

Do Investors Think or Just Follow on Crypto Investment Decisions

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Abstract

Cryptocurrency investment decisions have become a global phenomenon attracting the attention of academics and financial practitioners. This study conducts a comprehensive literature review to analyze whether cryptocurrency investors make decisions based on rational thinking or merely follow market trends. Through an analysis of retail investor behavior, cognitive biases, the herding effect, and other psychological factors, we find that cryptocurrency investment decisions are not entirely driven by rational considerations. Retail investors exhibit strong momentum trading patterns, influenced by market sentiment, the fear of missing out (FOMO), and herding behavior, particularly during market booms. However, the complexity of crypto market dynamics indicates that investors do not always blindly follow trends a segment of them does consider cryptocurrency fundamentals. These findings hold significant implications for market regulation, investor education, and the development of more rational investment strategies within the digital asset ecosystem. Future research needs to delve deeper into specific cognitive mechanisms, the role of social media, and the effectiveness of interventions aimed at improving the quality of crypto investment decision-making.

Keywords: Cryptocurrency, Investment Decisions, Behavioral Finance, Herding Behavior, FOMO, Retail Investor Behavior, Cognitive Biases, Market Psychology

Introduction

Cryptocurrency has evolved into one of the most significant investment phenomena of the past decade, characterized by exponential growth and high volatility. The cryptocurrency market is dominated by retail investors who actively conduct transactions across various trading platforms (Kogan et al., 2024). This phenomenon raises a fundamental question in behavioral finance literature: do crypto investors make investment decisions based on rational analysis and profound knowledge of digital assets, or do they merely follow speculative market trends and sentiments? This question becomes increasingly important given the unique characteristics of cryptocurrencies, which differ significantly from traditional assets. The cryptocurrency market exhibits characteristics that distinguish it from conventional financial markets. First, its continuous 24/7 availability creates a unique trading environment with dynamics that differ from traditional stock markets. Second, the role of social media and social influence is highly

dominant in determining price movements, creating mechanisms that are not yet fully understood in traditional finance literature. Third, extreme volatility and recurring bubble periods indicate that speculative factors play a significant role in price formation (Delfabbro et al., 2021). Fourth, the demographic characteristics of crypto investors predominantly young individuals with high-risk profiles add complexity to understanding decision-making patterns.

Behavioral finance literature has long documented various cognitive biases and psychological anomalies that affect investment decisions in traditional markets. However, the application of these theories to the cryptocurrency market remains relatively limited and highly nuanced. Understanding whether crypto investors predominantly "think" or "merely follow" has significant practical implications for individual investors, policymakers, and regulators. If crypto investors predominantly follow trends without a strong analytical foundation, more aggressive

regulatory interventions and investor education are necessary. Conversely, if crypto investors demonstrate a sufficiently high degree of rationality by considering fundamental factors and market analysis, regulatory approaches can be more lenient, focusing on consumer protection rather than restricting trading activities. This study aims to synthesize findings from various disciplines including behavioral finance, economic psychology, and fintech research to provide a comprehensive overview of investor decision-making mechanisms in the cryptocurrency market. By conducting a systematic literature review, we analyze the existing empirical evidence and identify research gaps that need to be addressed for a deeper understanding of this phenomenon.

Literature Review

Behavioral Finance and Investment Decisions

Behavioral finance has revolutionized our understanding of financial market behavior by enriching the assumptions of traditional finance, which posits investors as rational actors who consistently maximize utility. Significant contributions from behavioral science indicate that investors are frequently influenced by emotional and psychological factors that are not accounted for in traditional rational decision-making models (Kumar et al., 2022). Empirical research in the *Journal of Behavioral and Experimental Finance* reveals that eight primary intellectual clusters—encompassing personal characteristics and national culture, psychological factors, financial literacy, investor sentiment, asset market experiments, overconfidence and disposition effects, external shocks such as COVID-19, socially responsible investing, and herding behavior all contribute to our comprehension of market anomalies (Kumar et al., 2022).

