

## A Literature Review on the Influence of Availability Bias and Overconfidence Bias on Investor Decisions

Fitriana Rahmawati<sup>1\*</sup>, Fitri Santi<sup>2</sup>

Faculty of Economics and Business, University of Bengkulu

**Corresponding Author:** Fitriana Rahmawati [fitrianarahmawati2412@gmail.com](mailto:fitrianarahmawati2412@gmail.com)

---

### ARTICLE INFO

*Keywords:* Availability Bias, Overconfidence Bias, Investment Decisions, Cognitive Biases

*Received :* 06, October

*Revised :* 10, November

*Accepted:* 15, December

©2023 Rahmawati, Santi: This is an open-access article distributed under the terms of the [Creative Commons Attribution 4.0 International](https://creativecommons.org/licenses/by/4.0/).



### ABSTRACT

This research examines the impact of Availability Bias and Overconfidence Bias on investment decisions. Utilizing a literature review approach and VOSviewer analysis, this study explores how these biases affect investor decision-making processes and potential mitigation strategies. The objective is to highlight the significance of understanding and mitigating these biases in achieving more rational investment decisions. The findings underscore the potential negative effects of both biases, leading to overconfident and less rational investment decisions. Awareness of their interplay is crucial, as they reinforce each other's negative effects on investment decision-making. Overcoming these cognitive biases is essential for more effective investment decision-making. This research contributes insights into mitigating biases, aiding in a more balanced and rational approach to investment decision-making.

---

## INTRODUCTION

An examination of the impact of availability bias and overconfidence bias on investment decisions has been conducted in the realm of finance. This literature review explores how these biases influence investor decision-making processes and ways to mitigate their effects. It has been found that overconfidence bias significantly affects investment decisions positively, potentially influencing investment performance via risk tendencies (ul Abdin et al., 2022).

Other common behavioral biases affecting investment decisions include mental accounting bias, loss aversion bias, confirmation bias, representativeness bias, anchoring bias, and regret aversion bias (Salman et al., 2021). However, this research focuses solely on availability bias and overconfidence bias. Understanding these biases and their impact on investment decisions is crucial for making better financial decisions and improving investment outcomes.

Availability bias involves investors utilizing information without further review, making investment decisions based on the probability of that information (Pikulina et al., 2017). Conversely, overconfidence bias, marked by excessive confidence, significantly impacts investment decisions positively.

Behavioral economics experts suggest that overconfidence bias can be reduced by seeking objective feedback, considering conflicting evidence, and adhering to trading plans. Recognizing and understanding overconfidence bias is essential for making better financial decisions and enhancing investment outcomes. When investors use heuristics, their technical knowledge and reasoning abilities are disrupted, leading to judgment errors. Consequently, investors make irrational decisions, adversely impacting their investment performance (Ahmad & Shah, 2022). Literature reveals that when financial practitioners and business actors use heuristics, they reduce mental effort in decision-making processes, leading to various behavioral biases.

The purpose of this study is to conduct a literature review on the impact of availability bias and overconfidence bias on investment decisions, exploring how these biases affect investor decision-making processes and potential mitigation strategies. The proposed approach involves a comprehensive review of relevant literature on this subject. This research will analyze and synthesize findings from prior studies to provide a comprehensive understanding of the impact of availability bias and overconfidence bias on investment decisions. The novelty of this study lies in identifying strategies to assist investors in making more informed decisions and improving investment outcomes.

Overall, this study aims to provide a clear understanding of the impact of availability bias and overconfidence bias on investment decisions and to identify strategies aiding investors in making more informed decisions. Further research is required to explore the roles of these biases and how they can be mitigated to assist investors in making more informed decisions (Bihari et al., 2022). This study will contribute to the existing literature on this subject and provide insights for investors, financial advisors, and policymakers.

## LITERATURE REVIEW

The influence of cognitive bias on investment decisions has been an intriguing and extensively researched subject in the fields of behavioral finance, economics, and psychology. This literature review aims to provide a comprehensive overview of the primary findings and methodologies used in previous research concerning the impact of availability bias and overconfidence bias on investment choices. By summarizing existing research, this section offers valuable insights into the research background and highlights gaps and opportunities for further exploration.

