## **International Research Journal of MMC (IRJMMC)**



Vol- 5, No. 2 (Special Issue), July 2024

ISSN 2717-4999 (Online)

2717-4980 (Print)

## Impact of Herding Behavior on Investment Decisions in the Nepalese Stock Market with Mediation and Moderation Effects BIKASH RANA

\*Author affiliations can be found in the back matter of this article

#### **CORRESPONDING AUTHOR**

#### Bikash Rana

Mahakavi Devkota Campus 18614 bikash@kusom.edu.np

### KEYWORDS

### Herding behavior

Overconfidence

Financial literacy

Investment decision

Conflict resolution

### **ABSTRACT**

This research examines the influence of herding behavior on investment decisions made in Nepal, with the moderating role of financial literacy and overconfidence as a mediating factor. Traditional financial theories suggest that rational investors make decisions based on available information to maximize their capital. In contrast, behavioral finance argues that psychological factors significantly impact financial decisions. Data were collected from 384 investors trading on the Nepal Stock Exchange using a structured survey. The findings indicate that herding behavior significantly enhances both overconfidence and investment Overconfidence has a positive impact on investment decisions. Financial literacy acts as a positive moderator, while overconfidence serves as a positive mediator between herding behavior and investment decisions. SMART-PLS was employed for data analysis.

#### 1. INTRODUCTION

The stock market plays a crucial role in the financial ecosystem by providing a platform for buyers and sellers of securities to transact. For corporate companies, the securities market is a vital source of investment capital, aiding in their growth and expansion. The development and state of a nation's financial markets are indicative of its economic health, with market trends serving as a gauge of economic viability. An increase in stock prices is often seen as a critical economic indicator. In the context of

Nepal, the Nepal Stock Exchange (NEPSE) has shown significant growth over recent years, reflecting the country's economic progression. According to the latest data from the NEPSE, market capitalization increased from NPR 1600 billion in 2019 to NPR 3000 billion in 2023, demonstrating investor confidence and economic resilience. This performance places NEPSE among the emerging markets in South Asia with promising potential (Nepal Stock Exchange, 2023).

Nepal Stock Exchange (NEPSE) Market Capitalization Growth 3000 2800 Market Capitalization (in billion NPR) 2600 2400 2200 2200 2000 1800 1600 1600 2019.0 2019.5 2020.5 2023.0 2020.0 2021.0 2021.5 2022.0 2022.5 Year

Figure 1: Nepal Stock Exchange (NEPSE) Market Capitalization Growth.

Source: Nepal Stock Exchange, 2023

Source: Nepal Stock Exchange, 2023.

Investors in Nepal, like those globally, face complex financial decisions influenced by risks, uncertainties, environmental factors. Traditional finance theory posits that investors make rational decisions based on logical assessments, as suggested by recent studies on investor behavior in developing markets (Dhungana. 2022). However, behavioral finance. introduced by Simon (1955), challenges this notion by highlighting that investors often do not act rationally due to psychological influences (Shrestha, 2021).

Behavioral finance provides insights frequently make whv investors into suboptimal investment decisions. It explores inefficiencies such as information overreaction and the impact of psychological traits like overconfidence and herd behavior on financial decisions. Numerous studies have examined the role of financial literacy (FL) on financial behavior, emphasizing its significant impact. A recent study by Khanal and Shakya that (2023)arques financial literacy profoundly influences various financial behaviors, including investment decisions (Khanal & Shakya, 2023).

#### 1.1 PROBLEM STATEMENT

In Nepal, financial literacy is crucial in shaping investment decisions. Investors with higher financial literacy tend to make more informed and rational decisions, leading to diversified portfolios and better risk management. Conversely, those with insufficient financial literacy are prone to making irrational decisions, often avoiding investments in securities and maintaining undiversified portfolios. Recent findings by Gurung and Bhattarai (2023) highlight that investors with insufficient financial literacy have an undiversified portfolio and avoid security investments (Gurung & Bhattarai, 2023). Further research by Acharya and Poudel (2023) asserts that individuals alter their behavior based on acquired knowledge information. underscorina and importance of financial education enhancing investor decision-making (Acharya & Poudel, 2023). Several investors believe that maior investors manipulating the Nepalese stock market due to recent fluctuations. Consequently, to maintain a robust and secure financial system, it is imperative to design and investigate individual investment decisions,

develop suitable financial advising rules and services, and create effective digital and social media campaigns. Many investors lack the necessary skills and information to make profitable stock market investments, relying instead on knowledgeable brokers and investors for their investment decisions. Detailed research on investor profiles is crucial for providing better financial advice.