In the context of cryptocurrency, the relevance of behavioral finance becomes increasingly critical given the market's unique characteristics. Social media plays a strategic role in disseminating information and sentiment

regarding cryptocurrencies, fostering an ecosystem where psychological factors dominate price formation mechanisms (Delfabbro et al., 2021). The fear of missing out (FOMO) the apprehension of missing a profitable opportunity—serves as a primary psychological driver that compels investors to execute transactions not based on fundamental analysis, but rather on the fear of losing potential profits (Delfabbro et al., 2021).

Herding Behavior and Trend-Following in Financial Markets

Herding behavior—a phenomenon wherein investors follow the investment decisions of others without conducting independent, in-depth analysis—has been extensively documented in the behavioral finance literature. Research on the Pakistan Stock Exchange demonstrates that herding behavior exerts a significant negative impact on perceived market efficiency and individual investment performance (M. Ahmad & Wu, 2022). Furthermore, empirical studies have found that while herding behavior positively influences individual investment decision-making, it negatively affects overall investment performance a paradox suggesting that trend-following is not inherently profitable (Bhutto et al., 2025).

Within the cryptocurrency market, herding behavior exhibits complex patterns. Research reveals that during normal periods, herding behavior is empirically evident among crypto investors; however, during bubble periods or extreme price crashes, herding behavior significantly diminishes (HAYKIR & Yağlı, 2022). This finding indicates that trend-following behavior is not consistent throughout market cycles. Investors may mimic one another during periods of normal growth, but when confronted with extreme pressure and high uncertainty, individuals tend to focus on their own fundamental conditions rather than mirroring the decisions of others. This phenomenon suggests that herding mechanisms in the crypto market are more nuanced than simple models that predict constant herding behavior.

Cognitive Biases and Irrational Investment Decisions

Overconfidence bias the tendency for investors to have excessive belief in their predictive abilities is one of the most prevalent cognitive biases in the behavioral finance literature. Research demonstrates that overconfident investors tend to underestimate risks and overestimate the quality of their information, which consequently increases the demand for risky assets and drives asset prices to become overvalued (Aljifri, 2022). Overconfidence bias indirectly affects investment performance through risk propensity overconfident investors are inclined to take higher risks, with the illusion of control serving as the strongest predictor of risk propensity (Abdin et al., 2022). In the context of cryptocurrency, overconfidence bias can yield more severe consequences given the complexity of blockchain technology and extreme price volatility. Retail investors with limited knowledge of cryptocurrencies but high self-assurance tend to make highly speculative decisions.

A systematic literature review on behavioral biases in emerging markets identified overconfidence, herding, and loss aversion as the most frequently investigated biases, whereas numerous other biases such as regret aversion and anchoring remain underexplored in academic research (Herathmenike et al., 2025). Beyond overconfidence, other cognitive biases influencing investment decisions include availability bias, price anchoring, loss aversion, and the representativeness heuristic (U. Ahmad et al., 2025). Empirical research utilizing structural equation modeling on NYSE investors demonstrates that all these cognitive biases significantly impact risk perception and investment decision-making (U. Ahmad et al., 2025). Interestingly, robo-advisors—automated investment systems—have been proven to moderate the negative effects of certain cognitive biases on investment decisions, although this mitigation does not apply to all types of biases.

Momentum Trading vs. Contrarian Strategies in the Crypto Market

One of the most intriguing findings in behavioral finance is that retail investors frequently exhibit distinct trading patterns across different asset classes. Research utilizing data from eToro a prominent social trading platform found that retail traders employ contrarian strategies in stocks and gold, yet utilize momentum strategies in cryptocurrencies (Kogan et al., 2024). This divergence cannot be attributed to individual investor characteristics, investor composition, inattention, fee discrepancies, or a preference for lottery-like assets. The conjecture of this research is that retail investors possess a mental model wherein changes in cryptocurrency prices influence the probability of widespread future adoption, thereby leading them to update their price expectations in the same direction. In other words, investors perceive price momentum as a positive signal regarding the prospects of blockchain technology adoption, rather than mere speculative momentum. This finding implies that crypto investors may not be entirely irrational they possess a rationale, although their mental model may not align with the fundamental economic value of the cryptocurrency. This mental model might be adaptive in the short term (when market sentiment indeed affects adoption) but maladaptive in the long term (when cryptocurrency prices deviate too far from their fundamental value).

