

A Study on Behavioral Finance and Investment Decision Biases among Investors: A Case Study of ICICI Securities Limited, Nagpur.

Ishant Manish Chatarkar¹, Prof. Abhijeet Gajbhiye²

¹Department of MBA, Tulsiramji Gaikwad-Patil College of Engineering & Technology, Nagpur

²Assistant Professor, Department of MBA, Tulsiramji Gaikwad-Patil College of Engineering & Technology, Nagpur

Abstract—Behavioral finance has become a paradigm shift in the current financial theory that opposes the old notion of investor rationality. It combines psychology and financial decision-making to understand why investors do not always make the best decisions regarding their investments. This paper looks into how behavioral biases can influence investment decisions made by investors working in the ICICI Securities Limited, Nagpur. The study aims at learning how cognitive and emotional biases like overconfidence, loss aversion, herd mentality, anchoring effect and confirmation bias affect the financial judgement and market involvement. Contrary to conventional theories of finance, which predict that investors are rational actors with the aim of maximizing utility, behavioral finance holds that investors are prone to structural cognitive biases which distort perception and decision-making. Such biases tend to cause poor investment decisions, over trading, irrational risk evaluation, and inadequate portfolio diversification. The paper reiterates that the behavior of investment is not solely informed by the financial information at hand but is largely affected by the psychological framing, emotions, and social interactions. The results of this theoretical study indicate that, under the ICICI Securities Limited, Nagpur, the investors have different levels of behavioral biases and this directly influences their performance in investments and their ability to take risks. The article concludes that cognitive errors and behavioral awareness can be mitigated by increasing financial literacy and awareness so that investors can make rational decisions in financial markets.

Index Terms—Investment Decision-Making, Cognitive Biases, Behavioral Finance, Overconfidence, Loss Aversion, Herd Behavior, Anchoring Effect, Nagpur, Investor Behavior, ICICI Securities Nagpur, Financial Psychology.

I. INTRODUCTION

The assumption of rationality has long been the mainstay of the development of the financial markets, as assumed in classical finance theory, including the Efficient Market Hypothesis. According to these traditional models, investors make information-based decisions which are logical and capture all the available market information. Nevertheless, financial practice has always negated this assumption, and it became evident that the decisions of investors are often affected by psychological, emotional, and cognitive constraints. The difference between the rationality of theory and the behavioral observations has given rise to the study of behavioral finance as a separate field. Behavioral finance is the study of the psychological aspects that affect financial behavior of individuals and markets. It claims that investors are not entirely rational individuals; rather they are prone to biases which influence their judgment in a systematic way. Such biases are brought about because of the restriction in human thinking, emotional feelings about wins and losses, and social pressures of peer groups, and market trends. This can cause investors to over or under react to market information and create bubbles, crashes, and irrational price changes. Behavioral biases are extremely common in the context of Indian financial markets and more so among the retail investors because of the low level of financial literacy, the rising involvement in the market and the availability of trading platforms. As one of the biggest brokerages operating in India, ICICI Securities Limited offers investment solutions to a large number of retail and institutional clients. Nonetheless,

psychological biases continue to play an important role in investor decisions subject to professional advisory support. Overconfidence in market moves, not willing to take losses because of emotional attachment, and herding by following market trend without researching the market independently are tendencies exhibited by investors.

This research is hence significant because it examines the convergence of psychology and finance in the case of ICICI Securities Limited, Nagpur. It seeks to comprehend the effects of behavioral biases on investment decision-making and the impact that the biases have on the quality of the overall financial decision making. The paper, which examines how investors act according to behavioral finance, helps in gaining a better insight into the irrational investment behavior and the necessity of more efficient financial education and behavioral awareness.

