaya E-mail: saradaprasad.datta@yahoo.com

<sup>\*</sup> Guest Lecturer, Department of Commerce, Gour Mohan Sachin Mandal Mahavidyalaya E-mail: bijoy.pal.4838@gmail.com

candlestick pattern that signals a bearish reversal in the market. It occurs when a downward candle (often black or red) opens above the closing price of the preceding upward candle (typically white or green) and then closes below the midpoint of the upward candle. This pattern is significant as it indicates a shift in momentum from bullish to bearish. It is formed by an upward candle followed by a downward candle. Traders observe this pattern and anticipate further downward movement in the price, seeking confirmation from the subsequent (third) candle. The objective of this study is to analyse the challenges encountered in the cryptocurrency market and examine investors' awareness of these challenges. Additionally, the study proposes ideas to address and overcome these obstacles.

# Metamorphosis of Cryptocurrency Backdrop of Cryptocurrency

The story of cryptocurrency began in 2009 when an anonymous person named Satoshi Nakamoto and his team created Bitcoin. They wanted to make a digital currency that didn't rely on banks or other middlemen for transactions. They explained how it worked in a document called a whitepaper. Bitcoin uses a special technology called blockchain, which is like a digital ledger that keeps track of all the transactions. This technology doesn't need a central authority to control it, making it more decentralized and secure. At first, only a small group of tech enthusiasts were interested in Bitcoin, but as its value started to grow, more people became interested in using it as a form of money. Since then, many other crypto currencies, like Dogecoin, Solana, Ethereum, ShibaInu, Cardano, Binance coin, and XRP, have been created, and together they are worth trillions of dollars.

# **Prospects of Cryptocurrency**

# 1. Financial Empowerment

Cryptocurrencies hold the key to unlock financial access for millions of unbanked individuals, giving them control over their money and fostering economic empowerment.

#### 2. Global Commerce

With cryptocurrencies facilitating borderless transactions, the world becomes a single market, encouraging seamless international trade and investment.

# 3. Disrupting Traditional Finance

The decentralized nature of cryptocurrencies challenges traditional financial systems, paving the way for innovative, inclusive, and fairer models.

#### 4. Privacy and Security

Cryptocurrencies offer enhanced privacy and security, protecting user data and transactions from potential breaches and unauthorized access.

# 5. Technological Advancements

The rise of cryptocurrencies drives research and development in blockchain technology, spurring innovations with far-reaching implications beyond finance.

6. Financial Stability for the Unstable In economies with hyperinflation or volatile currencies, cryptocurrencies provide a stable alternative, safeguarding individuals' wealth from devaluation.

# Challenges associated with Cryptocurrency

#### 1. Regulatory Maze

The adoption of Cryptocurrency may become hazardous as there is no regulatory body regulating the cryptocurrency. So the problem of ban on Cryptocurrency may arise.

# 2. Rollercoaster Volatility

The rollercoaster-like price fluctuations of cryptocurrencies make them thrilling but risky investments, unlike risk-averse investors.

# 3. Hacking Hazards

The digital realm may attract hackers, who target cryptocurrency exchanges and wallets, leaving investors vulnerable to potential theft and loss.

# 4. Scalability Struggles

As cryptocurrencies gain popularity, scalability bottlenecks emerge, slowing down transaction speeds and threatening network efficiency.

#### 5. Energy Consumption

Certain consensus mechanisms demand substantial energy consumption, fuelling debates on the environmental impact of cryptocurrency mining.

#### 6. Perception Predicament

Cryptocurrencies face uncertainties and misconceptions from traditional financial institutions, reducing their mainstream acceptance and adoption.

# **Review of Literature**

The cryptocurrency market has been a

current topic of interest for researchers and investors, as the awareness, potentials of these currencies are unknown. This review of literature on the prospects of crypto market and investor awareness regarding the crypto market draws from a variety of authentic sources of data.

According to G. Giudici, A. Milne & D. Vinogradov, Cryptocurrencies are digital financial assets, for which ownership and transfers of ownership are guaranteed by a cryptographic decentralized technology. The rise of cryptocurrencies' value on the market and the growing popularity around the world open a number of challenges and concerns for business and industrial economics. Using the lenses of both neoclassical and behavioural theories, researchers have discussed the main trends in the academic research related to cryptocurrencies and highlighted the contributions of selected works to the literature.

