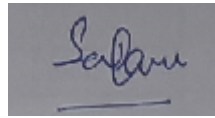


RISKS AND RETURNS OF CRYPTO CURRENCY : AN EXPLORATORY STUDY

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ABSTRACT

Cryptocurrencies are witnessing a rising interest from investors and media people all around the world. They are steadily recognized as a new class of assets through added benefits, like enclose capabilities and multiformity. However, this does not inhibit the fact that cryptocurrencies can be risky assets. Within such a circumstance, manifold studies were carried out at various risk levels. Cryptocurrency trading is a rapidly growing form of behaviour characterised by investing in highly volatile digital assets based largely on blockchain technology. In this paper, we review the particular structural characteristics of this activity and its potential to give rise to excessive or deleterious behaviour including over-spending and compulsive checking. We note that there are some similarities between online sports betting and day trading, but also several important differences. These include the ongoing 24-hour availability of trading, the global nature of the market, and the hefty role of social media, social domination and non-balance sheet related events as determinants of price movements. We review the precise psychological mechanisms that we propose to be particular risk factors for excessive crypto trading, including over-estimations of the role of knowledge or skill, the fear of missing out (FOMO), preoccupation, and anticipated regret. The paper surveys prospective protective and educational procedures that might be used to prevent harm to rookie investors when this new activity expands to attract a larger percentage of retail or community investors. The paper hints at the need for more specific research into the psychological impact of regular trading, individual differences and the nature of decision-making that protects people from harm, while allowing them to benefit from developments in blockchain technology and cryptocurrency.

Keywords

- Bitcoin
- Cryptocurrency
- Economic policy uncertainty
- Risks
- Global uncertainty measures
- Deep learning
- Systems of systems
- Complex systems

1. INTRODUCTION

A cryptocurrency is a digital form of currency that was originally made as regular means of exchange. In the existing scenario, the financial trades cannot be executed without the involvement of third-party organizations such as banks, whereas cryptocurrency eliminates those. Cryptocurrencies nowadays have become an integral part of society. It was first introduced as Bitcoin in 2008 to replace the entire cash exchange with a universal digital currency system. This newly introduced financial system is independent of centralized financial institutions such as banks, governments, and other organizations to make the system transparent, secure, and distributed.

When it was developed, the Cryptocurrency exchange rates were very low. However, with time, its market starts to boom up by inheriting its volatile nature. The price of Bitcoin (BTC), the leading currency, has increased in price from \$9500 (June 2020) to a peak of \$58,000 in February 2021, with similar exponential growth observed in Ethereum (ETH) and numerous other ‘altcoins’ (coins other than Bitcoin). This growth in cryptocurrency value, increasing investor interest and media attention has raised some media commentary about whether the general community might be fully aware of the risks or harms that might be associated with this activity.

The term cryptocurrency refers to digital ‘coins’ or assets that are based on block-chain technology. Blockchains are distributed ledger systems where each node of the system is linked together in a peer-to-peer network. All transactions are systematically validated by each component of the network. Blocks, which form the basis for the coins, are created through an initial coin release. can be earned through activities (e.g., in gaming, transaction activity), or “mined”.

Mining usually occurs through ‘proof-of-work’ systems, whereby cryptographic algorithms generate complex random numbers of hashes which must be solved using the application of computer power. The different parties that contribute to this work (or mine the blocks) receive a fraction of the block (e.g., part of a Bitcoin). Such systems also use ‘proof of stake’ methods based on value-added contributions to the generation of the coins. Coins are traded on exchanges, stored privately in wallets using “keys” or identifiers. Increasingly, they can be used in tokenised economies to pay for games, to gamble, to pay for commodities, for producing work or secure contracts or as currency (Reserve Rights or BTC).

Cryptocurrency trading has much in common with modern trading on the share-market . It attracts both experienced and less experienced investors; both large institutional investors as well as small retail investors; is subject to market fluctuations; and, trading is heavily automated, with buy and sell orders set by digital trading systems. However, there a number of clear differences.