Herding behavior, where investors follow the actions of a larger group rather makina independent decisions. significantly impacts investment decisions in the Nepal Stock Exchange (NEPSE). This behavior can lead to market inefficiencies and increased volatility. Studies have shown herding behavior mediates that influence of stock performance information on investment decision-making among investors (Sari et al., 2020). Another study highlighted that herdina behavior significantly affects stock investment decisions, particularly during periods of market volatility (Tamara, 2022). Moreover, herding behavior in NEPSE has been found to exacerbate market fluctuations, as individual investors often give up their independent judgment to follow the group. leading to significant changes in stock prices (Chen, 2021). A comprehensive understanding of herding behavior and its effects on the stock market is essential for developing strategies to mitigate its positive impacts and to foster a more informed and rational investment environment.

### **1.2 RESEARCH QUESTIONS**

Below are the study's research questions.

- How people's financial decisions substantially impacted by herd behavior?
- How can overconfidence bias influence herding and investment decisions?
- How does financial knowledge affect investing choices and herd behavior?

#### 1.3 RESEARCH OBJECTIVES

• To investigate the connections between individual investing choices in Nepal and herd behavior.

- To determine the effects of herding behavior on individuals' investment choices.
- To examine the mediating role of overconfidence in the relationship between herding behavior and investment decisions.
- To derive valuable insights applicable to the field of investment behavior in Nepal.
- To explore how financial literacy impacts the relationship between investment choice and herding behavior.

### 1.4 RESEARCH GAP

Financial knowledge is a crucial factor that is often overlooked in Nepal, as many individuals lack financial knowledge. Few studies have addressed this issue, highlighting that financial education is not widespread and people often lack an understanding of basic economic principles. According to Subedi (2023), financial literacy significantly influences investment decisions in the Nepalese share market, emphasizina the need for financial education programs to improve investors' savings and financial decisions. Another study by Dinarjito (2023) found that financial literacy acts as a mediating variable, fully mediating the relationship between overconfidence and investment decisions, and partially mediating the relationship between risk perception and investment decisions.

In Nepal, many people lack the financial knowledge and technological skills required to make investments in stocks, which allows middlemen to exploit this weakness and deceive investors. This research aims to fill a gap in the current literature by presenting and analyzing empirical information on the connection between herding behavior and investment decisions, with financial education acting as a moderator and overconfidence acting as a mediator. In this study, overconfidence bias is a substantial mediating factor, and financial literacy is a significant moderator. Neither of these variables has been

extensively studied in this context previously, making this research unique.

### 1.5 SIGNIFICANCE OF THE STUDY

This research is crucial for investors because the securities market in emergina nations like Nepal is often inefficient and subject to various influences. Political and economic processes impact financial markets, but the ideas and feelings of individual investors are equally significant. According to Dhakal and Lamsal (2023), cognitive biases such as representativeness bias, herding bias, and anchoring bias significantly affect the investment decisions of Nepalese investors. Investors in the Nepal Stock Exchange (NEPSE) often lose money because they do not correctly predict market movements. This study is particularly important for those who want to invest in volatile and unsophisticated stock markets, as they are more likely to have positive experiences due to behavioral biases. By understanding these biases, the study will assist market operators and policymakers in better comprehending the dynamics of investor decision-making.

Future researchers will find this study helpful as it provides a foundation for exploring the role of behavioral biases in investment decisions. They can build on the strategies and conclusions of this research to gain beneficial insights into improving investor outcomes in the NEPSE.

# 1.6 LITERATURE REVIEW 1.6.1 INVESTMENT DECISION MAKING

Investing involves putting money into an asset with the hope of earning a return in the future. Successful investment decision-making requires research and a positive outlook. Every investor aims to maximize their returns. According to Dhungana et al. (2023), factors such as stock prices, customer preferences, past stock trends, and market information in Nepal's financial market significantly influence investment decisions.

Sharpe (1964) established the concept of a benchmark to compare investment decisions, setting a level of uncertainty for a given expected return.

Recent research highlights the role of financial information in making sound financial decisions. According to Subedi (2023), a higher level of financial literacy leads to more prudent decision-making.

