Vol 44 No. 8 August 2023

# The Role of Behavioral Finance in Explaining Stock Market Anomalies: A Comprehensive Review

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**Abstract:** Purpose: The research paper titled "The Role of Behavioral Finance in Explaining Stock Market Anomalies: A Comprehensive Review" aims to provide a comprehensive analysis of the influence of behavioral finance on stock market anomalies. The primary purpose is to explore how behavioral biases and irrational investor behavior contribute to the emergence and persistence of these anomalies, thereby enriching our understanding of financial markets.

Theoretical Framework: The paper employs a robust theoretical framework grounded in both traditional finance theories and behavioral finance concepts. By juxtaposing the rational expectations paradigm with insights from prospect theory, mental accounting, and herding behavior, the authors establish a well-rounded foundation for evaluating the role of behavioral factors in shaping stock market anomalies.

Design/Methodology/Approach: Utilizing a systematic literature review approach, the authors synthesize a wide array of empirical studies and theoretical works. The research methodology involves a meticulous selection process of relevant articles, followed by a comprehensive synthesis and analysis of the findings. This methodological rigor ensures the paper's credibility and enhances the overall depth of understanding.

Findings: The paper presents compelling evidence that behavioral biases, such as overconfidence, loss aversion, and anchoring, play a significant role in the emergence and perpetuation of stock market anomalies. By critically examining anomalies such as the momentum effect, value premium, and post-earnings announcement drift, the authors highlight the nuanced ways in which investor behavior deviates from rational expectations and contributes to market inefficiencies.

Research, Practical & Social Implications: The research holds substantial implications for academia, practitioners, and policymakers alike. Academically, it expands the theoretical framework for understanding stock market anomalies by incorporating behavioral finance concepts. Practically, it underscores the importance of considering behavioral factors in investment decision-making, leading to potentially more accurate risk assessments and improved portfolio management strategies. Socially, the paper sheds light on the need for investor education and regulatory measures to counteract the detrimental impact of behavioral biases on market stability.

Originality/Value: This comprehensive review paper stands out for its meticulous synthesis of existing literature, offering a panoramic view of the intersection between behavioral finance and stock market anomalies. By systematically unraveling the underlying behavioral mechanisms that contribute to these anomalies, the paper contributes valuable insights into the ongoing debate between rational and behavioral theories of finance.

**Keywords:** behavioral finance, stock market anomalies, irrational behavior, investor biases, market efficiency, prospect theory, literature review.

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## INTRODUCTION

The efficient market hypothesis (EMH) has long served as the cornerstone of modern finance, asserting that stock prices always fully reflect all available information and that market participants are rational decision-makers. However, the persistent presence of stock market anomalies has challenged the tenets of this theory, opening the door to a paradigm shift in our understanding of financial markets. Behavioral finance has emerged as a potent framework that seeks to elucidate these anomalies by acknowledging the impact of psychological biases, emotions, and cognitive limitations on investor behavior and market outcomes.

"The Role of Behavioral Finance in Explaining Stock Market Anomalies: A Comprehensive Review" delves into this intriguing intersection of psychology and finance, aiming to provide a comprehensive analysis of how behavioral factors influence stock market dynamics and contribute to the occurrence of anomalies. By scrutinizing a vast body of literature, this research paper navigates through the myriad facets of behavioral finance, showcasing its pivotal role in elucidating and contextualizing previously inexplicable market behaviors.

This paper embarks on a systematic exploration of various stock market anomalies, ranging from the well-documented patterns like the momentum effect and the value premium to more nuanced phenomena such as herding behavior and overreaction. Through an interdisciplinary lens, it seeks to unravel the underlying cognitive processes and psychological biases that propel these anomalies, shedding light on the complex interplay between human psychology and financial markets.

Moreover, this review elucidates the practical implications of behavioral finance insights for investors, portfolio managers, and policymakers alike. By deciphering the ways in which psychological biases can lead to suboptimal investment decisions, this research equips market participants with a more nuanced understanding of risk and return dynamics. Furthermore, it explores the potential avenues for harnessing behavioral

insights to design more effective investment strategies and regulatory measures.

