Is Cryptocurrency safe for Future Investment?

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Abstract

Cryptocurrencies have emerged as a significant asset class in the financial markets, attracting a diverse range of investors from retail participants to institutional entities. This research investigates the determinants that impact the investing behaviour of cryptocurrency. The use of multiple correlations and descriptive statistics allows for the determination of influential variables in Cryptocurrency investing behavior. The findings underscore the significance of risk perception in influencing individuals' overall views toward investing in Cryptocurrency. Furthermore, it suggests that it could be crucial to tackle the perceived risks associated with cryptocurrencies to improve perceptions of their potential. The differences in perception may be ascribed to several factors, including varying levels of knowledge, experience, and individual risk tolerance. The p-values corroborate the soundness of the research and provide confidence to the conclusion that investors' perspectives on cryptocurrency investments are significantly influenced by perceived risk and prospects. Consequently, making investments in the development of blockchain technology, forming strategic partnerships, and undertaking new endeavors may result in a more promising future. To better serve the demands of various investor segments, financial advisors, analysts, and cryptocurrency platforms can customize their services and recommendations. Personalized guidance and assistance can aid investors in making wise investment choices and navigating the market more skillfully. Equitable and transparent regulatory systems can improve market integrity and investor trust.

Keywords: Bitcoin, CBDC, Cryptocurrency, Digital CurrencyGEL Code: G10, G11, G12, G40

Introduction

Digital currency is solely an electronic kind of money used nowadays. The exponential growth of internet use and the increasing popularity of online shopping have led to the creation of digital currency. This kind of currency has similar properties to physical money and enables fast transactions that can be easily conducted across international boundaries

using compatible devices and platforms (Wang et al., 2024). Digital currency is often seen as an innovative method of conducting trade and revolutionizing the management of exchanges (Nurbarani & Soepriyanto, 2022). Unlike physical cash, digital currency is generated and stored electronically on computers or mobile phones. The study conducted by (Gupta et al., 2024), in this analysis, examines the factors that influence the acceptance and usage of cryptocurrencies in the digital marketplace of Malaysia. There is a consensus that the usage of digital currencies will persistently grow. (Sashikala & Chitramani, 2018), recognized the influence of behavioral factors on the company's goals, both current and prospective, as an important component of the study. Two hundred prominent Coimbatore residents were chosen for the investigation, and surveys were used to collect a range of data. The effect of behavioral traits on financial supporters' short-term speculative goals and long-term value expectations was investigated using regression analysis.

Aspirations in venture capital include managing investment portfolios and engaging in personal speculation. (Kumar Sharma et al., 2024), the way to classify speculative expectations is by their time horizon. A "target of transitory speculation" is a company that has just become more liquid, has a shorter investment horizon, and generates quick returns. Investing in long-term assets that are held for a long time, have restricted liquidity, and often produce steady returns is the purpose of long-range risk business (R. & Aithal, 2022b). The only entity authorized to create and guarantee a central bank digital currency (CBDC) is the government of the issuing country. (Almeida & Gonçalves, 2023), financial institutions worldwide should recognize CBDC as a legitimate form of money for all lawful transactions, including the settlement of fees and the payment of utility bills. (Adholiya et al., 2020), Central banks and governments throughout the globe are pondering the possibility of launching their digital currencies in response to the proliferation of decentralized cryptocurrencies such as Ethereum and Bitcoin, which are increasingly seen as infinite intangible assets. (Nugraha & Prasetyaningtyas, 2023), The US Central Bank Digital Currency (CBDC) is now being considered as an option under Project Hamilton, which was launched by the central bank. The UAE National Bank is now working on a project to create its own CBDC or Central Bank Digital Currency. (Adholiya et al., 2020; Agarwal et al., 2018), to generate digital wallets, make transactions, and trade cryptocurrencies, it is necessary to have access to customer data. In addition, some believe that digital money forms still present security risks, because hackers might potentially hack into devices and get the private key of the complex wallet. (R. & Aithal, 2022a), they examine the inclination to use cryptocurrency from a behavioral perspective. The primary objective of the research is to prioritize the main motives, particularly investment in cryptocurrencies, and to understand the behavioral intents of investors. The purpose of their study is to provide valuable insights into the behavioral intents of Bitcoin users. This will enable merchants to develop a successful business plan to remain competitive (Sachitra & Rajapaksha, 2023).