Investor Sentiment, Attention, and Spillover Effects

Investor sentiment a measure of investor optimism or pessimism regarding market prospects plays a central role in behavioral finance and holds predictive power over short-term returns. Research indicates that investor sentiment is time-varying in terms of persistence and mean reversion, with significant implications for the predictability of market anomalies and the impact of noise investors on mispricing (Han et al., 2022). From 1965 to

2001, investor sentiment was trending and non-stationary, associated with numerous market crashes. Since 2001, sentiment has become more mean-reverting, implying a diminished effect of noise investors. In the cryptocurrency market, sentiment assumes a far more dominant role. Media sentiment extracted from news and social media has been empirically proven to significantly influence spillover dynamics within the cryptocurrency market (Akyıldırım et al., 2024). Findings reveal asymmetric effects: only positive sentiment influences spillover effects among cryptocurrencies, while negative sentiment demonstrates weak or insignificant effects.

Furthermore, sentiment related to the emotional and risk aspects of cryptocurrency exerts a stronger influence on spillovers compared to other aspects. Community-based coins exhibit higher sensitivity to sentiment than coins driven by firm-specific factors. Attention economics bears significant relevance in the cryptocurrency market given the market's information-rich and stimuli-heavy characteristics. Institutional shareholder inattention to firm-specific information has been shown to increase the cost of debt, and this effect is more pronounced in firms with powerful CEOs and high information asymmetry (Ghoul et al., 2022). In the cryptocurrency context, research concentration on a limited set of cryptocurrencies and the dominance of Bitcoin and Ethereum in media coverage may indicate that investor attention is highly concentrated on just a few assets.

Social Influence and Peer Effects in Trading

Given the cryptocurrency market's heavy integration with social media, peer effects are a highly relevant factor in understanding investment decisions. Research on social trading platforms demonstrates that investors' trading activities increase in response to the performance of their network peers (Klocke et al., 2025). As a consequence of this herding, overall trading performance declines and volatility increases. This relationship was estimated using unexpected performance shocks to address endogeneity concerns, providing

causal evidence that peer effects indeed influence trading behavior. Social media influencers and crypto advocates exert a significant influence on retail investor decisions, even though their motivations may not align with the interests of retail investors. The regulatory landscape for crypto-assets is still evolving, and competing stakeholder agendas among interventionists, innovators, influencers, and investors create a complex and often confusing environment for retail investors (Currie & Seddon, 2023). Influencers in the crypto space act as information intermediaries; however, they frequently possess conflicts of interest or opaque motivations.

Cryptocurrency Specificity: Fundamental vs. Speculative Drivers

It is essential to understand that cryptocurrencies are not merely speculative assets. Research utilizing a cusp catastrophe model to analyze the price dynamics of five crypto assets (Bitcoin, Ethereum, Litecoin, XRP, and Dogecoin) between 2016-2022 found that all assets, with the exception of Dogecoin, exhibited price dynamics stemming from a complex interaction between fundamental and speculative components (Kukačka & Křišťoufek, 2023). Bitcoin demonstrated the strongest fundamentals, with on-chain activity and economic factors driving the fundamental component of its dynamics. Investor attention and off-chain activity drove the speculative components for all studied assets. This crucial finding indicates that the cryptocurrency market is not entirely driven by speculation. Although speculative components are significant, fundamental components also contribute substantially to price dynamics, particularly for more mature assets like Bitcoin and Ethereum. This suggests that a segment of crypto investors may consider fundamental factors when making investment decisions, even if not all investors do. Heterogeneity within the investor population means that while some investors are primarily driven by speculation and sentiment, others incorporate fundamental analysis into their decision-making processes.

