The influence of conservatism and overconfidence on investment decisions among investors in Nepali stock market

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Abstract

Purpose - Adopting behavioral finance to identify the investors' investment decision is instrumental in developing insight into the financial and economic activity of the investors. This paper attempts to examine how conservatism and overconfidence influence investors' investment decisions in Nepali share market.

Design/methodology/approach - The research followed the questionnaire method where structured self-monitored close questions were surveyed from 335 respondents via internet. To analyze the data, SPSS software was used, and to test the direct effects of the hypotheses, covariance base analysis (CB-SEM) was applied.

Findings and Conclusion - The outcomes of the regression analysis depict that the conservatism of Nepali investors has a considerable positive impact on their investment decisions. It has also revealed that overconfidence had an insignificant role in investment decisions, which indicates investors do not show overconfidence while investing in the stock market.

Originality/value - Conservatism and overconfidence of stakeholders in the share market by applying behavioral theory in Nepal are largely unexplored. Because it is one of the few studies that examine the influence of conservatism in Nepal, this study occupies a precarious position in Nepali research on investment decision in the share market.

Keywords: Investment decision, behavioral finance, NEPSE, conservatism, and overconfidence.

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1. Introduction

Making an investment decision under uncertain conditions, particularly in the stock market, is thoughtprovoking. In such a situation, decision makers seek a variety of alternative sources of information and analysis (Nofsinger, 2014). In order to address this issue, a number of theories have been established in the area of behavioral finance to facilitate decision makers. In one hand, conventional finance theory advocates security investors behave rationally because a typical investor in the share market is sensitive and rational in the investment decisions, which is why they are unemotional in their evaluation of the risk-return tradeoff (Bakar and Yi, 2016). Alternatively, a behavioral finance process seeks to comprehend how feelings and reasoning errors affect investors' behaviors (Kengatharan & Kengatharan, 2014). An experimental investigation conducted by Babajide & Adetiloye (2012) and Bashir et al. (2013) on the examination of stock market variations discovered that the rationality of investors isn't always the case.

Investors make investment decisions considering their own knowledge and available news and information in the market, and such decisions are usually supported by decision-making tools (Mutswenje, 2009). Investment analysis involves a number of tools, including fundamental analysis, technical analysis, and judgment. Additionally, investors' uniqueness, information structure, and market characteristics influence both individual investment decisions and market outcomes (Maditinos et al., 2007). Despite all these rationale tools and techniques for analysis; however, according to behavioral finance, investors' behavior has been studied not only from the perspective of rationality, but also by combining other irrational psychological investment biases which are not considered by conventional finance (Sharma & Kumar, 2019).

Good decisions are frequently originated from a thorough knowledge about investments that investors gather from many ways, such as the television, internet, and other broadcasting channel (Loibl & Hira, 2009), because of that helps to boost effectiveness in the investment decisions and thus results in better performance. Similarly, the performance of the investment may be harmed by improper decisions making of investors. Investors make poor financial decisions because of their emotional, psychological, and behavioral elements instead of concentrating on the fundamentals (Raheja & Dhiman, 2020). Investors vary from one another in a variety of ways, such as demographic characteristics; however, psychological predispositions such as overconfidence and conservatism greatly influence them while they make decision on stock purchase.

Traditionally, conservatism suggests that people are not yet prepared to accept changes and will require more time to adjust to them. The conservative bias makes investors slow to react to new evidence and developments and to update their beliefs as a result (Márcia et al., 2014), and when new information or rumors are released regarding a company, conservative individuals may initially underreact. On the other hand, rational agents have been observed to exhibit overconfidence bias with a great deal of attention and application (Dubra, 2004). Essentially, overconfidence is the tendency to attribute one's success directly to one's own abilities and talent and blames unfortunate for his failure, thereby overvaluing his abilities. An investment decision becomes overconfident when investors believe they can predict the future better than others do. Overconfidence breeds overreactions on the part of decision makers and consequently, they are less able to comprehend or process the information (Daniela et al., 2002); (Mushinada & Veluri, 2018).

