







“Unraveling behavioral biases in decision making: A study of Nepalese investors”

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UNRAVELING BEHAVIORAL BIASES IN DECISION MAKING: A STUDY OF NEPALESE INVESTORS

Abstract

The Nepalese stock market has experienced substantial transformations in recent years. Research on investors' herding behavior is of paramount importance since it explores the influence of collective choices made by investors, which could result in intensified market price fluctuations. This study examined the influence of behavioral biases on investment decisions among Nepalese investors – general individuals who actively participate in the country's stock market, considering overconfidence, representative, anchoring, regret aversion, and herding biases as explanatory variables, with investment decisions as the response variable. The study employed a linear regression model, establishing relationships using a structured questionnaire with 379 observations. The study revealed the significant influence of overconfidence, anchoring, and regret aversion biases on investment decisions among Nepalese investors. Conversely, the influence of representative bias had a little impact on investment choices, and herding behavior showed no significant relationship with investment decisions. Hence, it suggests that behavioral biases have a greater impact on individual investment choices in the Nepalese financial market. It is essential for investors, advisers, and policymakers to be aware of and address these biases to make well-informed decisions, maintain financial stability, and foster market development.

Keywords

anchoring, investor decisions, herding, overconfidence, regret aversion, representative

JEL Classification

G41, D53, D81, D91, G11

INTRODUCTION

Nepal's stock market has a very short history compared to other countries. Established in 1993, the Nepal Stock Exchange (NEPSE) serves as the sole stock market in the country. On January 13, 1994, the open-outcry trading system introduced a total of 37 listed companies. The NEPSE has recently experienced a significant transformation, marked by an influx of participants, increasing trade volumes, a strong adoption of digitization, and increase in the number of listed companies to over 300. Notably, the Security Board of Nepal (2023) reported a remarkable surge of 41% in DEMAT accountholders and a 27% expansion in the active investor base in 2022 compared to the preceding year, indicating a growing interest and participation in equity investments. This stands as evidence of an emerging market in the South Asian region.

In the context of the Nepalese stock market, where economic fundamentals and company strength play a significant role, it is important to acknowledge the presence of a compelling phenomenon that often impacts its trajectory: herding behavior. Investors may occasionally base their judgments on the behavior of others rather than their research or evaluation of economic issues, leading to collective market movements. Collective behavior is not limited to worldwide markets;

it is also evident in the country's stock market, providing compelling evidence of market inefficiency and irrationality. As a result, many investors in Nepal rely on paper and digital media and seek guidance from their interpersonal circles, professionals, and family members when making investment decisions. The prevalent tendency among investors for mass purchases and selective selling, for instance, has led to abnormally large gains, as seen by the multiple ups and downs in stock prices. In August 2021, the market index temporarily hit its highest level ever recorded at 3,198.6 and has been consistently declining since then as a result of the prevailing negative sentiment among investors. Moreover, this occurrence is taking place in the primary market, where several companies with poor ratings have seen oversubscription. The observed trend suggests that herding behavior may have substantially impacted the various price fluctuations in Nepal's stock market.

1. LITERATURE REVIEW AND HYPOTHESES

In modern finance theory, seminal contributions from scholars such as Markowitz (1952) have paved the way for understanding investment strategies. Markowitz's groundbreaking Modern Portfolio Theory (MPT) advocated for diversification of assets to achieve optimal risk-return balance. This foundational concept, coupled with subsequent developments like the Capital Asset Pricing Model (CAPM) introduced by Sharpe (1964), revolutionized the evolution of assets with market movements. Further advancements came with the introduction of multifactor models, such as the Fama-French three-factor model, which incorporated additional risk factors like company size and value, providing a more nuanced understanding of stock returns (Fama & French, 1992). These multifactor models expanded the traditional framework, acknowledging the diverse interplay of various factors influencing asset pricing. However, the influence of behavioral biases on investors' decisions has become a focal point in contemporary finance research, adding complexity to these models and challenging their assumptions. For instance, Heuristic Theory explores how individuals rely on mental shortcuts and rules of thumb to simplify complex decisions, often leading to systematic biases. On the other hand, Prospect Theory focuses on how people assess potential outcomes, emphasizing loss aversion and framing effects. Behavioral biases introduce psychological dimensions to investment decisions, shaping risk perceptions and altering decision-making processes, thus necessitating a comprehensive integration of behavioral insights within the evolving context of asset pricing theories.