Crypto coins are harder to value. In contrast to mining companies that can state potential earnings (e.g., based on gold deposits or barrels of oil), this is more difficult with cryptocurrencies which share many similarities with stocks traded on venture exchanges. With such stocks, there are often only ideas for projects and few tangible assets and realisation of the business models. Crypto projects also often lack statements of profit margins that might be used to estimate future dividend returns. Instead, future value can only be based on whether investors believe that the coin will attract attention based on whether it has a good reputation and profile, or whether it has a genuine 'use case' (i.e., utility beyond trading). Investors can only look at simple ratios such as the maximum number of coins available vs current supply or the current total market capitalisation as the basis for hypothetical growth. This is based on the knowledge that some coins have a limited maximum and greater likelihood of price growth, whereas others with an infinite supply (e.g., DOGE coin) are inflationary and lose value as more coins are produced. Like speculative stocks, prices can shift rapidly overnight due to sentiment changes, celebrity endorsements, or single comments and their popularity on platforms such as Reddit. Although there is evidence that price rises in crypto stocks correlate with Twitter activity and have some predictability, many of these other extraneous factors are unpredictable and therefore (like an unexpected run by a horse) has a strong element of randomness or chance.

The crypto market is much more volatile. Prices for single coins can increase over 100% percent in a matter of hours and then drop back down again soon after. Crypto trading has the potential to create some additional uncertainties that traditional shares often do not create. Many thousands of coins have been produced and many have been scams, whereby coin values have been quickly "pumped" (i.e., artificially inflated in value through means of spreading misinformation) only for the founders to leave the market. Crypto owners can also lose their assets (the keys to their coins) through loss of hard wallets, hard-drives, hacks launched on exchanges, or incorrect use of the technology.

2. OBJECTIVES

- Challenges Posed by the Crypto Ecosystem
- Crypto Assets Continue to Grow through Ups and Downs
- What Are the Financial Stability Implications of Crypto Assets
- Cryptocurrency uncertainty
- Risk and return involved in cryptocurrency

3. LITERATURE REVIEW

Review of literature consigns a research study in proper perspective by showing the quantity of work already been done in the related area of the study. This part of the paper helps in understanding the results of research undertaken in the relevant directions. Various researchers have demonstrated their alibi and demonstrated various results in their research.

Louise Bennett (2022) : Investments in cryptocurrency are becoming increasingly popular. Which is attracting both amateur and professional investors to spend billions of pounds each year. However, crypto investment can come with huge risks, which all investors should be aware of before looking to purchase cryptocurrencies.

Balakrishnan, A. (2020) : Unlike other legal tender issued, cryptocurrencies are not backed by any government authority. In the current climate – fraud is on the rise, especially within the financial and banking sector, and cryptocurrency investments are ripe hunting ground for fraudsters who are making the most of its growing popularity and unregulated status.

Elcelina Carvalho Silva(2021) : Investors need to ensure they properly understand the investment they are making and carry out the appropriate due diligence on the scheme/end investment. The risk is entirely on the investors, with no formal protection in place if they take the wrong gamble. There has been a significant rise in crypto scams.

Cerqueti, R., Giacalone, M., & Mattera, R. (2020) : Financial institutions must maintain certain protection activities against money laundering and fraud, the transmission of funds, and more. New types of wallets are being released all the time, and while cryptocurrency exchanges are always improving their security measures, investors have so far not been able to fully eliminate the legal risks associated with owning cryptocurrencies, and it is likely that they never will.

Ruby Khan (2021) : Criminals are attracted to the features that allow for money laundering and secrecy, whilst investors see chances for big profits to go unreported. On the other hand, both governments and banks are beginning to raise their voices in protest. Despite the fact that cryptocurrency is intended to be more reliable by cryptography, there are still risks associated with utilizing it.

García-Medina & Hernández, (2020) : As we are moving towards a world when we can buy products using cryptocurrency, this means that crypto holders may start using their crypto wallets on a blockchain platform to buy products, raise loans, use faster payments, etc., so it is more akin to a bank account. If anything, though, having this multifaceted platform in which to conduct a range of matters, only amplifies the need to protect investments.