Investors need to make good judgments considering economic condition, financial condition, and available option in the market while making investment decision (Pompian, 2012). More importantly one

has to contemplate that there are many aspects of the economy in developing countries that are different from those in developed countries. These changes may include political stability, laws and regulations, scientific advances, IT usage, financial structure, the level of revenue, social class, and the educational system. Similarly, investors and stock exchanges in developing and established countries also differ in many respects. In the context of Nepal, the current volatile Nepali share market has been challenging for investors who want to make investment decision on Nepali stock market. Currently, the rise in awareness of the importance of saving and investment has increased the number of investors in Nepal, and the behavior of investors affects the volatility in stock prices. Despite these awareness and positive outcomes from some of the investors' decisions, challenges related to right decision making of investors which can influence the investment decision-making behavior of Nepali investors, this study aims to identify and address the influence of conservatism and overconfidence on investment decisions among Nepali investors.

2. Literature Review and Hypotheses

2.1 Investment Decision Making

Investment decisions are influenced by economic and financial conditions of the country (Virlics, 2013). Nonetheless, investment decision is a subjective in nature which is based on anticipated expenditures, individual's understanding of the better approaches, and his ability to assess risk (Harcourt et al., 1967). Gilan and Abbasi (2015) found that there is a substantial association between financial analysis, psychological elements, expected value of a company, historical price, and performance with investors' investment decision-making behavior. Dhungana et al. (2018) found that investors' behavior influences their decision making and performance in the Nepal Stock Exchange (NEPSE). Pokhrel (2018) suggests that important elements influencing investment decision-making in NEPSE include information provided by a stock-trader, a newspaper, and the marketplace attitudes. Thus, investment decision is one of the major dependent variables in the field of investment, which can be affected by various behavioral factors of investors in the stock market.

2.2 Relationship between Conservatism (CN) and Investment Decision Making (IDM)

Conservatism is positively associated to investment decision of stock investors (Kengatharan & Kengatharan, 2014). When stock investors seek to invest, they tend to believe in gossip and conversation with fellow friends. Chandra and Kumar (2012) introduce conservatism as a tendency that a person is dependent on news and information to make investing decisions in the maket. Because of the conservatism bias, investors take a long time to react to new information and developments and to update their beliefs. Different authors examine the different announcements and news, which also represent conservatism, about the market to understand their effects on the price of a stock. In this respect, the link between conservatism and investment decisions can be interpreted through the lens of behavioral finance theory and the BSV (Barberis, Shleifer and Vishny) model. Behavioral finance is an effort to describe the why, what, and how-related questions of money and investment from a human point of view (Fromlet, 2001). On the other hand, BSV aims to explain why and how investors react to the new information, financial data and news about the company while making investment decisions (Lam, 2010). Thus, considering the background just presented, following hypothesis is presented:

Hypothesis 1: Conservatism positively influences the investment decision-making behavior of Nepali investors.

2.3 Relationship between Overconfidence (OV) and Investment Decision Making (IDM)

Overconfidence, according to researchers, is a positive predictor of an individual's investment performance (Abdin, Farooq, Sultana, & Farooq, 2017). Thus, overconfidence influences the investment decision-making behavior of investors (Ekholm & Pasternack, 2008; Odean, 1998; Luong & Thuha, 2011). Investing decisions can be influenced by overconfidence in a variety of ways, including decisions related to share market investments or other investment decisions (Joo & Durri, 2017). When people tend to misjudge their abilities and talents, overconfidence results (De Bondt & Thaler, 1995; Hvide, 2002). They believe that their knowledge and forecasts are more accurate than they really are. Therefore, the decision making behaviors of investors are often irrational and thus result in decision biases. Overconfidence bias affects those people whose financial literacy tends to overvalue what it isn't and undervalue what it is (Ekholm & Pasternack, 2008). The work of Baker and Nofsinger (2002) established a substantial constructive association between overconfidence and investment decision. In order to connect overconfidence and investment decision, interplay of behavioral finance and heuristic theory has been established. Heuristics theory deals with why investors overestimate their knowledge and rely only on their own knowledge and abilities rather than performance results (Tversky & Kahneman, 1974). People usually overestimate the accuracy of their knowledge and ability to do well. Behavior finance deals with the behavior of investors regarding how they make investment decisions and how such beliefs affect the decision-making behavior of investors in the share market (Kengatharan & Ken, 2014). Based on the presented concepts and findings, following hypotheses is presented.

