

Challenges of Behavioral Finance in Investment Decision Making

¹Papi Halder, ²Prof (Dr.) Ram Milan

¹Research Scholar, Department of Commerce, University of Lucknow, Uttar Pradesh, India

²Head, Department of Commerce, University of Lucknow, Uttar Pradesh, India

DOI: <https://doi.org/10.51244/IJRSI.2024.1105068>

Received: 08 May 2024; Accepted: 20 May 2024; Published: 21 June 2024

ABSTRACT

This study investigates how behavioral challenges can influence the investment decisions of individual investors. In particular, it looks at some behavioral mistakes that might make the field of behavioral finance harder to understand. The Efficient Market Hypothesis is not supported by this study, which looks at how psychological factors affect financial decisions. Behavioral finance doesn't try to replace traditional theories of finance. Instead, it gives us a different way to think about why markets don't work well and why investors act in crazy ways. Overconfidence and emotion bias can induce investors to overestimate their skills and knowledge, ignoring market volatility. Herd behavior and framing bias can also skew investors' perspectives by influencing how they receive information, causing them to overlook or underestimate its importance and trustworthiness or make risky decisions. Because of this, it is essential for investors to regularly look into and understand the reasons and effects of behavioral problems, as well as come up with ways to reduce or get rid of them. The study wants to make investors, financial experts, teachers, and lawmakers more aware of the problems and complexities of behavioral finance.

Keywords: Behavioral challenges, investment decision, overconfidence, cognitive biases, emotions, herd behavior, prospect theory.

INTRODUCTION

Investors need to carefully consider their investment goals, risk tolerance, expected returns, current market conditions, and any other relevant factors to make an investment choice (Bihari et al., 2022). Behavioral finance challenges are regular and predictable mistakes that affect investors when they interpret information and make investment decisions. It can influence people's investment choices, leading them to make decisions that do not align with their best interests or objectives. Behavioral finance analyses the influence of psychology on the behavior of market players and the subsequent market movements, with a focus on the decision-making process of individual investors. (Barber & Odean, 2001) showed that investors make irrational financial decisions and focused on the behavioral biases that influence individual investors' decisions while choosing equities. Sometimes, it may lead to behavioral deviation, which reflects investors' irrational beliefs, emotions, preferences and habits (Kumar & Goyal, 2015). Conversely, traditional finance theory is based on the efficient market hypothesis (Fama, 1970), the modern portfolio theory (Markowitz, 1952), the M&M theorem (Modigliani and Miller, 1958) and the arbitrage pricing theory (Stephen Ross, 1976). These theories all assume that investors act rationally in order to maximize their profits. Investors often depend on cognitive biases and emotional elements rather than solely relying on rational and predictable reactions, as proposed by quantitative models. The behavioral finance paradigm points out these behaviors as causes of market anomalies and inefficiencies. In addition, it provides forecasts regarding market fluctuations. The hypothesis proposing subjective, irrational behavior can be categorized into two

principal theories: Festinger's theory of cognitive bias 1957 and Kahneman and Tversky's prospect theory, 1979. Cognitive bias theory suggests that an individual's thoughts and perceptions influence their behavior, whereas prospect theory describes how investors assess gains and losses. Individuals react dissimilarly to profits and losses. Specifically, investors are typically more emotionally affected by losses than by gains (Heukelom, 2007). The behavior of investors investigates the sociological and psychological factors that influence decision-making. Micro-level behavioral finance and macro-level behavioural finance are the two principal subfields of the discipline. The function of financial markets and the "anomalies" that challenge the Efficient Market Hypothesis are of particular interest at the macro level. Conversely, the micro level investigates the various biases that influence the investment decisions of individuals.