### *Investor Decision-Making*

Investment decisions form the core of financial activities, requiring careful consideration and in-depth analysis. Behavioral finance theory stands as a vital approach in comprehending human investment decision-making. This theory emphasizes how cognitive biases and psychological factors influence an individual's financial decisions, including investment choices. Investors and investment management firms can enhance their prospects for generating higher returns and reduce their risk exposure by understanding the behavioral biases influencing investor trading decisions (Kunjal & Peerbhai, 2021). Psychological evidence indicates that humans are susceptible to biases and heuristics that affect decision-making. Behavioral finance is an integration of finance and psychology, focusing primarily on the boundaries of rationality. Thus, it aims to explain why individuals make irrational financial decisions by combining behavioral and cognitive psychology theories with traditional financial theories (Joffre & Pires, 2020). In their quest to make sound investment decisions, investors often face various cognitive biases that can affect how they evaluate and select investments. Two of the most crucial cognitive biases in this context are availability bias and overconfidence bias. Here are several relevant concepts from behavioral finance theory that can help explain the impact of availability bias and overconfidence bias on investment decision-making:

- *Cognitive Biases in Investment Decisions*

Behavioral finance identifies several cognitive biases that influence investment decision-making. For instance, availability bias is an inclination for individuals to give more weight to easily remembered or readily accessible information. Research by ul Abdin et al. (2022) depicts that all cognitive biases affect risk propensity and investment performance through risk propensity. Moreover, the findings suggest that all cognitive biases have a positive relationship with investment performance. In investment decision-making, availability bias may lead investors to overly focus on recent news or easily accessible events, disregarding more relevant data. Overconfidence bias, referring to an individual's overestimation of their abilities and knowledge, can affect how investors evaluate investment risks and returns.

- *Prospect Theory Effect*

This theory delineates that individuals respond differently to losses and gains. They tend to be more sensitive to losses than equivalent gains. In the context of investment decision-making, investors might exercise greater caution in taking risks to avoid losses, which can be associated with overconfidence bias and the tendency to underestimate risks.

- *Herding Behavior*

Behavioral finance also encompasses the concept of group behavior, wherein individuals tend to follow the majority or market trends without independent analysis. Availability bias can influence this phenomenon as investors often trail trends based on easily accessible news or information.

- *Risk Assessment and Returns*

Behavioral finance emphasizes how cognitive biases, including overconfidence bias, can influence how investors assess the risk and returns of investments. Overconfidence Bias often leads to an overly low perception of risk, which can affect investment decision-making.

In investment decision-making, understanding behavioral finance theory can aid in identifying and addressing cognitive biases such as availability bias and overconfidence bias. Research by Ahmad & Shah (2022) indicates that risk perception fully mediates the relationship between the heuristic of overconfidence on one side and investment decisions and performance on the other.

This literature review integrates these theoretical elements to provide deeper insights into the influence of cognitive biases on investment decision-making and why investors often act irrationally in financial contexts. Through this understanding, investors and financial professionals can strategize investments more wisely and manage associated risks.

### ***Availability Bias***

In the context of investment decision-making, availability bias, first defined by Tversky & Kahneman (1973), stands as a crucial element influencing investor behavior. This bias refers to an individual's tendency to place more weight on easily remembered or readily accessible information. Most investors tend to excessively focus on recent and easily accessible news or events, often disregarding data that might be more relevant in investment assessments, such as a company's fundamental data.

Availability bias leads investors to rely solely on readily available information about stocks when making buying/selling decisions. Unimportant information might be dismissed, and only popular or visible information might be considered in decision-making (Isidore R & Christie, 2019). Investors susceptible to availability bias view news as a guarantee, investing in recently high-performing stocks purchased by the majority in the market, holding onto hopes of price increase despite already being on an upward trend, thus affecting investment decision-making (Shantha Gowri & Ram, 2019).

Research by Shantha Gowri & Ram (2019) reveals a close relationship between availability bias, cognitive dissonance, and rational behavior in the context of investment decision-making. These findings indicate the complexity of the interaction between psychological and cognitive factors that influence how investors evaluate investment options.

However, availability bias can also be influenced by external factors. Research conducted by Salman et al. (2021) highlights that factors like external locus of control can strengthen the influence of availability bias in encouraging investors to take higher risks in investment decision-making.

while availability bias holds significant sway in investment decision-making, findings suggest that the availability variable does not always have the same impact on all types of investors. For instance, research by Loris & Jayanto (2021) revealed that the availability variable does not affect the investment decisions of shariah-compliant investors. This suggests that other factors, such as ethical principles in investments, might moderate the influence of availability bias in this context.

Additionally, research by Sudirman et al. (2023) emphasizes the positive and significant mediating role of risk tolerance in linking the influence of overconfidence bias and availability bias to investment decision-making. This underscores that other factors moderate the impact of availability bias on the final outcomes of investment decision-making.

Apart from availability bias, other factors can also influence investment decisions. Studies conducted by Kurniawati & Sutrisno (2019) demonstrate that under the IPO process, factors such as underwriter reputation, CEO reputation, financial reports, representativeness bias, and availability bias do not affect investment decision-making. This underscores the importance of considering specific contexts and factors in investment decision analysis.