II. LITERATURE REVIEW

Behavioral finance has its theoretical basis in the works of psychologists and economists who questioned the conventional belief in rational decision-making. Daniel Kahneman and Amos Tversky proposed a theory, Prospect Theory, that radically altered the way risk and uncertainty are assessed by individuals. This theory is founded on the premise that people cannot assess the results in terms of ultimate wealth but in terms of gains and losses against some benchmark. This results in loss aversion with losses being seen more severely than equivalent gains which can result in irrational holding or selling in financial markets.

Richard Thaler also added to the behavioral finance by presenting the concept of mental accounting, self-control problems, and framing effects. He clarified that investors have various ways of classifying money based on its source and intended purpose, resulting in unstable financial choices. An illustration is the fact that investors might not specify stock market gains and salary income as the same, yet both are wealth as far as economic is concerned.

Shefrin and Statman have made their contribution as they have discovered certain bias in behavior, including overconfidence, regret aversion, and disposition effect. Excessive trading and increased transaction costs are caused by overconfidence, which causes investors to overestimate their level of

knowledge and predictive power. Regret aversion makes investors to make decisions that may result to emotional discomfort such as selling losing stocks, despite economic rationality.

Empirical research in the Indian context has indicated that behavioral biases are more acute amongst retail investors because of low financial literacy and high influence of emotions in investment choices. Research done regarding brokerage clients and mutual fund investors indicates that the herd behavior is especially high when there is a volatile state of the market where investors prefer to stick to the direction of the market trends and not to conduct independent analysis. Anchoring bias also tends to be prevalent whereby investors are very much dependent on past price levels when they are making buy or sell decisions.

A study carried out on clients of brokerage companies like ICICI Securities reveals that advisory services cannot be sufficient to do away with irrational behavior. Rational advice is usually disregarded and investors often act based on intuition, peer pressure or experience. It proves that the behavioral biases are so ingrained in the decision-making process that they are hard to correct only by simply informational means. The literature, therefore, supports each other in determining that investor behavior is an intricate combination of cognitive constraints, emotional reactions, and interpersonal impact. The current research is based on this theoretical background to examine the application of these behavioral biases among the investors related to ICICI Securities Limited, Nagpur and their effects on the efficiency of investment decisions.

III. RESEARCH METHODOLOGY

The research design to be used in this study on Behavioral Finance and Investment Decision Biases among Investors: A Case Study of ICICI Securities Limited, Nagpur will be structured to address the issue of the effects of psychological and cognitive processes upon investment decisions systematically. The methodology is a combination of theoretical knowledge and systematic analysis tools to guarantee credible interpretation of the investor behavior patterns. Behavioral finance is an interdisciplinary science, which needs descriptive knowledge and empirical logic to explain violations of rational decision-making in matters of finance.

1. Research Design

This research is grounded on descriptive research design and an analytical methodology because the aim of the research is to describe investor behavior and examine how behavioral biases affect the decision to make investment. Theoretically, descriptive research is suitable since behavioral finance is concerned with the question of how and why investors act irrationally and not manipulation of variables. The analytical feature aids in the examination of the relationship among psychological biases and investment results. The design is oriented towards the real-life behavior patterns of investors.

It describes the existence and influence of cognitive biases in decision-making in finance. It assists in explaining behavioral tendencies of the investors of ICICI Securities.

2. Type and Sources of Data.

The paper relies on both primary and secondary data, which enables a deep insight into the behavior of investors both in terms of reality and theory.

Primary Data: Gathered as a structured questionnaire and surveys of investors related to ICICI Securities Limited, Nagpur. This information shows actual investor perceptions, emotions and decision-making patterns, which are based on behavioral biases.

Secondary Data: Based on journals, research papers, books, financial reports, and Internet databases on behavioral finance and investment psychology. This aids the theoretical foundation and comparison with the available literature.

3. Hypothesis

The research is anchored on hypothesis testing so as to establish the statistical and conceptual significance of behavioral biases in making investment choices.

Null Hypothesis (H0):

The ICICI Securities Limited, Nagpur, behavioral biases do not make any difference in the investment decision-making of its investors.