Behavioral Finance offers excellent insights into understanding investor behavior, but it also poses many obstacles when it comes to making investing decisions. These issues come from the complexity of human psychology and behavior, which typically vary from the logical and foreseeable assumptions of traditional financial theory. Essential elements to consider are the impact of cognitive biases, emotional influences, and herd behavior, which can result in irrational investment decisions, market inefficiencies, and heightened volatility. Numerous issues arise from behavioral finance while making investing decisions. First, investors often have too much confidence, thinking that they can beat the market because they know more or have better instincts. This kind of overconfidence can cause people to do bad things with their money (Porto & Xiao, 2016). Second, the "heuristics and biases" initiative started by Berthet, V. in 2021 led to many studies into how these mental shortcuts might make it harder to make decisions in areas like management (Maule & Hodgkinson, 2003) and finance (Baker & Nofsinger, 2002). Comparing behavioral insights with quantitative models and using them correctly in investment plans can also be challenging. Because of this, investors who want to make successful investment choices find it very hard to understand the details of behavioral finance.

Gaining a deep comprehension of the complexities of behavioral finance is essential for making investing decisions that are more precise and impactful. Nevertheless, there needs to be more clarity between the theoretical knowledge derived from behavioral finance and its actual implementation within the financial business. Some investors and financial experts may need a comprehensive understanding of the principles and findings of behavioral finance. Although many individuals need more financial literacy, only a tiny percentage actively seek guidance from professionals or financial consultants when making decisions about saving and investing (Lusardi, 2008). Despite investors' awareness of behavioral biases, effectively implementing this knowledge into actionable strategies can take time and effort.

People from many different fields are interested in studying human behavior because it is complicated and varied (Box-Steffensmeier et al., 2022). Behavior is affected by many mental, social, and cognitive factors. behavioral biases and investment habits can be different in different cultures and regions because of differences in economic situations, cultural norms, and rules (Statman, 2019). The investment community must develop educational programmes, specialized tools, and data sources, as well as collaborate with behavioral finance scholars and practitioners to close these gaps.

The study will reveal psychological and cognitive elements that influence investment decisions, expanding investor behavior knowledge beyond traditional finance theories. The study can assist investors and financial professionals in creating more robust investing strategies that account for behavioral biases and market anomalies by identifying and addressing behavioral finance issues. This study aims to clarify behavioral finance's investment decision-making issues. This research aims to bridge theory and practice, influence policy conversations, and give investors, financial professionals, and politicians relevant insights.

LITERATURE REVIEW

There are large collections of biases available today, but they can't cover the breadth of decades of careful study in both theory and experimentation. There isn't a consistent approach that practitioners can use with

these lists to deal with problems that come up in the real world. Many biases cross or contradict each other, which makes behavioral finance look either too simple or too unreliable.

Overconfidence is one of the most examined behavioral biases. Overconfidence bias refers to the inclination to overrate one's own knowledge and capabilities in a particular field. Overconfident investors trade more frequently, resulting in higher transaction costs and decreased returns (Barber & Odean, 2001). Similarly, Daniel et al. (1998) demonstrated that investors may overestimate their ability to select winning equities due to overconfidence, which ultimately results in poor portfolio performance. Graham et al. (2009) discovered that while more competent investors are less vulnerable to home bias, they trade on average more frequently. In comparison to their counterparts, overconfident managers are less reliant on external funding and issue less equity when they do pursue external capital (Malmendier et al., 2011).

On the contrary, in the view of Statman et al. (2006), overconfident investors can expect high expected trading volume. (Hoffmann et al., 2010), in their study of brokerage customers in the Netherlands, discovered that investors who employ fundamental analysis tend to take more risks, engage in high trading activity, and exhibit overconfidence.

The presence of underreaction and overreaction in the London Stock Exchange has been attributed to cognitive biases, including representativeness and conservatism biases (Kariofyllas et al., 2017). Due to our inability to interpret information impartially, cognitive bias causes irrational behavior. Kahneman and Tversky (1979) established a paradigm in this field by illustrating that people tend to choose information that supports their previous opinions (confirmation bias) and develop the belief that they could have predicted an event in advance (hindsight bias). Due to these biases, investors may dismiss inconsistent information, making it more challenging to make impartial decisions and assess data. Investor decisions are occasionally illogical due to cognitive, environmental, and personal aspects (Ishfaq et al., 2020). The theory of planned behavior by Ajzen (1985) states that cognitive biases influence investor behavior. Extraversion affects the relationship between heuristic bias, risk perception, cognitive biases, and investor misjudgment (Holzmeister et al., 2020).

