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Behavioral Insights Into Investment Decision-Making: Evidence From the Nepal Stock Exchange

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Abstract

This paper provides a reliable foundation for investigating how people's behaviors influence investment decisions. The study surveyed 286 individual investors who participated in the Nepal Stock Exchange, employing a purposive sampling procedure and self-administered structured Likert scale questionnaire. The results indicate that behavioral factors, including stock affordability, information availability, third-party opinions, and herding effect, significantly influence individual investors' rationality in making investment decisions. The study concludes that in a developing and expanding environment, factors such as disposable income, market trends, and external opinions notably shape investment decisions when individuals choose to invest in the stock market. The alignment of our findings with existing literature reinforces the robustness of our results. The implications of these findings extend to investors, financial advisors, and policymakers alike. Recognizing the influence of behavioral factors can aid in developing strategies to promote informed decision-making and mitigate the adverse effects of herding behavior.

Keywords: behavioral finance, stock affordability, third-party opinion, herding effect, investment decision, Nepal Stock Exchange

Introduction

Individual investment decisions play a pivotal role in financial markets, representing a complex interplay of various factors that shape investors' choices. A comprehensive examination of studies from diverse sources enriches our understanding of economic behavior and its implications for investment. Notably, researchers such as Rathnayaka et al. (2014) emphasize that, among different investment methods, a significant portion of investors prefer direct investment in the stock market over savings

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accounts, given the array of investment products available, ranging from bonds to options (Das, 2012).

In the contemporary economy, stock markets serve as crucial sources of capital for industrial and commercial activities (Fauzi & Wahyudi, 2016). They facilitate the allocation of funds from individuals and institutions to businesses and industries (Akbar et al., 2016). However, irrational behavior often influences real-world economic decisions, necessitating decision-making tools to guide investment choices. Information structures and market factors are assumed to systematically impact personal investment decisions and market outcomes (Mehta & Chaudhari, 2016). Consequently, individual investors are susceptible to various influences, including firm-related factors, environmental conditions, and psychological aspects. Moreover, Obamuyi (2013) highlights several factors influencing investor decisions, including expected corporate earnings, the allure of instant riches, stock market liquidity, past stock performance, government holdings, and the development of structured financial markets. Conversely, Jagongo and Mutswenje (2014) note a divergence in decision-making approaches between individual and professional investors, with the former being more influenced by media and market noise, while the latter relies more on technical and fundamental analyses.

This paper aims to identify the factors shaping stock investment decisions among individual investors and analyze their relationships with investment choices. Through this exploration, we seek to enhance our understanding of the intricate dynamics within financial markets and their implications for investors' decision-making processes.

Literature Review and Hypothesis Development

The research deals with the factors and determinants of investment decisions an individual investor makes on the market. The first behavior theory was developed by Daniel Kahneman and Amos Tversky in 1979 as a prospect theory, the Regret theory by economist Graham Loomes and psychologist Robert Sugden in 1980, and the Mental Accounting concept introduced by economist Richard Thaler in 1980 provided insights into the psychological drivers of investment decisions. Prospect Theory explains reactions to gains and losses, influencing stock-holding behaviors. Reliability Theory emphasizes risk assessment's role in investment choices. Regret Theory highlights emotional impacts on decision-making, affecting stock-selling tendencies. Mental Accounting explores how categorization influences choices. These theories contribute to understanding investors' behaviors in the capital market beyond traditional financial theories.

Investment Decision Making

The investment decision evaluates the investment opportunities available in the market and selects the best that aligns with investors' financial goals, risk tolerance, and investment strategy (Gill et al., 2018). Moreover, the choice of investment decision is not only affected by market anomalies but also by investors' psychological factors. Analyzing the determinants of investment behavior and their investment decision is an issue relating to behavioral finance. Krishnan and Booker (2002) conducted a study exploring the factors that influence investors' decision-making. Their findings revealed that investors frequently rely on analysts' recommendations when making short-term decisions about whether to hold or sell a stock. Additionally, many investors place significant emphasis on market noises. Individual investors, in particular, tend to heavily consider information from the media, newspapers, and other sources of market chatter when making investment decisions, viewing these as crucial secondary market sources. This indicator helps to investigate and analyze the outcome of decisions made by people in the market that directly help to get outcomes from investment decision-making.