Lastly, the relationship between personality dimensions and behavioral biases also draws attention in the literature. Moradi et al. (2013) found a correlation between personality dimensions and behavioral biases such as conservatism bias and availability bias among investors. This indicates that individual characteristics also play a role in shaping investment preferences and decision-making.

### ***Overconfidence Bias***

In the realm of investment decision-making, overconfidence bias, referring to individuals' overestimation of their abilities and knowledge, has garnered significant attention. Overconfident investors often believe they have better insights than they actually possess, which in turn can impact their investment decision-making.

Research by Kasoga (2021) underscores the dominant influence of overconfidence bias on investment decisions. This study indicates that overconfidence bias exerts a stronger influence compared to other factors such as information availability, representativeness, risk tolerance, self-control, and financial literacy.

However, the intricacies of overconfidence bias become more apparent within changing market contexts. Analysis by X. H. Bao & Li (2020) reveals that the effects of overconfidence bias tend to be more pronounced during market booms or in inefficient market conditions. This study also highlights that overconfidence bias can lead to excessive trading activity, potentially impacting market equilibrium significantly.

Beyond its influence on investment decision-making, overconfidence bias also affects a company's value. Aljughaiman & Chebbi (2022) found that excessive investor confidence can positively impact a company's value. Over time, research by Rajasekharan Ganesh et al. (2023) confirms that the influence of overconfidence bias persists for more than 110 days, indicating the resilience of this bias in its influence on market behavior.

In a more nuanced perspective, Bouteska & Regaieg (2020) highlight how overconfidence bias has different impacts on the performance of industrial and service sector companies, indicating that its effects might depend on specific industry contexts. Over time, private investors are perceived to have lower performance compared to institutional investors, as revealed by Wenning, PhD, DBA (2023). Institutional investors tend to be more resistant to overconfidence bias, primarily because they possess resources and expertise that enable them to invest globally.

Despite all these influences, research by Sudirman et al. (2023) indicates a positive and significant mediating role of risk tolerance in linking the influence of overconfidence bias and availability bias to investment decision-making. This highlights the complex relationship among various factors influencing investment behavior.

Based on the literature review, the following research framework is developed. The research framework focuses on two elements in investment decision-making. The dependent variable in this study is investment decisions, while the independent variables are availability bias and overconfidence bias.

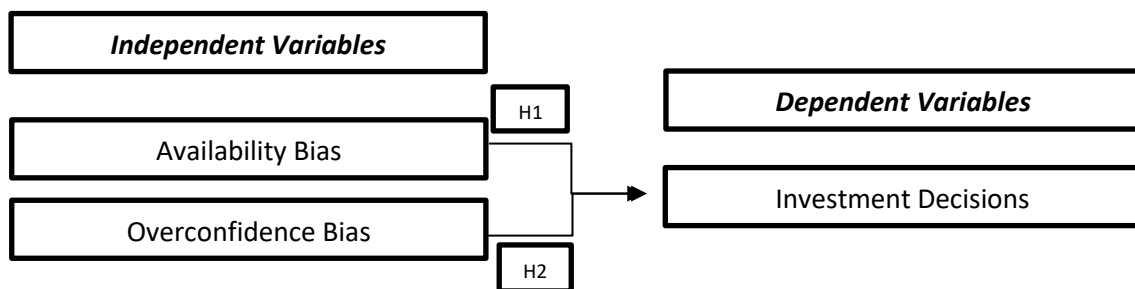


Figure 1. Proposed Research Framework on the Investment Decisions

## METHODOLOGY

In conducting a literature study on the impact of availability bias and overconfidence bias on investment decisions, the methodology utilized is a literature analysis approach. This may also take the form of a review article, which is an academic paper presenting the latest knowledge, including substantive findings as well as theoretical and methodological contributions to

a specific topic (Libório et al., 2023). The research is based on the exploration and analysis of relevant literature in the field of Investment Decision-Making, focusing on the influence of Availability Bias and Overconfidence Bias.

The literature search was conducted through Scencedirect, SagePub, Emerald, and prominent financial journals. Keyword searches such as "Availability Bias," "Overconfidence Bias," "investment decisions," and related variations were employed. Articles published between 2019-2023 were considered, emphasizing the reputation of the articles.

Data analysis of the literature involved a thorough review of theories, findings, and relevant research outcomes. The extracted data were analyzed to identify the impact of availability bias and overconfidence bias on investment decisions, as well as other factors that might moderate or influence the effects of these biases. The analysis also encompassed exploring discrepancies in research findings from various sources and the evolution of perspectives in the literature over time. Data collection techniques in this study proceeded in chronological order with the following steps:

- Identification and collection of literature related to Availability Bias, Overconfidence Bias, and Investment Decision-Making.
- Literature review and exploration of relevant theories in the context of Investment Decision-Making and cognitive biases.
- Literature analysis and identification of key findings regarding the impact of Availability Bias and Overconfidence Bias on Investment Decisions.
- Compilation of the research report including the Literature Review, findings, and implications for further understanding of the issue using Microsoft Excel.