Hypothesis 2: Overconfidence positively influences the investment decision-making behavior of Nepali investors.



Figure 1. Conceptual Framework

3. Methods

3.1 Sample and Procedure

The population for the study included all the investors who traded stocks in the secondary market of Nepal (NEPSE). According to Nepal stock exchange, there are more than 550,409 investors who have opened a trading account to do the transaction (Merolagani, 2022). All the investors who falls under 550,409 investors who have trading account are the population for the study. The convenience sampling technique was used in the study of conservatism, overconfidence, and Nepalese individuals' investment decisions—NEPSE with a sample size of 335 respondents who participate in secondary stock transactions provided by the Nepal Stock Exchange. In Nepal, there are 59 stock brokers. All of them are based in Kathmandu Valley, the capital city of Nepal, and only a few are outside the Valley, with their head office in Kathmandu. Based on researcher convenience and to ensure that all types of investors are represented, samples were taken from various brokers like Primo Securities Pvt. Ltd., Nepal Stock House Pvt. Ltd., Arya Tara Investment And Securities Pvt. Ltd. (Butwal branch and Kathmandu branch), Premier Securities Company Limited, and respondents were also taken from various groups on Viber, Facebook, and Telegram.

Out of 450 questionnaires distributed, 335 responded to the questionnaire with 181 usable responses. The study approach was descriptive and conclusive, which included data gathering and analyses of several forms. Descriptive research design is related with describing current situation of the issue in hand. The researcher can only describe what has occurred or is occurring without having any influence over these factors. To draw conclusions, a conclusive research design is used to collect data.

3.2 Measure

To express essential features of different variables related to the study, this study utilizes four measures. Firstly, demographic variables were measured by eight items and later three items were measured by the Likert Scale. A short explanation about the measures is specified below:

Investors' investment decision-making behavior was examined by three latent constructs using a 5 point Likert scale. On a scale of 1 to 5, respondents were asked to rate with (1 = "strongly agree," 5 = "strongly disagree"), with greater scores signifying a lower influence on investment decision making. It was measured by three dimensions with 11 items. Overconfidence was measured by the test given by Mushinada and Veluri (2019). The sample item includes: "I control and am fully responsible for the results of my investment decisions." It comprises of three items. Conservatism was adopted from Pompian (2011) from his book 'Behavioral Finance and Wealth Management'. The sample item includes: "Negative stock news is something I try to ignore. I'm confident in the company's success since I've already invested. It comprises three items. Investment decisions were measured by adopting the scale from (Rasheed, Rafique, Zahid, & Akhtar, 2018). The sample item includes: "When making an investment, I trust my inner feelings and reactions." It comprises of five items. The detailed instrument has been attached in the appendix section.

4. Result

A total of 306 respondents took part in the study. The demographic characteristics of the respondents included age, marital status, educational qualification, experience in stock market, education, and types of investors. The following table presents the profile of respondents.

Variable	Number	Percentage
Gender		
Male	223	72.9
Female	83	27.1
Age		
Under 20	9	2.9
20-35	284	92.8
36-55	6	2.0
Above	7	2.3
Marital Status		
Single	192	62.7
Married	114	37.3
Occupation		
Unemployed	89	29.1
Employed but not self-employed	194	63.4
Self-employed	21	6.9
Retired	2	0.7
Educational Level		
Undergraduate or below	48	15.7
Bachelor Level	167	54.6
Master Level	83	27.1
Above Master	83	2.6
Investor Types		
Active	192	62.7
Passive	114	37.3
Experience		
1-5 year	237	77.5
6-10 year	65	21.2
11-15 year	4	1.3

Table 1. Demographic profile of the respondents

Source: Field Data (2022)

According to the table 1, the majority of respondents in the study were male (n = 223, 72.9%). The majority of respondents (n = 192, 37.3%) were single. There were a significant number of respondents between the

ages of 20 and 35. (n = 284, 92.8%). Among 306 respondents, among the respondents, the majority were employed but not self-employed (n = 194, 63.4%). The majority of respondents (n = 167, 54.6%) have completed their bachelor's degree. Similarly, the majority of the respondents actively trade in NEPSE (n = 192, 62.7%). Finally, the majority of respondents had 1-5 years of experience (n = 237, 77.5%).