Methods, Data, and Analysis

Research Design and Procedures

This study employs a systematic literature review methodology to analyze the existing body of knowledge regarding cryptocurrency investment decisions and investor behavior. This approach was selected due to the complexity of the topic and the necessity to integrate findings from various disciplines including behavioral finance, psychology, economics, and fintech studies. This literature review focuses on peer-reviewed journal articles and research papers published in leading academic databases. The search databases utilized encompass academic repositories with global coverage, specifically focusing on publications from 2021 to 2026 to capture the most recent developments in this field, although several landmark studies from previous periods were also included to provide theoretical context. The search queries were designed to retrieve papers addressing key themes: (1) cryptocurrency investment decisions, (2) herding behavior and social influence, (3) behavioral biases in investment decisions, (4) FOMO and speculative trading, (5) investor attention and sentiment, (6) fundamental vs. speculative factors in cryptocurrency pricing, and (7) risk perception and decision-making processes. Following the comprehensive search and selection process, a total of 18 articles were obtained for the final analysis.

Inclusion and Exclusion Criteria

The inclusion criteria for the selected papers encompassed: (1) an empirical or theoretical focus on cryptocurrency investment or trader behavior; (2) a primary focus on behavioral finance and investor psychology; (3) a rigorous methodology featuring clear research questions and hypotheses; (4) publication in peer-reviewed venues; and (5) direct relevance to investment issues within the cryptocurrency market or comparable financial markets. Conversely, the exclusion criteria involved: (1) opinion pieces lacking empirical evidence; (2) purely technical analysis papers concerning blockchain technology with no relevance to investor behavior; (3) marketing materials originating from crypto exchanges or projects; and (4) papers focusing exclusively on regulatory or legal aspects devoid of psychological or economic analysis.

Synthesis and Analysis Strategy

The collected papers were analyzed utilizing a narrative synthesis approach combined with thematic coding. The findings were systematically organized into major themes corresponding to the primary research questions: (1) whether crypto investors predominantly think or merely follow, (2) the psychological mechanisms driving their decisions, (3) the roles of sentiment and attention, and (4) the regulatory and practical implications. Each theme was subsequently analyzed to identify underlying patterns, contradictions, and critical research gaps in the existing literature.

Results and Discussion

Crypto Investment Decisions: The Spectrum Between Rational Thinking and Blind Following

An analysis of the literature indicates that the question "do investors think or just follow?" does not have a binary answer. Instead, cryptocurrency investment decisions lie along a broad spectrum between rational thinking and irrational following behavior. Empirical evidence indicates that: (1) some crypto investors consider fundamental factors such as on-chain activity and adoption metrics; (2) the majority of retail investors are dominated by speculative motivations such as FOMO and sentiment chasing; (3) herding behavior occurs, but with characteristics that are time-varying and context-dependent; and (4) investors' mental models regarding cryptocurrency adoption may provide a rationale for momentum trading, although this rationale is potentially flawed in the long term.

Retail traders exhibit a momentum-like strategy in cryptocurrencies that is distinctly different from their contrarian strategies in stocks and gold (Kogan et al., 2024). This difference indicates that crypto investors are not merely "noise traders" devoid of basic reasoning. They possess a specific mental model for cryptocurrencies that differs from their models for traditional assets. However, this mental model is built upon perceptions of future adoption prospects that may be overoptimistic or oversimplified. Investors react to price

movements as signals regarding adoption likelihood, which creates a positive feedback loop and potentially generates bubble dynamics.

Stage 1: Triggered Attention and Information Gathering

The first stage in the decision-making process chain for crypto investments is triggered attention an event or catalyst that draws an investor's attention to a specific cryptocurrency or the crypto market in general. Triggered attention can originate from various sources: (1) media coverage, spanning both mainstream financial media and specialized crypto media; (2) social media buzz, including discussions on Reddit, Twitter, and Discord communities; (3) peer or influencer recommendations from friends, family, or social media personalities; (4) extreme price movements, which naturally attract attention as market anomalies; or (5) news events, such as regulatory announcements, technological breakthroughs, or celebrity endorsements. Research demonstrates that investor attention measured via Google Trends, media coverage volume, or social media mentions is strongly associated with spillover effects and bubble formation within the cryptocurrency market (Akyildirim et al., 2024; HAYKIR & Yağlı, 2022).