Research tools utilized were Microsoft Excel, Mendeley Desktop, and VOSviewer version 1.6.19. VOSviewer was employed for bibliometric analysis and visualizing literature data, enabling researchers to depict relationships among keywords, authors, journals, and related topics identified in the literature. This facilitated understanding trends, patterns, and interconnections among these elements in the literature. The technical data analysis comprised:

- Gathering required references and importing them into Mendeley, associating keywords with each reference and storing them in RIS file format.
- Importing RIS files into VOSviewer to map bibliometric network visualizations.
- Mapping research topics based on the literature review studies.

Moreover, this research applied qualitative analysis methods to comprehend key findings and implications from the collected literature. Qualitative analysis involved a deep understanding of the theoretical basis of Investment Decision-Making and cognitive biases, as well as identifying similarities and differences in findings from various sources.

The outcomes from the literature analysis and data visualization using VOSviewer will serve as the basis for compiling the research report. This report will encompass a Literature Review summarizing key findings from the analyzed literature and the implications of the analysis to enrich the understanding of the impact of availability bias and overconfidence bias on Investment Decision-Making.

Thus, the methodological approach used in this research involves literature analysis, bibliometric analysis using VOSviewer, and qualitative analysis to uncover crucial insights into the influence of availability bias and overconfidence bias in Investment Decision-Making.

**RESULTS**

***Mapping of Academic Publications on the Influence of Availability Bias and Overconfidence Bias on Investment Decisions.***

There are 29 reputable international journals from various sources within the period between 2019 and 2023. This research utilizes recent reference sources to ensure greater accuracy.

Table 1. Scientific Publication Data on the Effect of Availability Bias and Overconfidence Bias on Investment Decisions.

YEAR OF PUBLICATION	NUMBER OF PUBLICATIONS
2019	4
2020	6
2021	6
2022	6
2023	7

***Bibliometric Mapping of Research on the Impact of Availability Bias and Overconfidence Bias on Investment Decisions.***

Several key considerations should be taken into account when interpreting bibliometric results using VOSviewer. Firstly, ensure that the bibliographic data entered into VOSviewer is accurate and comprehensive. The quality of the data significantly influences bibliometric analysis outcomes. Secondly, pay attention to how bibliographic data is grouped. VOSviewer allows grouping based on keywords, authors, or specific topics. This grouping choice can influence the analysis outcomes. Thirdly, ensure that the time frame and amount of data entered reflect the research questions or analysis objectives. A data set that is too large or too small can affect the interpretation of results. Fourthly, choose bibliometric metrics that align with the research purpose. Some common metrics include citation counts, journal impact factors, among others. Tailor the metrics to the research context. Fifthly, carefully adjust visualization parameters. For instance, determine how nodes and edges are represented. Changes in these parameters can affect the display and interpretation of results. Sixthly, in the case of network analysis, pay attention



to the relationships between nodes. A good understanding of how nodes are interconnected can provide deeper insights. Larger nodes in the diagram represent more highly cited publications and assist in understanding how publications relate to each other.

The collected academic articles from various sources were exported in RIS (Research Information System) format, then input and analyzed using VOSviewer. The result is a visualization network on the co-word map related to the Impact of availability bias and overconfidence bias on Investment Decisions, consisting of 4 clusters and 18 items, as depicted in the following image:

