Role of Cognitive Bias in Investment Decision Making

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Certificate of Authorship

I hereby corroborate that I have researched and submitted the final draft of the dissertation entitled “Role of Cognitive Bias in Investment Decision Making” The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor has it been proposed and presented as part of requirements for any other academic purposes.

The assistance and cooperation that I have received during this research work has been acknowledged. In addition, I declare that all information sources and literature used are cited in the reference section of the dissertation.

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Report of Research Committee

Mr. Yagya Bahadur Ghimire has a defended research dissertation entitled "Role of Cognitive Bias in Investment Decision Making" successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per suggestions and guidance of the supervisor and submit the thesis for evaluation and viva vocal examination.

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Abbreviations

OB: Overconfidence Bias

ICB: Illusion of Control Bias

AB: Anchoring Bias

LAB: Loss Aversion Bias

IDM: Investment Decision-Making

Abstract

This study explores the influence of cognitive biases on investment decision-making among Nepalese investors, focusing on overconfidence bias, illusion of control bias, anchoring bias, and loss aversion bias. Using a descriptive research design, data were collected from 384 active investors in the Nepal Stock Exchange through structured questionnaires. The results reveal that cognitive biases significantly shape investment decisions, often leading to irrational behaviors and suboptimal outcomes. Overconfidence bias emerged as a dominant factor, with investors overestimating their predictive abilities and underestimating risks. Illusion of control bias was also prominent, as participants believed they could influence market outcomes, leading to excessive risk-taking. Anchoring bias reflected a fixation on initial reference points, such as purchase prices, while loss aversion bias highlighted a tendency to prioritize avoiding losses over potential gains, resulting in poor portfolio adjustments. The findings align with behavioral finance theories, particularly Prospect Theory, emphasizing the need for financial literacy programs and behavioral interventions. This study contributes to the behavioral finance literature, offering actionable recommendations to mitigate biases and foster rational investment practices, thereby enhancing market efficiency in Nepal.

Keywords: Cognitive Biases, Investment Decision-Making, Overconfidence Bias, Illusion Of Control Bias, Anchoring Bias, Loss Aversion Bias, Behavioral Finance.

CHPATER I

INTRODUCTION

1.1 Background of the Study

Investment decision-making is a multifaceted process influenced by various factors, including economic indicators, market trends, and individual psychological traits. Among these, cognitive biases—systematic patterns of deviation from norm or rationality in judgment—play a significant role in shaping investor behavior. Understanding these biases is crucial, as they can lead to suboptimal investment choices, affecting both individual portfolios and broader financial markets (Kahneman & Riepe, 1998; Shefrin, 2007).

Cognitive biases are inherent in human decision-making processes, often leading individuals to rely on heuristics or mental shortcuts. While these shortcuts can be efficient, they may also result in errors in judgment, particularly in complex environments like financial markets (Tversky & Kahneman, 1974). Key cognitive biases affecting investors include overconfidence, illusion of control, anchoring, and loss aversion.

Overconfidence Bias refers to an individual's unwarranted faith in their own intuitive reasoning, judgments, and cognitive abilities. In the context of investing, overconfident investors may overestimate their knowledge or predictive capabilities, leading to excessive trading and underestimation of risks (Barber & Odean, 2001). This behavior can result in lower returns due to higher transaction costs and poor timing decisions.

Illusion of Control Bias is the tendency to overestimate one's ability to control events. Investors exhibiting this bias may believe they can influence market outcomes through their actions, leading to increased risk-taking and potential financial losses (Langer, 1975). This bias is particularly prevalent in volatile markets, where outcomes are largely unpredictable.

Anchoring Bias involves relying too heavily on the first piece of information encountered (the "anchor") when making decisions. In investing, this can manifest as fixating on a stock's initial purchase price when deciding whether to sell, potentially leading to holding onto losing investments longer than is rational (Furnham & Boo, 2011).

Loss Aversion is the tendency to prefer avoiding losses over acquiring equivalent gains.

This bias can cause investors to hold onto losing investments to avoid realizing a loss, even when better opportunities are available. Such behavior can lead to a suboptimal investment portfolio and reduced overall returns (Kahneman & Tversky, 1979).

The influence of cognitive biases on investment decisions is well-documented. Overconfidence can lead to excessive trading, as investors believe they can time the market effectively. However, frequent trading often results in higher transaction costs and taxes, which can erode returns. Studies have shown that overconfident investors tend to underperform compared to those who trade less frequently (Barber & Odean, 2001).

The illusion of control can result in investors taking on more risk than is appropriate, under the false belief that they can influence market outcomes. This can lead to significant financial losses, especially in unpredictable markets (Langer, 1975). Similarly, anchoring bias can cause investors to cling to initial information, such as the purchase price of a stock, leading to poor decision-making (Furnham & Boo, 2011). For example, an investor might hold onto a declining stock, hoping it will rebound to the original purchase price, rather than cutting losses and reallocating capital to more promising investments.

Loss aversion can lead to the disposition effect, where investors hold onto losing investments too long and sell winning investments too early. This behavior can result in a portfolio that underperforms the market, as gains are realized prematurely and losses are allowed to accumulate (Kahneman & Tversky, 1979).

Recognizing and mitigating cognitive biases is essential for making rational investment decisions. One effective strategy is to implement a disciplined investment process, including setting predefined rules for buying and selling assets. This approach can help reduce the influence of emotions and biases on decision-making (Shefrin, 2007).

Diversification is another key strategy. By spreading investments across various asset classes and sectors, investors can reduce the impact of any single investment's poor performance on the overall portfolio. This approach can help mitigate the effects of biases like overconfidence and loss aversion (Markowitz, 1952). Education and awareness are also crucial. Investors who understand common cognitive biases are better equipped to recognize and counteract them. Engaging with financial advisors who are knowledgeable about behavioral finance can provide valuable insights and guidance (Pompian, 2011).

In the context of Nepal, the role of cognitive biases in investment decision-making becomes even more pronounced due to the relatively lower levels of financial literacy and the dominance of informal investment practices. Nepalese investors, often guided by emotional reasoning and heuristics, are highly susceptible to biases like overconfidence, anchoring, loss aversion, and the illusion of control. These biases not only affect individual investment outcomes but also contribute to broader market inefficiencies, which are particularly evident in emerging economies with developing financial markets.

Understanding how these biases shape the behavior of Nepalese investors is critical for improving financial decision-making and fostering a more efficient market. While cognitive biases are inherent to human decision-making, their adverse effects can be mitigated through targeted interventions. Strategies such as financial literacy programs, the use of decision aids, and the adoption of disciplined investment processes are particularly relevant in the Nepalese context. Additionally, promoting the services of financial advisors with expertise in behavioral finance could help investors identify and address biases, leading to more informed and rational decision-making.

This research seeks to explore the role of cognitive biases in investment decision-making among Nepalese investors, providing insights into their prevalence, impact, and mitigation strategies. By addressing these gaps, the study aims to contribute to the growing body of behavioral finance literature and offer actionable recommendations for improving investment practices in Nepal.

1.2 Statement of the Problem

Investment decision-making is a critical process influenced by numerous factors, including market conditions, economic indicators, and psychological traits of individual investors. Among these, cognitive biases—systematic deviations from rational judgment—play a pivotal role in shaping investment behaviors, often leading to suboptimal decisions (Kahneman & Tversky, 1979). Despite advancements in financial education and technology, cognitive biases remain a persistent issue, significantly impacting the investment strategies of individuals and institutions alike.

Cognitive biases such as overconfidence, illusion of control, anchoring, and loss aversion are particularly influential in investment decision-making. Overconfidence bias refers to

the unwarranted belief in one's own knowledge or predictive abilities, often resulting in excessive trading and underestimation of risks (Barber & Odean, 2001). Studies suggest that overconfident investors trade more frequently, incurring higher transaction costs and ultimately achieving lower returns (Chen et al., 2007).

Illusion of control bias, the tendency to overestimate one's ability to influence outcomes, further exacerbates risk-taking behaviors among investors. This bias is especially prevalent in volatile markets, where outcomes are largely unpredictable, leading to significant financial losses (Langer, 1975). Similarly, anchoring bias, the reliance on initial information or reference points, affects how investors evaluate stocks, often causing them to hold onto losing investments longer than rationality would dictate (Furnham & Boo, 2011). Loss aversion, on the other hand, highlights the human tendency to fear losses more than equivalent gains, resulting in the disposition effect—selling winning investments prematurely and retaining underperforming assets (Kahneman & Tversky, 1991).

The problem becomes more significant in emerging markets like Nepal, where limited financial literacy and access to structured investment tools exacerbate the influence of cognitive biases. Behavioral finance studies highlight that investors in such markets are more prone to these biases, given their reliance on heuristics and emotional decision-making (Sahi et al., 2013). The lack of awareness and education about these biases contributes to irrational decision-making, adversely affecting portfolio performance and market efficiency.

Understanding the role of cognitive biases in investment decisions is crucial for improving financial outcomes. Overconfidence and illusion of control often lead to excessive risk-taking, while anchoring and loss aversion contribute to inertia in portfolio adjustments (Ricciardi & Simon, 2000). These behaviors not only impact individual investors but also have broader implications for market dynamics, as collective biases can drive market bubbles and crashes (Shiller, 2003).

Despite the growing body of literature on behavioral finance, there is a gap in understanding how cognitive biases specifically affect investment decisions in developing economies like Nepal. Most existing research has focused on developed markets, with limited applicability to contexts characterized by lower financial literacy and differing

socio-economic dynamics (Banerjee et al., 2021). Addressing this gap is essential for designing targeted interventions that mitigate the adverse effects of cognitive biases and promote rational investment behaviors.

The need for this research is further underscored by the increasing complexity of financial markets. With the proliferation of financial instruments and technological innovations, investors are exposed to a wider array of choices, amplifying the potential for cognitive biases to influence decisions (Pompian, 2012). Identifying and addressing these biases is critical for enhancing investment outcomes and ensuring market stability.

In summary, cognitive biases pose a significant challenge to rational investment decision-making. Overconfidence, illusion of control, anchoring, and loss aversion are key drivers of suboptimal investment behaviors, particularly in emerging markets like Nepal. By understanding the extent and impact of these biases, this study aims to contribute to the growing field of behavioral finance, offering insights into mitigating their effects and fostering more informed and rational investment practices.

The questions that are addressed in this study are as follows:

- What is the current level of cognitive bias in investment decision-making among investor in Nepal?
- Weather there is any relationship between cognitive bias and investment decision making?
- What is the relationship between overconfidence bias, illusion of control bias, anchoring bias, loss aversion bias and investment decision-making?

1.3 Objectives of the Study

The objectives that will be achieved through this study are as follows:

1. To assess the current level of cognitive bias in investment decision-making among investors in Nepal.
2. To analyze the relation between cognitive bias in investment decision making.
3. To examine the relationship between overconfidence bias, illusion of control bias, anchoring bias, loss aversion bias and investment decision-making.

1.4 Hypothesis of the Study

H1: Over-confidence bias have significant impact over investment decision making.

H2: Illusion of Control bias have significant impact over investment decision making.

H3: Anchoring bias has a significant impact on investment decision-making.

H4: Loss aversion bias has a significant impact on investment decision-making.

1.5 Rationale of the Study

Investment decision-making is a critical aspect of financial behavior, with significant implications for individuals, institutions, and economies. Despite the widespread availability of financial tools and market information, investors often deviate from rational decision-making due to cognitive biases such as overconfidence, illusion of control, anchoring, and loss aversion. These biases not only affect portfolio performance but also contribute to market inefficiencies, creating bubbles and crashes. As a result, understanding and addressing cognitive biases has become an essential area of research in behavioral finance (Kahneman & Tversky, 1979; Barber & Odean, 2001).

While substantial research exists on cognitive biases and their impact on investment decisions in developed markets, limited attention has been given to emerging economies like Nepal. In these markets, lower financial literacy levels, reliance on informal investment practices, and lack of awareness exacerbate the influence of biases on decision-making. Investors in Nepal often rely on heuristics, social cues, and emotional reasoning, making them more vulnerable to irrational behaviors. Addressing this gap is crucial for enhancing financial decision-making and fostering more efficient markets.

This study aims to explore the role of cognitive biases in investment decision-making among Nepali investors. By identifying the specific biases that influence decisions and understanding their impact, this research will provide valuable insights for investors, financial advisors, and policymakers. Furthermore, the study will contribute to the growing field of behavioral finance by offering evidence from an emerging market context, which remains underrepresented in existing literature.

The findings of this study will not only deepen theoretical understanding but also have practical implications. Financial education programs, advisory practices, and policy

interventions can be designed to mitigate the adverse effects of cognitive biases, ultimately promoting rational investment behavior and economic stability in Nepal.