Sachitra, (2023), the study explores the causes of cryptocurrency investment in emerging markets. Despite their young creation, cryptocurrencies are becoming a worldwide economic topic as more individuals accept them. Many responders are men under 35 with high education, and technical, economic, social, and personal issues motivate their adoption. Heuristic-driven and frame-dependent behavioral biases impact Bitcoin acceptance. (Soekarno, 2023), This research seeks to examine the correlation between financial literacy, and behavioral bias, and their impact on the investment decision-making process and investment success (Suriadi et al., 2023). The study focuses on Indonesian cryptocurrency investors who are active in online groups. These results demonstrate that there is a correlation between financial literacy and each behavioral bias. (Bharadwaj, 2021), the behavioral biases examined in this research provide varying effects on the decision-making process and investment success. (S. Hemalatha, 2019), claimed that investing is saving for a return. Segment profile is crucial to speculative selection. This study's main purpose is to characterize demographic differences in investing decision views. The findings show that attention, age, employment, computer skills, and internet usage frequency affect item selection. (Ngoc, 2013) overall purpose was to examine how conservation

groups in Ho Chi Minh City, Vietnam, recruit individual donations. This study may assist securities firms create more appealing offerings by revealing potential contributors' preferences. Ho Chi Minh City's stock market, where companies may obtain cash, has become a metric of economic performance since share prices represent their worth.Therefore, on a global scale Digital currencies known as cryptocurrencies have lately garnered a lot of interest from the public, investors, risk-takers, and even some scientists (Aini & Rifa'I, 2023). Unlike traditional currencies, which are based on the authority of a central bank or other centralized institution, cryptocurrency is decentralized and operates as a medium of exchange via a system of interconnected computers (Chiang et al., 2021). The digital currency market in India is second to last in terms of crypto money use, behind only Vietnam. (Gupta et al., 2024), the cryptocurrency market in India will be worth $241 million, expanding at a CAGR (Compound Annual Growth Rate) of 14%. As a result of this growth, over 877 thousand job opportunities will become available. A big reason for the youthful zeal of today's generation, particularly in India, is their proficiency with computers.

The goal of this study is to identify the variables affecting cryptocurrency investors' decisions. In the future, analysts from other areas and organizations could be able to duplicate these results and add to the current dataset by a comparable procedure. Although there is not much research on cryptocurrencies and digital money, this study fills the gap. Researchers trying to figure out how digital money works and how it affects the Indian cryptocurrency market may find these findings helpful.

Objective of the Study

The study has been undertaken with the following objective: To identify and assess the factors that influence the consumer's perception relating to cryptocurrency investment.

Hypothesis of the StudyH0:

There is no significant relationship between any factors and the perception relating to cryptocurrency investment.

Research Methodology

This descriptive study aims to observe and describe the current investment behavior of cryptocurrency investors. Primary data was collected through structured questionnaires to analyze the factors influencing cryptocurrency investment behavior. The data was gathered from individuals with diverse backgrounds to ensure a wide range of perspectives on investment behavior. A total of 100 samples were collected using the convenience sampling technique.

Assuming continuous data, the researcher should ascertain whether a categorical variable will be the focus of data analysis before going further with sample size estimates. The categorical sample size formula needs to be used in such cases. In such circumstances, the sample size calculations for continuous data given in this part are suitable. A researcher intending to utilize a five-point scale has set the acceptable error level at 3% and assessed the scale's standard deviation at 1.167. This provides an example of Cochran's sample size calculation for continuous data along with the justifications for the choices used.