Constructs	Mean	Std. Deviation	1	2	3
1.Conservatism	3.2397	0.84969	0.443		
2.Overconfidence	3.3693	0.74839	.430**	0.603	
3.Investment	3.527	0.76172	.435**	.284**	0.598

Table 2. Mean, standard deviation, correlation matrix, and Cronbach's alpha.

Source: Field Data (2022)

In the table 2, the Pearson correlation coefficients between study variables, mean values, and standard deviations are shown. First, the results indicated that the overconfidence scores (M = 3.369, SD = 0.748) of the respondents increased as conservatism increased (M = 3.241, SD = 0.849). Therefore, the result of the analysis shows the positive correlation as overconfidence is positively correlated to conservatism. (r = 0.430, n = 306). Thus, there is a significant positive relationship between overconfidence and conservatism. Second, the results indicated that the investment decision scores (M = 3.527, SD = 0.762) of the respondents increased (M = 3.369, SD = 0.748). The result of the analysis shows that investment decisions are positively correlated to overconfidence (r = 0.284, n = 306) since r is less than 0.3, which shows a weak correlation. Third, the results indicated that the investment decision scores (M = 3.527, SD = 0.762) of the respondents increased as conservatism increased as conservatism increased (M = 3.241, SD = 0.849). Therefore, the result of the analysis shows a positive correlated to a score (M = 3.241, SD = 0.762) of the respondents increased as conservatism increased (M = 3.241, SD = 0.849). Therefore, the result of the analysis shows a positive correlation as investment decisions are positively correlated to conservatism increased (M = 3.241, SD = 0.849). Therefore, the result of the analysis shows a positive correlation as investment decisions are positively correlated to conservatism increased (M = 3.241, SD = 0.849). Therefore, the result of the analysis shows a positive correlation as investment decisions are positively correlated to conservatism increased (M = 3.241, SD = 0.849). Therefore, the result of the analysis shows a positive correlation as investment decisions are positively correlated to conservatism (r = 0.435, n = 60). Thus, an important positive relationship existed between conservatism and investmentd.

4.1 Common Method Bias

The study applied Harman's single factor test to check common method bias. For this, all measuring items or measuring latent variables were fed into common method. This method states that if the overall variance for a single factor is more than 50% then it indicates that there is common method bias in the study, and if the single factor overall variance is less than 50% then there is no common method bias (Harman, 1976). According to this common method of testing, the common latent components, which included all independent and dependent variables, accounted for only 41.9 percent of the total factors which was reasonable to accept because it is less than 50%. As a result, CMB was not a significant issue in the data.

4.2 Structural Equation Model (SEM)

Structural equation modeling (SEM) is used to describe the interactions between observable variables which are explained by using the multivariate quantitative approach in social sciences (Gonzalez et al., 2008). A SEM model based on PLS is used to examine the proposed hypotheses.

4.3 Measurement Model

The measurement model establishes the relationship between measurable and latent variables (Byrne, 2013). It follows a structural model in addition to the measurement model (Meyers et al., 2013). Using a measurement model, the latent variables or composite variables are measured. SPSS Statistics and SPSS Amos 26 were used to analyze a measurement model.

4.4 Reliability

Reliability is primarily related to 'error in measurement' (McDowell & Newell, 1996) i.e. how well a measurement scale constantly or dependably measure what it is designed to measure. Cronbach's Alpha and Composite Reliability are the two frequently used measures to determine internal consistency reliability (CR). Cronbach's Alpha results ranged from 0.779 to 0.847, while Composite Reliability values ranged from 0.782 to 0.851. Cronbach's Alpha has consistent statistics because it is greater than 0.600 (Hair et al., 2014). Similarly, Composite Reliability has reliable statistics because it exceeds or approaches the desired value of 0.700 (Hair et al., 2011). As a result, reliability in the study was established.