Arthur, J. N., Delfabbro, P., & Williams, R. J. (2021) : The reality is that cryptocurrency is here to stay, and it is hugely successful. Banks need to prepare for a more permanent change towards this type of investment. However, given the risks involved, and the importance of our banking services for the economy, it is a move not to be taken lightly.

4. RESEARCH GAP

Research have been carried out on various risks and return of cryptocurrency. Research have also been carried out to find facts for rationalizing the investment decisions with minimum bias. Upon going through various papers and surveys conducted by several researcher it could be seen that one critical aspect is missing that would act as an influencer in investment decision in cryptocurrency. Our study is limited by the lack of consolidated and verifiable data in the field of cryptocurrencies. The research area this paper tries to fill is how the prices fluctuate in cryptocurrency and risks and return involved in it. The study thus becomes more generalized than focused research study.

5. RESEARCH METHODOLOGY

This research paper is an exploratory study to acquire an in-depth understanding of various factors that affects the cryptocurrency market. It encompasses multidimensional approach by assessing various research work done by different research scholars on various topics which could led to a satisfactory answer regarding various biases and influences caused by the different factors that affects once investment decisions. This paper uses systematic review technique for the data collection of secondary data. Moreover various research papers have been assessed and different articles were collected to thoroughly study the risks and returns. All the papers and journals were qualitatively analyzed before getting into conclusions.

6. FINDINGS

Risk factors in crypto currency trading:

The illusion of control

Crypto trading, as with day trading and sports betting, is not entirely based on chance. Skill and strategy can make a difference to outcomes. By contrast, betting on Manchester City and buying altcoins when the price has recently dropped appear to be better decisions. However, all of these activities offer many opportunities for people to over-estimate the role that applying specific types of knowledge or skill might play in outcomes and, conversely, the significant role that luck and chance are likely to play.

The illusion of control, defined as a subjective over-estimation of the objective ability to exert is known to be a common feature of gambling. People believe that strategies, skills, or certain rituals can increase the probability of winning. Such beliefs are known to be present in both chance and more skilled games and appear to be stronger in people experiencing gambling problems. As a result, traders may gain a sense of invincibility or perception that they cannot lose and this may contribute to greater risk taking, for example: speculation of large amounts in just one speculative coin; not planning for strategies to exit the market at the right time; or, moving money from a more balanced portfolio towards purchasing riskier altcoins.

Social learning and reinforcement

Crypto trading has also emerged during the era of social media. This has led to the emergence of a strong social media culture of crypto advisors, spruikers/influencers and more experienced advisors on platforms such as YouTube. Searching online quickly shows that it is possible to find at least one positive endorsement of at least one major coin. Some of these arise from what appear to be more experienced and well-informed, but there are many others that are entirely speculative, ill-informed, and potentially misleading because they leave out key information (a coin might have a low market cap which suggests growth potential, but only 10% of the total supply of coins has been produced). Although similar promotional information has historically been available concerning conventional shares, the volume of material, the interactivity and superficial confidentiality of the information (i.e., the sense that one is in the know first, or is getting some special insights) is much stronger. Promoters of particular coins can show evidence of how much money they have already earned from buying in very low, and they can use graphics with great effect to show the anticipated growth. This can serve to create a sense of urgency and a need for immediate action. It also encourages a culture of mutual social reinforcement in which followers of channels seek to promote their successes, while also reading about the gains scored by others.

Preoccupation

Preoccupation or salience is a recognised feature of most major conceptual models of addiction. Those who engage excessively in a particular activity often find it difficult to disengage from the activity. They may continuously think about the activity (preoccupation) and prioritize the activity ahead of other important responsibilities. Crypto trading would appear to be an activity that has the potential to be highly absorbing. Like day-trading, it involves regular scrutiny of price movements, news and other online media about coin-related developments (e.g., coin ‘burns’), the need to make regular buy and sell decisions and research into the different coins (their potential value, market cap, number and reputation) However, because crypto markets operate continuously, it is possible for people to be engaged with the activity at any hour of the day. By contrast, sports bettors (unless they bet on many different activities) often have to wait for matches to occur. Day-traders can only be actively engaged with the activity in the sense of buying and selling during daylight hours. This creates the potential for crypto trading to absorb a considerable amount of time and potentially with greater risk of disruptions to sleep and other daily commitments.