An emotional bias is a thought or decision distortion caused by emotions. The influence of emotions, specifically anxiety and greed, on investment decision-making is significant. Fear, according to Statman (2004), can motivate investors to divest assets during periods of market decline, thereby preceding potential recoveries. On the other hand, avarice can result in exorbitant risk-taking and speculative conduct. According to Shiller (2000), investor sentiment can be significantly impacted by narratives and stories. He posits that emotional reactions to market news and events may result in herd behavior and market bubbles. The behaviour of individuals can be subtly impacted by previous emotional encounters (Stocco & Fum, 2008).

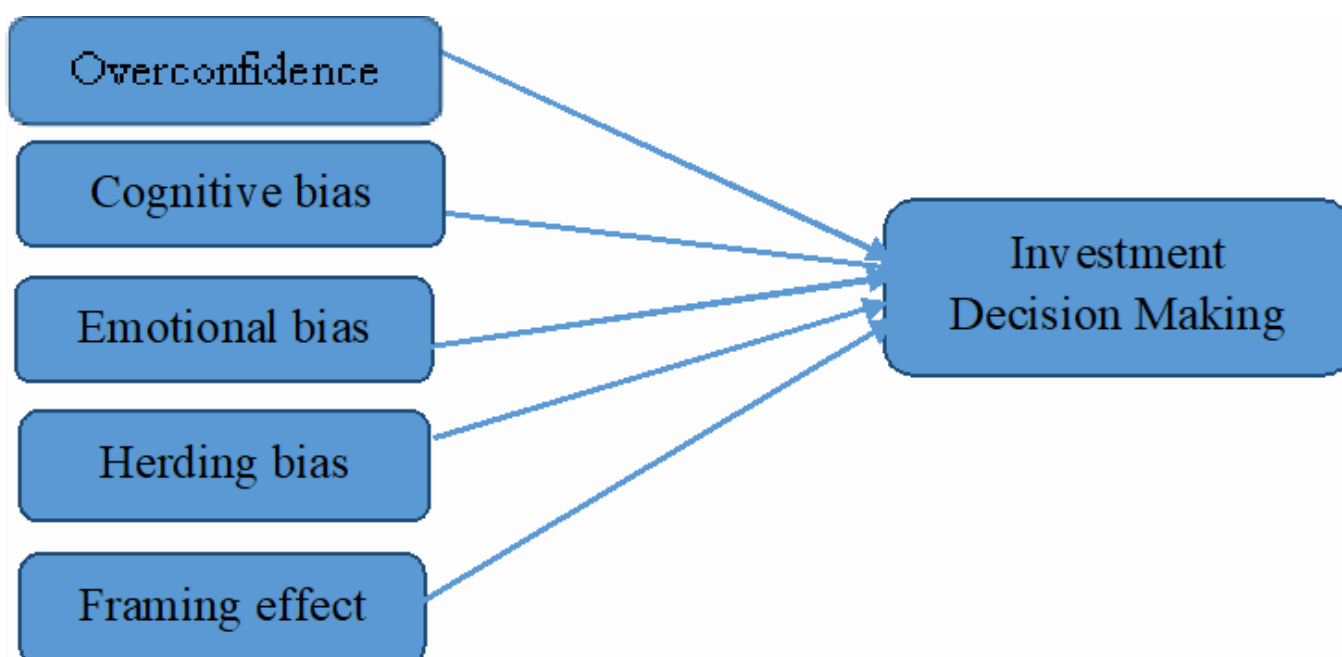
Keynes came up with the idea of herding because he thought it was natural to copy and follow the crowd in an uncertain setting (Keynes 1930). Herd behavior is an additional obstacle that is emphasized in the literature on behavioral finance. Particularly in uncertain or volatile markets, investors frequently follow herd behavior (Bikhchandani & Sharma, 2000), which can result in momentum trading and asset price increases. As witnessed during financial crises, this collective behavior can magnify market fluctuations and increase systemic risks. This conduct may result in significant volatility and unpredictability in the stock market (Javed et al., 2015). Herd behavior can also be seen in the commodities market, as traders make changes to their holdings without considering economic fundamentals. This behavior raises questions about the validity of the competitive pricing model (Pindyck & Rotemberg, 1990). Hong Teoh and Hirshleifer (2003) analyzed the reasons why parties engage in herding or cascade behaviors, as well as the incentives for parties to protect against or take advantage of such behaviors by others.