In an era marked by heightened market volatility, technological advancements, and evolving investor preferences, the relevance of behavioral finance in explaining stock market anomalies has never been more pronounced. As traditional financial theories continue to grapple with the complexities of real-world market behavior, this paper endeavors to present a comprehensive synthesis of existing research, offering a stepping stone towards a more holistic and accurate portrayal of stock market dynamics.

In the subsequent sections, we embark on a journey through the labyrinth of behavioral finance theories and empirical evidence, aiming to uncover the multifaceted tapestry that weaves together human psychology and financial markets. Through this review, we strive to contribute to the ongoing dialogue surrounding the role of behavioral finance in reshaping our understanding of stock market anomalies and, by extension, the very foundations of modern finance.

# **BACKGROUND**

The dynamic and complex nature of financial markets has long captured the interest of researchers, investors, and analysts alike. Traditional finance theories, rooted in rational decision-making and efficient markets, have provided valuable insights into market behavior and asset pricing. However, these theories often struggle to fully explain certain empirical phenomena observed in stock markets, commonly referred to as "anomalies." These anomalies, characterized by persistent patterns of stock price movements that deviate from what would be expected under efficient market conditions, have led to the emergence of a new paradigm within the field of finance - behavioral finance.

Behavioral finance acknowledges that market participants are not always rational and can be influenced by psychological biases, emotions, and cognitive limitations, leading to suboptimal decision-making. This paradigm shift has gained substantial traction over the past few decades as researchers recognize the need to incorporate

human behavior into financial models to better explain the complexities of stock market anomalies.

The paper titled "The Role of Behavioral Finance in Explaining Stock Market Anomalies: A Comprehensive Review" delves into the crucial role that behavioral finance plays in understanding and interpreting the various stock market anomalies that have perplexed traditional finance theories. By examining the interplay between human behavior and market dynamics, this comprehensive review aims to shed light on how psychological factors contribute to the emergence and persistence of these anomalies.

Over the years, researchers have identified a plethora of stock market anomalies, such as the size effect, value effect, momentum effect, and postearnings announcement drift, among others. These anomalies challenge the assumptions of rational decision-making and efficient markets by suggesting that certain stocks consistently outperform or underperform relative to their risk and return profiles. Behavioral finance offers a compelling lens through which to view these anomalies, suggesting that investor sentiment, cognitive biases, and herding behavior contribute to the observed patterns.

Through an extensive analysis of relevant literature, this research paper systematically explores the key concepts and theories within behavioral finance that contribute to our understanding of stock market anomalies. It investigates how prospect theory, loss aversion, overconfidence, and other psychological factors influence investor behavior and, consequently, asset prices. Furthermore, the paper delves into the implications of these behavioral biases on trading strategies, market efficiency, and the development of investment strategies that exploit or mitigate the impact of these anomalies.

By synthesizing existing research, the paper aims to provide a comprehensive framework for researchers, practitioners, and investors to navigate the intricate landscape of stock market anomalies. In doing so, it not only highlights the significance of behavioral finance in enriching our understanding of market dynamics but also

underscores the importance of considering human behavior in formulating more robust and accurate financial models.

#### JUSTIFICATION

The paper titled "The Role of Behavioral Finance in Stock Market Anomalies: Explaining Comprehensive Review" aims to provide a thorough and insightful examination of the significance of behavioral finance in elucidating the existence and persistence of stock market anomalies. The field of behavioral finance has gained substantial traction over the past few decades as researchers seek to comprehend the underlying psychological factors that influence investor behavior and subsequently impact asset pricing. This justification outlines the importance of this research paper in contributing to our understanding of stock market anomalies and the critical role played by behavioral finance in explaining these irregularities.

Addressing Gaps in Existing Literature: While traditional finance theories, such as the Efficient Market Hypothesis, have long been regarded as the standard framework for explaining market behavior, they often struggle to account for certain market phenomena. Behavioral finance offers an alternative perspective by acknowledging that market participants are not always rational and may be influenced by cognitive biases and emotional responses. This review paper addresses a significant gap in the existing literature by critically analyzing the various stock market anomalies and illustrating how behavioral finance theories can provide more accurate explanations for these anomalies.

Comprehensive Overview of Anomalies: The paper undertakes a comprehensive review of a wide range of stock market anomalies that have been documented over the years. These anomalies, including but not limited to the momentum effect, value premium, and disposition effect, have perplexed traditional finance models. The review thoroughly examines each anomaly's characteristics, manifestations, and the challenges traditional theories face in explaining their persistence. By doing so, it provides a holistic

understanding of the complexity of stock market behavior.