1.6 Limitations of the Study

The limitations of the study are as follows:

- The study is limited to the Kathmandu Valley, which may not represent the perspectives of investors in other regions.
- It relies solely on primary data collected through structured questionnaires, which may introduce response bias.
- The research focuses only on specific cognitive biases, excluding others like herd behavior or mental accounting.
- A cross-sectional design is used, limiting the analysis of changes over time.
- A convenient sampling method with a sample size of 384 may not provide full generalizability.

CHAPTER II

LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Prospect Theory

Prospect Theory, developed by Kahneman and Tversky (1979), represents a pivotal advancement in the understanding of decision-making under conditions of uncertainty. As a cornerstone of behavioral finance, the theory challenges the traditional economic assumption that individuals are fully rational and always make decisions to maximize utility. Instead, it posits that individuals evaluate potential outcomes relative to a reference point, rather than in absolute terms. This paradigm shift has profound implications for investment decision-making, particularly in explaining why investors often deviate from rational behavior.

Key Components of Prospect Theory

1. **Loss Aversion**: Loss aversion is one of the foundational principles of Prospect Theory. It highlights that individuals experience the pain of losses more intensely than the pleasure of equivalent gains. Kahneman and Tversky (1979) estimated that losses are approximately twice as psychologically impactful as gains. For investors, this means that the fear of realizing a loss often outweighs the motivation to achieve a gain. For example, an investor may hold onto a declining stock in the hope of a recovery, even when evidence suggests that selling and reallocating resources to a better-performing asset is a more rational choice. This behavior can lead to a suboptimal portfolio and missed opportunities for growth.
2. **Framing Effects**: Framing effects emphasize the influence of how information is presented on decision-making. According to Prospect Theory, individuals' choices can vary depending on whether outcomes are framed as gains or losses. For instance, an investor might react differently to a 10% drop in the value of a stock depending on the context. If framed as a loss from their initial purchase price, the investor might feel regret and choose to hold the stock. However, if the same loss is framed as a short-term fluctuation in a longer-term positive trend, the investor

might perceive it as less concerning. Framing effects demonstrate that the context and wording of information significantly impact investment behavior, often leading to inconsistent decision-making.

3. **Probability Weighting**: Another critical aspect of Prospect Theory is probability weighting, which suggests that individuals do not perceive probabilities linearly. Instead, people tend to overestimate the likelihood of rare events and underestimate the probability of moderate or common occurrences. For investors, this can manifest in an overemphasis on unlikely but highly impactful events, such as winning big on speculative investments or fearing catastrophic losses. This bias can lead to disproportionate allocation of resources to high-risk, high-reward assets or unnecessary risk aversion in more stable investments.

Prospect Theory provides valuable insights into several well-documented behavioral phenomena in financial markets. One such phenomenon is the disposition effect, identified by Shefrin and Statman (1985). This effect describes the tendency of investors to hold onto losing stocks for too long, driven by the hope of recovery and the desire to avoid realizing a loss. Conversely, they may sell winning stocks prematurely to "lock in" gains, even when further appreciation is likely. This behavior often results in portfolios that underperform due to suboptimal timing of buy-and-sell decisions.

Loss aversion also explains why investors are hesitant to take risks during market downturns, preferring to retain assets even when markets are expected to recover. Framing effects, on the other hand, shed light on why investors are influenced by market commentary and headlines. For example, negative framing of economic news may exacerbate panic selling, while positive framing may lead to over-enthusiasm and speculative buying.

Probability weighting has significant implications for the pricing of assets and market anomalies. Overestimation of rare events, such as a sudden market crash, may cause investors to overinvest in "safe-haven" assets like gold or government bonds. Similarly, the underestimation of moderate risks may lead to overconfidence in high-growth but volatile sectors, resulting in increased market volatility.

2.1.2 Behavioral Finance Theory

Behavioral Finance Theory represents a paradigm shift in financial thought, offering a more nuanced perspective on investor behavior by incorporating psychological and sociological principles. Departing from the traditional assumptions of the Efficient Market Hypothesis (EMH), which posits that markets are rational and all available information is reflected in prices, behavioral finance suggests that cognitive and emotional factors significantly influence decision-making processes (Shiller, 2003). This framework provides critical insights into understanding anomalies and inefficiencies in financial markets that cannot be explained by classical finance models.

Core Principles of Behavioral Finance Theory

1. **Cognitive Errors**: Cognitive errors are systematic deviations from rational judgment, often arising from reliance on heuristics or mental shortcuts. These errors manifest in various biases, including:
    - **Overconfidence Bias**: Investors overestimate their knowledge, ability, or predictive accuracy, leading to excessive trading and suboptimal portfolio performance (Barber & Odean, 2001). For instance, overconfident investors may believe they can time the market, incurring higher transaction costs and lower returns.
    - **Anchoring Bias**: This occurs when investors fixate on initial reference points, such as a stock's purchase price, and fail to adjust their expectations in light of new information. This can lead to poor decision-making, such as holding onto losing stocks in the hope of a rebound (Furnham & Boo, 2011).
    - **Confirmation Bias**: Investors tend to seek information that confirms their existing beliefs while disregarding contradictory evidence. This behavior reinforces preexisting strategies, often leading to persistent mistakes.
2. **Emotional Influences**: Behavioral finance also highlights the role of emotions, such as fear and greed, in driving investment decisions. Emotional reactions often lead to herd behavior, where investors follow the majority without independent analysis. This phenomenon is particularly prevalent during market bubbles and

crashes. For example:

- During speculative bubbles, greed drives investors to buy overvalued assets, expecting continuous price appreciation. The dot-com bubble of the late 1990s is a classic example (Shiller, 2003).
- Conversely, fear during market downturns causes panic selling, exacerbating market volatility and deepening losses for investors.

3. **Market Inefficiencies**: Behavioral finance challenges the EMH by demonstrating how biases and emotional influences lead to market anomalies, such as mispricing, overreaction, and underreaction. These inefficiencies arise because investors do not always process information rationally or update their beliefs in a Bayesian manner. For instance, the momentum effect, where stocks that have performed well in the past continue to do so in the short term, contradicts the EMH but aligns with behavioral finance explanations (Barberis & Thaler, 2003).

Behavioral finance provides a framework for understanding real-world investment behaviors that deviate from traditional finance models. Overconfidence bias, for example, explains why individual and institutional investors often engage in excessive trading, which has been shown to reduce net returns due to higher transaction costs and poor timing decisions (Barber & Odean, 2001). Similarly, herd behavior sheds light on market phenomena such as speculative bubbles, where irrational exuberance leads to unsustainable price increases, followed by abrupt corrections.

Market inefficiencies identified by behavioral finance also have implications for asset pricing and portfolio management. For instance:

- **Mispricing**: Behavioral biases often result in the overvaluation or undervaluation of securities, creating opportunities for arbitrage by informed investors.
- **Risk Perception**: Emotional influences can distort investors' perception of risk, leading to overly conservative or aggressive portfolio allocations.

Behavioral finance has also informed the design of decision-making tools and strategies aimed at mitigating biases. These include robo-advisors, which leverage algorithms to make emotion-free investment decisions, and structured financial education programs that

teach investors to recognize and counteract cognitive errors.

2.1.3 **Heuristic-Driven Bias Model: A Comprehensive Analysis**

The **Heuristic-Driven Bias Model**, introduced by Tversky and Kahneman (1974), is a cornerstone in behavioral finance, shedding light on the cognitive shortcuts or heuristics individuals use to simplify complex decision-making processes. While heuristics are essential for managing overwhelming information and making quick judgments, they often lead to systematic biases, particularly in high-stakes environments like financial markets. This model offers valuable insights into how these mental shortcuts influence investment decisions, explaining deviations from rational behavior observed in traditional finance theories.

The Role of Heuristics in Decision-Making

Heuristics are mental shortcuts or rules of thumb that people use to simplify complex decisions. These strategies are particularly useful in uncertain situations, where individuals lack complete information or the cognitive resources to analyze every possible outcome. However, reliance on heuristics can result in biases—systematic deviations from rational judgment—that affect investment choices and portfolio management.

The **Heuristic-Driven Bias Model** identifies several key heuristics that are particularly relevant to financial decision-making:

1. Representativeness Heuristic

The representativeness heuristic involves judging the probability of an event based on how similar it is to a known category or past event. In the context of investing, this heuristic often leads to overvaluation of recent trends or patterns. For example:

- Investors may assume that a company experiencing strong growth in the past will continue to perform well, disregarding underlying fundamentals or market conditions. This bias contributes to phenomena like momentum investing, where investors chase assets with recent high returns.
- Representativeness can also lead to excessive optimism during market booms, as investors extrapolate recent trends into the future, potentially fueling speculative bubbles.

This heuristic explains why investors often fall into the trap of "hot-hand fallacy," where they believe that recent success is indicative of continued performance, even in random environments like stock markets.

2. Anchoring Heuristic

The anchoring heuristic refers to the tendency to rely too heavily on initial information or reference points when making decisions. For investors, this often manifests in:

- Fixating on the purchase price of a stock as the anchor point, which influences subsequent decisions, such as whether to sell or hold the asset. This can lead to holding onto losing investments longer than rational analysis would recommend, as investors are anchored to the initial value and reluctant to realize losses.
- Setting arbitrary benchmarks, such as expected returns or price targets, which may not align with market realities.

Anchoring bias significantly impacts portfolio rebalancing and risk management, as investors struggle to adapt to new information or changing market conditions due to their attachment to initial anchors.

3. Availability Heuristic

The availability heuristic occurs when individuals assess the probability of an event based on how easily similar instances come to mind. In financial markets, this heuristic influences investment decisions by:

- Placing disproportionate weight on recent or highly publicized events. For example, investors may overreact to media coverage of market crashes or success stories, leading to panic selling or speculative buying.
- Overestimating the significance of recent market news while neglecting long-term trends or historical data, resulting in short-term, reactionary decisions.

This bias is particularly problematic in volatile markets, where frequent news updates and media sensationalism amplify emotional reactions and cloud objective analysis.

The Heuristic-Driven Bias Model provides a framework for understanding how biases such as overconfidence, anchoring, and illusion of control arise in investment contexts. For

instance:

- **Overconfidence Bias**: This often stems from the representativeness heuristic, where investors overestimate their ability to identify patterns or predict outcomes based on limited data.
- **Anchoring Bias**: As explained earlier, anchoring is a direct result of relying too heavily on initial reference points, affecting sell and hold decisions.
- **Illusion of Control**: This bias can be linked to the availability heuristic, as investors overestimate their ability to influence outcomes based on accessible but often irrelevant information.

The model highlights that while heuristics streamline decision-making, they come at the cost of rationality, leading to systematic errors in judgment. In financial markets, these biases can result in suboptimal portfolio management, misallocation of resources, and missed opportunities.

2.1.4 **Efficient Market Hypothesis (Critique)**

The Efficient Market Hypothesis (EMH), developed by Eugene Fama (1970), asserts that financial markets are "informationally efficient," meaning that asset prices fully reflect all available information at any given time. EMH is built on the premise of rational investor behavior, implying that market participants analyze available information logically and make optimal decisions to maximize returns. The hypothesis is foundational to classical finance, underpinning theories like the Capital Asset Pricing Model (CAPM). However, despite its widespread acceptance, EMH has been subject to extensive criticism, particularly from behavioral finance scholars, for its oversimplified assumptions about human behavior and its inability to explain observed market anomalies.

Assumptions of EMH

EMH is based on three core assumptions:

1. **Rationality**: Investors are rational and use available information to make decisions that maximize their utility.
2. **Market Efficiency**: Market participants act collectively to ensure that prices adjust

rapidly and accurately to reflect new information.

3. **No Arbitrage Opportunities**: Since prices reflect all information, there are no opportunities to earn abnormal profits consistently.

EMH categorizes market efficiency into three forms:

- **Weak Form**: Prices reflect all historical market data, making technical analysis ineffective.
- **Semi-Strong Form**: Prices incorporate all publicly available information, rendering fundamental analysis futile.
- **Strong Form**: Prices reflect all information, both public and private, ensuring that no investor can gain an advantage.

While these premises provide a theoretical framework for understanding markets, real-world evidence frequently contradicts them, highlighting persistent inefficiencies.

Behavioral Critique of EMH

Behavioral finance challenges EMH by demonstrating that investors are not always rational and that markets are influenced by cognitive biases, emotions, and social factors. These behavioral elements give rise to anomalies that EMH fails to explain.