Framing effects, introduced by Tversky and Kahneman (1981), showed that information presentation can

strongly influence decision-making. According to the framing effect, the way in which an issue is framed has a significant impact on the decisions of individuals. Investors can make poor decisions and respond inconsistently depending on how information is provided. Negative frames and high expectations make harmful decisions (Mishra et al., 2012). Individual participants were provided with the influence of framing on risk-related decision-making as profits or losses (Paese et al., 1993).

Kahneman and Tversky (1979) developed Prospect Theory to address these behavioral concerns. This theory encompasses several mental states that influence the investment process. Different mental perspectives lead to risk-seeking behavior when facing potential losses while being risk-averse when there is a chance of gain. This phenomenon is known as loss aversion (Konstantinidis et al., 2012). Prospect theory can describe investors' emotions and their tendency towards irrational decision-making (Wan, 2018).

Here, we have taken into account the following biases that may influence the investment decision-making process:



METHODOLOGY

The paper employs a literature review as its research method to facilitate the discussion. We searched for research articles using the Web of Science (WoS) and Scopus databases, which are popular among scholars (Gusenbauer, 2019). We conduct advanced searches using specific keywords to locate the relevant literature. The keywords included in the literature search are behavioral challenges, investment decisions, overconfidence, cognitive biases, emotions, herd behavior, and prospect theory.

DISCUSSION

Eugene F Fama, a vital proponent of the Efficient Market Hypothesis, strongly criticises behavioral finance theories, arguing that they use cognitive biases to explain financial behavior in specific contexts. Behavioral finance challenges the validity of the efficient market hypothesis, yet Rubinstein (2001) halted to reflect on the numerous factors that led to the widespread acceptance of this hypothesis within mainstream finance, particularly in academic spheres. The proxies for behavioral bias indicate that behavioral issues influence many investors' choices of mutual funds, impacting performance negatively (Bailey et al., 2011). The financial market possesses several attributes that strengthen market efficiency against arguments suggesting

that the irrationality of individual investors dictates prices. Conventional finance research maintains that it would be premature to dismiss the Efficient Market Hypothesis (EMH), and this viewpoint remains a compelling theory within the market (Nair & Antony, 2015). To combat the overconfidence bias in finance and investing, investors can employ various strategies. Investors should gather and contrast information from various perspectives and sources rather than solely depending on one's expertise or experience (Schwab, 2021). When making financial decisions, individuals need to consider the impact of social norms, peer pressure, and expert advice as they shape their perspectives (Baker & Nofsinger, 2002). Consulting professional advice or seeking feedback can help prevent cognitive pitfalls or emotional turmoil. Furthermore, receiving compulsory financial education or guidance can serve as a means to diminish overconfidence bias (Porto & Xiao, 2016; Xia et al., 2014).

CONCLUSION

This research examines the challenges and issues associated with investment decision-making in behavioral finance. Investors may exhibit bias and irrationality as a result of psychological factors. Prospect theory, cognitive biases, emotional biases, herd behavior, and framing effects are all factors that can result in irrational investment decisions. Governments, financial professionals, and investors must comprehend these behavioral issues to develop strategies and measures that mitigate their impact and enhance the decision-making process in the financial markets. Further research is needed to investigate these behavioral phenomena and their implications for investment practices, risk management, and market stability. However, we must approach our findings carefully, given certain limitations. Collecting and comparing information from diverse viewpoints and sources is recommended rather than relying solely on limited information. Investors should assess and appraise their capabilities and knowledge unbiasedly and evaluate the risks and opportunities inherent in the market. Recognising and eliminating behavioral biases helps investors make smart, long-term financial decisions. This introduction is crucial for a deeper understanding of behavioral finance's issues and implications in investing decision-making.

