The Influence of Cognitive Biases on Investor Behavior in Periods of Economic Instability

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Abstract

Global economic uncertainty often triggers substantial shifts in investor behavior. In this context, behavioral finance theory explains that investment decisions are not solely driven by rational analysis but are also shaped by psychological factors and cognitive biases. This study aims to analyze the transformation of investor behavior during periods of economic uncertainty using a library research approach. The findings reveal that cognitive biases such as overconfidence, confirmation bias, and loss aversion play a crucial role in driving irrational investment behavior. When uncertainty intensifies, investors tend to become more pessimistic and exhibit heightened sensitivity to negative information compared to positive signals, leading to suboptimal asset allocation decisions. Moreover, market fluctuations are frequently influenced by emotional responses rather than fundamental evaluations, reflecting bounded rationality in financial decision-making processes. This study highlights the necessity of integrating psychological insights into investment strategies and policy frameworks to enhance adaptability in volatile market conditions. By understanding behavioral tendencies, investors, policymakers, and financial institutions can develop more resilient strategies that account for the complexities of human behavior in financial decision-making.

1. Introduction

Investment decisions are a multidimensional process that not only involves rational analysis based on fundamental data and economic indicators but is also influenced by psychological factors that direct the perception of risk, the level of self-confidence, and return expectations. In a global economic situation filled with uncertainty, investor responses are often not based on objective evaluation but on emotional impulses. Changes in interest rate policy, inflationary pressures, and market turmoil can lead to collective reactions that are impulsive, thereby triggering volatility that is not always aligned with the asset's intrinsic value. This phenomenon indicates that financial markets do not always reflect the mechanism of efficiency assumed in traditional financial theory. According to Mittal (2022), the emergence of behavioral finance theory is a scientific attempt to explain the deviation of investor behavior from the assumption of perfect rationality.

This theory emphasizes that emotional factors and cognitive biases have the potential to significantly influence decision-making, especially under stressful conditions. Investors do not only consider accounting information or macroeconomic indicators but also react to news, opinions of public figures, media dynamics, and social pressure. Thus, the capital market is formed as an arena of psychological interaction, not merely a mechanism for economic valuation. Babarinde (2019) highlight that biases such as overconfidence can cause investors to have excessive belief in their ability to predict the market, thereby ignoring potential risks and increasing the likelihood of losses. This bias encourages aggressive speculative behavior, resulting in investors over-transacting or placing assets in risky

instruments without adequate diversification. Conversely, the loss aversion bias reflects the investor's tendency to avoid losses by holding assets whose value has declined, hoping for recovery in the future. This condition actually worsens the portfolio position because decisions are not based on economic rationality, but on the emotional drive to avoid the feeling of regret.

In his empirical study, Costa et al. (2019) revealed that investors often rely on intuition and heuristics when facing market uncertainty. This shows that the decision-making process is influenced by personal experience and subjective perception, not solely by mathematical calculations. Investors tend to seek psychological stability and social validation when the market fluctuates, making them more interested in information that aligns with their beliefs than evaluating all data objectively. Basiru et al. (2023) asserts that integrating behavioral aspects into economic analysis is becoming increasingly important with the increasing complexity of global markets. The behavioral finance perspective offers a more comprehensive understanding of investor decision-making patterns, especially in the context of crises and volatility. By understanding the patterns of investors' psychological reactions, analysts and regulators can formulate more effective behavioral risk mitigation strategies, including market education, strengthening financial literacy, and implementing investor protection policies.

Based on the development of the literature over the last five years, there is a visible shift in research focus from merely fundamental analysis towards a behavioral approach that emphasizes the importance of cognitive and emotional biases in influencing investment decisions. The abundance of empirical evidence regarding

the influence of biases such as herding bias, representativeness bias, and overconfidence bias indicates that investor behavior is influenced not only by economic information but also by social pressure, emotions, and subjective perception of risk.

Given this background, this research aims to explore changes in investor behavior in response to economic uncertainty through a behavioral finance approach. The research is focused on identifying the most dominant psychological and cognitive biases influencing investment decision-making, and analyzing how these biases can be minimized to create more rational and sustainable investment decisions. The results of this research are expected to provide theoretical and practical contributions to the development of behavioral finance literature and offer strategic recommendations for investors, regulatory institutions, and economic policymakers in Indonesia

2. Literature Review

2.1. Behavioral Finance as a New Paradigm in Investment

Behavioral finance has developed as a contemporary paradigm that provides a new perspective in analyzing the dynamics of investment decisions (Gomes, 2023). This paradigm stems from criticism of classical financial theory, which assumes that investors are always rational and markets move efficiently. In practice, various market phenomena actually indicate behavioral deviations that cannot be explained through the assumption of perfect rationality, thus requiring an approach that integrates psychological and social aspects in understanding the mechanism of

investor decision-making. According to Mittal (2022), behavioral finance suggests that financial decisions are influenced by psychological factors such as emotions, perceptions, personal beliefs, and past experiences. These factors shape how individuals process information, evaluate risk, and determine investment strategies. Thus, investors do not always act to maximize profit alone but are often influenced by psychological impulses that lead to deviations from rational behavior.