Stock Affordability and Investment Decisions

Affordability indexes gauge an individual's or a population's capacity to purchase an item in relation to their income or the average income within their country or region. Stock affordability plays a significant role in investment decisions (Annamalah et al., 2019). In the realm of unit trusts, these investment vehicles offer a convenient and sensible avenue for individuals to grow their wealth over the medium and long term. Managed by investment specialists, unit trusts distribute investments across various assets to mitigate risks through diversification. A fundamental characteristic of unit trusts is their comparatively low level of risk, which consequently results in lower returns compared to other financial instruments, as emphasized by Obamuyi (2013). According to the study of Aroni et al. (2014), on financial information and equity investment, a survey of individual investor in Kenya revealed that financial information is a significant consideration that positively influences investment decisions. Therefore, based on these shreds of evidence, we proposed following hypothesis:

H_1: Stock Affordability has a significant effect on investment decision-making.

Information and Investment Decisions

A stock exchange facilitates stockbrokers' trading of company stocks and other securities, serving as a meeting place for stock buyers and sellers (Yusuff, 2020). Yusuff stated that gender and product knowledge (PK) moderate the relationship between information sources and Islamic unit trust investment decisions. Abul (2019) emphasized the significance of information for individuals when making various decisions, particularly regarding investments. Investors base their investment choices on information related to financial instruments, such as the company's historical financial performance, dividend distributions, and past movements in market share prices. This underscores the critical role that information plays in decision-making processes, especially in the context of investments. Most researchers have measured accounting information to evaluate factors influencing individual investments (Ahmad, 2017). Similarly, Lam (2014) concluded that individual differences exist in various factors influencing investment decisions. These include past market trends, risk tolerance, comprehension of previous asset class performances, and the capacity to withstand risk. Each person's risk appetite and ability to interpret past market movements vary, shaping their approach to investment planning. In addition, neutral information significantly impacts personal investment decision-making (Bashir et al., 2013). Akbar et al. (2016) demonstrated a notable correlation between advocate recommendations and individual investment choices. Therefore, based on these empirical pieces of evidence, we hypothesized:

H_2: Information has a significant effect on investment decision-making.

Third-Party Opinion and Investment Decisions

Third-party opinions and suggestions are crucial in buying stocks (Ngahu, 2017). These opinions may come from family members, friends, coworkers, the firm's shareholders, brokerage houses, and other sources. The study by Sarwar and Hussan (2016) examined the factors influencing individual decision-making in the Islamabad Stock Exchange. The findings suggest a positive and significant relationship between advocate advice, unbiased information, self-image/firm image convergence, and individual investors' investment decision-making. Wendo (2015) points out that investment decisions are shaped by several factors, including prevailing market sentiment, recent trends in returns and profitability, as well as input from friends and colleagues. The study of Gunathilaka (2014) examined the equity investment decision-making process of individual investors in Sri Lanka. The study found that expectations of political stability, economic conditions/outlook, and good governance influenced these decisions. Ali and Tariq (2013) studied the factors affecting individual equity investor's decision-making in Pakistan. The study found that the individual equity investor’s decision-making is significantly influenced by converging self-image and firm-image, unbiased information, and advocacy proposals. Therefore, based on these shreds of evidence, the proposed hypothesis is:

H_3: Third party opinion has a significant effect on investment decision-making.

Herding and Investment Decisions

In finance, herding behavior occurs when investors abandon individual analysis and instead follow the crowd. This phenomenon has historically led to significant, unfounded market rallies and sell-offs, often lacking fundamental support. Din et al. (2022) sought to explore the influence of behavioral biases on herding in the context of Islamic financial products, with Shariah literacy serving as a mediator. Their study found that self-attribution, the illusion of control, and information availability positively and significantly affect herding behavior for Islamic financial products. This study contributes to the understanding of herding behavior and investment decisions. Dewan and Dharni (2019) illustrated that herding denotes how individuals act together in a group without any centralized direction. Risal (2019) examines the attitudinal factors influencing herding behavior to manage the fluctuations, bubbles, and bursts in the Nepali capital market, finding that hasty decisions have a significant relationship. Farooq and Sajid (2015) studied the factors affecting investment decisions using evidence derived from equity fund managers and individual investors in Pakistan, discovering that financial tools usage, heuristics, and internal corporate governance had a positive and significant effect on investment decision-making. On the other hand, the study found that risk aversion negatively impacted investment decision-making. Therefore, based on these shreds of evidence, the proposed hypothesis is:

H_4: The herding effect has a significant effect on investment decision-making.