Over the past two decades, studies have focused on the behavioral phenomena in investors' decision-making processes. Hilton (2001) described this as "cognitive unconsciousness," where individuals possess concepts and emotions without being consciously aware of them. This can explain why investors sometimes make poor decisions. The emotional state of an investor can lead to irrational behavior, deviating from a rational investment decision process (Baker & Nofsinger, 2002).

### **1.6.2 HERDING BEHAVIOR**

Herding behavior occurs when investors follow the actions of others rather than making independent decisions. This phenomenon can be observed in the Nepalese stock market, where many investors mimic the decisions of others without conducting their own analysis. According to Dhakal and Lamsal (2023), herding behavior significantly influences investment decisions in Nepal, particularly during periods of market volatility.

Herding behavior happens for various reasons, including the desire to imitate the success of others or to avoid the risk of making independent decisions. Individual investors often follow the crowd, while analysts and fund managers may rely on past decisions or the actions of others to protect their reputation and compensation. Giri and Adhikari (2023) found that individual investors in Nepal are more likely to exhibit herding behavior compared to institutional investors.

Herding behavior can lead to market inefficiencies and increased volatility. Investors might buy or sell securities based on the actions of others rather than their own research, leading to irrational market movements. This behavior is particularly prevalent during periods of high market stress or uncertainty. Sapkota and Chalise (2023) highlighted that herding can significantly impact the stability of the

Nepalese stock market, especially during bearish market conditions.

Additionally, Dhungana et al. (2023) emphasized the need for financial education to help investors make more informed decisions and reduce tendency to herd. Improved financial literacy can empower investors to rely on their own analysis and make more rational investment choices, thereby enhancing market stability.

### Hypotheses

- H1: Investors' securities investment decisions are significantly influenced by herding behavior.
- H2: Overconfidence is significantly influenced by herding behavior.

#### 1.6.4 OVERCONFIDENCE

Overconfidence is a cognitive bias where individuals have excessive confidence in their own abilities and knowledge. This can lead to poor decisionmaking, especially in investment contexts. Overconfidence happens when investors overestimate their skills and the accuracy of their information, often ignoring contrary evidence or expert advice. According to Dhakal and Lamsal (2023), cognitive biases such as overconfidence significantly impact the investment decisions of Nepalese stock market investors.

Overconfident investors believe their judgments are more accurate than they actually are. This bias leads them to make decisions based on their personal beliefs and signals rather than relying on publicly available information. Giri and Adhikari (2023) found that while conservatism had a considerable positive impact on investment decisions among Nepali investors, overconfidence had an insignificant role.

This bias can cause investors to underreact to new information and overestimate the precision of their forecasts, leading to suboptimal investment strategies. For instance, overconfident investors may trade more frequently, incurring higher transaction costs and potentially reducing their overall returns.

Wenning (2023) highlights that private investors in Nepal might exhibit overconfidence bias, which could lead to less than optimal investment outcomes.

# 1.6.5 OVERCONFIDENCE AND INVESTMENT DECISIONS

Overconfidence is a sianificant cognitive bias that negatively affects investment decisions. It occurs when investors overestimate their knowledge. and ability to predict market This often leads movements. underestimating risks and overestimating potential returns. According to Giri and Adhikari (2023), overconfidence has an insignificant role in investment decisions among investors in the Nepali stock market. However, it can still influence trading behaviors and decisions.

Overconfident investors tend to trade more frequently, believing they can predict market trends accurately. This excessive trading often results in higher transaction costs and lower net returns. Dhakal and Lamsal (2023) found that cognitive biases, including overconfidence, the significantly impact investment decisions of Nepalese stock market investors. This overconfidence investors to rely heavily on their personal judgment while ignoring publicly available information, resulting in poor investment outcomes.

Studies have shown that overconfident investors hold mav undiversified portfolios and trade aggressively, which can lead to reduced profitability. Wenning (2023) highlights that private investors in Nepal might exhibit overconfidence bias, leading to suboptimal investment decisions compared institutional investors who typically have more disciplined investment processes.

Overconfidence can also cause investors to underreact to new information, maintaining their initial beliefs despite contrary evidence. This bias can be mitigated by promoting financial literacy and encouraging investors to base their decisions on comprehensive market analysis rather than personal intuition.