1. **Overconfidence Bias**: Overconfidence bias leads investors to overestimate their knowledge and predictive abilities, causing excessive trading. This behavior contradicts EMH's assumption of rationality, as overconfident investors often incur higher transaction costs and achieve lower net returns (Barber & Odean, 2001). For example, during speculative bubbles, overconfidence drives aggressive buying, inflating asset prices beyond their intrinsic value.
2. **Loss Aversion**: Loss aversion, a central concept in Prospect Theory (Kahneman & Tversky, 1979), highlights that investors experience the pain of losses more acutely than the pleasure of equivalent gains. This emotional response leads to irrational behaviors such as holding onto losing stocks for too long (the disposition effect) or avoiding risky but potentially rewarding investments. EMH, which assumes rationality, does not account for such emotional influences on decision-making.

3. **Market Anomalies**: Behavioral finance explains market phenomena that EMH cannot, such as:
    - **Overreaction and Underreaction**: Investors overreact to dramatic news and underreact to incremental updates, causing price distortions (De Bondt & Thaler, 1985).
    - **Herd Behavior**: Social dynamics often lead investors to follow the crowd, amplifying market bubbles and crashes (Shiller, 2003).
4. **Irrational Market Participants**: EMH assumes that irrational behaviors are quickly corrected by rational arbitrageurs. However, behavioral finance shows that irrational behaviors can persist and even dominate markets, as seen in events like the 2008 financial crisis.

Implications of EMH Critiques

The critique of EMH underscores the need to incorporate behavioral insights into market models. Recognizing the role of cognitive biases and emotional influences can help explain why markets deviate from efficiency and how anomalies persist. For instance:

- **Market Predictability**: Contrary to EMH, historical data, trends, and sentiment analysis often provide predictive power for asset prices.
- **Investment Strategies**: Behavioral critiques suggest that strategies exploiting inefficiencies, such as momentum investing or contrarian approaches, can outperform market averages.

Furthermore, EMH's limitations highlight the importance of financial education and tools to mitigate behavioral biases. For example, automated trading platforms and robo-advisors can reduce emotional decision-making and improve portfolio management.

2.2 Empirical Review

Khan and Ahmed (2021) conducted an empirical study on the impact of cognitive biases on investment decision-making among retail investors in Pakistan. Using a sample of 250 respondents, the study employed multiple regression analysis to examine the influence of

overconfidence, loss aversion, anchoring, and herding on investment performance. The data was collected through structured questionnaires, capturing investors' behaviors and perceptions. The findings revealed that overconfidence and herding significantly and positively influence investment decisions, often leading to excessive trading and suboptimal portfolio allocation. Loss aversion was identified as a critical factor causing investors to hold onto underperforming assets, negatively affecting overall portfolio returns. Anchoring bias, however, showed mixed effects, as its impact varied depending on the investment context. Notably, the study emphasized that cognitive biases collectively result in substantial deviations from rational decision-making, leading to inefficiencies in financial markets. Based on the findings, the authors recommend enhancing financial literacy and awareness among retail investors to mitigate the adverse effects of cognitive biases. They also suggest the adoption of behavioral interventions, such as decision aids and rule-based investment strategies, to promote rational investment behaviors. The study underscores the importance of addressing psychological factors in financial decision-making to improve market efficiency and individual investment outcomes.

Bihari et al. (2023) conducted an empirical study to assess how cognitive biases affect investment decisions among retail investors. The researchers identified 13 relevant items covering major aspects of bias through existing research and expert consultation. They collected data from 337 retail investors and employed multiple linear regression and artificial neural network models to analyze the data. The findings revealed that cognitive biases significantly impact investment decisions, leading to deviations from rational behavior. The study emphasizes the importance of addressing these biases to improve investment outcomes.

Kudryavtsev and Cohen (2020) conducted a systematic review to identify the effects of behavioral factors on financial decision-making. The review analyzed 29 studies published between 2010 and 2020, focusing on overconfidence, anchoring bias, herding effect, and loss aversion. The findings indicate that these biases significantly influence investment decisions, leading to deviations from rational behavior. The study highlights the need for investors to be aware of these biases and suggests incorporating behavioral finance principles into investment strategies to mitigate their impact.

Smith (2021) conducted a case study to examine the impact of cognitive biases on investment decisions. The study focused on biases such as overconfidence, loss aversion, and herding behavior, highlighting how these psychological factors lead investors away from rational decision-making. The research utilized case studies and empirical evidence to demonstrate that these biases significantly influence investment strategies and portfolio outcomes. The findings underscore the necessity for investors to recognize and mitigate these biases to enhance decision-making processes.

Ady (2018) conducted a study on the cognitive and psychological biases affecting investment decision-making behavior among Indonesian investors. Using a mixed-methods approach, the research focused on identifying key biases, including overconfidence, anchoring, and loss aversion. Data was collected through surveys and interviews with individual investors, providing insights into the behavioral factors influencing their decision-making processes. The findings revealed that overconfidence bias is the most prevalent, leading to excessive trading and poor portfolio diversification. Anchoring bias also significantly impacted decisions, as investors frequently relied on initial reference points such as stock purchase prices. Loss aversion was evident in the reluctance of investors to sell underperforming stocks, hoping for a rebound. The study concluded that cognitive and psychological biases often lead investors away from rational decision-making, negatively impacting portfolio performance. Ady recommended financial literacy programs and structured decision-making strategies to mitigate these biases. The study's focus on an emerging market context highlights the importance of behavioral finance in understanding investment behavior outside developed markets.

Hsu and Chen (2017) examined the impact of managers' illusion of control on investment cash flow sensitivity within the context of corporate governance structures. Utilizing data from Taiwanese firms, the study assessed how managerial overconfidence, as a form of cognitive bias, influenced investment decisions under varying governance frameworks. The findings revealed that managers with a higher illusion of control exhibited increased investment cash flow sensitivity, often overestimating their ability to influence outcomes. This behavior was particularly pronounced in firms with weaker corporate governance, where fewer checks existed to curb overconfident decision-making. Conversely, stronger governance mechanisms mitigated the effects of the illusion of control, leading to more

rational investment strategies. The authors emphasized the need for robust governance practices to reduce the detrimental impact of cognitive biases on financial decision-making. This study contributed to understanding how psychological factors interact with organizational structures, influencing managerial investment decisions.

Labajova et al. (2021) explored the role of the illusion of control in farmers' investment and financing decisions. Through surveys and experimental methods, the study analyzed how farmers perceived their ability to control uncertain outcomes, such as market prices and production yields. The findings indicated that farmers with a stronger illusion of control were more likely to undertake risky investments and rely on external financing. This behavior often resulted in suboptimal financial outcomes, as their confidence in controlling external variables was unfounded. The study also highlighted that farmers with higher financial literacy were less prone to the illusion of control, demonstrating the importance of education in mitigating cognitive biases. By focusing on agricultural finance, this research extended the application of behavioral finance principles to a unique sector, offering insights into the intersection of cognitive biases and rural investment behavior.

Pompian (2011) provided a comprehensive analysis of behavioral finance concepts and their application in wealth management. The book synthesized key theories on investor biases, including overconfidence, loss aversion, and the illusion of control, to develop practical investment strategies. Pompian emphasized the need for financial advisors to identify and account for individual investor biases when designing portfolios. Using real-world examples, the book demonstrated how these biases affect asset allocation, risk assessment, and overall financial performance. One of the key takeaways was the importance of tailoring investment strategies to mitigate the impact of cognitive biases, such as using systematic decision-making processes and diversification. Pompian also introduced frameworks like Behavioral Investor Types (BITs) to categorize clients based on their behavioral tendencies, enabling personalized wealth management. The work provided both theoretical insights and actionable recommendations, making it a seminal contribution to the field of behavioral finance and its practical applications in wealth management.

Barber and Odean (2001) investigated the role of overconfidence in investment decision-making, with a focus on gender differences. Analyzing trading records from a large brokerage firm, the study found that male investors exhibited higher levels of overconfidence compared to female investors, leading to excessive trading. The research demonstrated that overconfident investors tend to overestimate their knowledge and abilities, resulting in higher transaction costs and lower net returns. Male investors, trading 45% more frequently than females, experienced annualized returns that were 1.4 percentage points lower than their female counterparts. The study concluded that overconfidence negatively impacts investment outcomes, particularly through increased trading frequency. Barber and Odean emphasized the importance of addressing overconfidence bias to improve financial decision-making. Their findings provided significant contributions to behavioral finance by empirically demonstrating the gender-specific impact of overconfidence on investment performance.

Dittrich et al. (2005) explored overconfidence in investment decisions through an experimental approach. The study involved controlled laboratory experiments with participants engaging in simulated investment scenarios. The researchers examined how overconfidence influenced decision-making, focusing on portfolio allocation and risk assessment. The findings revealed that overconfident participants tended to underestimate risks and allocate resources suboptimally, often taking on excessive risks for potentially higher returns. The experimental results also highlighted a tendency for overconfident investors to ignore external market signals, relying instead on their subjective judgment. Dittrich et al. concluded that overconfidence leads to inefficiencies in portfolio management and increased financial risk. They recommended incorporating behavioral insights into financial education and decision-making frameworks to counteract overconfidence. This study provided empirical evidence on the detrimental effects of overconfidence in controlled settings, bridging the gap between theoretical constructs and real-world applications.

Qadri and Shabbir (2014) explored the impact of overconfidence and illusion of control biases on investment decision-making, using data from investors in the Islamabad Stock Exchange (ISE). The study employed a survey methodology, collecting responses from

150 investors, and analyzed the data using regression analysis. The findings highlighted that both overconfidence and illusion of control significantly influenced investors' decisions, often leading to excessive trading and higher risk-taking. Overconfidence bias was particularly associated with an inflated sense of prediction accuracy, causing investors to disregard objective market indicators. The illusion of control bias was linked to investors' belief in their ability to control external market outcomes, resulting in over-commitment to specific investments. The authors concluded that these biases distort rational decision-making, adversely impacting portfolio performance. They recommended financial literacy programs and decision-making frameworks to help investors recognize and mitigate the effects of these biases.

Sabir et al. (2019) investigated the role of overconfidence and past investment experience in driving herding behavior among investors, with financial literacy as a moderating variable. Using a sample of 300 retail investors from the Pakistan Stock Exchange, the study applied structural equation modeling to analyze relationships between variables. The results revealed that overconfidence and past positive investment experiences significantly contributed to herding behavior, where investors follow the majority's actions regardless of rational analysis. However, financial literacy was found to mitigate the impact of these biases, promoting more independent and informed decision-making. The study underscored the importance of financial education in reducing susceptibility to cognitive biases and fostering rational investment behavior. The authors suggested integrating behavioral insights into financial advisory services to help investors make more objective decisions.

Syarkani and Alghifari (2022) conducted a study investigating the impact of overconfidence bias and illusion of control bias on investment decision-making, moderated by demographic factors such as gender, age, and education. Using a quantitative approach, the study surveyed 100 individual investors from Bandung, Indonesia. The findings revealed that both overconfidence and illusion of control biases significantly influence investment decision-making. Overconfidence bias was positively associated with more frequent decision-making, often leading to excessive trading and increased risks. The illusion of control bias also led investors to overestimate their ability to influence

outcomes, resulting in suboptimal decisions. Gender was found to significantly moderate these relationships; men displayed a higher susceptibility to overconfidence bias, while the illusion of control bias was less pronounced among female investors. Age and education, however, did not significantly moderate the effects of these biases. The study emphasized the importance of financial literacy and awareness to mitigate these biases, particularly among younger and less experienced investors. The research contributes to the field of behavioral finance by exploring how demographic factors shape the influence of cognitive biases on decision-making, highlighting the need for tailored interventions to promote rational investing.

Dhungana et al. (2022) examined the effect of cognitive biases on investment decision-making in Pokhara Valley, Nepal. The study analyzed five cognitive biases: availability, anchoring, overconfidence, herd instinct, and regret aversion. Data was collected from 179 investors using a structured questionnaire, and descriptive and inferential analyses were conducted. The findings revealed a significant relationship between overconfidence, availability, and herd instinct biases with irrational investment decisions. Among the biases, overconfidence had the highest impact, while regret aversion showed the least influence. Anchoring bias did not significantly affect decision-making. The authors concluded that cognitive biases are critical in shaping investment behavior, often leading to suboptimal financial outcomes. They recommended enhancing investor awareness and implementing de-biasing techniques to improve investment decisions. This study highlights the role of psychological factors in the financial decision-making process in a developing economy context.

Novianggie and Asandimitra (2019) investigated the influence of behavioral, cognitive, and emotional biases on investment decisions among college students in Surabaya, Indonesia, with financial literacy as a moderating variable. Data from 212 students were analyzed using multiple regression techniques. The results revealed that biases such as herding, overconfidence, and representativeness significantly impacted investment decisions. However, biases like disposition effect and regret aversion showed no significant effect. Surprisingly, financial literacy was not found to moderate the relationship between biases and investment decisions but acted as an independent variable. The study suggested that while financial literacy improves investment decision-making, cognitive biases still

dominate the decision processes of inexperienced investors. Recommendations included targeted educational interventions to reduce bias-driven errors in investment decisions among young investors.