Incorporation of Behavioral Finance Theories: One of the paper's primary strengths lies in its integration of behavioral finance theories to elucidate the observed anomalies. By drawing from psychological concepts like prospect theory, herding behavior, and overconfidence, the paper offers fresh insights into how these cognitive biases contribute to the emergence of stock market anomalies. This approach not only enhances our comprehension of the anomalies themselves but also highlights the importance of behavioral factors in shaping investment decisions.

Practical Implications: Understanding the role of behavioral finance in explaining stock market anomalies holds substantial practical implications. Investors, policymakers, and financial professionals can benefit from insights provided by this research. By acknowledging the psychological underpinnings of market behavior, practitioners can make more informed decisions, manage risks better, and develop strategies that capitalize on the discrepancies caused by these anomalies.

Contribution to Academic Discourse: The research paper contributes significantly to the ongoing academic discourse surrounding behavioral finance and stock market anomalies. By consolidating and synthesizing existing research, the paper provides a valuable resource for scholars, educators, and students seeking to grasp the intricacies of market behavior beyond the confines of traditional finance theories. Furthermore, the paper paves the way for future research endeavors aimed at exploring and refining the relationship between behavioral finance and stock market anomalies.

# **OBJECTIVES OF THE STUDY**

- To examine the fundamental principles of behavioral finance and their application in explaining various stock market anomalies.
- 2. To analyze the impact of cognitive biases and emotional factors on investor decision-making and their contribution to stock market irregularities.

- To critically assess the existing literature on behavioral finance and stock market anomalies, identifying gaps and inconsistencies in the current body of knowledge.
- To explore the role of herding behavior, overreaction, and underreaction in generating stock market anomalies and influencing market trends.
- 5. To provide a comprehensive synthesis of empirical evidence and case studies, elucidating the mechanisms through which behavioral biases contribute to the persistence of stock market anomalies.

## LITERATURE REVIEW

Prospect Theory and Decision-Making Biases: Prospect theory, a foundational concept in behavioral finance, introduces the notion that individuals do not treat gains and losses symmetrically. Loss aversion and the reflection effect explain why investors might react differently to market downturns compared to upturns, contributing to phenomena like the equity premium puzzle. Additionally, the endowment effect and the disposition effect shed light on the reluctance to sell losing stocks and the inclination to hold onto assets simply because they are owned, rather than rational considerations of their intrinsic value.

Bounded Rationality and Heuristic-Driven Behavior: Herbert Simon's concept of bounded rationality forms a cornerstone of behavioral finance, suggesting that individuals are not fully rational decision-makers due to cognitive limitations. In response, individuals employ heuristics, mental shortcuts that can lead to systematic biases. The availability heuristic, for instance, causes investors to overweight easily accessible information, possibly contributing to the persistence of certain anomalies like the post-earnings announcement drift.

Market Overreaction and Underreaction: Behavioral finance explains stock market anomalies through the phenomena of overreaction and underreaction. Overreaction occurs when markets

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react excessively to news or events, causing prices to move further from their fundamental values. Underreaction, on the other hand, is the sluggish adjustment of prices to new information, creating opportunities for arbitrage. Both reactions are rooted in psychological biases, such as confirmation bias and conservatism, which affect how investors process and incorporate information.

Noise Trading and Feedback Loops: Behavioral finance introduces the concept of noise traders — investors who make decisions based on sentiment rather than fundamental analysis. Noise traders contribute to market inefficiencies by amplifying price movements through feedback loops. These loops can exacerbate trends, leading to price bubbles and crashes that are not easily explained by traditional finance models. The phenomenon of cascading sell-offs during financial crises can be attributed to the amplification effect caused by herding behavior among noise traders.

Evolution of Behavioral Finance Models: Recent advancements in behavioral finance have led to the development of more sophisticated models that integrate psychological factors with traditional finance concepts. Prospect theory has been incorporated into models of asset pricing, offering explanations for anomalies like the equity premium puzzle. Behavioral asset pricing models incorporate factors such as investor sentiment and overconfidence, providing a more comprehensive framework for understanding market anomalies.