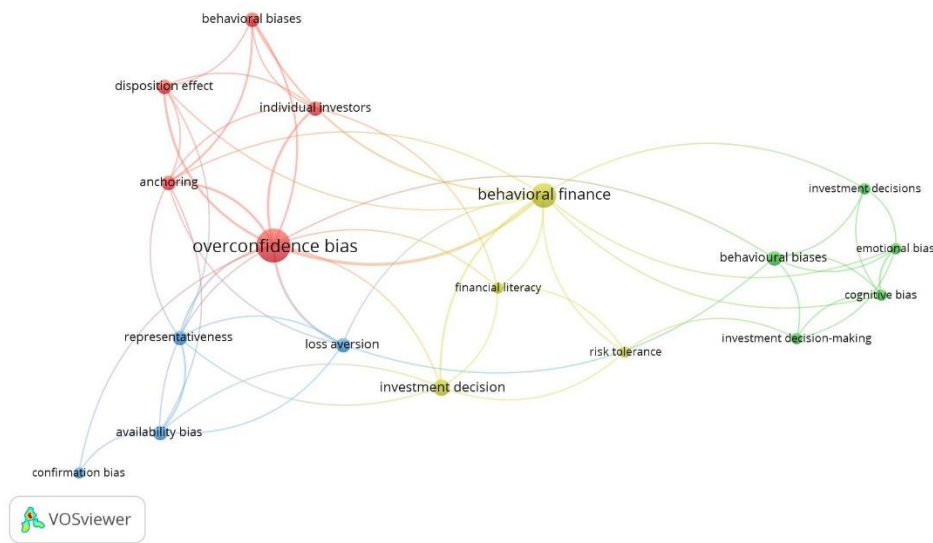


Figure 2. Network Visualization of Research Mapping on the Impact of Availability Bias and Overconfidence Bias on Investment Decision-Making. Source: Data processed using VOS viewer 1.6.19 software.

- Cluster 1, depicted in red, consists of 5 items: Behavioral Biases, disposition effect, individual investors, anchoring, and Overconfidence Bias.
- Cluster 2, shown in green, comprises 5 items: Investment decisions, behavioral biases, emotional bias, cognitive bias, and investment decision-making.
- Cluster 3, represented in blue, includes 4 items: Representativeness, Availability Bias, confirmation bias, and loss aversion.
- Cluster 4, displayed in yellow, encompasses 4 items: Behavioral finance, financial literacy, investment decision, and risk tolerance.

From these clusters, it can be observed that the availability bias item appears to be significantly distant from investment decisions and is relatively small in size. This indicates that this particular item has been less researched,

leaving ample room for further exploration into availability bias. Meanwhile, the overconfidence bias item appears significantly larger, suggesting that overconfidence has been extensively studied. However, due to the methodology employed in conducting a literature review, this finding serves as a starting point for further diverse and accurate investigations on overconfidence bias from various article sources. Conversely, the overlay visualization image below summarizes that the references are taken from the period between 2019 and 2023.

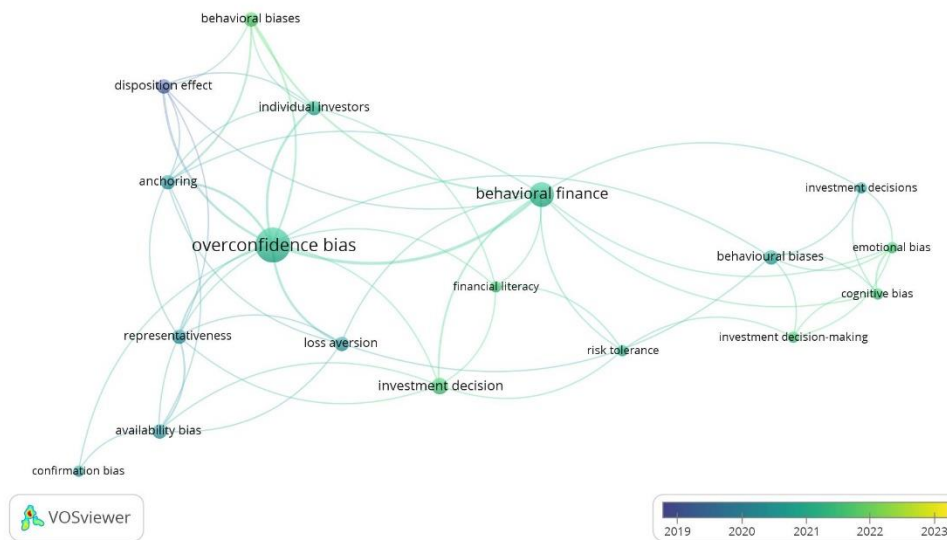


Figure 3. Overlay Visualization of Research Mapping on the Impact of Availability Bias and Overconfidence Bias on Investment Decisions. Source: Data processed using VOSviewer 1.6.19 software.

## DISCUSSION

*The Influence of Availability Bias on Investment Decisions Investors typically rely on firsthand information to make investment decisions.*

Investors are susceptible to various heuristics and biases that can lead to uncertain situations or irrational behavior, impacting their performance. Investor ambiguity arises due to cognitive dissonance between their beliefs and the factual reality (Shantha Gowri & Ram, 2019).

The results of this literature review reveal the significant influence of availability bias on investment decision-making (Febri et al., 2023; Jarrar, 2021). availability bias, which refers to an individual's tendency to give more weight to easily remembered or readily accessible information, has been proven to affect investor behavior in various contexts. Concerning investment decisions, availability bias can cause investors to overly focus on recent news or events that are easily accessible, disregarding more relevant data in investment assessments.

The findings of this research support indications that availability bias may lead investors to make investment decisions that are not always rational (Jain et al., 2020). In such instances, availability bias might prompt investors to disproportionately emphasize information that does not necessarily reflect the actual market conditions or investment prospects. This could lead to suboptimal investment decisions, with overlooked or unaccounted-for risks.