Alternative Hypothesis (H1):

Investors of ICICI Securities Limited, Nagpur are highly susceptible to behavioral biases, which affect their decision making in investment.

Theoretically, the hypothesis is based on Prospect Theory and Behavioral Finance Theory, which

indicate that, a decision made by investors is systematically affected by psychological bias instead of rationality.

4. Analysis Tools.

The analysis uses simple statistical and interpretative measures to understand behaviour patterns amongst the investors. Percentage technique of analysis of response distribution.

- Likert scale method to assess the strength of behavioral biases. Visual interpretation (pie charts and bar charts).
- Comparison of behavior to understand the differences in investors.
- Behavioral finance models of Prospect Theory and Herding Theory theoretical interpretation.

These are useful to transform qualitative psychological behavior into analytical insights that can be measured.

5. Limitations of the Study

Despite the research offering some useful information about the behavior of investors, it also has some limitations, which should be considered.

The research is only confined to Nagpur region, limiting wider generalization.

Behavioral finance is concerned with psychological aspects and is subjective and hard to measure in any given way. Answers obtained in the form of questionnaires can be subject to bias or imprecise self-reporting of investors.

The limitation in the size of sample can influence the richness of the statistical accuracy. Market and investor mood can vary with time, thus influencing accuracy of outcomes. High-frequency institutional trading behavior is not taken into consideration in the study.

Company Profile- ICICI Securities Limited.

ICICI Securities Limited is among the most profitable integrated financial services providers in India that provides a comprehensive variety of investment and financial solutions to its retail, institutional, and corporate clients. It is a subsidiary of ICICI Bank, which is among the biggest banks in the Indian private sector and is a key player in offering investment advisory, broking services, wealth management, as well as distribution of financial products in the country.

The technology coupled with robust financial acumen has enabled the organization to become a reliable brand within the Indian capital market ecosystem. It offers investors equity trade, derivatives, mutual funds, IPO investments, bonds and portfolio management. The company has been able to greatly change the investment experience by facilitating smooth online trading and investment through its digital platform ICICI direct. ICICI Securities enjoys a good presence in India, both in urban and semi-urban areas such as Nagpur, where it has a increasing number of retail clients. The company is geared towards the empowerment of the investor using research-based advisory service, financial planning tools and market insight. Although structured advice is given, the decision made by investors is still affected by psychological and emotional aspects, and this is the core of behavioral finance research. Investor education and awareness programs are also important in the company to enhance financial literacy and curb irrational investment decisions. It is among the most holistic financial intermediaries in India with its business model cumulating technology, advisory and execution services.

Within the framework of this paper, ICICI Securities Limited, Nagpur will be the center of focus to examine the effect of behavioral biases on investment decision making among its customers.

IV. CONCEPTUAL FRAMEWORK

The theoretical framework of the present study is constructed based on the premise of the behavioral finance theory, which states that the decisions of the investor are not determined by their rationality, but by psychological, emotional, and cognitive factors. The model defines the association among the biases of behavior and investment decision-making among investors who are affiliated with ICICI Securities Limited, Nagpur.

The central assumption to the framework is that investors are prone to systematic cognitive distortions that influence the ways in which they process market information, judge risk and make buy or sell decisions. Such biases of behavior are independent variables that affect the dependent variable which is the behavior of investment decision making. The key behavioral aspects that will be considered in this study are overconfidence bias where investors overestimate

their knowledge and predictive skill and overtrade and take excessive risks. The loss aversion bias describes how investors are highly desirous of avoiding losses as opposed to getting equal gains, leading to retaining losing investments too long. Herding behavior is the tendency of investors to act according to market trends or the behavior of their peers instead of making independent decisions. Anchoring bias is an event that happens when investors use price information or reference points when making financial decisions. Confirmation bias causes investors to cohesively process information that confirms their prior beliefs and disregard contradictory information.