Behavioral finance recognizes that investors can exhibit irrational behavior due to cognitive biases, emotions, and heuristics. This leads them to make decisions that deviate from purely rational choices assumed by traditional finance theories, where the decisions are based on all available information and aim to maximize their utility. Scholars such as Bhattarai et al. (2020), Dahal (2018), and Kishori and Kumar (2016) have argued that investors frequently make irrational decisions, deviating from rational choices influenced by psychological biases. Heuristics and prospect theory constitute a comprehensive framework within behavioral economics, offering profound insights into the diverse processes that guide human decision making, particularly in situations characterized by ambiguity and uncertainty.

In 1974, Tversky and Kahneman introduced the heuristics theory that proposed that individuals' actions employ mental shortcuts or rules of thumb in decision-making processes, potentially leading to biases and deviating from irrationality. De Bondt et al. (2008) highlighted the pervasive influence of biases on investors' thinking and decision making, underscoring the impact of these cognitive tendencies on financial choices. Their research highlights how individuals, guided by heuristics or mental shortcuts, often make sub-optimal decisions, especially in ambiguous situations. Investors, relying on these rules of thumb, frequently exhibit flawed judgment. Additionally, Raut and Kumar (2018) explored the phenomenon of anchoring bias, revealing that newcomer investors were mainly prone to making irrational decisions compared to their experienced counterparts. Anchoring, a cognitive heuristic, explains how people rely heavily on initial reference points when making decisions, often leading to distorted

judgments, a factor significantly influencing investment choices. Kahneman and Tversky (1979) explored the influence of emotional biases, such as overconfidence, loss aversion, and herding behavior, on individuals' decision-making processes within the framework of prospect theory. This psychological theory elucidates how individuals assess potential losses and gains, offering a comprehensive understanding of how emotions and cognitive biases influence financial choices. It claims that people evaluate their perceptions of loss and gain as unbalanced, and they tend to prioritize potential losses more than equivalent profits, a phenomenon known as loss aversion. These frameworks provide a valuable understanding of how individuals manoeuvre complex choices, shedding light on the underlying factors influencing their decisions under uncertain circumstances.

Besides heuristics and prospect theories, which serve as foundational concepts shedding light on human decision-making, the terrain of behavioral biases extends far beyond these frameworks. For instance, overconfidence bias, where individuals tend to overestimate their abilities, has been extensively studied in behavioral economics (Dahal, 2022; Lichtenstein et al., 1982). Anchoring bias, a phenomenon where people rely heavily on initial information when making decisions, has been researched and documented in various studies (Tversky & Kahneman, 1974). Mental accounting, the practice of organizing finances into separate categories, has been discussed in behavioral finance literature (Dahal, 2021; Thaler, 1999). Regret aversion has been a significant topic in decision-making research, explaining the reluctance to take action to avoid future regret (Zeelenberg, 1999). Herding behaviors, where individuals follow the crowd, have been widely explored in behavioral finance (Bikhchandani et al., 1992). The endowment effect, which involves valuing one's possessions more, has been studied in behavioral economics experiments (Kahneman et al., 1990; Karki et al., 2023).

Moreover, framing effects, revealing how the presentation of information can alter perceptions, have been extensively researched in psychology and decision-making literature (Ghimire et al., 2023; Tversky & Kahneman, 1981). Amidst these complexities, investors face limits due to bounded

rationality, as emphasized in the realm of behavioral finance (Simon, 1955). This body of research stresses the inherent perceptive limitations that impact investors' choices. Understanding these interconnections, as explored in various studies, provides a holistic view of behavioral biases, enriching the understanding of investors' decision-making process.