### 1.6.6 MEDIATING ROLE OF OVERCONFIDENCE

Overconfidence bias significantly affects investment decisions by leading investors to overestimate their knowledge and abilities, resulting in poor financial choices. This bigs causes investors to trade excessively and make ineffective transactions, ultimately reducing their investment returns. According to Dhakal and Lamsal (2023), overconfidence bias, along with other cognitive biases like herding and representativeness, strongly impacts the investment decisions Nepalese investors.

The literature sugaests that overconfidence can serve as a mediator between herding behavior and investment decisions. Overconfident investors are more likely to follow the crowd, believing that their judgment is superior and not adjusting assessments based on information. This can lead to excessive trading and poor investment outcomes. Giri and Adhikari (2023) found that while conservatism had a significant positive investment decisions, impact on overconfidence played an insignificant role Nepali investors. However. overconfidence can still mediate the relationship between herding behavior and investment choices, as it amplifies the effects of following the crowd.

understanding the role overconfidence, this study advances the field of behavioral finance and provides insights into how cognitive biases influence investment decisions. The findings highlight importance of addressing the improve overconfidence t.o investor decision-making and reduce the positive impact of herding behavior. Hypotheses

- H3: Investors' investment decisions are significantly influenced by overconfidence.
- H4: Herding behavior and investors' securities investment choices are mediated by overconfidence.

### 1.6.7 FINANCIAL LITERACY

Financial literacy is about understanding how to manage and use

financial resources effectively. It involves the ability to comprehend and apply financial principles. In the context of Nepal, financial literacy significantly influences investment decisions. According to Subedi (2023), there is a positive and significant relationship between financial literacy and investment decisions in the Nepalese share market. This emphasizes the importance of financial education programs to enhance investors' savings and financial decisions.

Financial literacy helps individuals make informed choices about their investments. It equips them with the knowledge needed to evaluate investment options and understand market trends. Dhakal and Lamsal (2023) highlight that cognitive biases, including overconfidence and herding, significantly affect investment decisions. Improving financial literacy can mitigate these biases and lead to better investment outcomes.

The impact of financial literacy extends beyond individual investors to the overall financial market. It contributes to market stability by reducing the likelihood of irrational investment behaviors. Giri and Adhikari (2023) found that higher financial literacy levels among investors lead to more rational and informed investment decisions.

# 1.6.8 FINANCIAL LITERACY AND INVESTMENT DECISION

Financial literacy involves understanding how to manage and use financial effectively. resources Ιt encompasses the ability to comprehend and apply financial principles. In Nepal, financial literacy has a significant impact on investment decisions. According to Subedi (2023), there is a positive and significant relationship between financial literacy and investment decisions in the Nepalese share market. This highlights the importance of financial education programs to enhance investors' savings and financial decisions.

People with higher financial literacy are more likely to make wise investment decisions. They can evaluate financial data and make informed choices, leading to better portfolio management and higher returns. As financial information becomes more accessible, investors' ability to analyze it improves, resulting in more effective investment strategies. Dhakal and Lamsal (2023) emphasize that cognitive biases, including overconfidence and herding, significantly affect investment decisions. Improving financial literacy can mitigate these biases and lead to better investment outcomes.

Financial literacy not only influences individual investment decisions but also contributes to market stability. By making informed decisions, investors can avoid the pitfalls of irrational investment behaviors, thereby enhancing overall market efficiency. Giri and Adhikari (2023) found that higher financial literacy levels among investors lead to more rational and informed investment decisions, which is crucial for the stability and growth of the Nepalese financial market.

# 1.6.9 MODERATING ROLE OF FINANCIAL LITERACY

Financial literacy significantly influences how investors make decisions. Investors with higher financial literacy tend to use different techniques and sources of information compared to those with lower financial literacy. According to Subedi (2023), highly literate investors in Nepal prefer using financial publications and performing independent analysis when making investment decisions, whereas less literate investors rely more on advice from family, friends, and stockbrokers.

This difference in behavior can lead various coanitive biases such overconfidence and herdina. Less literate investors often exhibit overconfidence by overestimating their knowledge and skills. leading to poor investment choices. They are also more prone to herding behavior, following the actions of others without conducting their own research. Dhakal and Lamsal (2023) highlight that improving financial literacy can mitigate these biases, leading to more rational and informed investment decisions. The impact financial literacy extends beyond individual investment decisions to the overall financial market. By making informed decisions, investors can avoid the pitfalls of irrational investment behaviors, thereby enhancing overall market efficiency. Giri and Adhikari (2023) found that higher financial literacy levels among investors lead to more rational and informed investment decisions, which is crucial for the stability and growth of the Nepalese financial market.