REFERENCES

1. Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In *Action control: From cognition to behavior* (pp. 11-39). Berlin, Heidelberg: Springer Berlin Heidelberg.
2. Berthet, V. (2021). The measurement of individual differences in cognitive biases: A review and improvement. *Frontiers in psychology, 12*, 630177. <https://doi.org/10.3389/fpsyg.2021.630177>
3. Bailey, W., Kumar, A., & Ng, D. (2011). Behavioral biases of mutual fund investors. *Journal of financial economics, 102*(1), 1-27. <https://doi.org/10.1016/j.jfineco.2011.05.002>
4. Baker, H. K., & Nofsinger, J. R. (2002). Psychological biases of investors. *Financial services review, 11*(2), 97-116.
5. 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>
6. Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *The quarterly journal of economics, 116*(1), 261-292. <https://doi.org/10.1162/003355301556400>
7. Box-Steffensmeier, J. M., Burgess, J., Corbetta, M., Crawford, K., Duflo, E., Fogarty, L., ... & Wagner, C. (2022). The future of human behaviour research. *Nature Human Behaviour, 6*(1), 15-24.
8. Bikhchandani, S., & Sharma, S. (2000). Herd behavior in financial markets. *IMF Staff papers, 47*(3), 279-310. <https://doi.org/10.2307/3867650>
9. Daniel, K., Hirshleifer, D., & Subrahmanyam, A. (1998). Investor psychology and security market under-and overreactions. *the Journal of Finance, 53*(6), 1839-1885. <https://doi.org/10.1111/0022->

1082.00077

10. Davies, G. B., & Brooks, P. (2017). Practical Challenges of Implementing Behavioral Finance: Reflections from the Field. *Financial Behavior: Players, Services, Products, and Markets*, 542-560.
11. Graham, J. R., Harvey, C. R., & Huang, H. (2009). Investor competence, trading frequency, and home bias. *Management Science*, 55(7), 1094-1106. <https://doi.org/10.1287/mnsc.1090.1009>
12. Gusenbauer, M. (2019). Google Scholar to overshadow them all? Comparing the sizes of 12 academic search engines and bibliographic databases. *Scientometrics*, 118(1), 177-214.
13. Hoffmann, A. O., Shefrin, H., & Pennings, J. M. (2010). Behavioral portfolio analysis of individual investors. Available at SSRN 1629786. <http://dx.doi.org/10.2139/ssrn.1629786>
14. Heukelom, F. (2007). Kahneman and Tversky and the origin of behavioral economics. <http://dx.doi.org/10.2139/ssrn.956887>
15. Holzmeister, F., Huber, J., Kirchler, M., Lindner, F., Weitzel, U., & Zeisberger, S. (2020). What drives risk perception? A global survey with financial professionals and laypeople. *Management Science*, 66(9), 3977-4002. <https://doi.org/10.1287/mnsc.2019.3526>
16. Hirshleifer, D., & Hong Teoh, S. (2003). Herd behaviour and cascading in capital markets: A review and synthesis. *European Financial Management*, 9(1), 25-66. <https://doi.org/10.1111/1468-036X.00207>
17. Ishfaq, M., Nazir, M. S., Qamar, M. A. J., & Usman, M. (2020). Cognitive bias and the extraversion personality shaping the behavior of investors. *Frontiers in psychology*, 11, 556506. <https://doi.org/10.3389/fpsyg.2020.556506>
18. Kumar, S., & Goyal, N. (2015). Behavioural biases in investment decision making—a systematic literature review. *Qualitative Research in financial markets*, 7(1), 88-108. <https://doi.org/10.1108/QRFM-07-2014-0022>
19. Keynes, J. M. (1930). *Treatise on money*.
20. Kariofyllas, S., Philippas, D., & Siriopoulos, C. (2017). Cognitive biases in investors' behaviour under stress: Evidence from the London Stock Exchange. *International Review of Financial Analysis*, 54, 54-62. <https://doi.org/10.1016/j.irfa.2017.09.003>
21. Konstantinidis, A., Katarachia, A., Borovas, G., & Voutsas, M. E. (2012). From efficient market hypothesis to behavioural finance: Can behavioural finance be the new dominant model for investing. *Scientific Bulletin—Economic Sciences*, 11(2), 16-26.
22. Lusardi, A. (2008). *Household saving behavior: The role of financial literacy, information, and financial education programs* (No. w13824). National Bureau of Economic Research. DOI 10.3386/w13824
23. Malmendier, U., Tate, G., & Yan, J. (2011). Overconfidence and early-life experiences: the effect of managerial traits on corporate financial policies. *The Journal of finance*, 66(5), 1687-1733. <https://doi.org/10.1111/j.1540-6261.2011.01685.x>
24. Mishra, S., Gregson, M., & Lalumiere, M. L. (2012). Framing effects and risk-sensitive decision making. *British Journal of Psychology*, 103(1), 83-97. <https://doi.org/10.1111/j.2044-8295.2011.02047.x>
25. Maule, A. J., & Hodgkinson, G. P. (2003). Re-appraising managers' perceptual errors: a behavioural decision-making perspective. *British Journal of Management*, 14(1), 33-37. <https://doi.org/10.1111/1467-8551.1401007>
26. Novianggie, V., & Asandimitra, N. (2019). The influence of behavioral bias, cognitive bias, and emotional bias on investment decision for college students with financial literacy as the moderating variable. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 9(2), 92-107. <http://dx.doi.org/10.6007/IJARAFMS/v9-i2/6044>
27. Nair, V. R., & Antony, A. (2015). Evolutions and challenges of behavioral finance. *International Journal of Science and Research (IJSR)*, 4(3), 1055-1059.
28. Pindyck, R. S., & Rotemberg, J. J. (1990). Do stock prices move together too much?.
29. Kahneman, D., & Tversky, A. (1981). *The simulation heuristic* (pp. pp-201). National Technical Information Service. DOI 10.3386/w3324