Khan (2020) explored the impact of cognitive biases on investment decisions in the Pakistani market, with financial literacy as a moderating factor. Using data from 250 individual investors, the study employed regression analysis to assess the effects of herding bias, disposition effect, and mental accounting on decision-making. Results showed that all three biases positively influenced investment decisions, often leading to irrational behavior. Financial literacy had a dual moderating role—it mitigated the impact of herding bias and mental accounting but amplified the disposition effect. The study highlighted the need for financial literacy programs to address these biases systematically, particularly in developing markets like Pakistan. This research contributes to behavioral finance literature by providing insights into the interaction between cognitive biases and financial literacy in influencing investment behavior.

Chand (2024) explored the role of behavioral factors on stock investment decisions among individual investors at the Nepal Stock Exchange (NEPSE). Using descriptive and analytical research methods, the study surveyed 384 investors and analyzed data with SPSS. The findings revealed that herding behavior, with a beta coefficient of 0.463, significantly influenced investment decisions, surpassing other biases like overconfidence and loss aversion. Herding behavior often led investors to mimic collective actions, creating market inefficiencies. Overconfidence and loss aversion biases also emerged as critical factors shaping decisions, often resulting in excessive risk-taking and suboptimal portfolio management. The study underscored the importance of financial literacy and investor education to mitigate these behavioral biases. Recommendations included regulatory measures and educational initiatives to enhance market stability and efficiency. Despite its contributions, the study noted limitations in generalizability due to its focus on NEPSE. Future research was suggested to expand scope and sample size to provide broader insights into investment behavior in emerging markets.

Subedi (2024) examined the investment decision-making behavior of Nepalese stock

market investors, emphasizing the role of financial literacy. Employing a qualitative approach, the study used semi-structured interviews to gather data from diverse participants. The findings identified key factors influencing decisions, such as EPS, P/E ratio, ROE, and qualitative aspects like company history and liquidity. Behavioral biases, including herding tendencies, overconfidence, and anchoring, were prevalent among investors. The study highlighted a preference for investing in commercial and development banks over hydropower companies. Financial literacy was identified as a crucial moderating factor, empowering investors to mitigate biases and adapt to market dynamics. Subedi recommended targeted financial education programs and tools to reduce the impact of cognitive biases, emphasizing the need for tailored strategies to promote rational investment practices.

Rana (2024) investigated the influence of herding behavior on investment decisions in Nepal, with overconfidence and financial literacy as mediating and moderating factors, respectively. Using survey data from 384 NEPSE investors, the study applied SMART-PLS for structural equation modeling. Results revealed that herding behavior significantly influenced investment decisions and enhanced overconfidence, which in turn positively impacted decision-making. Financial literacy moderated these effects, reducing the adverse impacts of herding and overconfidence. The findings suggested that psychological factors and cognitive biases are pivotal in shaping investment behavior, often overshadowing rational decision-making processes. Rana emphasized the critical need for financial education to empower investors and counteract bias-driven decisions, ultimately fostering market stability.

Gurung et al. (2024) explored behavioral biases in investment decision-making among Nepalese stock market investors. Using data from 379 respondents and a linear regression model, the study identified overconfidence, anchoring, and regret aversion as significant predictors of investment decisions, while representative bias had minimal influence. Surprisingly, herding behavior was not found to significantly affect decision-making in this context. The study highlighted the substantial role of cognitive biases in shaping investment choices, often leading to irrational behavior and suboptimal outcomes. Gurung et al. recommended increasing awareness of behavioral biases among investors and incorporating behavioral insights into financial policies to enhance market stability and

decision-making quality.

Subedi and Bhandari (2024) examined the role of psychological factors in investment decisions in the Nepalese share market, emphasizing the mediating effect of financial literacy. The study surveyed 410 investors using structured questionnaires and analyzed data with SmartPLS 4.0. Findings revealed that biases such as overconfidence, herding, and loss aversion significantly influenced investment decisions. Financial literacy emerged as a critical factor, mitigating the adverse impacts of these biases and enabling more rational decision-making. The study emphasized the importance of financial education programs to improve investment behavior and market efficiency. By addressing the interplay between psychological biases and financial literacy, the research offered actionable recommendations for policymakers and financial institutions to foster a stable and resilient investment environment.

Table 1

Summary of Empirical Review

Author (Year)	Objective	Methodology	Findings
Bihari et al. (2023)	Assess cognitive biases' impact on investment decisions among retail investors.	Survey of 337 respondents; regression and neural network analysis.	Cognitive biases lead to deviations from rational behavior; significant impact on investment outcomes.
Syarkani and Alghifari (2022)	Explore demographic factors moderating cognitive biases' effects on investment decision-making.	Survey of 100 investors; quantitative analysis.	Overconfidence and illusion of control influence decisions; gender significantly moderates effects.
Dhungana et al. (2022)	Examine cognitive biases' effects on investment decisions in Pokhara Valley, Nepal.	Survey of 179 investors; descriptive and inferential analysis.	Overconfidence and availability biases significantly influence decisions; regret aversion has minimal effect.

Khan and Ahmed (2021)	Investigate cognitive biases' impact on investment decisions among retail investors in Pakistan.	Survey of 250 respondents; multiple regression analysis.	Overconfidence and herding significantly influence decisions; loss aversion negatively impacts returns.
Labajova et al. (2021)	Explore the illusion of control in farmers' investment and financing decisions.	Surveys and experiments with farmers.	Illusion of control leads to riskier investments; financial literacy mitigates effects.
Smith (2021)	Examine cognitive biases' influence on investment decisions through a case study approach.	Case study with empirical data.	Overconfidence, loss aversion, and herding substantially influence investment strategies.
Kudryavtsev and Cohen (2020)	Systematic review of behavioral factors' influence on financial decision-making.	Systematic review of 29 studies.	Overconfidence, anchoring, herding, and loss aversion significantly affect decisions.
Sabir et al. (2019)	Analyze overconfidence and past investment experience in driving herding behavior among investors.	Survey of 300 investors; structural equation modeling.	Overconfidence and past experiences drive herding; financial literacy mitigates biases.
Novianggie and Asandimitra (2019)	Study behavioral, cognitive, and emotional biases in college students' investment decisions.	Survey of 212 college students; regression analysis.	Herding, overconfidence, and representativeness biases significantly impact decisions.
Ady (2018)	Study cognitive and psychological biases affecting investment behavior among Indonesian investors.	Mixed-methods: surveys and interviews.	Overconfidence is the most prevalent bias; anchoring and loss aversion also impact decisions.

Qadri and Shabbir (2014)	Examine overconfidence and illusion of control biases' impact on investment decisions in Islamabad Stock Exchange.	Survey of 150 investors; regression analysis.	Overconfidence and illusion of control distort decision-making, causing higher risks and poor performance.
Pompian (2011)	Analyze behavioral finance concepts and their application in wealth management.	Conceptual and practical analysis.	Biases like overconfidence and loss aversion significantly impact wealth management strategies.

2.3 Research Gap

Despite the extensive literature exploring cognitive biases in investment decision-making, several critical gaps remain unaddressed, particularly in the context of emerging markets like Nepal. While behavioral finance studies have significantly advanced our understanding of how cognitive biases such as overconfidence, anchoring, and loss aversion influence investment choices, much of the existing research has focused on developed economies with mature financial markets. This leaves a gap in understanding how these biases operate in less structured and volatile markets like the Nepal Stock Exchange (NEPSE), where information asymmetry and limited financial literacy are prevalent.

Most studies, including those by Khan and Ahmed (2021) and Sabir et al. (2019), focus on retail investors in larger, well-regulated stock exchanges. However, Nepalese investors often rely on informal networks, word-of-mouth, and limited publicly available data, making them potentially more susceptible to biases such as herding behavior and the illusion of control. Furthermore, while financial literacy has been identified as a mitigating factor for cognitive biases, its specific role in Nepalese investment decisions remains underexplored.

Additionally, there is limited empirical evidence on how demographic factors such as age, gender, and education interact with cognitive biases to influence investment decisions in

Nepal. Studies like those by Syarkani and Alghifari (2022) have highlighted these interactions in other markets, but their applicability to Nepal's unique socio-economic context remains unexplored.

Finally, while previous studies have focused on individual biases in isolation, the interplay between multiple biases and their cumulative impact on investment outcomes in Nepal is not well understood. Addressing these gaps is crucial for developing targeted strategies to enhance financial literacy, reduce irrational decision-making, and improve market efficiency in Nepal. This study aims to fill these gaps by providing insights into the role of cognitive biases in investment decision-making among Nepalese investors.

CHAPTER III

RESEARCH METHODLOGY

3.1 Research Design

This study adopts a descriptive research design to investigate the role of cognitive biases in investment decision-making among Nepalese investors. A descriptive research design is chosen because it enables the systematic collection and analysis of data to describe the characteristics, behaviors, and perceptions of a population concerning a specific phenomenon. This approach is particularly suitable for understanding the prevalence and impact of cognitive biases such as overconfidence, loss aversion, anchoring, and herding on investment decisions.

The descriptive design allows the study to achieve its objectives by providing insights into the extent to which these biases influence investor behavior and their implications for financial decision-making in the context of the Nepal Stock Exchange (NEPSE). It helps establish relationships between cognitive biases and investment outcomes without manipulating variables, ensuring an accurate portrayal of real-world investor behavior.

Data will be collected through structured questionnaires distributed to individual investors actively participating in the NEPSE. This approach ensures consistency in responses, enabling the identification of patterns and trends related to cognitive biases. The data will then be analyzed using statistical tools to describe the influence of these biases and their impact on investment decision-making.

By employing a descriptive research design, this study aims to provide a comprehensive understanding of how cognitive biases affect investment choices among Nepalese investors, contributing valuable insights to the field of behavioral finance and informing strategies to mitigate the adverse effects of these biases on investment outcomes.

3.2 Population and Sampling Procedure

The population for this study comprises individual investors actively participating in the Nepal Stock Exchange (NEPSE). These investors include retail traders, professionals, and individuals from various demographic and socio-economic backgrounds who make investment decisions within the Nepalese stock market.

To achieve the research objectives, a sample size of 384 respondents was determined based on Cochran's formula for sample size calculation, ensuring adequate representation of the target population. Given the practical constraints of time, resources, and accessibility, the study employs a convenience sampling method to select participants. Convenience sampling is chosen because it allows for the efficient collection of data from readily accessible and willing respondents, facilitating the study's timely completion.

Investors were approached through online platforms, investment forums, and stockbrokers to ensure diversity in the sample. The selection criteria required participants to have prior investment experience in NEPSE, ensuring that the data reflects insights from individuals familiar with the stock market's dynamics. Structured questionnaires were distributed to the selected respondents, ensuring consistency and reliability in data collection.

While convenience sampling may limit the generalizability of findings, the study prioritizes capturing the behavioral patterns and cognitive biases of active investors in NEPSE. The chosen approach balances practicality with the need for meaningful insights, laying the foundation for further exploration and more extensive studies in the future.

3.3 Nature and Sources of Data

The nature of the data for this study is primary, collected directly from the respondents to address the research objectives. Primary data is chosen because it provides firsthand information about the role of cognitive biases in investment decision-making among Nepalese investors, ensuring relevance and accuracy for the study's context.

The primary data is collected through a structured questionnaire, designed to capture detailed information about the participants' investment behaviors, experiences, and the influence of specific cognitive biases such as overconfidence, loss aversion, anchoring, and herding. The questionnaire consists of both closed-ended and Likert scale questions, enabling the quantitative measurement of biases and their impact on investment decisions. This approach ensures consistency in responses and facilitates statistical analysis to identify patterns and trends.

The questionnaire is distributed to 364 individual investors selected through convenience sampling. The data collection process targets active investors in the Nepal Stock Exchange (NEPSE) through online platforms, stockbrokers, and investment groups, ensuring

diversity in the sample.

3.4 Data Collection Technique

The data for this study is collected using a structured questionnaire, which is distributed to the participants through Google Forms. This method ensures efficient data collection, broad reach, and convenience for both the researcher and respondents. The questionnaire is designed to gather quantitative data on the impact of cognitive biases such as overconfidence, loss aversion, anchoring, and herding on investment decision-making among Nepalese investors.

The questionnaire consists of 5-point Likert scale questions, ranging from "Strongly Disagree" (1) to "Strongly Agree" (5). This scale enables respondents to express the degree of their agreement or disagreement with various statements related to their investment behavior and cognitive biases. The Likert scale format allows for the measurement of subjective attitudes and perceptions in a structured and quantifiable manner, facilitating statistical analysis.