### ***The Influence of Overconfidence Bias on Investment Decisions***

In addition to availability bias, overconfidence bias also significantly affects investment decision-making (Kartini & Nahda, 2021). Overconfidence Bias is a major measure of risk as it reflects individuals considering themselves superior and better than others. Excessive overconfidence bias is relatively common among investors (Jamshidi et al., 2019). In investment finance, individuals often underestimate or overestimate their capacity for logical decision-making (Imran Gulzar, 2023).

Overconfidence bias, referring to individuals' overestimation of their abilities and knowledge, tends to make investors feel more confident in their abilities than they actually are. Research by Schulz (2023) and Adil et al. (2022) indicates that male investors are more prone to Overconfidence Bias in the context of investment decision-making. Overconfidence bias can lead investors to take greater risks than necessary and underestimate the risks present in their portfolios.

Overconfidence Bias has been the subject of many investor studies (Alp Coşkun et al., 2023; Alsabban & Alarfaj, 2020; Amalia Yunia Rahmawati, 2020; Isidore R & Christie, 2019; Koc, 2021; Lee et al., 2022; Madaan & Singh, 2019). Research findings suggest that overconfidence bias, at times, can result in impulsive and overly confident investment decisions. This creates imbalances in investment portfolios, with risks that may not align with investment objectives or investor risk tolerance. These findings illustrate the complexity of overconfidence bias in the context of investment decision-making.

### ***Implications and Relevance***

The findings in this literature review have significant implications for investment decision-making. Investors and financial professionals must understand the influence and interaction of both biases in their efforts to make more rational and prudent investment decisions. Awareness of the potential negative impact of availability bias and overconfidence bias can aid in making more balanced and rational decisions. Furthermore, further research in this field can provide deeper insights into addressing cognitive biases in investment decision-making.

This part allows you to elaborate on your results findings academically. You must not put numbers related to your statistical tests here; instead, you have to explain that numbers here. You have to compile your discussion with academic supports to your study and a good explanation according to the specific area you are investigating.

## CONCLUSIONS AND RECOMMENDATIONS

In order to comprehend investment decision-making more effectively, this literature review has presented crucial findings regarding the influence of availability bias and overconfidence bias. Availability bias, which tends to direct attention to easily accessible information, and overconfidence bias, which results in overestimation in judgments, have been proven to significantly impact investor behavior in the context of investment decisions.

The findings from this literature review assert that both biases can lead to less rational and overly confident investment decisions, with the potential to disrupt the balance within investment portfolios. These biases can also interact with each other, reinforcing negative effects in investment decision-making. Awareness of the influence of these biases is a crucial step in creating wiser and more balanced investment strategies. Addressing these cognitive biases becomes essential in achieving more effective investment decision-making.

This literature review offers a strong foundational understanding of the importance of recognizing and managing these biases in investment decision-making. While providing valuable insights, there is still room for further research in this field. Further exploration of the interaction between availability bias and overconfidence bias, as well as methods to mitigate their negative impacts, will be crucial steps in developing smarter investment strategies in the future.

## FURTHER STUDY

The limitation of this research lies in the relatively limited number of gathered references. Therefore, for future researchers, it is encouraged to explore and include a more extensive range of references to ensure the accuracy and comprehensiveness of the study's outcomes.

## ACKNOWLEDGMENT

Alhamdulillah, all praises be to Allah SWT for guiding, granting me the opportunity, and providing strength throughout the completion of this research article. I would like to extend my heartfelt gratitude to:

- My parents, who have always offered prayers, unwavering support, and boundless love. Thank you for all the sacrifices and encouragement they have provided throughout this research journey.
- My guiding professors who have offered invaluable guidance, direction, and insight. Thank you for their patience and motivational support in mentoring me.
- My siblings, who have been a constant source of moral support and motivation to move forward through every challenge. Thank you for the spirit and belief in me.
- My friends who have been the balancing factor in life. Thank you for the support, motivation, and incredible cooperation.

- Colleagues who have shared knowledge, ideas, and inspiration during this research. Thank you for your contributions and valuable discussions.
- Everyone involved directly or indirectly in this research. Thank you for your cooperation, support, and contributions.

May Allah SWT reward all the kindness and blessings and accept the prayers and well-wishes from each individual who assisted in this research journey. May this article benefit many and become an ongoing charity with continuous rewards.