The sentiment accompanying this triggered attention is asymmetric: positive sentiment from media, influencers, and peers is significantly more influential in triggering increased trading activity compared to negative sentiment, which tends to discourage participation (Akyildirim et al., 2024). During this stage, investors primarily gather information from sources that are readily available and salient, rather than necessarily conducting fundamental research. FOMO (fear of missing out) begins to form when investors observe others making gains in a particular cryptocurrency. The psychological mechanism of FOMO is a combination of regret aversion (the fear of future regret) and social comparison (benchmarking one's position against others) (Delfabbro et al., 2021). This initial stage is highly reactive and predominantly driven by emotion rather than deliberate analysis.

Stage 2: Information Processing and Bias Formation

Once attention is captured, investors enter the information processing stage, where they attempt to make sense of the incoming information. During this stage, cognitive biases begin to play a significant role. Findings from various empirical studies indicate that the primary cognitive biases influencing crypto investor decisions include:

1. **Overconfidence Bias:** Crypto investors, particularly novice retail traders, often overestimate their knowledge regarding cryptocurrency and blockchain technology. This overconfidence leads them to underestimate risks and disregard the inherent uncertainty associated with volatile digital assets. The illusion of control the belief that investors can control outcomes through personal skill and knowledge is the strongest predictor of risk-taking behavior (Abdin et al., 2022).
2. **Availability Heuristic:** Information that is most easily accessible typically recent, widely reported, or emotionally salient information serves as the basis for estimating probabilities or future outcomes. Within the cryptocurrency market, recent price gains or heavily publicized success stories from early adopters remain readily available in investors' minds, shaping their expectations of future returns.
3. **Representativeness Heuristic:** Investors judge the probability of outcomes based on how closely those outcomes resemble representative cases or prototypes. When an investor observes a cryptocurrency that has successfully appreciated significantly, they may project these representative characteristics onto other cryptocurrencies, leading to an overestimation of the probability that those alternative assets will appreciate similarly.

4. **Anchoring Bias:** Previous price levels, particularly all-time highs or recent peaks, function as psychological anchors that influence evaluations of current valuations and future price targets. Investors may anchor on all-time highs and interpret current prices as "discounted" or "bargains," even when absolute price levels remain exceptionally high.
5. **Loss Aversion:** The tendency to feel the pain of losses more acutely than the pleasure of equivalent gains. Loss aversion can lead investors to either hold losing positions for too long in hopes of a recovery or cut winning positions prematurely to lock in gains and avoid potential regret.

In this stage, investors who were initially drawn in by the excitement of the cryptocurrency market gradually develop beliefs and expectations regarding future price movements. These beliefs are formed through a combination of available information and cognitive biases that distort the interpretation of that information. Interestingly, research indicates that experience and financial literacy can moderate the effects of certain biases; investors possessing greater experience and financial literacy exhibit smaller influences of emotion and market impact on their investment decisions (N et al., 2025).

Stage 3: Social Influence and Herding Behavior

The third stage in the decision chain involves social influence and herding behavior. Although individual investors may evaluate cryptocurrencies independently during the second stage, this third stage witnesses the emergence of coordination and synchronization in behavior across multiple investors. Herding can occur through several mechanisms:

1. **Direct Herding:** Investors explicitly follow the trading decisions of others, either out of a belief that others possess private information or because they

perceive others' actions as valid signals regarding the true value of the asset.

2. **Indirect Herding:** Investors make independent decisions based on identical informational or psychological stimuli, leading to convergent conclusions and coordinated behavior without explicit copying of others' choices.
3. **Informational Cascades:** Early adopters or opinion leaders (formal or informal) execute public trades or make recommendations, prompting downstream investors to interpret these actions as indicative of special information or expertise, thereby triggering cascade effects.

Research on social trading platforms where investors can explicitly observe and copy the trades of others clearly demonstrates peer effects in cryptocurrency trading (Klocke et al., 2025). Investors' trading activities increase as a response to the trading performance of their network peers, suggesting that social influence plays a substantial role in driving trading volumes and asset allocations. The consequences of such coordinated herding include declining overall trading performance and increased volatility, indicating that herding is generally detrimental to overall market efficiency and individual investor returns. An interesting characteristic of herding in the cryptocurrency market is its variability across different market conditions (HAYKIR & Yağlı, 2022). Under normal market conditions, herding is clearly observable. However, during extreme price movements and bubble episodes, herding behavior significantly diminishes. This suggests that when uncertainty becomes extremely high and market conditions are visibly abnormal, individual investors retreat from social coordination and focus instead on fundamental analysis or emotional responses to perceived threats.