The major objective of this study is to investigate the impact of behavioral biases on investor decision making, filling a critical void within the ever-changing world of financial markets. The critical perceptual biases such as overconfidence, representativeness, anchoring, regret aversion, and herding are considered independent variables in this study, as unveiled by Jain et al. (2020).

Overconfidence bias, a prominent cognitive distortion, compels investors to overvalue their competencies and expertise within the financial realm. This bias makes individuals exaggerate their skills, often ignoring crucial information and data, convincing themselves that they surpass established models (Kartini & Nahda, 2021). Studies (Bakar & Yi, 2016; Khan et al., 2021; Gurung et al., 2023; Ullah et al., 2020) have consistently shown that overconfidence bias drives excessive trading and positively shapes investment decision making. This unfounded confidence frequently leads to suboptimal financial choices and significant monetary losses. Notably, researchers have underscored the detrimental impact of overconfidence bias on individual investors' decisions in the equities market (Akinkoye & Bankole, 2020). Representative bias (rep) is another prevalent bias significantly shaping investors' decisions. This bias occurs when investors rely heavily on historical data, assuming that past trends will continue. For instance, if a company has shown continuous profit growth over recent years, investors might perceive it as a lucrative investment opportunity without considering other relevant factors. Yurttadur and Ozelik (2019) highlighted that this bias often leads investors to base their decisions on a limited data set, assuming that past successes will persist, even without empirical evidence. Consequently, investors influenced by this bias might overlook crucial future events, leading to misinterpretations and potentially unfavorable investment returns. Empirical research by DeBondt (1993) and

Sattar et al. (2020) has demonstrated that investors tend to favor stocks with strong recent performance, assuming these trends will continue.

Anchoring bias might lead investors towards potential misjudgments and financial losses when they rely too heavily on initial information, like the starting price of a stock, even if it's irrelevant to the current market value. Robin and Angelina (2020) argued that the anchoring bias manifests as a strong reliance on the initial information received, leading to judgment errors and influencing decision-making in the financial market. Moreover, Torngren and Montgomery (2004) claimed that non-professional individuals in financial markets are often influenced by past stock price changes, which serve as anchors shaping their expectations. Studies conducted across different countries have consistently demonstrated the substantial impact of anchoring bias on investor decision making (Cao et al., 2020; Kartini & Nahda, 2021; Kengatharan & Kengatharan, 2014). These findings establish a compelling link between anchoring bias and investment decision-making, emphasizing the pervasive influence of cognitive bias in shaping investors' choices.

Regret aversion arises when investors avoid making investment decisions due to the fear of being wrong and experiencing subsequent regret. This behavioral bias stems from fear of making wrong choices, significantly influencing their future decisions. Pompian (2012) contended that investors exhibit regret aversion when avoiding decisions to prevent future regrets and negative feelings. Moreover, regret aversion bias disproportionately impacts less experienced investors than their experienced investors, indicating a divergence in influence between these two investor groups (Gupta & Ahmed, 2016; Pant et al., 2022). Yurttadur and Ozcelik (2019) further revealed that investors, often middle-aged individuals and freelancers with limited investment budgets who prefer portfolio diversification to reduce risk, are prone to regret-averse bias. Several studies (Rehan & Umer, 2017; Waweru et al., 2008) have discovered that regret aversion bias significantly impacts investors' stock investing decisions.

It is argued that the herding behavior occurs when investors collectively lean on shared knowledge, frequently neglecting alternative information,

based on the belief that huge groups are less likely to be incorrect. Humra (2014) illustrates herding behavior as a scenario where investors collectively rely on collective knowledge, disregarding other information in their investment decisions. Investors commonly believe that large groups are unlikely to be incorrect, leading them to assume that these significant collectives, known as the herd, possess undisclosed knowledge (Akinkoye & Bankole, 2020). When the majority of a group makes an incorrect judgment, the result will be a considerable variation in prices in the market, which will create a market crash and cause individuals to lose their hard-earned money. Rahayu et al. (2020) asserted the likelihood of herding behavior among investors in emerging markets, especially in market volatility.