$n0 = (t)^2 * (s)^2 / (d)^2$

$n0 = (1.96)^2 * (1.167)^2 / (0.2287)^2 = 100$

Where t = value for a selected alpha level of .025 in each tail = 1.96 (the alpha level of .05 indicates the level of risk the researcher is willing to take that true margin of error may exceed the acceptable margin of error.)Where s = estimate of standard deviation in the population = 1.167.Where d = acceptable margin of error for mean being estimated = 0.2287.

Therefore, the required sample size is 100.

Results and Discussion

According to the demographic research, most respondents (37%) are between the ages of 36 and 45. Those who are between the ages of 26 and 35 (20%) and 56 and older (16%) are next in line. As a percentage of the sample, men make up 64% of the sample while women make up 36%. When it comes to education, the majority of participants have master's degrees (60%) and bachelor's degrees (33%). A smaller percentage of participants have finished doctorates or equivalent degrees (5%) or have only

completed high school or less (2%). When it comes to employment, the respondents are split evenly between self-employed and employed people (36% each), students (19%), jobless people (6%), and others (3%). The results offer significant perspectives on the demographic makeup of the representative sample, hence supporting the interpretation and extrapolation of research outcomes concerning cryptocurrency investments.

The dataset of 100 respondents provides insights into various aspects of their cryptocurrency involvement in table 1. The mean duration of cryptocurrency investment, $\bar{x}1 = 2.33$ years with a standard deviation of $s1 = 0.829$ suggests a moderately long period of engagement, while the mean trading frequency, $\bar{x}2 = 2.63$ times, with a larger standard deviation of $s2 = 1.454$ indicates more variability in trading habits. Cryptocurrencies typically constitute a small portion of investment portfolios, with a mean percentage of $\bar{x}3 = 1.59$ and a standard deviation of $s3 = 0.767$. However, confidence in cryptocurrency investments ($\bar{x}4 = 2.38$, $s4 = 1.324$) and the influence of various factors on this confidence ($\bar{x}5 = 2.53$, $s5 = 1.150$) exhibit moderate levels with significant variability.

Furthermore, the respondents perceive a moderate level of risk associated with cryptocurrencies compared to traditional investments, with a mean of $\bar{x}6 = 2.8182$ and a standard deviation of $s6 = 1.328$. The adoption of risk management strategies in cryptocurrency investments is moderate, with a mean of $\bar{x}7 = 2.87$ and a standard deviation of $s7 = 1.376$. Looking ahead, there is a general tendency among respondents to maintain or slightly increase their cryptocurrency investments, as reflected in the mean future investment plans of $\bar{x}8 = 2.20$ and a standard deviation of $s8 = 0.765$. However, the significant influence from various factors ($\bar{x}9 = 3.13$, $s9 = 1.488$) highlights the complexity and variability in decision-making processes regarding future investment actions explained in table 2.

The respondents' average perception rating is shown by the mean score of 2.2920. A mean of 2.2920 indicates that, on average, the respondents have a low to moderate perception related to cryptocurrency investment. This score indicates a propensity for a less favorable opinion. The degree to which individual perception scores vary from the mean is shown by the standard deviation, which is 0.44804 in this case. A smaller standard deviation suggests that respondents' opinions are mostly stable and concentrated towards the 2.2920 mean score. The standard deviation of 0.44804 in this instance is comparatively low, indicating that most respondents have similar perceptions of trade in cryptocurrency.

The average amount of perceived risk connected with investing in cryptocurrencies among the respondents is indicated by the mean score of 2.8300. A mean score of 2.8300 indicates that respondents generally consider investing in cryptocurrencies to be quite risky. This score is just below the middle of the range (1-5, where 1 indicates very low perception and 5 could indicate very high perception), meaning that although some knowledge of the hazards is present, it is not a very high perception. It displays a circumspect but not unduly paranoid attitude towards cryptocurrency investing. The comparatively high standard deviation of 1.04982 suggests substantial variation in respondents' perceptions of the danger associated with investing in cryptocurrencies.