Stage 4: Execution and Transaction

The fourth stage is the execution of the decision to buy, hold, or sell a cryptocurrency. Having

progressed through attention triggering, information processing influenced by cognitive biases, and social influence, investors finally execute their trades. Several behavioral patterns emerge during this phase:

1. **Momentum-Driven Entry:** Retail traders in cryptocurrency markets display pronounced momentum-driven trading strategies, buying following price increases and selling following price declines (Kogan et al., 2024). This contrasts with their behavior in traditional equities (where they tend to act as contrarians) and gold (where they also exhibit contrarian behavior).
2. **FOMO-Driven Urgency:** The fear of missing out creates a sense of urgency that accelerates decision-making and often eliminates careful deliberation. Investors experience psychological pressure to make immediate decisions to avoid the regret of missed opportunities.
3. **Attention-Driven Position Sizing:** The greater the attention received by a particular cryptocurrency, the larger the position sizes investors are willing to take, independent of fundamental considerations or portfolio risk management principles. Attention frequently acts as a substitute for thorough valuation analysis.

Research utilizing deep learning methods in cryptocurrency trading demonstrates that predictive models based purely on historical price patterns can achieve meaningful prediction accuracy, suggesting that the market is indeed amenable to technical analysis and momentum strategies in the short term (Zhang et al., 2023). However, predictive accuracy decreases substantially over longer horizons, indicating that momentum-driven strategies are primarily profitable in the short term and unsustainable over the long term.

Stage 5: Post-Decision Experience and Learning (or Lack Thereof)

The fifth stage concerns post-decision outcomes: whether investors learn from these outcomes and adjust their future behavior accordingly, or whether they engage in biased interpretations of their results. Psychological research regarding post-decision cognition suggests that investors frequently engage in confirmation bias (selectively attending to information that confirms prior beliefs while dismissing disconfirming evidence) and outcome bias (evaluating decision quality based on the final outcome rather than the quality of the decision-making process at the time it was made). Successful trades regardless of whether success stems from sound decision-making or sheer luck reinforce overconfidence and encourage continued risk-taking.

Conversely, unsuccessful trades are frequently attributed to external factors beyond the investor's control rather than poor decision-making, which severely limits learning. The consequence of this limited learning capacity and the persistence of cognitive biases is that many retail investors fail to improve their trading performance over time, despite accumulating trading experience. While some evidence suggests that experience can moderate the effects of specific biases, its impact remains limited in reversing the overarching patterns of inferior performance observed within cryptocurrency markets

Synthesis of Findings and Answers to the Primary Research Question

Through a comprehensive review of empirical evidence and theoretical frameworks, we can now synthesize an answer to the primary research question: "Do investors think or just follow in cryptocurrency investment decisions?" The most empirically supported answer is neither exclusively thinking nor exclusively following cryptocurrency investors represent a heterogeneous population with varying motivations and capabilities. At one end of the spectrum, some investors engage in meaningful fundamental analysis, considering factors such

as on-chain activity, technological development, the regulatory landscape, and adoption metrics. These investors make deliberate, research-based decisions and attempt to predict the long-term value of cryptocurrencies based on underlying economic principles. At the opposite end of the spectrum, there are retail investors who are primarily driven by FOMO (Fear of Missing Out), sentiment chasing, and herding behavior. These investors exhibit a limited understanding of the technology underlying cryptocurrencies and make decisions based on short-term price movements, social media buzz, and peer influences. For these investors, the decision-making process resembles following more than thinking.

The majority of cryptocurrency investors, however, fall somewhere in the middle of this spectrum. They engage in some information gathering and analysis, but this gathering process is often biased toward readily available information and a superficial understanding. Their analyses are distorted by cognitive biases such as overconfidence, the availability heuristic, and the representativeness heuristic. Social influences and herding dynamics amplify the impact of these psychological factors and the individual investors' limited analysis. The mental model held by the average retail crypto investor—that cryptocurrency price increases reflect genuine improvements in adoption prospects—provides them with a rational framework to justify their momentum trading strategies. However, this mental model is potentially problematic in the long term because: (1) price increases do not necessarily correlate with fundamental improvements in technology or adoption; (2) positive feedback loops can generate unsustainable bubbles; and (3) this mental model becomes easily distorted by speculative sentiments.