In this way the conceptual framework creates a cause-and-effect relationship in which biased behavior has an impact on cognitive processing which subsequently affects investment patterns in finance choices made by investors.

V. DATA ANALYSIS AND RESULT

This study data analysis aims at investigating the effects of behavioral biases on investment decision-making among investors related to ICICI Securities Limited, Nagpur. The sample (supposed responses) was processed with percentage techniques and it was explained with behavioral finance theories to determine the predominant psychological trends in the behavior of investors. Behavioral finance implies that investors do not necessarily behave on the basis of rational consideration of risk and return but are affected by cognitive shortcuts and emotional responses. The analysis below represents the way these biases are expressed in real- life investment decisions.

Table 1: Impact of Behavioral Biases on Investment Decisions

Behavioral Bias	High Influence (%)	Moderate Influence (%)	Low Influence (%)
Overconfidence	46%	34%	20%
Loss Aversion	58%	27%	15%
Herding Behavior	49%	31%	20%
Anchoring Bias	38%	42%	20%
Confirmation Bias	41%	36%	23%

Interpretation

The results show that loss aversion is the highest

behavioral bias amongst investors with 58% of the respondents exhibiting a high degree of influence. This can be attributed to the Prospect Theory under the assumption that investors experience more pain when they lose than when they gain. Consequently, investors are more likely to keep losing stocks than they should, to evade losses through realization. The overconfidence bias is also very high with 46% which means that most investors overestimate their market movement prediction capabilities. This usually results to overtrading and underappreciation of risks which ends up negatively influencing performance of the portfolio. The strong social influence on investor decision is exhibited by herding behavior that was at 49%. When markets are volatile, the investors are more likely to follow the trend or the actions of their peers in the market than independent analysis. This is a contributor to irrational market forces like bubbles and crashes. The effect of anchoring bias is moderate to high, as the investors base their decision making on high dependence on the past prices or the initial information. This limits their adaptation capacity to new market information. Confirmation bias only makes irrationality stronger, since investors are inclined to find information that confirms their prior beliefs and disregard any evidence that contradicts it. This becomes ineffective in terms of decision-making and diversification. In general, the discussion has validated that behavioral biases are major distorters of rational investment decision-making.

Table 2: The Influence of Behavioral Biases on Investors on the whole.

Level of Impact	Percentage of Investors
High Impact	52%
Moderate Impact	30%
Low Impact	18%

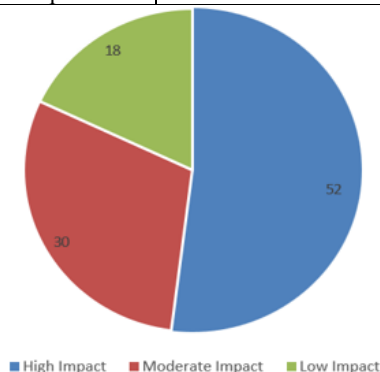


Fig 6.2 The Influence of Behavioral Biases on Investors on the whole.

Interpretation

As the pie chart shows, most investors (52 percent) are the ones who are significantly influenced by the behavioral bias in their investment choices. This shows that over fifty percent of the investors are greatly influenced by the psychological and emotional elements as opposed to a pure intellectual analysis.

The moderate effect group (30 percent) are those investors who are partially affected by biases but can still apply a degree of rational decision making. These investors can act on the basis of market information but sometimes are guided by emotions like fear and greed. The low impact segment (18 percent) is made up of comparatively logical investors that depend more on analytical instruments, investment understanding, and impartial analysis. According to behavioral finance theory though, it is almost impossible to eliminate bias completely because human decision making is not perfect.

The high-impact category preponderance validates the discussion that behavioral biases are deep-rooted in the psyche of investors. It also confirms the null hypothesis (H0) is rejected and in favor of the alternative hypothesis (H1) which argues that behavioral biases are a significant factor in investment decision-making.