The respondents' assessment of the prospects for cryptocurrency investments in the future is indicated by the mean score of 2.6650. This score suggests a cautious or slightly pessimistic attitude toward the potential impact and feasibility of cryptocurrency as an investment. The moderately high standard deviation of 0.80420 suggests that although there is considerable variation in the opinions of the respondents, most of their assessments are quite near to the mean. This indicates that most investors hold opinions that are generally similar, clustering around the somewhat below-neutral average, despite the possibility that some have a more optimistic or negative outlook.

Pearson Correlation Coefficient ®

The Pearson correlation coefficient (r) in table 3 measures the linear relationship between two variables. Its value ranges from -1 to 1; where r = 1: Perfect positive correlation, r = -1: Perfect negative correlation, r = 0: No linear correlation. In this table: Perception and Risk Factor (r = 0.681) indicate a strong positive association. This implies that investors' views of the dangers associated with cryptocurrencies rise in tandem with their more positive

opinions of them. This might be the result of growing interest in and interaction with cryptocurrencies, which raises awareness and comprehension of possible risks. The Future Outlook Factors and Perception (r = 0.392) suggest a somewhat favourable association. Though not as much as the Risk Factor, the Future Outlook—or projections on the performance and potential of cryptocurrencies—also tends to improve as Perception does.

Significance level (2-tailed)

The p-value indicates in table 3 the probability that the observed correlation happened by chance. A p-value less than 0.05 typically suggests that the correlation is statistically significant: $p < 0.05$: Statistically significant correlation; $p \geqslant 0.05$: Not statistically significant correlation. The p-value of 0.002 indicates that the connection between perception and risk factors is statistically significant because it is substantially less than 0.05 ($p < 0.05$). It is improbable that chance alone is the cause of the significant positive connection observed between Perception and Risk Factors. The p-value of the association between perception and outlook is 0.015 ($p < 0.05$) which indicates a statistically significant and moderately positive association. This implies that investors' expectations regarding the potential of cryptocurrencies grow in tandem with their improving perceptions of them; however, this relationship is not as strong as the one involving the risk component. Though not significantly, investors who have a more favourable opinion of cryptocurrencies typically have stronger expectations for their future. This suggests a somewhat favourable association. Though not as much as the Risk Factor, the Future Outlook—or projections on the performance and potential of cryptocurrencies—also tends to improve as Perception does.

Conclusion of the Study

The results show that middle-aged, well-educated men are the majority demographic and that investor perceptions have a considerable impact on cryptocurrency investment behaviours. There is a lot of daily trading and extensive usage of risk management strategies. Participants' perceptions of risk vary greatly (SD = 1.04982, average score of 2.8300), despite their modest variability (SD = 0.44804) and rather favourable average perception score (2.2920) for cryptocurrency investments. A significant positive connection (r = 0.681, p = 0.002) has been shown between perception and risk awareness, which highlights the importance of well-informed perceptions in risk management for investments. Furthermore, a positive opinion of cryptocurrencies is linked to an optimistic outlook for future investments, according to the moderately positive correlation (r = 0.392, p = 0.015) between perception and outlook. These results highlight the significance of informed and balanced viewpoints in fostering prudent investment practices in the volatile cryptocurrency market.

Conflict of Interest

The authors have no conflicts of interest to declare. All co-authors have seen and agree with the contents of the manuscript and there is no financial interest to report.

Author Contributions Conceived and designed the analysis: Dr. R.K Tailor, Ms. Vertika Goswami, Dr. Preeti NagarCollected the data, contributed data or analysis tools and performed the analysis: Ms. Vertika GoswamiWrote the paper: Ms. Vertika Goswami, Dr. Preeti Nagar, Dr. R.K TailorRestructured the paper: Dr. R.K Tailor, Ms. Vertika Goswami, Dr. Preeti Nagar

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