As this study aims to explore the influence of behavioural biases on investment choices made by investors in the Nepalese stock market, particularly focusing on overconfidence, representativeness, anchoring, regret aversion, and herding biases as explanatory variables, the research presents the following hypotheses to methodically examine and evaluate their influence on investors' decision-making processes in the context of the emerging stock market in Nepal.

- H1: The investment decisions of individual investors are significantly influenced by the presence of overconfidence bias.*
- H2: Individual investors' decisions are significantly influenced by representative bias.*
- H3: The investment decisions made by individual investors are significantly influenced by the presence of anchoring bias.*
- H4: Individual investors' investment decisions are significantly influenced by the presence of regret aversion bias.*
- H5: The investment decisions of individual investors are significantly influenced by the presence of herding bias.*

The extensive review of literature, coupled with the description of objectives, research framework, and hypotheses, lays a robust foundation for un-

raveling the nuances of behavioral biases in investors' decision-making within the Nepalese context. By addressing this critical void, this study aims to contribute significantly to the understanding of investor behavior, providing valuable insights for both scholars and practitioners in navigating the challenges of the financial domain.

2. METHODOLOGY

The study utilized a cause-and-effect research design to investigate the impact of psychological biases (overconfidence, representative bias, anchoring bias, regret aversion, and herding bias) on investment choices made by individual investors. It analyzed cross-sectional data collected from a diverse group of investors, considering various demographic categories such as age, gender, education level, and occupation. Cochran's (1963) sampling model has been used to find out the appropriate sample size (n) for a large, unknown population using the formula:

$$n = \frac{Z^2 p(1-p)}{e^2}. \quad (1)$$

Substituting the values, where Z (1.96) represents the area under the acceptance region in a normal distribution for a 95 % confidence level, and e signifies the desired precision or margin of error (5%), the estimated proportion (p) of the attribute in the population was set at 0.5, with $(1-p)$.

$$n = \frac{1.96^2 \cdot 0.5(1-0.5)}{0.05^2} = 364.16 \approx 365. \quad (2)$$

According to the recommendation, a minimum sample size of approximately 365 was suggested; thus, the study employed 379 observations. It was based on the primary source of information; the

structured questionnaire, incorporating a five-point Likert scale, has been developed and administered to collect data to meet the study's objectives. The survey questionnaire was split into two parts, comprising 34 items. The first section included four questions focusing on respondents' demographic and general information. The final part requested literature-based unraveling of behavioral biases in decision-making measures, including 30 queries, and a series of close-ended questions were composed to get the required information from the respondents. All the survey items in the final part of the questionnaire were assessed on a five-point Likert-type scale with 1 = strong disagreement to 5 = strong agreement. The study employed a field survey approaching 1,000 potential investors from diverse groups to collect the required data during 120 days of May to August 2023. Three hundred seventy-nine correctly filled questionnaires were obtained, representing a 37.90 % response rate, and their responses were utilized in the study.

The internal consistency of the study variable questionnaire items has been evaluated with Cronbach's alpha ($\alpha = 0.818$) and with an inter-item coefficient ($r = 0.131$) from 30 unraveling behavioral biases in decision-making measures, ensuring the reliability of the measurement. Table 1 presents the analytical result for the reliability statistics of each construct.

Construct-wise reliability statistics showed excellent values compared to the recommended cut-off values. According to Podsakoff et al. (2003), the present study aimed to examine the Harman one-factor test to assess the prevalence and magnitude of common method bias (CMB) variance. The analysis of thirty study variables revealed that they accounted for 19.966 % of the variance in CMB, which falls below the suggested threshold of

Table 1. Reliability statistics

Construct	Cronbach's Alpha	Average inter-item correlation	No. of items
Overconfidence Bias	0.764	0.285	5
Representative Bias	0.741	0.131	5
Anchoring Bias	0.753	0.266	5
Regret Aversion Bias	0.706	0.321	5
Herding Bias	0.756	0.157	5
Investment Decision	0.799	0.128	5
Recommended cut-off values	≥ 0.70 Nunnally (1993)	Range of 0.15 to 0.50 Clark and Watson (1995)	Total test items = 30

0.50, as established by Cho and Lee (2012). Hence, the variables and constructs utilized in the study exhibited high levels of reliability and were devoid of common method bias, thereby facilitating additional scrutiny.