The structured questionnaire includes sections covering demographic information, investment experience, and behavioral tendencies associated with cognitive biases. By employing Google Forms, the study ensures accessibility and ease of participation, especially for investors located in different regions of Nepal. The online distribution method also enables the collection of a sufficient number of responses within a limited timeframe.

3.5 Research Framework and Definition of Variables

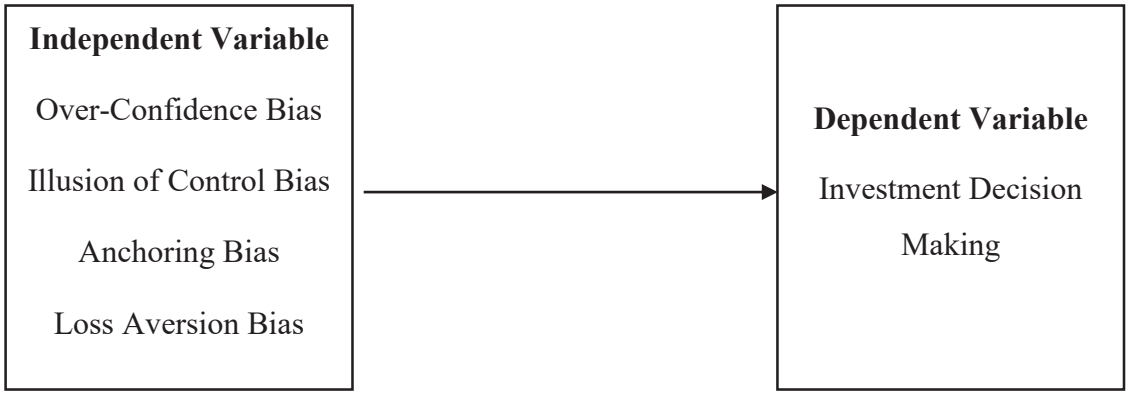

Figure 1: Conceptual Framework

Source: (Dhakal & Lamsal, 2023; Syarkani & Alghifari 2022)

Independent Variables:

Overconfidence Bias

Overconfidence bias refers to an investor's tendency to overestimate their abilities, knowledge, or the accuracy of their judgments in financial decision-making. This bias often leads to excessive trading, underestimation of risks, and poor portfolio diversification. In the context of this study, overconfidence bias is measured by assessing respondents' perceptions of their knowledge, prediction accuracy, and confidence in their investment decisions.

Illusion of Control Bias

Illusion of control bias is the tendency of individuals to believe they have more control over outcomes than they actually do, especially in uncertain situations like financial markets. Investors with this bias may take excessive risks, believing their actions can influence market results. This variable is measured by examining how respondents perceive their ability to influence stock performance and market outcomes through their decisions.

Anchoring Bias

Anchoring bias refers to the tendency of individuals to rely heavily on the first piece of information (anchor) they encounter when making decisions, even when better or more relevant information is available. In the financial context, investors might anchor their decisions to initial purchase prices or past market trends, leading to reluctance in selling underperforming assets or making adjustments based on current market conditions. For this study, anchoring bias is measured by assessing how investors' reliance on initial reference points influences their judgment and decision-making processes in financial investments.

Loss Aversion Bias

Loss aversion bias describes the psychological tendency of individuals to prioritize avoiding losses over achieving equivalent gains. This bias is rooted in the perception that the pain of losing is greater than the pleasure of gaining. In financial decision-making, loss aversion may lead investors to hold onto losing investments for too long or sell profitable

investments prematurely to secure gains. For this study, loss aversion bias is measured by evaluating how the fear of losses influences participants' investment strategies and their willingness to take risks.

Dependent Variable:

Investment Decision-Making

Investment decision-making refers to the process through which investors select financial assets, balance risk and return, and make portfolio allocation decisions. It reflects the rationality or irrationality of decisions influenced by behavioral biases. In this study, investment decision-making is evaluated based on respondents' choices, trading frequency, and portfolio management practices, as influenced by cognitive biases.

3.6 Method of Analysis

To analyze the data and achieve the research objectives, both descriptive and inferential statistical methods will be employed. The analysis begins with a demographic analysis, which uses descriptive statistics to provide an overview of the respondents' characteristics, such as age, gender, education level, and investment experience. This analysis ensures a clear understanding of the sample population and its relevance to the study.

Descriptive analysis will summarize the key variables, including cognitive biases (overconfidence and illusion of control) and investment decision-making. Measures such as mean, standard deviation, and frequency distribution will be used to assess the intensity and prevalence of these biases among Nepalese investors, offering valuable insights into behavioral patterns.

To examine the relationships between variables, correlation analysis will be conducted. This analysis will measure the strength and direction of the association between the independent variables (overconfidence bias anchoring bias, loss aversion bias and illusion of control bias) and the dependent variable (investment decision-making). The correlation results will highlight whether these biases are significantly related to investor behavior.

Multiple regression analysis will be employed to assess the impact of cognitive biases on investment decision-making. This method will identify the predictive power of the independent variables, quantifying their influence on the dependent variable. Regression

coefficients will provide insights into the relative contribution of each bias to investment decisions, enabling a deeper understanding of their effects.

These analyses, performed using statistical software such as SPSS, will allow the study to draw meaningful conclusions about the role of cognitive biases in investment decision-making and support actionable recommendations for improving investment practices.

CHAPTER IV
RESULTS AND DISCUSSION

This chapter presents the findings of the study, which examines the relationship between various cognitive biases and investment decision-making. The analysis integrates data obtained through structured questionnaires and employs statistical tools to assess the significance and strength of these relationships. Key cognitive biases, including overconfidence bias, illusion of control bias, anchoring bias, and loss aversion bias, are analyzed in the context of their influence on investment behavior. The results section includes descriptive statistics, correlation analysis, and regression analysis to provide a comprehensive understanding of the data. These findings serve as the basis for interpreting the impact of each bias on decision-making and evaluating the study's hypotheses. The chapter aims to bridge the gap between theoretical assumptions and empirical evidence, offering insights into how cognitive biases shape financial decisions.

4.1 Demographic Statistics

This section presents the demographic characteristics of the respondents, which form the foundation for understanding the composition of the study sample. The demographic analysis includes variables such as age, gender, educational qualification, occupation, and investment experience. These factors provide valuable context for interpreting the results by highlighting the diversity and representativeness of the sample population. Understanding the demographic profile is crucial for assessing how individual differences might influence cognitive biases and investment decision-making. The insights derived from this analysis enable a deeper exploration of how demographic variations relate to the study's findings and hypotheses.

The percentages reveal that the majority of investors in the study belong to the 21–30 years age group, comprising 39.06% of the sample. This indicates that young adults are the most active participants in investment activities, likely driven by their willingness to take risks, technological savviness, and interest in exploring financial opportunities.

Table 2

Age of respondents

Age Group	Frequency	Percentage (%)
Below 20 years	100	26.04%
21–30 years	150	39.06%
31–40 years	80	20.83%
41–50 years	40	10.42%
Above 50 years	14	3.65%

The Below 20 years age group also represents a substantial portion of investors at 26.04%, suggesting that even younger individuals are increasingly engaged in financial markets, possibly influenced by financial literacy programs or parental guidance. These two groups together account for a significant majority, highlighting the prominence of youth-driven investment behavior in the Nepalese market.

The remaining age groups demonstrate a gradual decline in participation as age increases. The 31–40 years age group constitutes 20.83%, reflecting moderate involvement from middle-aged investors who might be balancing financial risks with responsibilities like family and career. Participation drops further for the 41–50 years group (10.42%) and is minimal for those Above 50 years (3.65%), possibly due to risk aversion and a preference for safer investment options like savings accounts or fixed deposits. These findings suggest that younger and middle-aged individuals dominate the investment landscape, while older investors remain cautious and less involved in high-risk financial markets.

Table 3

Gender of Respondents

Gender	Frequency	Percentage (%)
Male	220	57.14
Female	160	41.56
Other/Prefer not to say	4	1.3

The table outlines the gender distribution among the 384 respondents, providing insight into the representation of males, females, and individuals who prefer not to disclose their

gender. Male respondents form the majority, constituting 57.14% (220 respondents) of the total sample. This indicates that investment decision-making might be more actively pursued or accessible to males in the context of the study, reflecting potential societal or cultural norms that influence participation rates.

Female respondents account for 41.56% (160 respondents), signifying a significant but comparatively lower level of participation. This highlights the growing presence of women in investment-related activities but also suggests a potential gap in gender representation. Such findings underscore the importance of addressing barriers that might discourage women from engaging actively in financial decision-making, including targeted financial literacy programs or empowerment initiatives.

The remaining 1.30% (4 respondents) represents individuals who either identify outside the male and female categories or prefer not to disclose their gender. While this is a small proportion, it emphasizes the importance of inclusivity in research and the need to consider diverse perspectives when analyzing investment behavior. Overall, the data reveals a male-dominated respondent pool, with room for greater gender balance and inclusion in financial literacy and investment practices.

Table 4

Education of respondents

Education Level	Frequency	Percentage (%)
High School	100	25
Bachelor's Degree	180	46.75
Master's Degree	90	23.38
Other (please specify)	14	3.87

The table presents the education level distribution of the 384 respondents, shedding light on the relationship between education and participation in investment decision-making. Respondents with a Bachelor's degree constitute the largest group, representing 46.75% (180 respondents) of the total sample. This indicates that individuals with undergraduate

education are the most actively engaged in investment activities, likely due to their exposure to basic financial concepts and access to resources that enhance their decision-making abilities.

The second-largest group comprises respondents with a high school education, accounting for 25% (100 respondents) of the sample. This suggests that a quarter of the respondents are making investment decisions with relatively limited formal education, which may point to the need for accessible financial literacy programs tailored to individuals without advanced educational backgrounds.

Respondents with a Master's degree represent 23.38% (90 respondents), reflecting a significant level of participation among those with higher education. This group may possess greater analytical skills and a deeper understanding of financial markets, enabling them to make more informed investment decisions. Lastly, 3.87% (14 respondents) fall into the "Other" category, indicating alternative educational pathways or qualifications. This highlights the diverse educational backgrounds of investors and the potential for inclusive financial education initiatives to cater to all levels of formal education. Overall, the data demonstrates a strong association between education and active engagement in investment activities, underscoring the importance of tailored financial education across all educational strata.

Table 5

Employment of the Respondnets

Employment Status	**Frequency**	**Percentage (%)**
Student	120	31.17
Employed	150	38.96
Self-Employed	50	12.99
Unemployed	40	10.39
Retired	24	6.49

The table provides insights into the employment status of the 384 respondents, highlighting how various professional categories contribute to investment decision-making. The largest

group comprises employed individuals, accounting for 38.96% (150 respondents) of the total sample. This suggests that people with stable employment are the most active participants in investment activities, possibly due to their steady income streams and access to workplace resources that enable financial planning.

Students represent the second-largest group, making up 31.17% (120 respondents) of the sample. This significant proportion reflects the increasing interest of younger individuals in financial markets, likely driven by growing awareness of the importance of early investment. However, their relatively limited financial resources and professional experience may influence their investment behaviors, potentially making them more conservative or risk-averse in their decisions.

Self-employed individuals constitute 12.99% (50 respondents), highlighting the involvement of entrepreneurs and small business owners in investment activities. This group may seek diversification of income streams or leverage investments to supplement their entrepreneurial ventures. Meanwhile, 10.39% (40 respondents) of the sample are unemployed, indicating a smaller but notable segment of individuals who, despite lacking steady income, are engaging in investments, possibly for financial security or long-term planning. Finally, retirees account for 6.49% (24 respondents), reflecting their interest in investment as a means of sustaining income during retirement. Overall, the data illustrates a diverse range of employment statuses among investors, emphasizing the need for targeted financial advice and tools to cater to the unique circumstances of each group.

Table 6

Frequency of investment

Frequency of Investment	Frequency	Percentage (%)
Once a week	80	20.78
Once a month	150	38.96
Rarely	100	25.97
Never	55	14.29

The table provides an overview of the frequency of investment among the respondents,

highlighting their level of engagement in financial activities. The majority of respondents, 38.96% (150 individuals), reported investing "once a month." This indicates a trend toward regular but less frequent investment, likely reflecting the behavior of individuals who align their investment activities with monthly income cycles or specific financial goals.

Respondents who invest "rarely" constitute the second-largest group, representing 25.97% (100 individuals). This group may include those who view investments as secondary to other financial priorities or those with limited disposable income. Their sporadic investment behavior could also be attributed to limited financial literacy or a cautious approach to market risks.