30. Paese, P. W., Bieser, M., & Tubbs, M. E. (1993). Framing effects and choice shifts in group decision making. *Organizational Behavior and Human Decision Processes*, 56(1), 149-165. <https://doi.org/10.1006/obhd.1993.1049>
31. Porto, N., & Xiao, J. J. (2016). Financial literacy overconfidence and financial advice seeking. *Porto, N., & Xiao, JJ (2016). Financial Literacy Overconfidence and Financial Advice Seeking. Journal of Financial Service Professionals*, 70(4).
32. Stocco, A., & Fum, D. (2008). Implicit emotional biases in decision making: The case of the Iowa Gambling Task. *Brain and cognition*, 66(3), 253-259. <https://doi.org/10.1016/j.bandc.2007.09.002>
33. Statman, M. (2004). What do investors want?. Available at SSRN 603683. <http://dx.doi.org/10.2139/ssrn.603683>
34. Statman, M. (2019). *Behavioral finance: The second generation*. CFA Institute Research Foundation.
35. Schwab, K. (2021). *Stakeholder capitalism: A global economy that works for progress, people and planet*. John Wiley & Sons.
36. Shiller, R. J. (2000). Measuring bubble expectations and investor confidence. *The Journal of Psychology and Financial Markets*, 1(1), 49-60. https://doi.org/10.1207/S15327760JPFM0101_05
37. Wan, W. (2018). Prospect theory and investment decision behavior: A review. In *2018 International Conference on Education Technology and Social Sciences. Etsocs* (pp. 114-118).
38. Rubinstein, M. (2001). Rational markets: yes or no? The affirmative case. *Financial Analysts Journal*, 57(3), 15-29.
39. Xia, T., Wang, Z., & Li, K. (2014). Financial literacy overconfidence and stock market participation. *Social indicators research*, 119, 1233-1245.