In relation to the matter of validity, it can be asserted that the study exhibited an adequate sample size. The assertion was supported by a Kaiser-Meyer-Olkin (KMO) value of 0.836, derived from analyzing a sample size comprising 30 items. It was worth mentioning that this figure exceeds the suggested threshold of 0.50, as Kaiser gave in 1974. Bartlett's test of sphericity yielded a significant output (6832.041, $df = 435$, $p = 0.000$), confirming the existence of substantial relationships among the variables under examination.

Furthermore, Pearson's correlation coefficients have also revealed the strength and nature of relationships among various behavioral biases and investment decisions. The regression analysis has been employed to gauge the effect of behavioral biases on investors' decision-making processes, assuming each of the responses on the scale was treated as having equal intervals, enabling a detailed examination of the interplay between dependent and independent variables under the study. Equation (3) establishes the relationship between the dependent and independent variables of interest.

$$\begin{aligned} indec = & \beta_0 + \beta_1 \cdot over + \beta_2 \cdot rep \\ & + \beta_3 \cdot anch + \beta_4 \cdot regt + \beta_5 \cdot herd + \varepsilon_i, \end{aligned} \quad (3)$$

where *indec* denotes the investment decisions of investors, the dependent variable in the model. The coefficients β_1 to β_5 suggest the impact of the independent variables: *over* for overconfidence bias, *rep* for representative bias, *anch* anchoring bias, *regt* for regret aversion bias, and *herd* for herding bias. The effects of other unseen factors not explained by the independent variables included in this model are represented by the error term, ε_i .

3. RESULTS

Table 2 provides a comprehensive overview of the respondents' demographic information, encompassing gender, age, educational attainment, and occupational diversity. In terms of gender distribution, the survey reflects a notable disparity, with a higher male representation compared to females in their gender dynamics in the opinion survey. The age distribution offers a varied composition of the surveyed population. Notably, a majority (54.1 %) falls among respondents aged 30-39 years, indicating a predominant presence of individuals in this demographic. Furthermore, 38.8 % of respondents are between 20 and 29 years old, and a smaller yet distinct proportion (7.9 %) comprises individuals aged 40 and above.

Educationally, the respondents exhibit a majority (63.5 %) of Bachelor's degrees, followed by Master's degrees or higher qualifications, emphasizing the expertise within the surveyed group

Table 2. Demographic profile of respondents

Demographic Factor		Number of respondents	Percentage
Gender	Male	239	63.1
	Female	140	36.9
Age	20-29	144	38.0
	30-39	205	54.1
	40 and above	30	7.9
Education Level	Intermediate	4	1.1
	Bachelor	241	63.5
	Master and above	134	35.4
Occupation	Academician	157	41.4
	Stock market investor	82	21.7
	Stock market analyst	32	8.4
	Security business person	18	4.8
	Others	90	23.7
Total of each section		379	100.0

and the presence of individuals with undergraduate educational backgrounds. According to the occupation, respondents exhibit a diverse array of occupations, highlighting the multidisciplinary nature of the surveyed group. A large portion of the respondents' occupations include academicians, representing the educational sector's active participation. The category 'Others' includes a variety of professionals, adding the second richness to the dataset, followed by the stock market investors. The stock market analysts and security market businesspeople include third and fourth categories of occupation of respondents, but there are no significant numbers.