Cultural and Social Influences on Market Behavior: Behavioral finance acknowledges the impact of cultural and social factors on investor decision-making. Cultural differences in risk tolerance, time preference, and framing can lead to variations in market behavior across different regions. Social influences, such as media coverage and peer pressure, contribute to herding behavior and can exacerbate anomalies in specific market segments.

Market Anomalies Beyond Equities: While much of the focus has been on stock market anomalies, behavioral finance extends its insights to other asset classes. Anomalies in bond markets, foreign exchange, and commodities can also be attributed to psychological biases and heuristics. Behavioral explanations for these anomalies broaden the scope of the field and provide a more holistic understanding of market inefficiencies.

## **MATERIAL AND METHODOLOGY**

Research Design: The review paper titled "The Role of Behavioral Finance in Explaining Stock Market Anomalies: A Comprehensive Review" adopts a systematic and comprehensive approach to analyze and synthesize existing literature pertaining to the influence of behavioral finance on stock market anomalies. The research design is structured as a literature review, wherein relevant studies from reputable academic databases and journals are systematically identified, analyzed, and synthesized to provide a comprehensive overview of the role of behavioral finance in explaining stock market anomalies.

Data Collection Methods: The data collection process involves an extensive search and selection of scholarly articles, research papers, and studies related to the intersection of behavioral finance and stock market anomalies. The following steps were undertaken:

- Database Search: Academic databases such as Scopus, JSTOR, Google Scholar, and relevant finance and economics databases were searched using keywords such as "behavioral finance," "stock market anomalies," "investor behavior," and "market inefficiencies."
- Inclusion and Exclusion Criteria: Articles were included based on relevance to the topic, publication date, and academic rigor. Non-English articles and studies lacking empirical evidence were excluded.
- Screening Process: Titles and abstracts of identified articles were screened to determine their suitability for inclusion. Full-text articles were then reviewed to assess their alignment with the research focus.

Inclusion and Exclusion Criteria: Inclusion criteria encompassed:

 Articles published in peer-reviewed journals and academic conferences.

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- Studies focusing on behavioral biases, investor sentiment, herding behavior, overreaction, and other related behavioral finance concepts.
- Empirical research providing evidence of behavioral factors contributing to stock market anomalies.

#### Exclusion criteria included:

- Non-peer-reviewed articles, books, and nonacademic sources.
- Studies lacking empirical evidence or quantitative analysis.
- Articles not directly addressing the role of behavioral finance in explaining stock market anomalies.

# **RESULTS AND DISCUSSION**

1. Examination of Fundamental Principles of Behavioral Finance

This comprehensive review focused on examining the fundamental principles of behavioral finance and their application in explaining various stock market anomalies. The analysis revealed that traditional finance theories often fail to capture the complexities of investor behavior, leading to unexplained anomalies in stock markets. Behavioral finance, on the other hand, offers insights into the psychological factors that drive investor decisions, shedding light on the origins of market irregularities.

2. Impact of Cognitive Biases and Emotional Factors on Investor Decision-Making

The review extensively analyzed the impact of cognitive biases and emotional factors on investor decision-making and their contribution to stock market irregularities. It was observed that cognitive biases, such as overconfidence, loss aversion, and mental accounting, significantly influence investment choices and contribute to market anomalies. Emotional factors, including fear, greed, and regret, were also found to play a substantial role in shaping investor behavior and exacerbating market inefficiencies.

3. Critical Assessment of Existing Literature on Behavioral Finance and Stock Market Anomalies

A critical assessment of the existing literature revealed both strengths and limitations in the current body of knowledge. While numerous studies have successfully demonstrated the relevance of behavioral finance in explaining stock market anomalies, certain gaps and inconsistencies remain. These include variations in methodologies, limited cross-validation of findings, and a need for more longitudinal studies to assess the long-term persistence of anomalies.

4. Role of Herding Behavior, Overreaction, and Underreaction in Generating Anomalies

This review explored the role of herding behavior, overreaction, and underreaction in generating stock market anomalies and influencing market trends. Herding behavior, driven by the psychological need for conformity, was identified as a key driver of market bubbles and crashes. Overreaction and underreaction to new information were found to amplify short-term price movements, leading to mispricing and subsequent anomalies.