## REFERENCES

- Adil, M., Singh, Y., & Ansari, M. S. (2022). How financial literacy moderate the association between behaviour biases and investment decision? *Asian Journal of Accounting Research*, 7(1), 17-30. <https://doi.org/10.1108/AJAR-09-2020-0086>
- Ahmad, M., & Shah, S. Z. A. (2022). Overconfidence heuristic-driven bias in investment decision-making and performance: mediating effects of risk perception and moderating effects of financial literacy. *Journal of Economic and Administrative Sciences*, 38(1), 60-90. <https://doi.org/10.1108/jeas-07-2020-0116>
- Aljughaiman, A. A., & Chebbi, K. E. (2022). Do Investor Overconfidence and Loss Aversion Drive Saudi Firm Market Performance? The Moderating Effect of Corporate Governance. *Sustainability (Switzerland)*, 14(16). <https://doi.org/10.3390/su141610072>
- Alp Coşkun, E., Kahyaoglu, H., & Lau, C. K. M. (2023). Which return regime induces overconfidence behavior? Artificial intelligence and a nonlinear approach. *Financial Innovation*, 9(1). <https://doi.org/10.1186/s40854-022-00446-2>
- Alsabban, S., & Alarfaj, O. (2020). an Empirical Analysis of Behavioral Finance in the Saudi Stock Market: Evidence of Overconfidence Behavior. *International Journal of Economics and Financial Issues*, 10(1), 73-86. <https://doi.org/10.32479/ijefi.8920>
- Amalia Yunia Rahmawati. (2020). Demographic Factors and Behavioral Biases of Individual Investors in Nepalese Capital Market Manish. *Journal of Business and Economics*, 6(July), 1-23.
- Bihari, A., Dash, M., Kar, S. K., Muduli, K., Kumar, A., & Luthra, S. (2022). Exploring behavioural bias affecting investment decision-making: a network cluster based conceptual analysis for future research. *International Journal of Industrial Engineering and Operations Management*, 4(1/2), 19-43. <https://doi.org/10.1108/ijieom-08-2022-0033>

- Bouteska, A., & Regaieg, B. (2020). Loss aversion, overconfidence of investors and their impact on market performance evidence from the US stock markets. *Journal of Economics, Finance and Administrative Science*, 25(50), 451–478. <https://doi.org/10.1108/JEFAS-07-2017-0081>
- Febri, W., Sudirman, R., Alif, M. I., & Pratiwi, A. (2023). DOES HEURISTIC BIAS MATTER FOR LONG AND SHORT-TERM INVESTMENT DECISION-MAKING DURING THE COVID-19 PANDEMIC? *Journal of Indonesian Economy and Business*, 38(3), 254–269.
- Imran Gulzar, T. (2023). The Influence of Behavioral Biases on Investment Decisions; Moderating Role of Emotional Stability. *Journal of Development and Social Sciences*, 4(II). [https://doi.org/10.47205/jdss.2023\(4-ii\)61](https://doi.org/10.47205/jdss.2023(4-ii)61)
- Isidore R, R., & Christie, P. (2019). The relationship between the income and behavioural biases. *Journal of Economics, Finance and Administrative Science*, 24(47), 127–144. <https://doi.org/10.1108/JEFAS-10-2018-0111>
- Jain, J., Walia, N., & Gupta, S. (2020). Evaluation of behavioral biases affecting investment decision making of individual equity investors by fuzzy analytic hierarchy process. *Review of Behavioral Finance*, 12(3), 297–314. <https://doi.org/10.1108/RBF-03-2019-0044>
- Jamshidi, N., Ghalibaf Asl, H., & Nejad, M. E. (2019). Studying the Overconfidence and Representativeness Biases of Individual Investors in Tehran Stock Exchange. *Financial Research Journal*, 21(2), 143–164. <https://doi.org/10.22059/frj.2019.266852.1006745>
- Jarrar, A. (2021). making: Evidence from Jordanian banks " The association between cognitive biases and the quality of strategic decision making: Evidence from Jordanian banks. *Banks and Bank Systems*. [https://doi.org/10.21511/bbs.16\(2\).2021.01](https://doi.org/10.21511/bbs.16(2).2021.01)
- Joffre, R., & Pires, A. (2020). A Review of Overconfidence in Behavioral Finance. *International Journal of Science and Business*, 4750, 71–78. <https://doi.org/10.5281/zenodo.3818346>
- Kartini, K., & Nahda, K. (2021). Behavioral Biases on Investment Decision : A Case Study in Indonesia. *Journal of Asian Finance, Economics and Business*, 8(3), 1231–1240. <https://doi.org/10.13106/jafeb.2021.vol8.no3.1231>
- Kasoga, P. S. (2021). Heuristic biases and investment decisions: multiple mediation mechanisms of risk tolerance and financial literacy – a survey at the Tanzania stock market. *Journal of Money and Business*, 1(2), 102–116. <https://doi.org/10.1108/jmb-10-2021-0037>
- Koc, I. O. (2021). Investigating the Demographic Characteristics of Institutional Investors Affecting Representativeness, Conservatism and Overconfidence Biases in their Individual Investments. *Journal of Accounting, Business and Finance Research*, 13(1), 15. <https://doi.org/10.20448/2002.131.15.25>