Research Methodology

Our paper employed an explanatory research design that provides detailed insights into the sample findings, facilitating hypothesis testing and assessing statistical significance. The study population consisted of individual investors who had invested in NEPSE. However, individual active investors who frequently traded in NEPSE are unknown. In this case, a purposive sampling method is more appropriate (Kothari & Garg, 2014). Therefore, the sample size for this study has been determined as ten times the number of items in the questionnaire as suggested by (Hair et al., 2013). The questionnaire includes 24 items under the constructs. Thus, the appropriate sample size for this study has been established as 240. However, to collect data from target investors from brokerage firms in Kathmandu Valley, we distributed 300 hard copies of questionnaires and received 203 returned. After filtering and clearing, we finalized only 180 questionnaires usable for further analysis. By obtaining the contact of investors interested in filling out online questionnaires, we collected data from 106 investors. Therefore, this study used data from 286 investors.

Table 1

Operationalization of Variables

Variables	Measurement	Source
Investment decision	Decision to buy or not, number of stocks, Long or short-term plan	Gill et al. (2018), Adhikari (2010), Krishnan and Booker (2002)
Stock affordability	Occupation and salary, Price trends, Dividend Changes	Annamalah, et al. (2019) Aroni et al. (2014), Obamuyi (2013), Ngahu (2017)
Information	Types of Information, Firms and Industrial Performance, Source of Information	Yusuff (2020), Abul (2019), Ngahu (2017)
Third-party opinion	Stakeholder's opinion, Relative's and friend's opinion, Investment, and Business Group	Ngahu (2017), Sarwar and Hussan (2016), Wendo C. (2015), Ali and Tariq (2013)
Herding effect	Opinions on finances, leader's views, and Rational and Irrational herd opinion	Din et al. (2022), Dewan and Dharni (2019)

This paper relies on survey data gathered through a structured questionnaire from various academic researchers, as delineated in Table 1. The initial segment of the questionnaire delves into the demographic composition of the respondents. Notably, a predominant portion of respondents identified as male, constituting 57.53 percent of the total sample. Furthermore, a substantial majority, comprising 72.04 percent, fell within the youthful demographic bracket of 20-30. Educational attainment among respondents revealed that 53.23% possessed a bachelor's degree, with a subsequent 40.32 percent holding a postgraduate degree. Turning to investment experience, findings indicated that 42.47% of respondents reported a tenure ranging between 5 to 10 years, while 45.16% reported possessing less than five years of experience in the realm of investment. The second segment of the questionnaire encompasses the measurement of constructs employed within the model using a 5-point Likert scale.

The reliability of the data, indicating its internal consistency, is assessed using Cronbach's Alpha. According to Nunnally (1987), a Cronbach's Alpha value exceeding 0.70 signifies that the data is reliable and suitable for subsequent statistical analyses. Table 2 presents the reliability coefficients for each variable.

Table 2

Result of Reliability Analysis

Variables	Number of Items	Cronbach's Alpha (α)
Stock affordability	5	0.733
Information	4	0.798
Third-party opinion	5	0.722
Herding effect	5	0.755
Investment decisions	5	0.721

Note. Calculation based on survey data, 2023

The baseline model of the paper used to achieve the objective of the study is

$ID = \beta_0 + \beta_1 SA + \beta_2 I + \beta_3 TPO + \beta_4 HE + \varepsilon$……………………………………….(1)

Where ID = Investment decisions making, $\beta 0$ = Constant term, SA = Stock affordability, I = Information, TPO = Third party opinion, HE = Herding effect, ε = Error of estimates, and β_1, β_2, β_3, and β_4 are the coefficients of the estimators.

Results

This section presents the results of the data analysis and discusses the findings concerning those of other scholars.

Correlation Matrix

Table 3 illustrates the descriptive statistics and correlations between behavioral factors and investment decisions.