Böhme, Christin, Edelman, & Moore, in an article published in 2015 said that "Another challenge is the high degree of technical knowledge required to invest in cryptocurrencies. Investors need to understand complex concepts such as blockchain technology, wallet security, and private keys. This technical barrier can deter some investors from participating in the market, limiting the growth potential of cryptocurrencies."

Famous Website "CoinMarketCap" in a blog that has been published in 2023 explained the opportunities and volatility of the Crypto market. The blog explored that the cryptocurrency market presents several opportunities for investors as well as challenges are present hand in hand. One of the main advantages is the potential for high returns but also the risk of volatility in the market. Cryptocurrencies have exhibited substantial growth in value over the years, with Bitcoin, the most popular cryptocurrency, experiencing a surge in value from \$0.003 in 2010 to over \$60,000 in 2021 and then the price shows downward trend and has become above \$25000 in 2023.

Investor awareness of the crypto market is an essential factor in the success and growth of cryptocurrencies. A survey was conducted in 2019 by the "Global Block chain Business Council", a not for profit organisation and it was found that awareness of cryptocurrencies was low. The study also found that investors who had invested in cryptocurrencies lacked a basic understanding of the technology and its potential.

Another blog namely "Awareness About Cryptocurrency in India" published by Academia.edu explored that in modern day Economies, the Blockchain has the potential to revolutionize how value is exchanged. The future of blockchain technology is full of potential and possibilities. Since cryptocurrency is digital and hence ubiquitous, it can as well be employed to counter the issue of foreign currency externalisation.

The sources of data used in this review of literature provide valuable insights into the current state of the cryptocurrency market and highlight the need for further research and education on the topic.

# Objectives of the Study

The specific objectives of the study are as follows:

- 1. To have a glimpse at a variety of concepts associated with Cryptocurrency with the help of existing studies.
- 2. To check awareness among investors regarding Cryptocurrency so that future prospects and challenges can be addressed.

#### Research Methodology

The present study is empirical analysis of Cryptocurrency. Present study based on both primary and secondary sources of data.

# Research Design

The research design for this study will be a cross-sectional survey. This type of design is used to collect data at a single point in time, making it useful for examining the awareness of investors regarding cryptocurrency, as well as their perceptions of the challenges and opportunities in the market.

#### Sampling Method:

The study will use a convenience sampling method, selecting individuals who have invested in different places. The sample size initially was 160 but due to some inadequate responses, the samples has been sorted and the size has been confined to 144 respondents.

Data Collection

Primary Data have been collected through an online survey that will be distributed to the participants via email or social media. The survey is consisting of closed-ended questions related to the awareness of investors regarding cryptocurrencies, their investment strategies, the challenges they faced in the crypto market. Moreover, secondary data have been collected from various journals, websites, published reports, magazines etc. The collected data are coded, tabulated, analysed and presented in SPSS and MS-Excel packages.

#### Data Analysis

Data analysis is conducted using tables, charts and graphical presentation showing the investment trend among sample and segregating them on the basis of various demographics and to analyse awareness among them regarding crypto currency and investment avenues that has been availed by them.

# **Ethical Considerations**

The study will adhere to ethical guidelines such as informed consent, confidentiality, and anonymity of the participants.

Participants have been informed about the purpose of the study and their rights to withdraw from the study at any time. The data collected will be kept confidential, and only the researchers have access to it.

#### Presentation and Data Analysis

The main objective of the present study is to analyse the knowledge of people regarding cryptocurrency and investment pattern of people. To fulfil this objective, a survey was conducted to understand the awareness of cryptocurrency among 160 persons but 144 responses has been sorted due to incomplete feedback in some cases. The respondents are mostly comprised of teachers. The study aimed to assess their understanding of cryptocurrencies, and their perception of the risks and benefits associated with investing in the market. The results of the survey may provide valuable insights into the knowledge gap among the general public, particularly among educators, regarding the emerging and rapidly evolving cryptocurrency market. The results are shown below:

Table 1: Segregation of Respondents on the basis of Gender

Gender	Percentage (%)	Count
Male	52.78	76
Female	47.22	68

Source: Author's Estimation

**Interpretation:**The table 1 above provides an analysis of the gender distribution of the respondents who responded to a

survey. Of the total 144 respondents, 52.78% were male, while 47.22% were female.

Table 2: Age group wise classification:

Age of Respondents	Percentage (%)	Count
Upto 25 years	5.56	8
25-35 years	69.44	100
35-55 years	25.00	36
55 and above	0.00	0

Source: Author's Estimation

**Interpretation:**So, from the table 2 we can conclude that the respondents are

predominantly ranged in between 25-35 years i.e. middle aged people.