- Kunjai, D., & Peerbhai, F. (2021). Investor overconfidence in the South African exchange traded fund market. *Cogent Economics and Finance*, 9(1). <https://doi.org/10.1080/23322039.2021.1978190>
- Kurniawati, D., & Sutrisno, S. (2019). the Benchmark of Investor Decisions To Invest in the Initial Public Offering (Ipo). *Riset Akuntansi Dan Keuangan Indonesia*, 4(2), 166–176. <https://doi.org/10.23917/reaksi.v4i2.8543>
- Lee, C. C., Lee, H. Y., Yeh, W. C., & Yu, Z. (2022). the Impacts of Task Complexity, Overconfidence, Confirmation Bias, Customer Influence, and Anchoring on Variations in Real Estate Valuations. *International Journal of Strategic Property Management*, 26(2), 141–155. <https://doi.org/10.3846/ijspm.2022.16704>
- Libório, M. P., Martins, C. A. P. S., Laudaes, S., & Ekel, P. I. (2023). *MethodsX Method of preparing an international and national literature review for novice researchers*. 10(January). <https://doi.org/10.1016/j.mex.2023.102165>
- Loris, R. P., & Jayanto, P. Y. (2021). the Effect of Representativeness, Availability, Anchoring, Risk Perception, and Herding on Investment Decisions Syariah Investors. *Jurnal Akuntansi*, 11(1), 81–92. <https://doi.org/10.33369/j.akuntansi.11.1.81-92>
- Madaan, G., & Singh, S. (2019). An Analysis of Behavioral Biases in Investment Decision-Making. *International Journal of Financial Research*, 10(4), 55–67. <https://doi.org/10.5430/ijfr.v10n4p55>
- Moradi, M., Mostafaei, Z., & Meshki, M. (2013). A study on investors' personality characteristics and behavioral biases: Conservatism bias and Availability Bias in the Tehran Stock Exchange. *Management Science Letters*, 3(4), 1191–1196. <https://doi.org/10.5267/j.msl.2013.03.003>
- Pikulina, E., Renneboog, L., & Tobler, P. N. (2017). Overconfidence and investment: An experimental approach. *Journal of Corporate Finance*, 43, 175–192. <https://doi.org/10.1016/j.jcorpfin.2017.01.002>
- Rajasekharan Ganesh, Sampath Thiyagarajan, Gopala Vasudevan, & G. Naresh. (2023). Investors' Overconfidence in the Stock Market. *Copernican Journal of Finance & Accounting*, 11(4), 107–123. <https://doi.org/10.12775/cjfa.2022.021>
- Salman, M., Khan, B., Khan, S. Z., & Khan, R. U. (2021). The impact of heuristic Availability Bias on investment decision-making: Moderated mediation model. *Business Strategy and Development*, 4(3), 246–257. <https://doi.org/10.1002/bsd2.148>
- Schulz, B. (2023). Biases Affect German Investors. *ACTA VŠFS*, 17, 39–59.

- Shantha Gowri, B., & Ram, V. S. (2019). Does Availability Bias have influence on FMCG investors? An empirical study on cognitive dissonance, rational behaviour and mental accounting bias. *International Journal of Financial Research*, 10(4), 68–83. <https://doi.org/10.5430/ijfr.v10n4p68>
- Sudirman, W. F. R., Winario, M., Priyatno, A. M., & Assyifa, Z. (2023). Risk Tolerance: Heuristic Bias Towards Investment Decision Making. *Jurnal Manajemen Teori Dan Terapan | Journal of Theory and Applied Management*, 16(2), 266–279. <https://doi.org/10.20473/jmtt.v16i2.47471>
- Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases Biases in judgments reveal some heuristics of thinking under uncertainty. *Science*, 185(4157), 1124–1131.
- ul Abdin, S. Z., Qureshi, F., Iqbal, J., & Sultana, S. (2022a). Overconfidence Bias and investment performance: A mediating effect of risk propensity. *Borsa Istanbul Review*, 22(4), 780–793. <https://doi.org/10.1016/j.bir.2022.03.001>
- Wenning, PhD, DBA, P. S. (2023). Overcoming home- and Overconfidence Bias: an effective guideline for private investors based on meta-analysis. *Journal of Economics and Public Finance*, 9(1), p72. <https://doi.org/10.22158/jepf.v9n1p72>
- X. H. Bao, H., & Li, S. H. (2020). Investor Overconfidence and Trading Activity in the Asia Pacific REIT Markets. *Journal of Risk and Financial Management*, 13(10). <https://doi.org/10.3390/jrfm13100232>