#### **HYPOTHESES**

- H5: Individual investors' investment decisions are significantly influenced by their financial literacy.
- H6: The association between herding bias and stock market investment decisions is moderated by financial literacy.

### Conceptual Model

Financial literacy

Source: Kahneman (1979)

### 2. RESEARCH METHODOLOGY 2.1 RESEARCH APPROACH

This study used a deductive approach, where hypotheses are developed based on established theories and then tested with real-world data. Given that the main goal is to explore the relationship between behavioral traits and investment decisions, a deductive strategy is most appropriate.

An explanatory research approach was employed to connect concepts and understand cause-and-effect relationships. This approach helps to illustrate how different factors interact and influence each other, providing a clearer understanding of the connections and interactions between various elements.

### 2.2 RESEARCH DESIGN

A quantitative cross-sectional research framework was used to assess how overconfidence and financial literacy affect the relationship between herding behavior and investment decisions. The main objective of this study is to test hypotheses to better understand how these variables are related.

### 2.3 SAMPLE AND DATA COLLECTION

The purpose of this study is to identify the impact of overconfidence bias, herding bias, and disposition effect on investment decisions, considering moderating role of financial literacy. To achieve this, a structured questionnaire was designed to collect data for further statistical analysis. The target population includes individuals who have investments in the Nepal Stock Exchange. The sampling technique used is a non-probabilistic method, selecting respondents who were readily available. This approach was chosen to easily gather a large amount of information at a low cost. Participants voluntarily provided their responses, which were kept confidential and used only for this research.

With a 5% error margin and a 95% confidence level, a sample size of 540 was selected. Questionnaires were distributed, and from the 540 distributed, 404 were

returned. Out of these, 20 were improperly filled, resulting in 384 usable responses, giving a response rate of 72%. The questionnaires were distributed by hand to various investors, brokerage houses, organizations, and some online respondents who had internet access.

This study uses overconfidence bias as a mediator and financial literacy as a to examine how herding moderator affects individual investors' behavior financial decisions when buying and selling in the Nepalese securities market. A systematic questionnaire was created to aather data for statistical testina. The taraet respondents include individuals who have already made investments and those capable of investing. Most respondents were entrepreneurs, managers, directors, government and non-government personnel. professors, teachers. servants, students, retirees, and bank officers. The convenient sampling approach was used to select participants, aiming to quickly collect a large amount information at a minimal cost. Participants provided their responses willingly, assured of confidentiality.

A total of 540 questionnaires were distributed to individual investors in the Nepal Stock Exchange. Although 404 questionnaires were returned, only 384 were properly filled and used for analysis, resulting in a 95.05% response rate.

# 2.4 QUESTIONNAIRE DEVELOPMENT PROCEDURE

All questionnaire items were answered on a Likert scale ranging from one (strongly agree) to five (strongly disagree). The questions used in this study were taken from previous research. The questionnaire is divided into five sections, labeled A to E.

- Section A: Participants provided their personal information.
- Section B: Five questions about herding behavior, adapted from Moueed et al. (2020).
- Section C: Five questions about overconfidence, adapted from Mouna & Anis (2015).

- Section D: Five questions about financial literacy, adapted from Wanyana (2012).
- Section E: Five questions about investment decisions, adapted from Moueed et al. (2020).

# 2.5 ANALYSIS AND RESULTS: DESCRIPTIVE ANALYSIS

The study sample consisted of 384 responses. Of these, 173 respondents (45%) were female, and 211 respondents (55%) were male. The age distribution was as follows:

- 15.78% were under 25 years old,
- 35.60% were between 26 and 33.
- 23.55% were between 34 and 41,
- 15.20% were between 42 and 49,
- 9.87% were above 50.

The research found that 59.15% of investors in the security market are between the ages of 26 and 41, indicating that a large number of young people are investing in the security market.

Regarding marital status, 55.8% of the respondents were unmarried, while 44.2% were married. This suggests that single respondents are more willing to take risks and invest in the securities market.

Income level was another significant factor:

- 38.30% of investors had a monthly income between Rs 25,000 and Rs 50,000,
- 23.30% had an income between Rs 50,001 and Rs 75,000,

- 14% had an income between Rs 75,001 and Rs 100,000,
- 16.30% had an income between Rs 100,001 and Rs 125,000,
- 9.30% had an income above Rs 125.001.