Investment Status based on gender wise classifications:

Table 3: Percentage of Investors and Non-Investors in New Age Investment Option like Modern Financial Instruments, Digital Currencies etc.

Options	Percentage (%)	Count
Investor	58.33	84
Non-Investor	41.67	60

Source: Author's Estimation

Table 4: Investment Status based on gender wise classifications

Gender	Percentage (%)	Count
Male	52.38	44
Female	47.62	40

Source: Author's Estimation

Interpretation: The above two tables provide an analysis of the investment status and gender distribution among investors and non-investors in new age investment option like modern financial instruments, digital currencies etc. Table 3 shows that out of the total 144 respondents, 58.33% were investors, while 41.67% were non-investors in this particular area. Table 4 provides a facet of the gender distribution among

investors. Of the total 84 investors, 52.38% were male, while 47.62% were female. This finding indicates that there is an even distribution of gender with respect to investment trend from the collected data. However; the data also shows that in table 3, there is still a significant portion of the population that has not yet invested in the volatile market rather they follow orthodox and conservative old investment avenues.

Table 5: Preference for investment:

Investment Avenues	Percentage (%)	Count
Savings Bank Account	16.67	24
Fixed Deposit	44.44	64
Life Insurance	8.33	12
Mutual Fund	19.44	28
Shares/Securities and Other Digital Currencies	11.11	16

Source: Author's Estimation

Interpretation: The above table 5 provides an analysis of the investment avenues chosen by respondents. Out of the total 144 respondents, the majority (44.44%) preferred fixed deposits as an investment avenue, followed by mutual funds (19.44%). Savings bank account (16.67%), life insurance (8.33%), and shares/securities and other digital currencies (11.11%) were the other investment options selected by the respondents.

The high preference for fixed deposits suggests that investors in the sample are

conservative in their investment choices and are more likely to choose low-risk options with guaranteed returns or in other words they are mostly risk averters. Mutual funds were the second most preferred investment avenue, indicating that a significant portion of investors is willing to take some risk in pursuit of higher returns. The relatively low percentage of respondents who chose shares/securities and other digital currencies as an investment option suggests that the cryptocurrency market has not yet gained significant traction among investors in this sample.

Table 6: Awareness about Cryptocurrency:

Responses about Awareness	Percentage (%)	Count
Strongly Disagree – I have never heard of cryptocurrency before.	5.56	8
Disagree – I have heard of cryptocurrency but I do not know anything about it.	30.56	44
Neutral - I have some knowledge about cryptocurrency but not enough to use it or invest in it	52.78	76
Agree - I have a good understanding of cryptocurrency and its workings.	8.33	12

Time's Journey/ISSN: 2278-6546 (Print) ISSN: 2583-8652 (Online)

Responses about Awareness	Percentage (%)	Count
Strongly Agree - I am very knowledgeable about cryptocurrency and actively use it or invest in it.	2.78	4

Source: Author's Estimation

Interpretation: The above table 6 provides an analysis of the awareness of cryptocurrency among the respondents. Out of the total 144 respondents, the majority (52.78%) had some knowledge about cryptocurrency but not enough to use it or invest in it. This suggests that there is a significant portion of the sample that is aware of the existence of cryptocurrency but has not yet taken the step to invest or use it. Around 30.56% of respondents have heard of cryptocurr-

ency but do not know anything about it, which indicates a need for more education and awareness about the benefits and risks associated with this emerging asset class. Only 8.33% of respondents reported having a good understanding of cryptocurrency and its workings, and even fewer (2.78%) reported being very knowledgeable about cryptocurrency and actively using or investing in it.

Table 7: Sources of Learning about Cryptocurrency:

Sources of Learning	Percentage (%)	Count
Online Sources(News, blogs etc.)	58.33	84
Friends or Family	16.67	24
Social Media	11.11	16
Other	13.89	20

Source: Author's Estimation

Interpretation: The table7 above presents an analysis of the sources of learning about cryptocurrency among the respondents. The majority (58.33%) reported online sources, such as news articles and blogs, as the primary source of information about cryptocurrency. This finding is not surprising, as the internet is a vast and easily accessible source of information that can be accessed from anywhere in the world.