Measurements	Loadings	AVE	CR	Alpha
Conservatism				
C1	0.758			
C2	0.875	0.656	0.851	0.847
C3	0.828			
Investment Decision				
ID1	0.748			
ID2	0.728		0.782	0.022
ID3	0.708	0.561	0.782	0.832
ID4	0.823			
Overconfidence				
OV1	0.728			
OV2	0.713	0.545	0.836	0.779
OV3	0.773			

Table 3. Reliability

4.5 Convergent Validity

In terms of convergence validity, this is the measure of how closely several measures of a given construct are aligned. To confirm convergent validity, the indicator's factor loading, composite reliability (CR), and

average extracted variance (AVE) must all be considered (Hair et al, 2011). The value anywhere between 0 and 1. Fornell and Larcker (1981) recommend that the AVE value should be greater than 0.50 to be sufficient for convergent validity.

Table 4. Convergent Validity	Гable 4. (Convergent	Val	lidity
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Latent	CR	AVE
Investment Decision	0.836	0.561
Conservatism	0.851	0.656
Overconfidence	0.782	0.545

From table 8, the composite reliability (CR) and average variance extracted are greater than 0.7 and 0.5 respectively, which means the study supports convergent validity.

4.6 Discriminant Validity

The second criteria is to use the Fornell-Lacker criterion to determine discriminant validity (Ab Hamid et al., 2017). This approach contrasts the association of latent constructs with the square root of the extracted average variance (AVE) (Hair et al, 2014). In contrast to the variance of other latent constructs, the variance of a latent construct should be better explained by its own indicator. As a result, the correlations between each latent construct and its square root should be larger than those between its other latent constructs (Hair et al., 2014).

Investment							
Latent	CR	AVE	Decision	Conservatism	Overconfidence		
Investment Decision	0.836	0.561	0.749				
Conservatism	0.851	0.656	0.498	0.810			
Overconfidence	0.782	0.545	0.337	0.522	0.738		

Table 5. Discriminant/Divergent Validity (Fornell's and Larker Criteria)

Source: Field Data (2022)

From table 9, since all the off-diagonal components have values that are smaller than the square roots of AVE, our research study supports divergent validity.

4.7 Structural Model

The structural model shows how the components on the proposed study model are related to one another (Paths) (Latif et al., 2020). Structural model was tested with two hypotheses. The reason for using structural equation modeling as a method of data analysis is provided by the nature of the research hypothesis. Below table shows the path coefficient between the variables.



Figure 1. Structural Model

Hypotheses Testing

Table 6. Hypotheses Testing

Hypotheses			Estimate	S.E.	C.R.	Р	Label
Investment	<	Conservatism	.443	.064	5.450	***	Significant
Decision		Conservation					orgrinicant
Investment	,	Orversenfidense	.106	.074	1.335	182	Not
Decision	<	Overconfidence				.102	Significant

Hypothesis 1: Conservatism positively influences the investment decision-making behavior of Nepali investors.

The relationship between the "conservatism" and "investment decisions" of Nepali investors was analyzed. In the study, the investment decision behavior was considered as the dependent variable, where conservatism was considered as an independent variable. A linear regression was run to test the models. In the table above, the results of the regressions are presented. The results show that conservatism has a

significant impact on the investment decisions of Nepali investors as (β =0.443, p<0.001). Therefore, Hypothesis 1 was supported.

Hypothesis 2: Overconfidence bias positively influences the investment decision-making behavior of Nepali investors.

The relationship between the overconfidence and investment decisions of Nepali investors was analyzed by using linear regressions and shows that there is no significant impact of overconfidence on investment decisions on Nepali investors as(β =0.106, p>0.05). Therefore, Hypothesis 2 was rejected.