The data also reveals that 20.78% (80 respondents) invest "once a week," indicating a segment of active investors who closely monitor market trends and frequently adjust their portfolios. These individuals may include experienced investors or those engaged in short-term trading strategies. On the other hand, 14.29% (55 respondents) reported "never" investing, reflecting a group that is disengaged from investment activities, potentially due to financial constraints, lack of knowledge, or skepticism about the financial markets. Overall, the data showcases varying levels of investment frequency, underscoring the need for tailored financial education and resources to encourage greater market participation, especially among those who invest infrequently or not at all.

4.2 Descriptive Statistics

This section summarizes the descriptive statistics of the variables used in the study, providing an overview of their central tendencies, variations, and distributions. The analysis includes the mean, standard deviation, minimum, and maximum values for each variable, offering insights into the overall trends and patterns within the dataset. Descriptive statistics are crucial in understanding the behavior and characteristics of cognitive biases such as overconfidence, illusion of control, anchoring bias, and loss aversion bias, as well as their potential impact on investment decision-making. These statistical measures form the basis for further inferential analysis by providing a preliminary understanding of the data's structure and relationships.

The table 7 provides an analysis of variables related to overconfidence bias among investors, detailing their responses on a 5-point Likert scale. The first variable, "I believe I

am better at predicting investment outcomes than most investors," yielded a mean score of 3.88 and a standard deviation of 0.758. This indicates that respondents generally perceive themselves as superior in predicting investment outcomes, with moderate variability in responses, reflecting some diversity in confidence levels.

The second variable, "I attribute my investment success primarily to my skills and abilities," had the highest level of agreement among the first three variables, with a mean of 3.92 and a standard deviation of 0.65. This low standard deviation suggests strong agreement and consensus among respondents, indicating a shared belief in their abilities as key drivers of investment success.

Table 7

Overconfidence Bias

Variable	N	Minimum	Maximum	Mean	Std. Deviation
I believe I am better at predicting investment outcomes than most investors.	384	1	5	3.88	0.758
I attribute my investment success primarily to my skills and abilities.	384	1	5	3.92	0.65
I believe my positive outlook increases the chances of investment success.	384	1	5	3.91	0.685
I tend to underestimate the risks associated with my investment decisions.	384	1	5	3.99	0.622
I assume that my investment plans will go exactly as I expect without major obstacles.	384	1	5	4.08	0.715

The third variable, "I believe my positive outlook increases the chances of investment success," also exhibited a high mean score of 3.91, with a standard deviation of 0.685. This result highlights the optimism among investors regarding the influence of their positive mindset on their investment outcomes, with limited variability in their responses.

For the fourth variable, "I tend to underestimate the risks associated with my investment decisions," the mean score increased to 3.99, reflecting a stronger agreement among respondents. The relatively low standard deviation of 0.622 indicates that respondents consistently acknowledged their tendency to downplay risks in decision-making, suggesting a critical aspect of overconfidence.

The fifth variable, "I assume that my investment plans will go exactly as I expect without major obstacles," recorded the highest mean score of 4.08, paired with a standard deviation of 0.715. This indicates a strong inclination among investors toward assuming ideal outcomes, with some variation in the degree of agreement.

In summary, the table reveals a consistent pattern of overconfidence bias among respondents, as reflected in high mean scores across all variables. This bias is evident in their beliefs about superior predictive abilities, reliance on personal skills, optimism, underestimation of risks, and assumptions about flawless investment plans. The relatively low standard deviations across the variables indicate a shared tendency toward overconfidence among the sample population, underscoring the significance of this bias in shaping investment decisions.

The table 8 presents the responses related to variables measuring the illusion of control bias among investors. The first variable, "I believe I can predict investment outcomes with a high degree of accuracy," has a mean score of 4.03 and a standard deviation of 0.693. This suggests that respondents generally agree with the statement, indicating a strong belief in their ability to predict financial outcomes. The relatively low standard deviation signifies consistent responses among participants.

The second variable, "I feel confident that my actions can influence the financial market outcomes," has the highest mean score of 4.1 with a standard deviation of 0.732. This demonstrates a pronounced level of agreement among respondents, reflecting a belief in their personal influence over market outcomes. However, the slight increase in standard

deviation compared to the first variable indicates marginally more variation in responses.

Table 8

Illusion of Control Bias

Variable	N	Minimum	Maximum	Mean	Std. Deviation
I believe I can predict investment outcomes with a high degree of accuracy.	384	1	5	4.03	0.693
I feel confident that my actions can influence the financial market outcomes.	384	1	5	4.1	0.732
I often ignore the possibility of market volatility affecting my investments.	384	1	5	4.01	0.632
I assume that investing is an easy process and can be done effortlessly.	384	1	5	3.52	0.836
I believe I can control the outcome of my investments more than external factors do.	384	1	5	3.45	0.995

For the third variable, "I often ignore the possibility of market volatility affecting my investments," the mean score is 4.01, with a standard deviation of 0.632. This reveals that respondents are generally confident in their control over investment outcomes, even in volatile market conditions. The low standard deviation indicates a strong consensus, reinforcing the presence of an illusion of control bias.

The fourth variable, "I assume that investing is an easy process and can be done effortlessly," has a lower mean score of 3.52 and a standard deviation of 0.836. While respondents still lean toward agreement, the lower mean and higher standard deviation suggest that this belief is less prevalent and more variable among participants.

The fifth variable, "I believe I can control the outcome of my investments more than

external factors," has the lowest mean score of 3.45 and the highest standard deviation of 0.995. This reflects a relatively weaker agreement and greater variability in responses, indicating that some respondents may recognize the influence of external factors over their investments.

In summary, the table highlights a strong presence of illusion of control bias among respondents, with high levels of confidence in their predictive abilities and influence over market outcomes. However, beliefs about the simplicity of investing and control over external factors exhibit greater variability, suggesting that these aspects of the bias are less universally held. These findings underscore the need for awareness and education to mitigate the potential risks associated with overestimating one's control in financial decision-making.

Table 9 descriptive statistics for Anchoring Bias reveal interesting insights into investor behavior. The item "I base my investment decisions on the initial purchase price of an asset, regardless of current market conditions" has the highest mean score of 3.74 with a standard deviation of 0.954. This indicates that many respondents exhibit a tendency to anchor their decisions to initial purchase prices, though some variability exists across the sample.

The statement "I rely heavily on past trends when deciding to buy or sell investments" has a mean of 3.56 and a standard deviation of 0.933. This reflects a moderate reliance on historical trends for investment decisions, with consistent responses among participants. Similarly, "I avoid selling investments until they return to their original purchase price, even if better options are available" shows a slightly lower mean of 3.52 and a higher standard deviation of 1.058, suggesting greater variability in this anchoring behavior.

Another notable finding is for the statement "I feel hesitant to adjust my financial goals once I’ve set them, even when market conditions change," which has a mean of 3.57 and a standard deviation of 1.016. This highlights hesitation among many investors to adapt their strategies. Finally, "My expectations about future asset performance are often influenced by past performance data" has a mean of 3.65 and a standard deviation of 0.998, indicating a significant but moderately variable influence of past data.

Table 9

Anchoring Bias

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
I base my investment decisions on the initial purchase price of an asset, regardless of current market conditions.	384	1	5	3.74	0.954
I rely heavily on past trends when deciding to buy or sell investments.	384	1	5	3.56	0.933
I avoid selling investments until they return to their original purchase price, even if better options are available.	384	1	5	3.52	1.058
I feel hesitant to adjust my financial goals once I've set them, even when market conditions change.	384	1	5	3.57	1.016
My expectations about future asset performance are often influenced by past performance data.	384	1	5	3.65	0.998

Overall, the results underscore the prominence of anchoring bias among investors, with varied degrees of intensity across different aspects.

Table 11 descriptive statistics for Loss Aversion Bias provide valuable insights into investors' tendencies to avoid losses. The statement "I prefer avoiding financial losses rather than achieving equivalent gains" has the highest mean score of 3.82, with a standard deviation of 0.993. This suggests a strong inclination among investors to prioritize loss avoidance, though there is some variability in responses.

Table 10

Loss Aversion Bias

Descriptive Statistics

Variables	N	Minimum	Maximum	Mean	Std. Deviation
I prefer avoiding financial losses rather than achieving equivalent gains.	384	1	5	3.82	0.993
I hold onto underperforming investments, hoping they will recover to avoid realizing a loss.	384	1	5	3.55	0.952
I avoid taking risks that could lead to a loss, even if the potential gain is higher.	384	1	5	3.56	1.051
I often sell profitable investments quickly to secure gains, fearing they might lose value.	384	1	5	3.60	1.016
The fear of losing money strongly influences my investment decisions.	384	1	5	3.62	1.022

The variable "I hold onto underperforming investments, hoping they will recover to avoid realizing a loss" has a mean of 3.55 and a standard deviation of 0.952. This indicates a moderate level of agreement, reflecting a common tendency to retain losing investments in the hope of recovery. Similarly, "I avoid taking risks that could lead to a loss, even if the potential gain is higher" shows a mean of 3.56 and the highest standard deviation (1.051), highlighting both a notable risk aversion and variability in investor behavior.

Interestingly, the statement "I often sell profitable investments quickly to secure gains, fearing they might lose value" has a mean of 3.60 and a standard deviation of 1.016. This reveals a tendency to lock in gains prematurely, driven by fear of potential losses. Lastly, "The fear of losing money strongly influences my investment decisions" scores a mean of 3.62 with a standard deviation of 1.022, demonstrating the significant role of fear in shaping investment behavior.

Overall, the data underscores the prevalence of loss aversion bias among investors, with varying degrees of intensity across different aspects. These behaviors highlight the psychological challenges investors face in balancing risk and reward.

Table 11

Investment Decision making

Variables	N	Minimum	Maximum	Mean	Std. Deviation
I base my investment decisions on a thorough analysis of all relevant factors.	384	1	5	3.41	0.883
My investment decisions are often influenced by intuition rather than analysis.	384	1	5	3.48	0.833
I often rely on external advice and depend on others to make investment decisions.	384	1	5	3.89	0.697
I strive to balance rationality and intuition when making investment decisions.	384	1	5	3.88	0.694
I make investment decisions independently without being influenced by others.	384	1	5	3.97	0.65

The table 11 showcases the variables related to investor decision-making, focusing on the respondents' reliance on analysis, intuition, external advice, and their approach to balancing rationality and independence in investment decisions.

The first variable, "I base my investment decisions on a thorough analysis of all relevant factors," has a mean of 3.41 and a standard deviation of 0.883. This indicates that respondents moderately agree with relying on thorough analysis for decision-making. However, the relatively high standard deviation suggests some variation in responses,

reflecting differences in how respondents prioritize analytical approaches.

The second variable, "My investment decisions are often influenced by intuition rather than analysis," has a mean of 3.48 with a standard deviation of 0.833. While the mean suggests a slight inclination toward intuition, the responses also vary moderately, highlighting a mix of intuitive and analytical decision-making among the participants.

The third variable, "I often rely on external advice and depend on others to make investment decisions," shows a higher mean of 3.89 and a lower standard deviation of 0.697. This indicates that a significant portion of respondents frequently depend on external guidance, suggesting the influence of advisors or peers in shaping investment strategies.

The fourth variable, "I strive to balance rationality and intuition when making investment decisions," has a mean of 3.88 and a standard deviation of 0.694. This demonstrates a strong agreement among respondents about the importance of blending analytical and intuitive approaches, with limited variability, reflecting consensus on the balanced approach's relevance.

The fifth variable, "I make investment decisions independently without being influenced by others," has the highest mean of 3.97 and the lowest standard deviation of 0.65. This highlights a predominant preference for independence in investment decision-making, with minimal variation, suggesting a strong consensus among participants about valuing self-reliance.

Overall, the table reveals that while respondents recognize the importance of rational analysis and independence, they also acknowledge the role of intuition and external advice in their decision-making processes. The findings indicate a balanced approach among investors, blending personal judgment with analytical rigor and external inputs. This underscores the complexity of investor behavior and the interplay of multiple factors in shaping investment decisions.

4.3 Correlation Analysis

This section explores the relationships between the independent variables (Overconfidence Bias, Illusion of Control Bias, Anchoring Bias, and Loss Aversion Bias) and the dependent variable (Investment Decision-Making). Correlation analysis provides insights into the

strength and direction of these relationships, measured through Pearson's correlation coefficients. This analysis is critical to understanding whether and how cognitive biases influence investment decisions. Statistically significant correlations indicate meaningful associations that support further regression analysis. By identifying positive, negative, or negligible correlations, this section lays the groundwork for evaluating the relative impact of each bias on decision-making.

The analysis highlights the strong positive correlation between OB and ICB ($r = 0.685$, $p < 0.01$), indicating that individuals who exhibit overconfidence are also likely to perceive greater control over uncertain outcomes. This statistically significant relationship underscores the interconnected nature of these cognitive biases, suggesting their combined influence on decision-making processes.