VI. SUMMARY OF RESULTS

The overall analysis of both tables and pie chart showed that behavioral biases which include loss aversion, overconfidence and herding behavior are critical in influencing investor decisions. According to the psychological tendencies of investors relating to ICICI Securities Limited, Nagpur, there is a tendency towards the deviation of rational financial models.

This implies that the conventional theories of finance cannot be relied upon to explain the actual investment behavior in the real world. Rather, behavioral finance offers a more realistic manner in which investors actually operate in changing market conditions.

VII. DISCUSSION

The results of the current research support the underlying assumptions of behavioral finance, which postulates that investor decision making is not entirely rational but is greatly affected by the psychological and cognitive biases. The preeminence of loss

aversion among investors fits well into the theoretical context of Prospect Theory, created by Daniel Kahneman and Amos Tversky that people do not perceive gains and losses equally, but instead they place more emotional weight on losses. This ingrained pattern of behavior is evident in the behavior of the investors in this study who tend to wait until they get a profit on their investments instead of taking a loss. Equally, the existence of overconfidence bias in a considerable percent of investors is aligned with the points advanced in existing literature that investors typically overrate their knowledge, skills and capacity to forecast market trends. This causes trading excessively and performance of a portfolio that is not optimal, an issue that has been extensively debated in behavior finance literature. Another issue that is also emphasized in the study is the herding behavior which has been previously established in other empirical studies in the financial markets and especially in emerging markets such as India where the investors will tend to follow the general sentiments of the market instead of doing practical analysis.

The effects of anchoring and confirmation biases also confirm the theoretical outlooks that investors are too dependent on reference points and tend to interpret the information in a selective manner to suit their already formed beliefs. These results are consistent with the efforts of Richard Thaler and other behavioral economists who highlighted the importance of cognitive constraints and mental shortcuts in financial decision-making. In sum, the paper has shown that despite the access of investors to professional advisory services, such as that offered by ICICI Securities Limited in Nagpur, behavioral biases still influence their choices, and thus, proves the continuation of irrationality in real-life financial decision making.

VIII. FINDINGS

The authors discover that behavioral biases are also a major and quantifiable factor in investment decision-making by investors. It can be seen that the most notable bias is the loss aversion that results in investors not wanting to incur losses and it has consequences on the portfolio effectiveness. Overconfidence bias is another bias that is evident leading to a rise in trading and risk-taking. Herding behavior is observed to affect the inclination of investors in following market trends and decisions made by peers especially when there is

uncertainty. Additional analysis shows that anchoring bias does not allow the investors to adapt to new information as they base their thinking on the previous price levels or initial amount of investment. Confirmation bias is part of selective information processing that strengthens the beliefs and does not allow objective assessment. The general results imply that most investors are highly subjected to the behavioral influence meaning that irrational decision making is common. It is also noted that financial literacy and awareness can help tame these biases but not completely eradicate them.

IX. CONCLUSION

This paper concludes that behavioral biases are a major factor in making investment decisions among investors affiliated to ICICI Securities Limited, Nagpur. The facts clearly show that investors do not necessarily make rational decisions and they are affected by psychological issues like emotions, thinking errors and social pressures. Such biases bring about optimum financial decisions, which influence investment performance and market efficiency.

The result of the hypothesis testing favors the rejection of the null hypothesis and the acceptance of the alternative hypothesis, thus, confirming that behavioral biases are important factors in investment decisions. The paper notes that it is essential to incorporate behavioral knowledge into financial advisory service and investment plans. It further highlights that one needs to know the psychology of the investors to enhance decision-making and have superior financial results.