While traditional financial theory focuses on market efficiency and the assumption that asset prices reflect all available information, the behavioral finance approach seeks to explain market anomalies through the analysis of investor mindset. This paradigm asserts that market behavior is influenced not only by empirical data and macro-economic factors but also by emotional responses and cognitive biases that affect how investors interpret information and make decisions (Ridley et al., 2020). Therefore, behavioral finance can be positioned as a more realistic approach in understanding the dynamics of modern financial markets, as it is capable of comprehensively describing investor behavior based on the interaction between economic rationality and psychological factors inherent in the investment decision making process.

2.2. Cognitive and Emotional Biases in Investment Decision Making

Cognitive bias is one of the main determinants that influence the investment decision-making process, especially in the context of modern investor behavior. According to Babarinde (2019), biases such as overconfidence, anchoring, and confirmation bias cause individuals to deviate from rational judgment because decisions are based on subjective perceptions, not on available objective

information. Overconfidence bias emerges when investors have excessive belief in their analytical and predictive abilities, leading them to often ignore potential risks and transact aggressively. This condition not only increases exposure to market volatility but also magnifies the likelihood of losses due to misjudgment. Anchoring bias occurs when investors rely too heavily on initial information or a specific reference point in determining the value of an asset, even though market conditions have changed significantly.

This dependence on initial information hinders the investor's ability to rationally re-evaluate. Meanwhile, confirmation bias arises when investors tend to seek and accept information that supports their previously made beliefs or decisions, and ignore facts or data that contradict their view. This phenomenon creates a distortion of perception that can lead to suboptimal investment decisions (Almansour et al., 2023). On the other hand, emotional biases such as fear and greed play an important role in shaping investor responses to market dynamics. Fear encourages excessive risk-averse behavior, while greed triggers aggressive speculative behavior. These two emotional aspects result in extreme decision patterns that move away from the principle of rationality, thereby having a direct impact on portfolio stability and overall investment performance.

2.3. Economic Uncertainty and Investor Psychological Response

Uncertainty in macro-economic conditions has significant implications for investor decision-making patterns, especially in strengthening the manifestation of behavioral biases. Costa et al. (2019) suggests that unstable economic dynamics can increase investor sensitivity to negative information, making them more susceptible

to making reactive decisions. In such situations, investors tend to ignore fundamental analysis and are more influenced by short-term risk perceptions formed from psychological pressure. This reaction reflects an irrational behavioral tendency that can trigger market panic and disrupt investment portfolio stability. Basiru et al. (2023) asserts that during periods of high market volatility, investment decisions are no longer driven solely by rational calculations but are dominated by emotional reactions such as anxiety and excessive optimism.

This condition reinforces various biases, especially cognitive and emotional biases, because investors are more inclined to act based on intuition and collective sentiment compared to analytical considerations. This phenomenon indicates that investor behavior is essentially adaptive to external pressures, but this adaptation is not always aligned with the principle of market efficiency (Husnah & Ichwan, 2023). Thus, a deep understanding of psychological dynamics in investor behavior becomes a strategic aspect in investment risk management. Behavioral analysis is not only important for individual investors but also for regulators and market authorities in formulating policies that are responsive to volatility. This approach enables the creation of a more adaptive policy framework oriented toward long-term stability, by considering the complex interaction between economic and psychological factors in investment decision-making.

3. Method

This research uses the library research method, which focuses on theoretical, conceptual, and empirical review from various scientific sources relevant to the topics of behavioral finance, cognitive bias, and investor responses to economic uncertainty. This approach was chosen because it allows the researcher to comprehensively examine the phenomenon of investment behavior through a critical interpretation of previous research findings, without directly collecting primary data. Thus, this research serves as a synthesis study aimed at identifying patterns, trends, and scientific contributions that have developed in the domain of behavioral finance.

According to Mittal (2022), the library research method is very effective for uncovering the recurrence of concepts and empirical findings related to the influence of cognitive and emotional biases in investment decision-making. The research process begins with collecting literature from trusted academic databases such as Google Scholar, focusing on scientific publications within the last five years. The research inclusion criteria cover journals that directly discuss behavioral biases, economic uncertainty dynamics, and the mechanism of investor decision-making in the capital market.

The next stage is to perform a content analysis of the literature that meets the criteria to identify main themes such as the dominant types of cognitive and emotional biases, their impact on investor behavior, and the implications for financial market stability. Content analysis is carried out through a systematic review of conceptual models, empirical findings, and theoretical frameworks developed by

previous researchers. This approach combines descriptive analysis to explain the phenomena and interpretive analysis to understand their meaning and relevance in the context of modern finance.