Fear of Missing Out (FOMO)

One of the strongest psychological factors that appears to influence crypto-trading is the fear of missing out (FOMO). This term is often used by some experienced traders and a style of thinking to avoid. Although FOMO is likely to be a feature of online sports betting (e.g., the belief that one could be missing a good bet), the opportunities for FOMO seem particularly intensified in crypto-trading. Traders are confronted with displays of hundreds of coins. Some of them, they already own; others they do not. If one which they have purchased is going up rapidly, they may regret having not made a larger investment. If another unpurchased coin is going up which they had previously considered, they feel annoyed for having missed out on the opportunity.

Anticipated regret

Cognitive psychology has recognised for some time that many decisions are based on the desire to minimise anticipated regret. One of the central findings in this area is that acts of commission (doing something) usually led to stronger feelings of regret than acts of omission (not doing something). This asymmetry has been used to explain why people are reluctant to sell shares which they have held for some time, why they avoid hitting on 16 in blackjack, and why people will value lottery tickets held for a long time as being more valuable than those held for a shorter period. Acts of commission involving regret in trading would include decisions where a stock or coin holding is sold, only for it to rapidly appreciate in value. Acts of omission involve situations where ultimately successful stocks or coins were forgone (not purchased) for other investment decisions.

Fraud/Theft Risk

Subsequently to IT deficiencies, cryptocurrencies are particularly prone to identity theft and fraud. Here, a nuance is provided; identity theft consists of stealing the identity of cryptotraders including their personal details, banking information, among others, while identity fraud refers to the use of stolen information to commit illegal or unethical practices. Within the cryptocurrency context, the fakeness of trading volume is considered among the main scandals of identity fraud.

Returns in Cryptocurrency

As cryptocurrencies become popular and market places for cryptocurrencies are growing rapidly. Understanding the rate of return can support cryptocurrency world is and how design choices affect investors. One threat to cryptocurrencies is high fluctuations in traders' willingness to buy or sell. The adoption of crypto assets has been a great concern for policy makers ever since Facebook announced its cryptocurrency, in June 2019.

While it's true that crypto should only be a very small part of your investment strategy, it does represent a unique opportunity to diversify your investments. Investing in crypto provides us with an asset that exists in a separate sphere from the behavior of the traditional financial marketplace. Thus, for instance, when market wide events cause a precipitous downturn of the stock market, or when inflationary trends diminish the value of the traditional dollar, or when new regulations alter the landscape, cryptocurrencies often behave according to their own rules. By adding crypto to our portfolio, we are adding an asset that, because of its global interchange and the decentralized nature of its transactions, is frequently insulated from the types of sweeping events that permeate every other part of the centralized financial market. In spite of its characteristic volatility, crypto can be a great way to balance against events with an otherwise universal impact on financial systems.

Now let's take a quick look at Bitcoin for an understanding of just how dramatic a return one could make in the crypto sphere. According to Coinbase, in August of 2012, a single Bitcoin was valued at Rs. 8,570.61 +. At the time of writing in December of 2021, a single Bitcoin is valued in excess of Rs.4,361,828.64. Naturally, as the first entrant into an area of tremendous and rapid innovation, Bitcoin is unparalleled in the marketplace both in terms of its value and its long-term viability. However, there are numerous prominent entrants into cryptocurrency that have seen a similarly rapid and dramatic rise from fractions of a penny per token to hundreds and even thousands of dollars per token in a matter of months or years. This means that we have the opportunity today to prospect any number of tokens at an extremely modest cost with the potential for rapid and robust growth.