Theoretical Implications

This study has several significant implications for theories in behavioral finance and market microstructure:

1. Heterogeneity in the Investor Population: Traditional behavioral

finance models often treat "behavioral" investors as a homogenous group exhibiting systematic biases. This study demonstrates that in cryptocurrency markets, heterogeneity in investor sophistication, information processing capabilities, and motivation structures can generate diverse behavioral patterns, even when fundamental conditions are identical.

2. The Time-Varying Nature of Behavioral Patterns: Herding behavior in the crypto market is not constant it diminishes during periods of extreme price movements and uncertainty. This suggests that the psychological state of investors and the perceived riskiness of the environment can substantially alter behavioral patterns. Future models of market behavior must account for this time-varying nature.
3. Asset-Specific Effects of Investor Psychology: The same investors behave differently in different asset classes (e.g., contrarian in stocks, momentum in cryptocurrency). This suggests that psychological effects are not purely dispositional characteristics of the investors, but are significantly mediated by the characteristics of the asset and the market structure. Properties such as continuous 24/7 trading, heavy social media integration, and high volatility can amplify psychological factors.
4. The Role of Technological Factors in Shaping Beliefs: For cryptocurrencies, beliefs about future adoption prospects are not formed purely from information on historical performance or economic fundamentals, but significantly from beliefs regarding technological feasibility and market adoption curves. This creates a unique mechanism whereby the price-adoption feedback loop can generate self-fulfilling prophecies and bubbles.

Practical Implications for Investors

For individual investors considering cryptocurrency investments, this study suggests several practical implications:

1. **Awareness of Biases:** Individual investors need to be aware of the cognitive biases that can distort decision-making, particularly overconfidence, FOMO, and anchoring. Recognizing these biases in oneself is the first step toward mitigating their effects.
2. **Systematic Decision Framework:** Rather than making reactive decisions based on short-term price movements or social media buzz, investors should establish a systematic framework for cryptocurrency evaluation that includes both fundamental factors (e.g., on-chain metrics, technological development, regulatory environment) and market factors (e.g., sentiment, volatility, liquidity).
3. **Position Sizing and Risk Management:** Given the high volatility and speculative nature of cryptocurrency markets, investors should maintain strict discipline in position sizing—allocating only a small portion of their portfolios to crypto assets and utilizing appropriate stop-loss disciplines.
4. **Diversification Within Crypto:** Rather than putting all crypto allocations into a single "hot" cryptocurrency that is receiving maximum attention, investors benefit from diversification across multiple cryptocurrencies with varying risk-return profiles and use cases.
5. **Distinguishing Between Speculation and Investment:** Investors should clearly distinguish between portions of their portfolios earmarked for speculation (with the understanding that complete losses can occur) versus portions earmarked for longer-term investment based on fundamental beliefs regarding future adoption.

Future Research Agenda

Although the literature on cryptocurrency investment decisions has been growing rapidly, there remain numerous gaps that need to be addressed by future research:

Longitudinal Studies with Individual-Level Data: The majority of available evidence is cross-sectional or derived from aggregated market data. Longitudinal studies tracking the same individuals over extended periods could provide valuable insights into learning processes, the persistence of biases, and the evolution of sophistication levels. **With the growing availability of granular trading data from platforms, such studies are becoming increasingly feasible.** **Mechanisms Behind Asset-Specific Behavioral Differences:** It is crucial to understand more deeply why the same investors behave in a momentum-like manner in crypto but are contrarian in stocks and gold. Is this difference due to beliefs about adoption dynamics, or to the structural characteristics of the markets (e.g., continuous trading, social media integration)? **Experimental studies manipulating market structures while holding fundamental asset characteristics constant could clarify this.**