Furthermore, this research applies the thematic synthesis method to integrate various findings from the analyzed literature. Thematic synthesis allows researchers to identify the relationships between psychological, cognitive, and economic variables more deeply. For example, by comparing the findings of Babarinde (2019) regarding the role of behavioral bias with Costa et al. (2019) study related to the influence of market uncertainty, an understanding is obtained of how investor bias is strengthened by unstable macroeconomic conditions. Through this synthesis process, this research aims to produce a systematic conceptual mapping and contribute to the development of behavioral finance knowledge, especially in the context of investment decision-making under global economic pressure.

4. Results

The results of this study, based on a library research, indicate that investor behavior undergoes a significant change when faced with uncertain economic conditions. Economic uncertainty such as global crises, exchange rate fluctuations, or continuously increasing inflationary pressures not only affects risk perception individually but also encourages the emergence of investment decision-making patterns that deviate from conventional rationality principles. Behavioral finance provides an analytical framework for interpreting this phenomenon, by highlighting how cognitive and emotional biases influence investor responses to market

information and external dynamics. In the context of increasingly complex economic uncertainty, investment decisions are no longer driven solely by mathematical calculations, but by the interaction between subjective perception, past experience, and psychological dynamics that are difficult to measure quantitatively.

The literature shows that under conditions of high volatility, investors show a tendency to overreact to negative information and ignore stable fundamental signals (Costa et al., 2019). This relates to the concept of loss aversion, which is the preference for avoiding losses more than gaining equivalent profit, so investors tend to hold onto poorly performing assets hoping for a price reversal, even though this action potentially increases portfolio risk. Basiru et al. (2023) suggests that increased volatility strengthens investors' emotional responses, causing asset price decreases that are disproportionate to their intrinsic value. This situation is further exacerbated by overreaction when negative news dominates the global financial media, while the reaction to positive information tends to be delayed or non-proportional. This behavior explains why markets often fluctuate extremely during crisis periods, even when there are no fundamental changes to corporate performance in the long term.

In the realm of behavioral finance, cognitive biases are the main determinant of investment decision deviations. Overconfidence leads investors to overestimate their analytical abilities and transact too often (Shah et al., 2020). This action not only increases transaction costs but also lowers overall portfolio performance. Confirmation bias further narrows the scope of analysis, as investors only accept information that supports their beliefs and reject contradictory data. Anchoring bias is also very dominant, where investors are fixated on historical prices or certain

references when making decisions, thereby ignoring fundamental market changes. These biases show that investment decisions are not merely the product of rational optimization, but the result of a limited cognitive process and are often influenced by heuristics or rules of thumb that are not always aligned with modern market dynamics.

Besides cognitive biases, emotional factors such as fear and greed have a significant influence on market volatility (Bihari et al., 2022). When asset prices increase rapidly, greed encourages investors to buy without considering the risk of a price reversal. Conversely, when prices drop suddenly, fear triggers panic selling which accelerates the decline in market value, creating a negative spiral that worsens financial instability. In this context, emotions act as a catalyst that accelerates market movement, rather than as a reflection of changes in economic fundamentals. This phenomenon indicates that markets do not always react efficiently but are often driven by mass psychology that is difficult to predict using traditional economic approaches.

The theory of bounded rationality introduced by Herbert Simon provides a conceptual foundation for understanding the limitations of human rationality in processing information. In conditions of high uncertainty, investors cannot perfectly process all available information, so they rely on heuristics to accelerate the decision-making process (Costa et al., 2019). These heuristics allow individuals to make decisions quickly, but they also open up space for distortions in risk assessment. Thus, investor rationality is not absolute but is limited by cognitive capacity, time, and access to information. This perspective challenges the classical economic

assumption that considers investors as rational agents who always consistently optimize utility.

The influence of external factors and social dynamics is also an important determinant in shaping modern investor behavior. Gazali et al. (2021) suggests that risk perception is often formed by public opinion and information widely disseminated through social media. The phenomenon of herding behavior occurs when investors follow collective decisions without conducting independent analysis, assuming that the majority action reflects accurate information. Herding behavior increases when market conditions are uncertain, as investors seek psychological safety by following the majority, even though this strategy can decrease portfolio efficiency and reduce asset diversification. In this context, collective behavior becomes a force that can accelerate market turmoil, as well as create an illusion of consensus that does not reflect fundamental economic reality.

The implications of behavioral finance findings are very significant for market stability and risk management. Bihari et al. (2022) suggest the need to develop investment models that integrate psychological, social, and emotional aspects into the modern financial analytical framework. Financial institutions can use behavioral analytics-based algorithms to detect patterns of deviant behavior and provide automatic intervention to prevent impulsive decision-making. In addition, financial education that emphasizes the understanding of cognitive and emotional biases is necessary to increase investor literacy and encourage more objective decision-making. Integrating behavioral aspects is also important in policy formulation, as

market movements are influenced not only by macroeconomic indicators but also by the expectations and psychological responses of market participants.