5. Discussion

The study examines the influence of conservatism and overconfidence on investment decision makingbehavior of investors in Nepali stock market. Hypothesis 1 examines the influence of conservatism on investment decision making-behavior of investors. The study found that conservatism significantly influenced the investment behavior of investors of Nepali stock market. The findings of this study are consistent with those of previous studies (e.g. Desai & Jain, 1997; Ikenberry et al., 1996; Kaestner, 2006) which means increase in conservatism among investors greatly influence the decision making behavior of investors. Further, Lim (2012) and Kengatharan and Kengatharan (2014) found that conservatism positively impacted the investment decision making. Thus, this result validates our first hypothesis. When investors feel to make investment decisions, their dogmatism and beliefs overshadows the rational way of thinking. It may be reason that conservative investors tend to avoid the complexity process of decision making, and they might be prone to make wrong decision.

Alternatively, hypothesis 2 examines the effect of overconfidence on investors' behavior in Nepali stock markets. The study found that overconfidence does not influence the investment decision-making behavior of investors of Nepali stock markets. This finding is inconsistent with the findings of previous studies (e.g. Qadri & Shabbir, 2013; Lim, 2012; Qureshi, 2012; Bashir et al., 2013). The results of this study are, however, consistent with those of previous studies (e.g. Kengatharan & Kengatharan, 2014). It indicates that investors in Nepali stock markets do not overestimate their beliefs and knowledge while making investment decision. This result does not validate our second hypothesis. The overconfident investor believes that they are better at investing than their peers and the market index as a whole.

6. Implications

6.1 Theoretical Implications

The findings of the study have implications on two levels: theoretical implications and managerial implications. This research contributes to the field of behavioral finance by exploring the factors that influence the investors' decision making behavior. By drawing on behavior finance theory (Kahneman & Thaler, 1991), heuristics theory (Tversky & Kahneman, 1980), and BSV model, the study provides strong empirical evidence to help better understand the investment behavior of investors. Theoretical models also provide a good framework for designing investment strategies. Further, the paper contends that overconfidence does not necessarily influence the decision-making behavior of investors of Nepali share

market. This study may be used as a foundation for further research into this specific market and investors' behavior in Nepali stock market.

6.2 Managerial Implications

The purpose of behavioral finance is to clarify and expand people's understanding of the psychological processes that affect the decision making ability of people when they invest in financial markets. In addition, an unconventional approach has been introduced identifying the significance of cognitive and psychological mistakes related with investment decision (Humra, 2016). The findings of the study offer valuable source of information to the investors and traders who operate in the share market of Nepal. In some ways, the study is the right source of information for investors about stock-investment behavior and attitudes of ordinary people to consider and evaluate before making appropriate investment strategies. The research gives security organizations (SEBON, NEPSE, NRB and Broker firms) an excellent groundwork for forecasting forthcoming share-market trends and providing reliable consulting information to investors and helps to make the norms, rules, and regulations related to the stock market more investor-friendly.

7. Limitations and Future Direction

This research is limited to retail investors who invest in the secondary market, and thus the results and recommendations may not be applicable to institutional investors of Nepali stock market. Using a questionnaire survey, data were collected for this study, and therefore the possibility of self-reported bias cannot be excluded. Since the study was cross-sectional, it would have been possible to determine more firm and accurate results by conducting longitudinal research. Further, the study only talks about the relationship between conservatism, overconfidence, and investors' decision-making behavior of Nepali stock market. However, there are many other elements, such as gambler's trickery, interest rate, monetary policy, illusion of control, and misconception of knowledge could have a substantial influence on Nepali investors' buying behavior. This study does not intend the moderating effect of variables such as age, gender, level of education, nature of employment, and investing knowledge on the stock market. Likewise, this study has given preference only to retail investors and neglected institutional investors like investment companies that invest and trade in Nepal stock exchange. In the future, researchers can test the hypothesis by taking more diversified samples to allow for more generalization. To validate the findings of this study, qualitative research approaches such as, in-depth interviews and focus group discussions could have been used.

Conflict of Interest

Authors declare no conflict of interest while preparing this article.

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