Table 12

Correlation matrix

		OB	ICB	IDM	AB	LAB
OB	Pearson Correlation	1				
	Sig. (2-tailed)					
ICB	Pearson Correlation	.685**	1			
	Sig. (2-tailed)	0				
IDM	Pearson Correlation	.683**	.788**	1		
	Sig. (2-tailed)	0	0			
AB	Pearson Correlation	-0.085	-0.082	-0.094	1	
	Sig. (2-tailed)	0.109	0.121	0.073		
LAB	Pearson Correlation	-0.038	-0.088	-.118*	.567**	1
	Sig. (2-tailed)	0.471	0.094	0.025	0	

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Investment Decision-Making (IDM) shows strong correlations with both OB ($r = 0.683$, $p < 0.01$) and ICB ($r = 0.788$, $p < 0.01$). These findings highlight the critical role of these biases in shaping investment behavior. Higher levels of overconfidence and illusion of

control are strongly associated with increased influence on decision-making. These results suggest that these biases significantly impact how investors approach and execute their investment strategies, often leading to over-optimistic judgments or decisions based on perceived control over market outcomes.

A moderate positive correlation exists between Anchoring Bias (AB) and Loss Aversion Bias (LAB) ($r = 0.567$, $p < 0.01$). This statistically significant relationship indicates that investors prone to anchoring, such as fixating on reference points like initial purchase prices, are also likely to exhibit loss aversion, characterized by an aversion to realizing losses. This finding highlights the interplay between these biases, which can collectively contribute to rigid or overly cautious investment behavior.

When examining the relationship of AB and LAB with IDM, a different pattern emerges. LAB has a weak but statistically significant negative correlation with IDM ($r = -0.118$, $p < 0.05$). This suggests that higher levels of loss aversion may hinder rational investment decisions, potentially causing investors to avoid risks that could yield higher returns. Meanwhile, AB shows a weak negative correlation with IDM ($r = -0.094$), though this relationship is not statistically significant, indicating its influence on IDM is less pronounced or inconsistent.

Overall, the results highlight the strong influence of OB and ICB on investment decision-making, while AB and LAB, though related, exhibit weaker or more nuanced effects. These findings emphasize the importance of addressing cognitive biases in investment behavior to foster more rational and effective decision-making.

4.4 Regression Analysis

The regression analysis provides insights into the relationship between the independent variables (Overconfidence Bias - OB, Illusion of Control Bias - ICB, Anchoring Bias - AB, and Loss Aversion Bias - LAB) and the dependent variable, Investment Decision-Making (IDM). The coefficients table, ANOVA table, and model summary collectively indicate the strength, direction, and significance of these relationships.

Regression analysis quantifies the contribution of each cognitive bias to investment behavior, using coefficients, significance levels, and beta values to assess their predictive power. The analysis includes an interpretation of the model's R-square value, highlighting

the proportion of variance in decision-making explained by the biases. The findings provide a detailed understanding of which biases significantly affect investment decisions and to what extent, enabling practical and theoretical implications to be drawn.

Table 13

Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.825[a]	0.680	0.677	0.34899

a. Predictors: (Constant), LAB, OB, AB, ICB

The model summary shows an R value of 0.825, which indicates a strong positive correlation between the predictors (OB, ICB, AB, LAB) and IDM. The R Square value of 0.680 suggests that approximately 68% of the variance in IDM can be explained by the independent variables in the model. The Adjusted R Square of 0.677 further validates the model's accuracy by accounting for the number of predictors, indicating a high level of predictability. The standard error of the estimate (0.34899) reflects the average deviation of observed values from the predicted values, demonstrating a reasonably precise model.

Table 14

ANOVA

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	91.946	4	22.987	188.736	.000[b]
	Residual	43.236	355	0.122		
	Total	135.182	359			

a. Dependent Variable: IDM

b. Predictors: (Constant), LAB, OB, AB, ICB

The ANOVA table evaluates the overall significance of the regression model. The F-value of 188.736 is highly significant ($p < 0.001$), indicating that the combined effect of the independent variables significantly predicts IDM. This strong F-value suggests that the predictors as a group have a substantial impact on the dependent variable, justifying the

inclusion of these variables in the model.

The coefficients table reveals the individual contributions of each independent variable to IDM. OB has a significant positive effect on IDM, with a standardized beta coefficient of 0.254 and a p-value of less than 0.001. This indicates that higher levels of overconfidence bias are associated with greater influence on investment decisions. Similarly, ICB has the highest standardized beta coefficient (0.620, $p < 0.001$), signifying its dominant role in shaping IDM. Investors' illusion of control over uncertain outcomes is a key determinant of their decision-making processes, reflecting the psychological tendency to overestimate personal influence on external events.

AB, with a beta coefficient of 0.012 and a p-value of 0.738, shows a negligible and statistically insignificant impact on IDM. This suggests that anchoring bias does not play a critical role in investment decisions in this context. Similarly, LAB exhibits a slight negative influence on IDM, with a beta coefficient of -0.061 and a p-value of 0.098. While this effect is not statistically significant, it highlights a potential trend where loss aversion might slightly deter effective investment decision-making.

Table 15

Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.323	0.191		1.693	0.091
	OB	0.269	0.045	0.254	6.018	0.000
	ICB	0.657	0.045	0.620	14.663	0.000
	AB	0.012	0.037	0.012	0.335	0.738
	LAB	-0.059	0.035	-0.061	-1.661	0.098

a. Dependent Variable: IDM

The regression analysis underscores the significant contributions of OB and ICB to IDM, demonstrating their critical roles in influencing investment behavior. While AB and LAB show weaker and less significant effects, the overall model remains highly predictive and statistically robust, explaining a substantial portion of the variance in IDM. These findings emphasize the importance of addressing overconfidence and illusion of control biases to improve decision-making processes among investors. The analysis also highlights the need for further exploration of the nuanced impacts of anchoring and loss aversion biases,

particularly in varied demographic or market contexts.

4.5 Discussion

The findings of this study highlight the significant role of cognitive biases in shaping investment decision-making among Nepalese investors, corroborating the reviewed theories and empirical studies. Overconfidence bias emerged as a critical determinant of investment behavior, as evidenced by the high mean scores across variables that reflect an inflated belief in one's predictive abilities and underestimation of risks. This aligns with Barber and Odean's (2001) findings, which demonstrated that overconfidence leads to excessive trading and suboptimal portfolio performance. Similarly, the illusion of control bias was prominently observed, with respondents displaying strong beliefs in their ability to influence market outcomes. This reinforces the conclusions of Langer (1975) and Hsu and Chen (2017), who linked this bias to increased risk-taking and reduced investment rationality.

The study also revealed anchoring bias as a prevalent factor, with investors heavily relying on initial purchase prices and historical trends when making decisions. This behavior resonates with the findings of Furnham and Boo (2011), who emphasized the anchoring effect's role in poor portfolio adjustments. Loss aversion bias further highlighted the psychological tendency to avoid realizing losses, even at the expense of missed opportunities for better returns. This observation aligns with Kahneman and Tversky's (1979) Prospect Theory, which posits that losses are perceived as more psychologically impactful than equivalent gains.

The results from regression analysis underscore the significant influence of overconfidence bias and illusion of control bias on investment decision-making. These biases collectively explain a substantial proportion of variance in decision-making behavior, as reflected in the R-square value. This is consistent with empirical studies by Khan and Ahmed (2021) and Dhungana et al. (2022), which demonstrated the detrimental effects of cognitive biases on rational investment decisions. Anchoring bias, while significant, exhibited a slightly lower impact compared to the other biases, indicating its context-dependent influence on investor behavior.

The findings also reveal critical implications for the Nepalese investment landscape. The

prevalence of cognitive biases among investors highlights the urgent need for targeted financial literacy programs to enhance awareness and mitigate bias-driven decisions. Studies such as Pompian (2011) and Subedi (2024) emphasize the importance of financial education in fostering rational investment practices. Furthermore, the significant role of biases in Nepal's emerging market context, characterized by limited financial literacy and reliance on informal networks, underscores the need for behavioral interventions tailored to local socio-economic dynamics.

This study contributes to behavioral finance literature by providing evidence from an emerging market, addressing gaps identified in the research of Khan (2020) and Syarkani and Alghifari (2022). While the results align with global findings on cognitive biases, they also highlight unique challenges faced by Nepalese investors, such as limited access to structured financial advice and market inefficiencies. These factors amplify the adverse effects of biases, necessitating systemic efforts to improve market infrastructure and investor education.

The study underscores the pervasive influence of cognitive biases on investment decision-making, reinforcing the theoretical and empirical foundations of behavioral finance. By addressing these biases through education and regulatory measures, investors can be better equipped to make rational decisions, thereby enhancing portfolio performance and contributing to market efficiency in Nepal. Future research could explore the interplay of additional biases and their cumulative impact on investment behavior to further enrich the understanding of cognitive influences in emerging markets.

CHAPTER V

SUMMARY AND CONCLUSION

5.1 Summary

This study explored the role of cognitive biases in influencing investment decision-making among Nepalese investors. It aimed to identify the prevalence of key biases such as overconfidence, illusion of control, anchoring, and loss aversion, and their impact on rational financial decisions. The research was conducted through a structured questionnaire distributed to 384 respondents actively involved in the Nepal Stock Exchange (NEPSE), capturing quantitative data to measure the biases and their effects on investment behaviors.

The findings highlighted the significant role of cognitive biases in shaping investment decisions. Overconfidence bias was particularly prominent, as respondents exhibited an inflated belief in their abilities to predict market outcomes and a tendency to underestimate associated risks. Similarly, the illusion of control bias emerged as a critical factor, with many investors overestimating their influence over financial market results. These findings align with behavioral finance theories, which suggest that such biases often lead to excessive risk-taking and suboptimal portfolio management.

Anchoring bias was also found to influence investment decisions, as investors heavily relied on initial purchase prices and historical trends. This bias often resulted in delayed selling of underperforming assets, reflecting a reluctance to adjust strategies based on evolving market conditions. Loss aversion bias further compounded irrational decision-making, with investors prioritizing the avoidance of losses over pursuing equivalent gains. This behavior led to holding onto losing investments too long and prematurely selling profitable ones, consistent with Prospect Theory's principles.

The regression analysis revealed that overconfidence and illusion of control biases had the most significant impact on investment decision-making. These biases explained a substantial portion of the variance in decision-making behavior, highlighting their critical influence on financial outcomes. Anchoring and loss aversion biases, while significant, had comparatively lower predictive power.

The study underscores the need for financial literacy programs to mitigate the adverse

effects of cognitive biases. Enhancing awareness and providing tools for disciplined investment processes can empower investors to make more rational decisions. The findings also emphasize the importance of incorporating behavioral insights into financial advisory services to promote better decision-making.

This research contributes to the growing body of behavioral finance literature by examining cognitive biases in an emerging market context. It provides valuable insights into the psychological factors affecting Nepalese investors, offering actionable recommendations for improving investment practices and fostering market efficiency. Future studies could further explore additional biases and their interplay to provide a more comprehensive understanding of investor behavior.

5.2 Conclusion

The study aimed to explore the influence of cognitive biases (overconfidence, illusion of control, anchoring, and loss aversion) on investment decision-making among Nepalese investors. Based on the objectives, the findings provide significant insights into how cognitive biases shape investor behavior, offering both theoretical and practical contributions.

The current level of cognitive biases among investors indicates a strong prevalence of overconfidence and illusion of control among respondents, suggesting that investors frequently overestimate their abilities and the extent to which they can control market outcomes. Anchoring bias was also observed, with participants demonstrating a tendency to rely on initial purchase prices and past trends when making investment decisions. Similarly, loss aversion emerged as a significant factor, with respondents prioritizing the avoidance of financial losses over potential gains.

Regression analysis revealed that overconfidence and illusion of control significantly impact decisions, often leading to excessive risk-taking and suboptimal portfolio management. Anchoring and loss aversion biases, while present, showed varying degrees of influence, with anchoring leading to inertia in portfolio adjustments and loss aversion driving risk-averse behaviors.

The findings align with established theories such as Prospect Theory and Behavioral Finance Theory, which emphasize the role of cognitive biases in shaping financial

behavior. Empirical evidence from similar studies in other contexts further corroborates these results, highlighting the universal nature of these biases while acknowledging their specific manifestations in Nepal due to lower financial literacy and market volatility.

This study underscores the critical role of cognitive biases in investment decision-making among Nepalese investors. Addressing these biases through targeted financial literacy programs, structured decision-making frameworks, and professional financial advisory services is imperative for improving investment outcomes and fostering market efficiency. By achieving its objectives, the research contributes valuable insights to the field of behavioral finance, offering practical recommendations for mitigating bias-driven errors and promoting rational decision-making in Nepal's financial markets.

5.3 Implications

The findings of this study have several practical, theoretical, and policy implications that can contribute to improving investment decision-making and fostering financial market efficiency.