Just a few short years ago, cryptocurrency seemed to the outside observer an incomprehensible idea. How could this invisible, virtual form of currency carry any value in the real world? Even today, there are those with a controlling interest in the centralized financial markets who doubt the legitimacy of cryptocurrency. However, perhaps the reality which most drives home the actual value of cryptocurrency is the fact that a growing number of merchants—both online and in brick-and-mortar establishments—now accept Bitcoin and several other prominent tokens. In other words, it is now possible to walk into a store—look for the Bitcoin sticker on the front window or door—and purchase actual goods simply by transferring the requested sum to a merchant. We can do the same at a growing number of e-commerce websites as well. There are more businesses and establishments who accept cryptocurrency all the time, a fact which has attached actual, meaningful, real-world value to digital tokens.

In fact, there may be more risk in failing to seize this opportunity today. That's because all evidence suggests blockchain technology and cryptocurrency are becoming increasingly intertwined with traditional finance. As more businesses large and small adopt cryptocurrency. While the value of individual tokens can be highly volatile, there is reason to believe that the broader cryptocurrency market will become an increasingly stable and accepted part of the mainstream economy.

7. CONCLUSIONS

This report presented an overview of the diverse risks associated with the cryptocurrency industry. We mainly handled five risks; namely technological, fraud/theft, legal, market, liquidity, and COVID-19 pandemic risks. Considering the technology risk, the occurrence of any technological failure, like networks bugs or loss of private keys, among others, tends to raise insecurity and distrust in the cryptocurrency technology. And, incidents in the form of hacks and exchange breakdowns are most likely inclined to take place. For the fraud/theft risk, crypto-exchanges tend to release wash trading volumes and manipulate crypto-traders in order to take control of their wealth. In fact, the legal framework is still inconclusive, which indicates a lack of transparency in such a market. All of these factors can enhance market risk across cryptocurrencies. It sorts out that such assets are highly investible. Nonetheless, a substantial connectedness exists between liquidity and efficiency in the cryptocurrency market, since price dynamics can influence the market liquidity.

Crypto trading is a rapidly growing activity that is likely to receive increasing mainstream acceptance over the next few years. We believe that the topic is important in behavioral addiction research for two reasons. The first is because it brings together elements of risk inherent in gambling, but also in excessive social media use. Particular features that make this form of speculation unique include its 24-hour availability, long-form nature, the extreme volatility of outcomes, and the strong influence of sentiment and social influence. In this sense, it has the potential to be riskier for inexperienced traders whose engagement in the market has been strongly influenced by media attention or FOMO sentiments. A second issue is that crypto trading provides many opportunities to examine the operation of many established principles of social and cognitive psychology. Opportunities exist to profile the distinct risk factors that differentiate crypto trading from other similar activities (day trading and online sports wagering), but also to identify protective factors that can avoid the development of the various harms that might arise when large numbers of inexperienced investors enter the market. Research programs examining these factors are likely to be influential to discussions of consumer protections and inform potential steps for regulation of trading platforms and other activities that involve cryptocurrencies.

Nevertheless it's possible to get filthy rich by investing in cryptocurrency in 2022 -- but you could also lose all of your money. Investing in crypto assets is risky but also potentially extremely profitable. Cryptocurrency is a good investment if you want to gain direct exposure to the demand for digital currency. A safer but potentially less lucrative alternative is buying the stocks of companies with exposure to cryptocurrency.

8. FUTURE DIRECTIONS

We can speculate on what value cryptocurrency may have for investors in the coming months and years (and many will), but the reality is it's still a new and speculative investment, without much history on which to base predictions. No matter what a given expert thinks or says, no one really knows. That's why it's important to only invest what you're prepared to lose, and stick to more conventional investments for long-term wealth building.

“If you were to wake one morning to find that crypto has been banned by the developed nations and it became worthless, would you be OK?” Frederick Stanield, a CFP with Lifewater Wealth Management in Atlanta, Georgia, told Next Advisor recently.

Keep your investments small, and never put crypto investments above any other financial goals like saving for retirement and paying off high interest debt.

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