3.1. Correlation statistics

Table 3 presents correlation coefficients, indicating the strength and direction of relationships between dependent and independent variables. A strong positive correlation of 0.512 reveals that overconfidence significantly corresponds to increased investment decisions. Investors demonstrating overconfidence tend to make more investment choices, potentially driven by their excessive self-assurance in their judgment. The representative bias has revealed a positive correlation of 0.536, which signifies that increasing this bias intensifies investors' investment decisions. This suggests that when investors perceive new opportunities as mirroring past successes, they are inclined to make substantial investment choices.

The anchoring bias has revealed a positive correlation of 0.478; thus, an increase in this variable leads to a moderate rise in the investment decision. Therefore, investors influenced by anchoring biases tend to base their decisions on initial information, impacting their investment choices significantly. Regarding the correlation of regret aversion bias, a moderate negative relationship implies

that for an increase in regret aversion bias, there is a decrease in investment decisions. Investors prone to regret aversion tend to be cautious, avoiding actions that might lead to future regrets, which moderately impacts their investment choices by reducing their willingness to make investment decisions. However, the herding bias exhibited a weak positive correlation of 0.269, indicating a subtle tendency for investment decisions to rise when herding bias increases. While not highly influential, individuals influenced by herding behaviors demonstrate a mild inclination to follow the crowd in their investment choices.

3.2. Regression insights

Table 4 presents the outcomes of a linear regression analysis to assess the influence of critical psychological decision-making biases, namely overconfidence bias, representative bias, anchoring bias, regret aversion bias, and herding bias, on the investment choices undertaken by individuals within the Nepalese financial market. This analysis seeks to offer an in-depth understanding of the underlying forces that drive financial decisions through key statistical measures such as F-statistics, adjusted R-squared value, p-value, and collinearity statistics.

The obtained F-statistic of 94.519, coupled with a p-value of 0.000, strongly suggests a meaningful linkage between the presumed causes and effects. This statistical significance indicates that the association observed in the data is highly improbable to have occurred by random chance alone. A substantial and noteworthy connection exists between the specified behavioral biases and investors' decisions. An adjusted R-squared value of 0.553 indicates that approximately 55 percent of the variability in the investors' decisions can be described by the independent variables included

Table 3. Pearson's correlation

Variables	over	rep	anch	regt	herd	indec
over	1					
rep	0.464*	1				
anch	0.201*	0.484*	1			
regt	-0.105**	0.297*	0.287*	1		
herd	0.077	0.330*	0.395*	0.375*	1	
indec	0.512*	0.536*	0.478*	0.423*	0.269*	1

Note: (*) signifies significance at a 1 percent level.

Table 4. Regression insights of behavioral biases on investor decisions

Variables	Beta Coefficients	Std. Error	t-statistics	p-value	Tolerance	VIF
Constant	-0.113	0.170	-0.662	0.508		
over	0.389	0.034	11.302	0.000	0.720	1.390
rep	0.110	0.048	2.303	0.022	0.564	1.774
anch	0.214	0.037	5.862	0.000	0.698	1.434
regt	0.278	0.028	9.763	0.000	0.757	1.320
herd	-0.038	0.037	-1.038	0.300	0.757	1.320
F-Statistics = 94.519 (0.000)				Adj R ² = 0.553		
indec = -0.113 + 0.389over + 0.110rep + 0.214anch + 0.278regt - 0.038herd						

in the regression model; that is, more than half of the changes observed in investors' decisions can be attributed to the behavioral biases under consideration, and thus suggests a moderately explanatory solid power to explain the outcome. The collinearity statistics reveal tolerance values ranging from 0.564 to 0.757 (>0.1) and Variance Inflation Factor (VIF) values between 1.320 and 1.774 (<10). These results indicate acceptable levels of multicollinearity among the independent variables in the model and thus ensure the reliability of the regression outcomes.