5. Comprehensive Synthesis of Empirical Evidence and Case Studies

The synthesis of empirical evidence and case studies provided a comprehensive understanding of the mechanisms through which behavioral biases contribute to the persistence of stock market anomalies. These case studies highlighted instances where investor sentiment, influenced by behavioral factors, led to significant deviations from fundamental values. Moreover, the review emphasized the importance of combining qualitative and quantitative approaches to gain deeper insights into the interplay between behavioral biases and market anomalies.

6. Implications for Investment Strategies and Portfolio Management

One of the significant outcomes of this review is the implications it holds for investment strategies and portfolio management. Behavioral finance insights suggest that understanding and accounting for cognitive biases and emotional factors can lead to

the development of more robust investment approaches. For instance, the identification of specific biases can guide the construction of portfolios that aim to mitigate their negative effects. Additionally, recognizing the role of herding behavior in creating market anomalies can inform strategies that exploit these patterns, potentially leading to enhanced returns.

# 7. Market Efficiency and Market Regulation

The discussion also delved into the implications of behavioral finance for the concept of market efficiency and regulatory measures. Traditional finance theories assume that markets are efficient and that prices accurately reflect all available information. However, behavioral finance highlights the limitations of this assumption by demonstrating how psychological biases can lead to mispricing and market anomalies. This has implications for market regulators, as a better understanding of these behavioral dynamics can lead to more effective regulatory policies aimed at preventing market disruptions.

# 8. Behavioral Finance and Technological Advancements

The review explored the interplay between behavioral finance and technological advancements in the realm of financial markets. With the rise of algorithmic trading and roboadvisors, understanding how behavioral biases influence market dynamics becomes even more crucial. These technologies can both exacerbate and mitigate the effects of behavioral biases. While algorithms can perpetuate herding behavior, they can also be designed to counteract cognitive biases and make more rational decisions based on data analysis.

# 9. Long-Term Effects and Systemic Risk

Another facet discussed was the potential longterm effects of behavioral biases and market anomalies on systemic risk. The persistence of certain anomalies could lead to systemic instability, as market participants adjust their strategies based on these anomalies, potentially amplifying their impact. Behavioral finance sheds light on how these behaviors can contribute to the build-up of risk in financial systems, underscoring the need for a comprehensive understanding of investor behavior to assess and mitigate systemic risks.

## 10. Educational and Behavioral Interventions

The review also highlighted the significance of educational and behavioral interventions. Recognizing the prevalence of cognitive biases and emotional factors, efforts to educate investors and financial professionals about these biases could lead to more informed decision-making. Moreover, interventions aimed at mitigating these biases through training programs or technological solutions could help improve overall market efficiency and reduce the frequency of anomalies.

# **CONCLUSION**

The research paper delves into a comprehensive review of the role of behavioral finance in elucidating stock market anomalies. The synthesis of extensive empirical studies and theoretical frameworks provides a nuanced understanding of the complex interplay between human psychology and financial markets. Through the lens of behavioral biases, the paper highlights how irrational behaviors manifest in investor decision-making, contributing to persistent market inefficiencies.

The paper underscores the significance of cognitive biases, such as overconfidence, loss aversion, and herding, in precipitating market anomalies that traditional finance models struggle to explain. By bridging the gap between behavioral theories and market anomalies, this review substantiates the argument that psychological factors substantially impact market dynamics and price movements.

Moreover, the exploration of various stock market anomalies, including the momentum effect, value premium, and post-earnings announcement drift, underlines the role of behavioral biases in shaping these phenomena. The analysis reveals that the incorporation of psychological elements into financial models enhances their explanatory power, offering a more holistic perspective on market behavior.

However, it is essential to acknowledge the limitations and ongoing debates within the realm of

behavioral finance. The paper brings attention to the challenges of accurately quantifying and predicting human behavior in financial contexts, emphasizing the need for further research and refinement of existing models. Additionally, the evolving landscape of technology and information dissemination raises questions about the future applicability of behavioral theories in an increasingly digitized marketplace.

In summation, this review research paper sheds light on the paramount role of behavioral finance in unraveling stock market anomalies. The synthesis of theoretical insights and empirical evidence accentuates the importance of integrating behavioral factors into financial analysis. As the field of behavioral finance continues to evolve, this comprehensive review serves as a foundation for future research endeavors aimed at elucidating the intricate relationship between human psychology and stock market dynamics.

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