The behavioral finance approach provides an important contribution to the development of investment theory by presenting a new paradigm that is more realistic and adaptive to the complexity of human behavior. Shah et al. (2020) suggest that the application of behavioral finance concepts in asset allocation strategies enables the identification of systematic errors in decision-making and provides a basis for designing strategic interventions to improve portfolio performance. Thus, behavioral finance is not merely a complement to traditional financial theory, but a comprehensive approach that enriches the understanding of the interaction between psychological, social, and economic factors in the financial decision-making process. The overall analysis indicates that investor behavior in facing economic uncertainty is a reflection of the limitations of rationality, the dominance of cognitive biases, and emotional influences that cannot be ignored.

These findings provide a significant theoretical contribution by expanding the horizon of understanding regarding the mechanism of financial decision-making, and challenge the basic assumptions of the efficient market theory that considers investors to act completely rationally. Integrating behavioral finance into the development of investment models not only enriches the treasury of science but also opens opportunities to create new theoretical approaches that are more capable of reflecting the empirical reality of modern financial markets, while also providing a foundation for the development of future theoretical models that are more responsive to psychological and social complexity in the investment context.

5. Discussion

The results of this research reinforce the theoretical understanding that investor behavior cannot be fully explained through the framework of classical financial theory, which bases its assumptions on perfect rationality and market efficiency. In empirical reality, investors are not economic agents who always make decisions based solely on objective logic and mathematical calculations, but individuals with cognitive limitations, subjective preferences, and are influenced by emotional stimuli and social pressure that shape their behavioral patterns in making investment decisions. Therefore, the behavioral finance approach offers a more representative perspective in explaining modern market dynamics, especially in conditions of high uncertainty (Holfort, 2019).

According to Bihari et al. (2022), economic volatility tends to increase the manifestation of behavioral biases such as herding behavior, loss aversion, and overconfidence, which collectively lead to price distortions in the financial market. Loss aversion bias emerges when investors show greater sensitivity to potential losses than to opportunities for profit, thus encouraging disproportionate mass selling that is not proportional to the asset's fundamentals. In this situation, extreme price fluctuations are not merely due to changes in intrinsic value, but excessive emotional reaction to negative information. Conversely, during the economic recovery phase, overconfidence bias again dominates investor behavior. Shah et al. (2020) explain that investors who feel they have superior ability to predict the market

tend to engage in excessive trading, ignore the principle of diversification, and increase risk exposure unconsciously. Besides individual psychological factors, this research also underscores the significant influence of social dynamics on the formation of investor expectations and actions.

Gazali et al. (2021) shows that the flow of public information, especially that disseminated through social media and digital platforms, plays an important role in creating market sentiment that sometimes does not reflect the fundamental economic reality. Viral or speculative information is often widely accepted without verification, thereby accelerating the occurrence of herding behavior. This collective behavior is reinforced by the psychological need to seek a sense of safety by following the majority decision, even if it is not always based on rational analysis. The theoretical implications of these findings are very important in the development of contemporary financial models. Costa et al. (2019) emphasizes that integrating psychological and social aspects into financial education can make a significant contribution to shaping investors who are more aware of personal biases, thus enabling them to make decisions with more objective consideration.

Furthermore, increasing information transparency and structuring a policy framework that considers investor behavioral dynamics are believed to increase market stability in the long term. This research confirms that financial markets do not merely move by following the forces of economic rationality but are a reflection of the complex interaction between psychological factors, social factors, and information. By understanding investor behavior more deeply through the behavioral finance approach, the development of investment theories and strategies

can be directed toward models that are more adaptive, realistic, and relevant to global economic challenges in the future.

6. Conclusion

This research confirms that investor behavior under economic uncertainty is highly influenced by psychological factors and cognitive biases. When facing high volatility, investors tend to act emotionally, exhibiting behaviors such as loss aversion, herding, and overconfidence. This phenomenon indicates the limitations of rationality in investment decision-making. Through the behavioral finance approach, it can be understood that investors are not only data-oriented decision-makers but also individuals with emotions and subjective perceptions. Behavioral bias is an important variable in explaining market movements.

The practical implication of these results is the importance of financial literacy that not only emphasizes technical aspects but also the understanding of investor psychological dynamics. Education and training that highlight behavioral biases can help investors manage risk and make more rational decisions. In addition, macroeconomic policies that consider behavioral aspects can help create a more stable and sustainable market. Thus, the integration between classical economic theory and behavioral finance is a strategic step in understanding and anticipating investor behavior in an era of increasingly complex economic uncertainty.

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