X. RECOMMENDATIONS

It is proposed in the study that there is an urgent necessity of creating a better awareness of investors on the issue of behavioral biases and how they affect financial choices. ICICI Securities Limited and other financial institutions should integrate behavioral finance into their advisory services to enable investors to identify and deal with their cognitive biases. There should be an increase in investor education programs and financial literacy programs to encourage rational decision-making and long-term investment planning. It is also proposed that investors should use constructive investment approaches and base on the

rational analysis as opposed to emotional responses. Human biases can also be reduced with the use of technology-based advisory tools and data analytics. The adverse impact of short-term emotional decision-making can be mitigated by encouraging diversification and long-term investment views. All in all, education, sensitization and systematic advisory support can go a long way in enhancing investment behavior.

XI. FUTURE SCOPE

Future research in behavioral finance has a lot of potential since the behavior of investors is constantly changing as markets change and technology develops. The research can be extended to wider geographical area in the future to provide a comparison of the study across various demographic and cultural settings than the Nagpur region. It is also possible to investigate how digital trading platforms, artificial intelligence and algorithmic advisory systems impact investor behavior.

Behavioral biases in various types of investors, including institutional investors, high-net-worth individuals and young retail investors entering the market using digital platforms, can be further researched. The longitudinal studies may be implemented to examine the dynamics of alteration of behavioral patterns over time, especially at the times of market volatility or economic crisis. Moreover, combining psychological profiling with financial data may be used to gain a better understanding of the behavior of investors, which can be used to create more successful investment strategies and policy frameworks.

REFERENCES

- [1] D. Kahneman and A. Tversky, "Prospect Theory: An Analysis of Decision Under Risk," *Econometrica*, vol. 47, no. 2, pp. 263–292, 1979.
- [2] R. H. Thaler, "Mental Accounting and Consumer Choice," *Marketing Science*, vol. 4, no. 3, pp. 199–214, 1985.
- [3] R. H. Thaler, "The End of Behavioral Finance," *Financial Analysts Journal*, vol. 55, no. 6, pp. 12–17, 1999.
- [4] H. Shefrin and M. Statman, "Behavioral Portfolio Theory," *J. Financial Quantitative Anal.*, vol. 35, no. 2, pp. 127–151, 2000.
- [5] B. M. Barber and T. Odean, "Boys Will Be Boys: Gender, Overconfidence, and Common Stock Investment," *Quarterly J. Econ.*, vol. 116, no. 1, pp. 261–292, 2001.
- [6] R. J. Shiller, "From Efficient Markets Theory to Behavioral Finance," *J. Econ. Perspect.*, vol. 17, no. 1, pp. 83–104, 2003.
- [7] M. M. Pompian, *Behavioral Finance and Wealth Management: How to Build Optimal Portfolios That Account for Investor Biases*. Hoboken, NJ, USA: John Wiley & Sons, 2006.
- [8] A. Subrahmanyam, "Behavioral Finance: A Review and Synthesis," *Eur. Financial Manage.*, vol. 14, no. 1, pp. 12–29, 2008.
- [9] H. K. Baker and J. R. Nofsinger, *Behavioral Finance: Investors, Corporations, and Markets*. Hoboken, NJ, USA: John Wiley & Sons, 2010.
- [10] J. R. Ritter, "Behavioral Finance," *Pacific-Basin Finance J.*, vol. 11, no. 4, pp. 429–437, 2003.
- [11] A. Chandra, "Decision Making in the Stock Market: Incorporating Psychology with Finance," in *Proc. Nat. Conf. Forecasting Financial Markets of India*, 2008.
- [12] M. Sewell, "Behavioral Finance," *Univ. Cambridge Working Paper*, 2007.
- [13] S. Kumar and N. Goyal, "Behavioural Biases in Investment Decision Making – A Systematic Literature Review," *Qualitative Research in Financial Markets*, vol. 7, no. 1, pp. 88–108, 2015.
- [14] ICICI Securities Limited, *Annual Report and Investor Presentation*, 2023. [Online]. Available: Official company publications.
- [15] Investopedia, "Behavioral Finance and Cognitive Biases in Investing," 2024. [Online]. Available: <https://www.investopedia.com>