A significant proportion of respondents (16.67%) reported that, they learn the fundamentals of cryptocurrency from friends or family members. This highlights the importance of personal relations and word-of-mouth in spreading awareness and knowledge about new technologies and investment opportunities.

Social media was reported by only 11.11% of respondents as a source of learning

about cryptocurrency. This could be due to the fact that social media platforms are often viewed as unreliable sources of information, and investors may prefer to rely on more traditional sources of information such as news outlets and financial advisors. Finally, 13.89% of respondents reported other sources of learning about cryptocurrency, which could include educational courses, seminars, or conferences. This highlights the importance of education and training programs in promoting awareness and understanding of cryptocurrency among potential investors.

Table 8: Opinion about safety and security of using Cryptocurrency

Opinion of respondents	Percentage (%)	Count
Very safe and secure	0.00	0
Somewhat safe and secure	11.11	16
Neutral	52.78	76
Somewhat unsafe and insecure	27.78	40
Very unsafe and insecure	8.33	12

Source: Author's Estimation

**Interpretation:** From the above table 8, we can see that 52.78% respondents are not sure about safety and security of cryptocurrency rather they are not fully aware of the problem and prospect of such exchange. 27.78% respondents think that the crypto market is somewhat unsafe and insecure and 8.33%

respondents thinks that it is very unsafe and insecure. Due to deficiency of proper regulation, lack of knowledge in the cryptocurrency market, the market volatility is skyrocketed high but most of the aware investors think that the digital market is not a safe place to invest.

Table 9: Cryptocurrency Recommendation for Potential Investors

Recommendation for Potential Investors	Percentage (%)	Count
Yes, definitely	8.33	12
Yes, maybe	30.56	44
Not sure	41.67	60
No, probably not	13.89	20
No, definitely not	5.56	8

Source: Author's Estimation

Time's Journey/ISSN: 2278-6546 (Print) ISSN: 2583-8652 (Online)

**Interpretation:** The table 9 presents the findings of a survey that asked people whether they would advise others who are interested in investing to consider cryptocurrency. The respondents could choose from five options that ranged from definitely yes to definitely not. The table 9 also displays the percentage and count of respondents who picked each option. The most frequent option was not sure, picked by 41.67% of respondents. This shows that they are either indifferent or perplexed about giving cryptocurrency advice to potential investors. The next most frequent option was yes, maybe, picked by 30.56% of respondents. This indicates that they have some positive or favourable attitude towards cryptocurrency as an investment option, but also have some hesitation or reservations.

A very small proportion of respondents (8.33%) picked yes, definitely, while an equally small proportion (5.56%) picked no, definitely not. This suggests that they have a clear or strong observation about suggesting cryptocurrency as a potential investment opportunity.

A slightly larger proportion of respondents (13.89%) picked no, probably not. This implies that they have some negative or unfavourable attitude towards cryptocurrency as an investment option, but also some ambiguity or exception.

#### Conclusion

From the above analysis, it is evident that there is a certain level of awareness about cryptocurrency among the respondents. However, there is still a considerable gap in knowledge and understanding that needs to be bridged. The survey was conducted among educated investors and thus uneducated investors without adequate knowledge about cryptocurrency market invests in crypto market, that will be similar to gambling and they may incur huge financial loss. This indicates an opportunity for investment firms and financial advisors to educate and support investors interested in exploring the cryptocurrency market. Due to the absence of proper regulations and lack of awareness, investment in the cryptocurrency market is often equated to gambling or betting. The majority of respondents in this paper are not willing to take the risk, given the instability and high volatility of the crypto market. However, it does have future prospects and may eventually be considered a viable investment avenue. In recent times, the Indian Government is taking steps to regulate cryptocurrency, including imposing a 30% tax on transfers and proposing a 1% TDS on transfers exceeding Rs. 50,000 (or Rs. 10,000 in some cases) in a financial year. The government is also taking initiatives to educate investors on digital currency. Recently, RBI has launched CBDC (Central Bank Digital Currency) to increase financial inclusion and spread awareness. The CBDC can be used as an alternative to traditional financial instruments. As a result, the future prospects of cryptocurrency and digital currencies are promising, so it may create a significant impact on investors' interests and financial decision.

# Suggestions and Recommendations

As we can see there is a lack of clear concept between most of the persons interviewed during the study, Government may take some initiatives to educate more people regarding Cryptocurrencies. For this purpose, workshops, seminars can be done. Also drastic steps can be taken from regulation point of view so that when people think to invest in Cryptocurrency, they will have clear conception about it, especially risks associated with the investment. Otherwise, if an ignorant person invests in crypto then he or she may incur huge financial loss and may think the same kind of gambling. So a clear regulation is necessary from the regulatory authority such as the Reserve Bank of India so that people feel safe for investment in cryptos and may safeguard himself, friends or relatives from blind investment in these currencies.