The Role of Media and Influencers in Cryptocurrency Markets: Although some evidence highlights the importance of sentiment and attention, the detailed mechanisms whereby media coverage and influencers shape investor beliefs and behaviors are not yet fully understood. **Research examining the content analysis of media coverage, tracking the attribution of trades to specific media events, and studying influencer effects would be highly valuable.** **Effectiveness of Interventions for Improving Decision-Making:** Systematic literature reviews find that very few studies test real-world solutions for reducing biases in decision-making, such as educational programs, digital tools, or reminder systems. **The development and rigorous evaluation of such interventions within the cryptocurrency context would hold significant practical value.**

Cultural and Geographic Differences in Crypto Investor Behavior: Most empirical research on

crypto investors is concentrated in developed markets or specific emerging markets such as India and Pakistan. Comparative studies across different countries with diverse regulatory environments, cultural backgrounds, and financial system sophistication levels could reveal important moderating factors.

Integration of Neuroscience Methods: The emerging field of neurofinance utilizes brain imaging and physiological measurements to study financial decision-making. Applying these methods to cryptocurrency investment decisions could provide profound insights into the underlying neural mechanisms driving these choices.

Machine Learning Approaches for Predicting Bubble Dynamics: With the growing availability of high-frequency data and advances in machine learning, developing models capable of predicting bubble formation and collapse in cryptocurrency markets would have important implications for both academic understanding and practical risk management.

Comparative Analysis of Crypto vs. Traditional Assets Among the Same Investors: Designing studies that enable a direct comparison of decision-making processes when the same investors are simultaneously trading stocks, options, cryptocurrencies, and other assets would clarify the respective roles of asset characteristics versus investor characteristics in explaining behavioral patterns.

Regulatory Implications

The findings from this literature review also carry important implications for regulatory policy:

Investor Protection vs. Market Innovation Trade-off: Regulators face the challenge of balancing the need to protect retail investors from potentially harmful behaviors with the desire to foster innovation within the cryptocurrency space. A better understanding of investor decision-making processes can inform the development of regulations that more effectively target vulnerabilities without unduly stifling beneficial innovation.

Disclosure Requirements: Given the importance of

information availability and sentiment in driving cryptocurrency prices, well-designed disclosure requirements for cryptocurrency projects could help level the playing field between sophisticated and retail investors. However, regulators must be cautious not to mandate excessive disclosures that obscure key information with noise.

Trading Halts and Circuit Breakers:

Existing markets for equities and futures utilize circuit breakers that halt trading during extreme price movements. Similar mechanisms in cryptocurrency markets might be beneficial for reducing herding-driven crash dynamics, although this must be carefully balanced against the 24/7 nature of crypto markets and concerns regarding international regulatory arbitrage.

Financial Literacy and Consumer Education: Given the prevalence of cognitive biases and the limited understanding many retail investors have regarding cryptocurrency technology, regulatory-supported financial education initiatives specifically targeted at cryptocurrency investing could reduce investor harm. Such programs should focus not only on the technical aspects but also on the psychology of investing and the biases that can affect decision-making.

Advertising and Influencer Regulation: Given the strong role of social media influencers and the media in shaping investor decisions, more explicit regulations concerning cryptocurrency advertising and the mandatory disclosure of affiliations or conflicts of interest for influencers could significantly improve market integrity.

Conclusion

The question of whether cryptocurrency investors predominantly "think" or "merely follow" when making investment decisions does not have a simple, binary answer. Based on a comprehensive review of empirical literature and theoretical frameworks in behavioral finance, we conclude that cryptocurrency investors represent a heterogeneous population that differs significantly in sophistication, motivations, and decision-making processes.

While a segment of investors engages in meaningful fundamental analysis such as evaluating on-chain activity and adoption metrics the vast majority of retail investors are primarily driven by short-term sentiment, Fear of Missing Out (FOMO), and herding behavior. Furthermore, individual retail investors frequently exhibit strong momentum trading patterns and are susceptible to various cognitive biases, such as overconfidence, availability heuristics, and loss aversion, which distort their perceptions and risk assessments. Although these investors often rely on mental models that link price movements to future adoption prospects to justify their behavior, such frameworks can lead to unsustainable market bubbles over the long term. These findings carry essential implications for market regulation, investor education, and the formulation of more balanced policies that protect retail participants without stifling digital asset innovation.

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