Table 3

Means, Standard Deviations, and Correlation Coefficients

Variables	Mean	SD	1	2	3	4	5
Investment decision (1)	2.645	0.363	1				
Stock affordability (2)	2.569	0.426	.284**	1			
Information (3)	2.586	0.505	.376**	.617**	1		
Third-party opinion (4)	2.481	0.436	.449**	.477**	.502**	1	
Herding (5)	2.234	0.397	.352**	-0.015	-0.108	.170*	1

*Note:- ** means p<0.01 * means p< 0.05*

The findings indicate a positive and statistically significant relationship between all behavioral factors and investment decisions. This suggests that an increase in stock affordability, access to information, reliance on third-party opinions, and herding behavior correspond to an enhanced quality of investment decision-making.

Effect of Behavioral Factors on Investment Decision

This study investigates the influence of behavioral factors: stock affordability, information availability, third-party opinion, and herding on investment decision-making among individual investors. Utilizing data from 10 analytical models, we assess all the models' statistical significance and the relative effects of these factors. F-values and R^2 values highlight the models' importance and explanatory power, while VIF values below 2 alleviate multicollinearity concerns.

Table 4

Regression Results Using Investment Decision as Dependent Variable

Model	Constant	SA	I	TPO	HE	F-Value	R^2	Adj R^2	VIF
1	2.022** (12.875)	0.243** (4.025)	-	-	-	16.204**	0.081	0.076	1.000
2	1.946** (15.039)	-	0.270** (5.507)	-	-	30.326**	0.141	0.137	1.000
3	1.716** (12.414)	-	-	0.374** (6.821)	-	46.529**	0.202	0.197	1.000
4	1.927** (13.459)	-	-	-	0.321** (5.094)	25.948**	0.124	0.119	1.000
5	1.857** (11.752)	0.072 (0.977)	0.233** (3.732)	-	-	15.63**	0.146	0.137	<2
6	1.237** (7.271)	-	-	0.334** (6.301)	0.259** (4.452)	35.55**	0.280	0.272	<2
7	1.607** (9.743)	0.077 (1.212)	-	0.338** (5.423)	-	24.05**	0.208	0.200	<2
8	1.056** (5.785)	-	0.301** (6.719)	-	0.363** (6.363)	38.65**	0.297	0.289	<2
9	1.282** (6.408)	0.247** (4.406)	-	-	0.325** (5.410)	23.97**	0.208	0.199	<2
10	0.910** (4.693)	-0.09 (-0.133)	0.212** (3.589)	0.207** (3.335)	0.312** (5.416)	23.238**	0.339	0.325	<2

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

Note. Figures in parentheses are t-values. Where, SA: Stock Affordability, I: Information, TPO: Third Party Opinion and HE: Herding Effect

Results indicate a significant positive effect of all factors on investment decisions, with third-party opinion exhibiting the highest influence, followed by information availability and herding effect. Conversely, stock affordability has the most negligible impact on decision-making. These findings underscore the importance of behavioral considerations in understanding investor behavior and decision-making processes.

Summary of Hypothesis

Four hypotheses were tested, and the findings presented in Table 4 reveal that all of them are supported at the 5 percent significance level.

Table 5

Summary of Hypothesis

	Hypotheses	Results
H_1	Stock Affordability has a significant effect on investment decisions.	Supported
H_2	Information has a significant effect on investment decision-making.	Supported
H_3	Third-party opinion has a significant effect on investment decisions.	Supported
H_4	Herding effect has a significant effect on investment decision-making.	Supported

Discussion

This paper provides a reliable foundation for investigating how people's behaviors influence investment decisions. The results reveal the influence of behavioral factors on investment decisions, with stock affordability, information, third-party opinion, and herding effect positively and significantly influencing all models except stock affordability, which has no significant impact on the rationality of investment decisions in model 10. The results indicate that stock affordability positively and significantly influences investment decisions. It means that an increase in stock affordability also leads to a rise in the quality of investment decision-making. This finding aligns with study by Annamalah et al. (2019) and Obamuyi (2013), which emphasized the significance of factors such as past performance of the firm's stock, projected security capital bonus, projected firm earnings, dividend policy, and the 'get rich quick' mentality in investment decision-making.