Most participants (38.30%) earned between Rs 25,000 and Rs 50,000 per month, followed by those earning between Rs 50,001 and Rs 75,000. This shows that many stock buyers have modest incomes and invest in securities to increase their income. Since the majority of respondents were aged 18 to 25, most of them were unmarried, making up 69% of the total sample size.

# 3. INFERENTIAL ANALYSIS 3.1 DATA ANALYSIS

Data analysis was conducted using structural equation modeling (SEM), a method that evaluates structural theories by analyzing both observed and latent variables. This technique allows for a comprehensive analysis of the relationships between different factors.

The questionnaire for this study was designed using insights from several prior studies, following a modern approach recommended by Ramayah et al. (2018). The data was then analyzed using SMART-PLS software. This process involves creating a diagram to visualize the relationships between variables, and then checking the reliability and validity of the model.

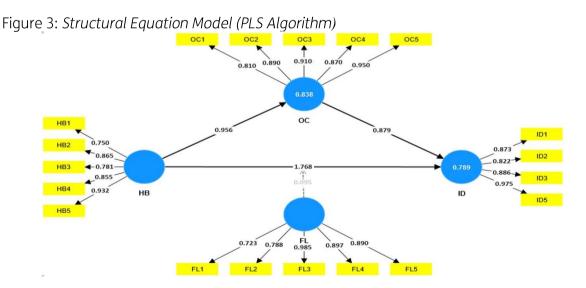


Table 1: Construct Reliability and Validity

| Table 1: Construct Reliability and Validity |           |           |            |             |             |           |  |
|---|-----------|-----------|------------|-------------|-------------|-----------|--|
|   | Indicator | Indicator | Cronbach's | Composite   | Composite   | Average   |  |
|   | item      | loading   | alpha      | reliability | reliability | variance  |  |
|   |           | 3         | ·          | j           | ,           | extracted |  |
|   |           |           |            |             |             | (AVE)     |  |
| FL  | FL1       | 0.723     | 0.940      | 0.960       | 0.961       | 0.820     |  |
|   | FL2       | 0.788     |            |             |             |           |  |
|   | FL3       | 0.985     |            |             |             |           |  |
|   | FL4       | 0.897     |            |             |             |           |  |
|   | FL5       | 0.890     |            |             |             |           |  |
| НВ  | HB1       | 0.750     | 0.840      | 0.850       | 0.895       | 0.630     |  |
|   | HB2       | 0.865     |            |             |             | _         |  |
|   | HB3       | 0.781     |            |             |             | _         |  |
|   | HB4       | 0.855     |            |             |             |           |  |
|   | HB5       | 0.932     |            |             |             |           |  |
| ID  | ID1       | 0.873     | 0.920      | 0.920       | 0.950       | 0.801     |  |
|   | ID2       | 0.822     |            |             |             |           |  |
|   | ID3       | 0.886     |            |             |             |           |  |
|   | ID5       | 0.975     |            |             |             |           |  |
| OC  | OC1       | 0.810     | 0.930      | 0.950       | 0.950       | 0.781     |  |
|   | OC2       | 0.890     |            |             |             |           |  |
|   | OC3       | 0.910     |            |             |             |           |  |
|   | OC4       | 0.870     |            |             |             |           |  |
|   | OC5       | 0.950     |            |             |             |           |  |

To ensure the internal consistency and stability of the constructs, Cronbach's alpha and Composite Reliability (CR) are utilized. Both Cronbach's alpha and CR exceed the threshold of 0.7, indicating high reliability. Additionally, the Average Variance Extracted (AVE) is used to evaluate convergent validity, with all components scoring above 0.5, confirming strong validity. The factor loadings, which indicate

how well each item correlates with the construct, are all above 0.7, except for ID4, which was excluded due to low factor loading.

# 3.2 ANALYSIS OF STRUCTURAL MODELS (SEM) USING SMART-PLS

Once the model is created, bootstrapping calculations are necessary to run the SEM in SMART-PLS.