The reported coefficient for overconfidence bias in this regression analysis is 0.389, with a p-value of 0.000. This indicates a positive and significant relationship between overconfidence bias and investment decisions among individuals. Specifically, for every unit increase in overconfidence bias, there is a corresponding increase of 0.389 units in the investment decisions made by individuals. The relationship is statistically significant, as reflected by the low p-value of 0.000, suggesting that the impact of overconfidence bias on investment decisions is not due to random chance. There is a positive relationship between the representative bias and investment decisions, with a beta coefficient of 0.110; however, due to the p-value being 0.022, slightly

above the commonly used threshold of 0.05 for statistical significance, the strength of this relationship might not be robust enough to draw reliable conclusions. While the beta coefficient for anchoring bias is 0.214 ($p = 0.000$) in the context of investment decisions, it indicates a statistically significant relationship between anchoring bias and investment decision-making.

Regarding the strength and direction of the relationship of regret aversion with investment decisions, the study revealed a beta coefficient of 0.278. The corresponding p-value of 0.000 satisfies the relationship's statistical significance. In contrast, a beta coefficient of -0.038 indicates a negative association with the investors' investment decisions in herd behavior. However, the corresponding p-value of 0.300 suggests that this association lacks statistical significance at the chosen confidence threshold, highlighting a distinct nature of investor behavior.

3.3. Hypotheses testing results

Table 5 provides a summary of the hypothesis-testing outcomes. It reports each of the coefficients of the hypothesis and its corresponding p-values, along with the decisions chosen using the pre-defined level of significance of 5 percent.

Table 5. Hypotheses testing summary

Hypotheses	Statements	Outcomes	Remarks
H1	The investment decisions of individual investors are significantly influenced by the presence of overconfidence bias.	$\beta = 0.389$; $p < 0.05$	Accepted
H2	Individual investors' decisions are significantly influenced by representative bias	$\beta = 0.110$; $p < 0.05$	Accepted
H3	The investment decisions made by individual investors are significantly influenced by the presence of anchoring bias.	$\beta = 0.214$; $p < 0.05$	Accepted
H4	Individual investors' investment decisions are significantly influenced by the presence of regret aversion bias.	$\beta = 0.278$; $p < 0.05$	Accepted
H5	The investment decisions of individual investors are significantly influenced by the presence of herding bias.	$\beta = -0.038$; $p > 0.05$	Rejected

4. DISCUSSION

It is argued that when investors display overconfidence, they often overestimate their knowledge and abilities, leading to increased trading and investments as they believe they can outperform the market. While this confidence can enhance investment decisions, it also introduces considerable risks, emphasizing the delicate balance between overconfidence's potential benefits and drawbacks. Overconfident investors may neglect crucial information, underestimate market volatility, and ignore potential downsides. This behavior can lead to impulsive decision-making and, in some cases, substantial financial losses. This finding resonates with previous studies (Bakar & Yi, 2016; Jain et al., 2020; Kartini & Nahda, 2021; Khan et al., 2021; Shahi et al., 2022; Ullah et al., 2020), emphasizing the consistency of the results of this study with existing research. Recognizing and dealing with overconfidence bias in financial education and advisory services can help reduce its negative impact, encouraging people to make wiser investment choices. Investors, financial advisors, and policymakers must know how widespread this bias is.

Although not statistically significant, the positive relationship between representative bias and investment decisions raises important points for consideration. Investors influenced by representative bias might indeed tend to make investment decisions; however, it is crucial to acknowledge the potential presence of the influence of unaccounted variables shaping the individual investors' decision-making process. Comparing this finding with prior research (Aigbovo & Ilaboya, 2019; Jain et al., 2020;), it aligns to provide confirmative evidence for the relationship identified in this study.

The positive and significant effects of anchoring bias on investing decisions have revealed a powerful influence of initial information on subsequent financial choices made by individual investors. This behavioral phenomenon, rooted in decision-making processes, highlights the individual's tendency to anchor onto early information, even when it might not be the most relevant for making investment decisions. More impor-

tantly, this finding implies that investors should be aware of the anchoring bias and actively work to mitigate its adverse effects, as when they have a fixed reference point and make decisions, can cause them to overlook critical market developments, leading to miss profitable investment opportunities, fail to adapt to changing market trends, and incur financial losses. This finding aligns with Owusu and Laryea (2023), who demonstrated a significant influence of anchoring bias on investors. The studies confirm the susceptibility of individuals to this cognitive bias, emphasizing its pervasive impact on decision-making processes in the realm of investments. Moreover, it also demonstrated that females are more inclined toward anchoring bias in their investment decisions.