# Limitations and Future Scope of the Study

The limitation of the study is that, the response has been taken mostly from teachers i.e. from a particular section of the society and thus other persons outside the purview may act differently. Moreover, any statistical analysis that is non-parametric studies could have been applied but have not because the sample size is not too large and the analysis had been made simple and easy to understand by all i.e. people not from statistical background can also decipher the study. Future studies can be made in the same area i.e. statistical analysis can be applied for these kind of studies.

#### **Conflict of Interests**

I/We declare/s that there are no conflict of interests that are directly or indirectly related to this research work.

### **Funding**

I/We have not received any financial support from any organization to undertake this study.

#### References

- Giudici, G., Milne, A., & Vinogradov, D. (2020). Cryptocurrencies: Market analysis and perspectives. Journal of Industrial and Business Economics, 47(1), 1-18.
- Drakopoulos, D., Natalucci, F., & Papageorgiou, E. (2021). Crypto boom poses new challenges to financial stability. IMF Blog. Retrieved from https://www.imf.org/en/Blogs/Articles/2021/10/01/blog-gfsr-ch2-crypto-boom-poses-new-challenges-to-financial-stability
- KPMG International Limited. (2022). A world of challenges amid opportunities as crypto assets gain momentum. Retrieved from https://kpmg.com/xx/en/home/insights/2022/04/aworld-of-challenges-amid-opportunities-ascryptoassets-gain-momentum.html
- Bezhovski, Z., Davcev, L., Mitreva. M., (2021), Main Issues for Adoption of Cryptocurrencies as Payment Means, Knowledge, International Journal, 48(1), 53-58. Retrieved from https:// ikm.mk/ojs/index.php/kij/article/view/4679
- Coin Market Cap. (2023). Up trend and downfall in Cryptocurrency Market. Retrieved from https://coinmarketcap.com/.
- 6.Costantini, O. (2019). Cryptocurrencies: Will machines replace your banker? International Journal of Political Economy, 101–104.
- Vigna, P., & Casey, M. (2016). The age of

- cryptocurrency: how bitcoin and the blockchain are challenging the global economic order. First Picador edition. New York, New York: Picador/ St. Martin's Press.
- Adhami, S., Giudici, G., & Martinazzi, S. (2018). Why do businesses go crypto? An empirical analysis of initial coin offerings. Journal of Economics & Business, 100, 64–75.
- Bank of England, Financial Conduct Authority, and HM Treasury. (2018). Cryptoassets taskforce: Final report. London.
- Caballero, R. J., & Krishnamurthy, A. (2008). Collective risk management in a flight to quality episode. The Journal of Finance, 63 (5), 2195–2230.
- Cryptocurrencies: An assessment (2022), Keynote address delivered by Shri T Rabi Sankar, Deputy Governor, R.B.I, at the I. B.A 17th Annual Banking Conference, 14.2.22, R.B.I - Speeches (www.rbi.org.in)
- Board, F. S. (2018). Crypto-asset markets:

- Potential channels for future financial stability implications. Basel: Financial Stability Board, 10.
- Nakamoto, S. (2008). Bitcoin: a peer-to-peer electronic cash system. https://bitcoin.org/bitcoin.pdf. Accessed 14 Sept, 2022.
- Shiller, R. J. (2003). From Efficient Markets Theory to Behavioral Finance, Journal of Economic Perspectives, 17(1), 83–104.
- *Urquhart, A.* (2016). The Inefficiency of Bitcoin, Economics Letters, 148(1), 80–82.
- Zhu, Y., & Hendry, S. (2018). A framework for analyzing monetary policy in an economy with e-money (December 31, 2018). https://ssrn.com/abstract=3318915 or http://dx.doi.org/10.2139/ssrn.3318915. Accessed 14 Sept, 2022
- Sridhar, L.S., Jebasingh, D.R., Kruthik, D. K.K(2022) The Crypto Boom Pose New Challenges to Economic Stability: An overview of Crypto Ecosystem, Chartered Secretary, Vol 52, No11, P-74-80

Copyright @ Sarada Prasad Datta & Time's Journey (CC BY-NC 4.0)