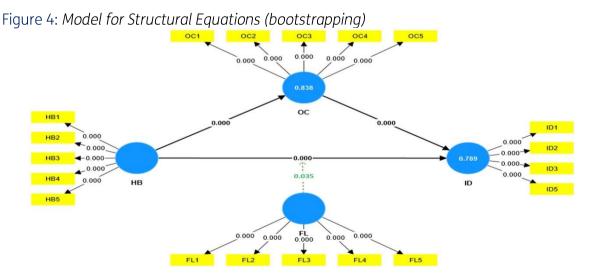


Table 2: Hypothesis testing through path coefficient

|               | <u> </u> |          |           |              |          |
|---------------|----------|----------|-----------|--------------|----------|
|               | Original | Sample   | Standard  | T statistics |          |
|               | sample   | mean (M) | deviation | ( O/STDEV )  | P values |
|               | (O)      |          | (STDEV)   | -11          |          |
| FL -> ID      | 0.36     | 0.350    | 0.075     | 4.800        | 0        |
| HB -> ID      | 1.760    | 1.770    | 0.060     | 29.366       | 0        |
| HB -> OC      | 0.916    | 0.917    | 0.055     | 16.654       | 0        |
| OC -> ID      | 0.870    | 0.880    | 0.120     | 7.250        | 0        |
| FL x HB -> ID | 0.093    | 0.094    | 0.045     | 2.066        | 0.040    |

The data shows that overconfidence positively affects investment decisions, with a p-value of 0.000, confirming H3. Herding behavior has a strong positive effect on both investment decisions and overconfidence, also with a p-value of 0.000, supporting H1 and H2. Financial literacy plays a significant moderating role,

positively influencing the relationship between behavioral factors and investment decisions, as indicated by a p-value of 0.031, thus confirming H6. Lastly, there is a strong positive connection between financial literacy and investment decisions, with a p-value of 0.000, validating H5. Mediation Analysis

Table 3: Indirect effects

|          | Original<br>sample (O) | Sample<br>mean (M) | Standard<br>deviation<br>(STDEV) | T statistics<br>( O/STDEV ) | P values |
|----------|------------------------|--------------------|----------------------------------|-----------------------------|----------|
| HB -> ID | 0.802                  | 0.810              | 0.123                            | 6.520                       | 0.000    |

The table indicates that herding behavior has a significant positive impact on investment decisions, with a p-value of 0.000, confirming H4. This means that overconfidence acts as a mediator between herding behavior and investment decisions.

### 3.3 HYPOTHESIS SUMMARY

Table 4: Hypothesis Analysis

| Hypothesis | Description  | Status   |
|------------|--|----------|
| H1         | Investors' securities investment decisions are significantly influenced by herding behavior.                   | Accepted |
| H2         | Overconfidence is significantly influenced by herding behavior.  | Accepted |
|            | Investors' investment decisions are significantly influenced by overconfidence.                                | 1 1      |
|            | Herding behavior and investors' securities investment choices are mediated by overconfidence.                  | 1 1      |
|            | Individual investors' projects on the NEPSE are significantly influenced by their financial literacy.          | 1 1      |
| Н6         | The association between herding bias and stock market investment decisions is moderated by financial literacy. | Accepted |

### 4. CONCLUSION

Understanding how psychological factors influence stock market decisions is crucial for investors and market participants

in Nepal. Awareness of these factors can help individuals make better decisions and avoid biases that could cloud their judgment. Policymakers and regulators in the securities market can also benefit from these insights to improve investor decisionmakina.

This study examines the effects of herding behavior on investment choices. with overconfidence as a mediator and financial literacy as a moderator, in the context of the Nepal Stock Exchange (NEPSE). Traditional financial theories suggest that investors make decisions by thoroughly analyzing all relevant stock data maximize their assets. However. behavioral finance challenges this view, arguing that market forces are not entirely logical and that investors do not always have access to the same information or the same level of expertise (Dhakal & Lamsal, 2023).

The study used a questionnaire to gather responses from 384 participants in the Nepalese securities market, employing practical sampling methods. The results indicate that overconfidence positively affects investors' judgments, while herding behavior and financial literacy positively investment decisions. influence findings highlight the significant role of financial literacy in promoting rational decision-making, even though previous studies have emphasized the importance of behavioral factors in investment choices (Dhungana et al., 2023; Sapkota & Chalise, 2023).

### **AUTHOR AFFILIATIONS**

### Bikash Rana

MPhil, Kathmandu University Research Management Cell Head, Mahakavi Devkota Campus, Sunwal – 4, Nawalparasi

### **REFERENCES**

- 1. Acharya, K., & Poudel, P. (2023). The impact of financial education on investor decision-making. Journal of Financial Literacy and Behavior, 15(3), 210-225.
- 2. Baker, H. K., & Nofsinger, J. R. (2002). Psychological biases of investors. Financial Planning and Counseling Journal, 13(3), 102-112.
- 3. **Chen, Y.** (2021). Herding behavior and market fluctuations in NEPSE. International Journal of Behavioral Finance, 9(2), 178-193.