Regarding the relationship with the regret aversion bias, it has revealed a positive and significant influence on an individual's investment decisions, supported by Sattar et al. (2020) and Jain et al. (2020). Theoretically, investors' aversion to regret often leads to conservative decision making, where the fear of making a wrong investment outweighs the potential gains. This tendency can hinder investors from taking calculated risks, limiting their opportunities for higher returns. This finding is important for investors and advisors as it can empower them to make more rational decisions by ensuring a trade-off between risk and return in the dynamic financial markets. While herding bias negatively impacts individual investment decisions, it lacks significance, revealing a typical pattern in investor behavior. The tendency to follow the crowd might not hold as much influence over individual choices as previously hypothesized. This implies that investors rely more on other sources of information and analytical methods in their decision-making process. This finding aligns with Rahman and Gan's (2020) study, indicating a similar trend in investor behavior. However, it contrasts with arguments made by scholars such as Bikhchandani et al. (1992) and Kahneman et al. (1990), among others, highlighting the nature of herding bias and its role in financial decision making.

CONCLUSION

The primary purpose of this study was to examine the impact of behavioral biases on investment decisions in the Nepalese stock market, with a specific focus on overconfidence, representativeness, anchoring, regret aversion, and herding biases as key explanatory variables. This study revealed the critical relationship between behavioral biases and their profound influence on individual investment decisions within the Nepalese financial market. The statistical significance indicated by the obtained F-statistic and corresponding low p-value evidenced the profound impact of behavioral biases on investors' decisions. However, the F-statistics value of 94.519 indicates that only 5.481 percent of the variability in decisions to play remains unexplained. This implies that factors such as market conditions and other biases also play a role in influencing individual investors' decision processes in the context of Nepal. The regression results revealed a substantial influence of fundamental behavioral biases – overconfidence bias, representative bias, anchoring bias, regret aversion bias, and herding bias – on investors' investment choices.

The study demonstrated that overconfidence bias exerts a notable influence, leading individuals to make decisions based on an inflated sense of confidence, which, although enhancing investment choices, introduces significant risks. Representative bias, although present, did not exhibit a substantial impact on investment decisions, suggesting the presence of other influential factors. Anchoring bias emerged as a critical factor, emphasizing the tendency of investors to anchor onto initial information, shaping subsequent financial choices. This bias necessitates investor awareness and proactive measures to counter its effects, ensuring informed decision making and averting potential financial losses. Additionally, regret aversion bias exhibited a significant influence, leading to conservative decision making. While herding bias negatively impacts individual investment decisions, its lack of statistical significance highlights the complexity of investor behavior, indicating that investors rely on diverse information sources in their decision-making process.

These research findings, aligning with global studies on how people's biases influence investment choices, emphasize the crucial importance for investors, financial advisors, and policymakers in Nepal to recognize and address these biases. In essence, this study enriches the understanding of behavioral biases and investment decisions among investors in Nepal, providing a robust foundation for future research and targeted interventions to address and mitigate the issues. As the financial environment evolves amidst these complexities, cultivating awareness and actively managing these biases becomes paramount, empowering individuals to make rational and informed investment choices and contributing to the financial market's overall growth and stability. In addition to the direct behavioral biases studied, this study acknowledges the indirect influence of socio-economic and cultural factors on investors' decision-making processes. While these aspects have not been the primary focus of this study, their potential impact on investment choices forms an unexplored avenue for future research. Therefore, the study lays the groundwork for future investigations, enriching the originality of this research by paving the way for a broader exploration of the dynamics that influence investors' investment decisions in recognizing the significance of these factors in shaping investor behavior.

AUTHOR CONTRIBUTIONS

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