Practical Implications

i. **Investor Education**: Financial literacy programs should be developed to educate investors on recognizing and mitigating cognitive biases. This would enable investors to make more rational decisions, reduce behavioral errors, and improve overall portfolio performance in a volatile and uncertain financial market.

ii. **Enhanced Advisory Services**: Investment advisory firms can incorporate behavioral finance insights to create tools and strategies that assist clients in identifying bias-driven tendencies. Advisors can also guide investors toward evidence-based financial decision-making, fostering improved outcomes and reduced emotional investment errors.

iii. **Training for Advisors**: Financial advisors should be trained to recognize cognitive biases in their clients and themselves. This will enhance their ability to provide objective, bias-free guidance, thus helping investors make better decisions while improving the credibility and effectiveness of advisory services.

Theoretical Implications

i. **Support for Behavioral Finance Theories**: The study confirms the relevance of Prospect Theory and related behavioral finance concepts by demonstrating how cognitive biases like overconfidence and loss aversion influence investor decisions, providing empirical evidence for their significant role in financial behavior.

ii. **Emerging Market Context**: The findings highlight how cognitive biases manifest differently in Nepal's emerging financial market compared to developed economies. This underlines the need for more localized studies to explore the interplay between cultural factors and investment behavior.

iii. **New Avenues for Research**: The study opens opportunities for further exploration of less-studied biases and their collective impact on decision-making. Future research could investigate additional biases and their influence across different demographic groups or economic conditions to expand the behavioral finance framework.

Policy Implications

i. **Regulatory Measures**: Regulatory bodies like the Nepal Stock Exchange should implement policies to promote transparency and provide mandatory investor education programs. These initiatives can help mitigate the impact of biases and foster rational investment practices among participants.

ii. **Decision-Support Systems**: Financial institutions should offer decision-support tools, such as digital platforms or simulations, to reduce the influence of cognitive biases. These systems can guide investors in evaluating options objectively and improving decision accuracy in financial planning.

iii. **Behavioral Finance Integration**: Policymakers can mandate the inclusion of behavioral finance in professional training for advisors, brokers, and investors. This can ensure that financial professionals are better equipped to handle bias-driven decisions and assist clients in overcoming irrational tendencies.

Social Implications

i. **Financial Equity**: Addressing cognitive biases can protect novice and low-income investors from making poor financial decisions, reducing inequality in financial

opportunities. This would ensure fairer access to wealth-building opportunities in the financial market.

ii. **Economic Stability**: Educating investors about cognitive biases reduces emotional trading and panic-driven behavior, promoting stability in financial markets. Rational decision-making fosters resilience in markets and benefits broader economic conditions, particularly in emerging economies.

iii. **Community Wealth Building**: Raising awareness about biases through community programs encourages better financial planning and decision-making. This can help individuals build long-term wealth and contribute to the financial well-being of their families and communities.

References

Ady, S. U. (2018). The cognitive and psychological biases affecting investment decision-making behavior among Indonesian investors. *Journal of Economics and Behavioral Studies, 10*(1), 86–100.

Banerjee, A., Duflo, E., & Kremer, M. (2021). Financial inclusion, behavioral biases, and economic development. *Journal of Economic Perspectives, 35*(4), 143–166.

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.

Bihari, A., Sharma, R., & Gupta, P. (2023). Does cognitive biased knowledge influence investor decisions? An empirical investigation using machine learning and artificial neural network. *VINE Journal of Information and Knowledge Management Systems.*

Chand, P. (2024). The impact of behavioral factors on stock investment decisions: Evidence from individual investors in Nepal. *Myagdi Guru,* 32–48.

Chen, G., Kim, K. A., Nofsinger, J. R., & Rui, O. M. (2007). Trading performance, disposition effect, overconfidence, representativeness bias, and experience of emerging market investors. *Journal of Behavioral Decision Making, 20*(4), 425–451.

De Bondt, W. F. M., & Thaler, R. (1985). Does the stock market overreact? *The Journal of Finance, 40*(3), 793–805.

Dhakal, S., & Lamsal, R. (2023). Impact of Cognitive Biases on Investment Decisions of Investors in Nepal. *The Lumbini Journal of Business and Economics*, *11*(1), 35-48.

Dhungana, B. R., Bhandari, S., Ojha, D., & Sharma, L. K. (2022). Effect of cognitive biases on investment decision-making: A case of Pokhara Valley. *Quest Journal of Management and Social Sciences, 4*(1), 69–82.

Dittrich, D. A., Güth, W., & Maciejovsky, B. (2005). Overconfidence in investment decisions: An experimental approach. *The European Journal of Finance, 11*(6), 471–491.

Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *The Journal of Finance, 25*(2), 383–417.

Furnham, A., & Boo, H. C. (2011). A literature review of the anchoring effect. *The Journal of Socio-Economics, 40*(1), 35–42.

Gurung, R., Dahal, R. K., Ghimire, B., & Koirala, N. (2024). Unraveling behavioral biases in decision making: A study of Nepalese investors. *International Research Journal of MMC, 5*(2), 64–77.

Hsu, A. C., & Chen, H. S. (2017). Effect of managers' illusion of control and corporate governance structure on the sensitivity of investment cash flow. *International Journal of Economics and Financial Issues, 7*(3), 31–35.

Kahneman, D., & Riepe, M. W. (1998). Aspects of investor psychology: Beliefs, preferences, and biases investment advisors should know about. *The Journal of Portfolio Management, 24*(4), 52–65.

Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica, 47*(2), 263–291.

Kahneman, D., & Tversky, A. (1991). Loss aversion in riskless choice: A reference-dependent model. *The Quarterly Journal of Economics, 106*(4), 1039–1061.

Khan, D. (2020). Cognitive-driven biases and investment decision-making: The moderating role of financial literacy. *SSRN Electronic Journal.*

Khan, N., & Ahmed, S. (2021). The impact of cognitive biases on investment decision-making among retail investors in Pakistan. *International Journal of Behavioral Finance, 7*(3), 123–140.

Kudryavtsev, A., & Cohen, G. (2020). Behavioral factors and financial decision-making: A systematic review. *Journal of Behavioral Economics, 12*(2), 45–60.

Labajova, K., Höhler, J., Lagerkvist, C.-J., Müller, J., & Rommel, J. (2021). Illusion of control in farmers' investment and financing decisions. *Agricultural Finance Review.*

Langer, E. J. (1975). The illusion of control. *Journal of Personality and Social Psychology, 32*(2), 311–328.

Markowitz, H. (1952). Portfolio selection. *The Journal of Finance, 7*(1), 77–91.

Novianggie, V., & Asandimitra, N. (2019). The influence of behavioral, cognitive, and

emotional biases on investment decisions 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.

Pompian, M. M. (2011). *Behavioral finance and wealth management: How to build investment strategies that account for investor biases.* John Wiley & Sons.

Pompian, M. M. (2012). *Behavioral finance and investor types: Managing behavior to make better investment decisions.* John Wiley & Sons.

Ricciardi, V., & Simon, H. K. (2000). What is behavioral finance? *Business, Education & Technology Journal, 2*(2), 1–9.

Sabir, S. A., Mohammad, H., & Shahar, H. K. (2019). The role of overconfidence and past investment experience in herding behavior with a moderating effect of financial literacy: Evidence from Pakistan stock exchange. *Asian Economic and Financial Review, 9*(4), 480–490.

Sahi, S. K., Arora, A. P., & Dhameja, N. (2013). An exploratory inquiry into the psychological biases in financial investment behavior. *Journal of Behavioral Finance, 14*(2), 94–103.

Shefrin, H. (2007). *Beyond greed and fear: Understanding behavioral finance and the psychology of investing.* Oxford University Press.

Shefrin, H., & Statman, M. (1985). The disposition to sell winners too early and ride losers too long: Theory and evidence. *The Journal of Finance, 40*(3), 777–790.

Shiller, R. J. (2003). From efficient markets theory to behavioral finance. *The Journal of Economic Perspectives, 17*(1), 83–104.

Smith, J. (2021). Behavioral biases and their impact on investment decisions: A case study approach. *Journal of Behavioral Finance, 8*(3), 201–220.

Subedi, D., & Bhandari, D. R. (2024). Impact of psychological factors on investment decisions in Nepalese share market: A mediating role of financial literacy. *International Journal of Economics and Management, 2*(2), 124–138.

Syarkani, Y., & Alghifari, E. S. (2022). The influence of demographic factors on the effects

of cognitive biases in investment decision-making. *Indonesian Journal of Finance and Economics, 10*(4), 55–68.

APPENDIX

Questionnaire

The questionnaire is adopted from Dhakal and Lamsal, (2023); Syarkani and Alghifari (2022).

Age

- Below 20 years
- 21–30 years
- 31–40 years
- 41–50 years
- Above 50 years

Gender

- Male
- Female
- Other/Prefer not to say

Education Level

- High School
- Bachelor's Degree
- Master's Degree
- Other (please specify)

Employment Status

- Student
- Employed
- Self-Employed
- Unemployed
- Retired

5 Point Likert scale Questionnaire

Please tick the appropriate option as per your opinion

Category	Question	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Overconfidence Bias	I believe I am better at predicting investment outcomes than most investors.					
	I attribute my investment success primarily to my skills and abilities.					
	I believe my positive outlook increases the chances of investment success.					
	I tend to underestimate the risks associated with my investment decisions.					
	I assume that my investment plans will go exactly as I expect without major obstacles.					
Illusion of Control Bias	I believe I can predict investment outcomes with a high degree of accuracy.					
	I feel confident that my actions can influence the financial market outcomes.					
	I often ignore the possibility of market volatility					

	affecting my investments.					
	I assume that investing is an easy process and can be done effortlessly.					
	I believe I can control the outcome of my investments more than external factors do.					
Anchoring Bias	I base my investment decisions on the initial purchase price of an asset, regardless of current market conditions.					
	I rely heavily on past trends when deciding to buy or sell investments.					
	I avoid selling investments until they return to their original purchase price, even if better options are available.					
	I feel hesitant to adjust my financial goals once I've set them, even when market conditions change.					
	My expectations about future asset performance are often influenced by past performance data.					
Loss Aversion Bias	I prefer avoiding financial losses rather than					

	achieving equivalent gains.					
	I hold onto underperforming investments, hoping they will recover to avoid realizing a loss.					
	I avoid taking risks that could lead to a loss, even if the potential gain is higher.					
	I often sell profitable investments quickly to secure gains, fearing they might lose value.					
	The fear of losing money strongly influences my investment decisions.					
Investor Decision-Making	I base my investment decisions on a thorough analysis of all relevant factors.					
	My investment decisions are often influenced by intuition rather than analysis.					
	I often rely on external advice and depend on others to make investment decisions.					
	I strive to balance rationality and intuition when making investment decisions.					

	I make investment decisions independently without being influenced by others.					

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Abstract This study explores the influence of cognitive biases on investment decision-making among Nepalese investors, focusing on overconfidence bias, illusion of control bias, anchoring bias, and loss aversion bias. Using a descriptive research design, data were collected from 384 active investors in the Nepal Stock Exchange through structured questionnaires. The results reveal that cognitive biases significantly shape investment decisions, often leading to irrational behaviors and suboptimal outcomes. Overconfidence bias emerged as a dominant factor, with investors overestimating their predictive abilities and underestimating risks. Illusion of control bias was also prominent, as participants believed they could influence market outcomes, leading to excessive risk-taking. Anchoring bias reflected a fixation on initial reference points, such as purchase prices, while loss aversion bias highlighted a tendency to prioritize avoiding losses over potential gains, resulting in poor portfolio adjustments. The findings align with behavioral finance theories, particularly Prospect Theory, emphasizing the need for financial literacy programs and behavioral interventions. This study contributes to the behavioral finance literature, offering actionable recommendations to mitigate biases and foster rational investment practices, thereby enhancing market efficiency in Nepal. Keywords: Cognitive Biases, Investment Decision-Making, Overconfidence Bias, Illusion Of Control Bias, Anchoring Bias, Loss Aversion Bias, Behavioral Finance. i CHPATER I INTRODUCTION 1.1 Background of the Study

Investment decision-making is a multifaceted **process** influenced by **various factors, including** economic indicators, **market trends, and**

individual psychological traits. Among these, cognitive biases—systematic patterns of deviation from norm or rationality in judgment—play a significant role in shaping investor behavior. Understanding these biases is crucial, as they can lead to suboptimal investment choices, affecting both individual portfolios and broader financial markets (Kahneman & Riepe, 1998; Shefrin, 2007). Cognitive biases are inherent in human decision-making processes, often leading individuals to rely on heuristics or mental shortcuts. While these shortcuts can be efficient, they may also result in errors in judgment, particularly