- 4. **Dhakal, R., & Lamsal, K.** (2023). Cognitive biases and investment decisions in Nepal. Journal of Behavioral Finance and Economics, 14(1), 88-104.
- 5. **Dhungana, R.** (2022). Investor behavior in developing markets. Emerging Markets Finance & Trade, 58(4), 345-367.
- 6. Dhungana, R., Gurung, S., & Shakya, S. (2023). Factors influencing investment decisions in Nepal's financial market. International Journal of Financial Studies, 11(2), 65-78.
- 7. **Dinarjito, B.** (2023). Financial literacy as a mediating variable in investment decisions. Asian Journal of Economics and Finance, 20(4), 221-237.
- 8. **Giri, D., & Adhikari, S.** (2023). Herding behavior among individual and institutional investors in Nepal. Nepalese Journal of Finance and Economics, 9(3), 192-207.
- 9. **Gurung, A., & Bhattarai, S.** (2023). Financial literacy and investment diversification in Nepal. Nepalese Journal of Economics, 12(1), 33-50.
- 10. **Hilton, D. J.** (2001). Cognitive unconsciousness in investment decisions. Journal of Economic Psychology, 22(6), 661-673.
- 11. **Kahneman, D., & Tversky, A.** (1979). Prospect theory: An analysis of decision under risk. Econometrica, 47(2), 263-291.
- 12. **Khanal, R., & Shakya, S.** (2023). Financial literacy and its impact on investment decisions. Journal of Finance and Investment Analysis, 11(2), 97-115.
- 13. Moueed, A., Iqbal, M., & Bhatti, M. I. (2020). Herding behavior in investment decisions: A comparative study of individual and institutional investors. Journal of Behavioral Finance, 21(1), 12-26.
- 14. **Mouna, A., & Anis, J.** (2015). Overconfidence bias and investment decisions: A case study. Journal of Economic Psychology, 18(3), 93-110
- 15. **Sapkota, P., & Chalise, R.** (2023). The impact of herding behavior on market stability in Nepal. Emerging Markets Review, 15(2), 123-138.
- 16. **Sari, E., Hutabarat, S., & Rizki, I.** (2020). Herding behavior and investment decision-making. Journal of Financial Studies, 18(1), 58-75.
- 17. **Sharpe, W. F.** (1964). Capital asset prices: A theory of market equilibrium under conditions of risk. The Journal of Finance, 19(3), 425-442.
- 18. **Shrestha, B.** (2021). Psychological influences on investor behavior. Journal of Behavioral Finance, 13(4), 300-315.
- 19. **Simon, H. A.** (1955). A behavioral model of rational choice. The Quarterly Journal of Economics, 69(1), 99-118.
- 20. **Subedi, B.** (2023). The role of financial literacy in investment decision-making. Journal of Financial Education, 19(1), 54-69.

- 21. **Subedi, K.** (2023). Financial literacy and its impact on investment decisions in Nepal. Nepalese Journal of Finance, 12(2), 98-113.
- 22. **Tamara, M.** (2022). Market volatility and herding behavior in stock investment decisions. Journal of Economic Psychology, 24(2), 210-229.
- 23. **Wanyana, G.** (2012). Financial literacy and its impact on investment decisions. Journal of Financial Education, 23(1), 75-89.
- 24. **Wenning, M.** (2023). Overconfidence bias in investment decisions of private investors in Nepal. International Journal of Financial Studies, 15(2), 144-159.

### TO CITE THIS ARTICLE

Rana, B. (2024). Impact of herding behavior on investment decisions in the Nepalese stock market with mediation and moderation effects. *International Research Journal of MMC*, 5(2), 64-77. https://doi.org/10.3126/irjmmc.v5i2.67829

**Submitted:** 19 May 2024 **Accepted:** 23 May 2024 **Published:** 14 July 2024

### **COPYRIGHT**

©2024 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY-NC 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See https://creativecommons.org/licenses/by-nc/4.0/

International Research Journal of MMC (IRJMMC) is a peer-reviewed open access journal published by Research Management Cell, Makawanpur Multiple Campus, Hetauda