Moreover, information on firms' performance significantly affects their investment choices because information positively and substantially affects investment decision-making. The finding of this paper aligns with research conducted by Akbar et al. (2016) and Yusuff (2020), which emphasized the importance of understanding the past performance of relevant assets. Personal investment strategies, such as determined investment commitments or expected returns upon maturity, are significant in guiding individual investment decisions. Third-party opinion has a positive and significant effect on investment decisions. This finding echoes the finding of Chong and Lai (2011), who underscored the paramount importance of unbiased information for Malaysian investors because access to impartial information is pivotal for making well-informed investment decisions within the Malaysian investment landscape.

Moreover, the result is consistent with the research of Sarwar and Hussan (2016), and Ngahu (2017). It means the quality of opinion received from family members, friends, coworkers, the firm's shareholders, brokerage houses, and other sources leads to an improvement in the quality of decision-making. Herding behavior significantly influences investment decisions, while rational behavior leads to favorable investment decisions. The result of this paper is consistent with the results of Din et al. (2022) and Dewan and Dharni (2019). These findings suggest that the decisions of other investors in buying and selling stocks play a substantial role in investment decision-making and that herding behavior can encourage or discourage such choices.

Conclusion and Implication

Based on the research findings, this paper concludes that behavioral factors significantly influence investment decisions. Key elements such as stock affordability, information availability, third-party opinions, and herding behavior are critical in shaping these decisions. In a developing and expanding market, factors like disposable income, market trends, and external opinions also play a crucial role when individuals invest in the stock market. Specifically, the study highlights that third-party opinions significantly impact investment patterns among investors at the Nepal Stock Exchange. Furthermore, it confirms that herding behavior notably affects individual investors' decisions in Nepalese capital markets.

The study's findings have important policy implications for the Securities Board of Nepal. Emphasizing information disclosure and conducting awareness campaigns are essential to encourage more individual investors to participate in equity markets. Strategic measures are necessary to ensure that individual investors can fully benefit from equity investments.

References

Abul, S. J. (2019). Factors influencing individual investor behavior: Evidence from the Kuwait stock exchange. *Asian Social Science, 15*(5) 27–39.

Adhikari, P. (2010). Investment behavior of Nepalese investors. *PYC Nepal Journal of Management, 3*(1) 47-58.

Ahmad, S. (2017). Factors influencing individual investors' behavior: An empirical study of Pakistan financial markets. *Journal of Business & Financial Affairs, 6*(4), 55-57.

Akbar, M., Salman, A., Mughal, K. S., Mehmood, F., & Makarevic, N. (2016). Factors affecting the individual decision making: A case study of Islamabad stock exchange. *European Journal of Economic Studies, 15*(1), 242-258.

Ali, I., & Tariq, A. (2013). Factors affecting individual equity investor's decision making in Pakistan. *Journal of International Education in Business, 1*(1), 18-31.

Annamalah, S., Raman, M., Marthandan, G., & Logeswaran, A. K. (2019). An empirical study on the determinants of an investor's decision in Unit trust investment. *Economies, 5*(10), 1-11.

Aroni, J., Namusonge, G., & Sakwa, M. (2014). The effect of financial information on investment in shares: A survey of individual investors in Kenya. *International Journal of Business and Commerce, 3*(8), 58-69.

Bashir, T., Javed, A., Butt, A. A., Azam, N., Tanveer, A., & Ansar, I. (2013). An assessment study on the "factors influencing the individual investor decision making behavior. *IOSR Journal of Business and Management, 9*(5), 37-44.

Chong, T. P., & Lai, M. M. (2011). An empirical evidence of factors in equity selection process in Malaysia. *African Journal of Business Management, 5*(15), 6221-6232.

Das, S. K. (2012). Small investor's behaviour on stock selection decision: A case of Guwahati stock exchange. *International Journal of Advanced Research in Management and Social Sciences, 1*(2), 59-78.

Dewan, P., & Dharni, K. (2019). Herding behaviour in investment decision making: A review. *Journal of Economics, Management and Trade, 24*(2), 1-12.

Din, S. J. U., Mehmood, S. K., Shahzad, A., Ahmad, I., Davidyants, A., & Rumman, A. A. (2022). The impact of behavioural biases on herding behaviour of investors in Islamic financial products. *Organizational Psychology, 5*(4), 12-20.

Farooq, A., & Sajid, M. (2015). Factors affecting investment decision making: evidence from equity fund managers and individual investors in Pakistan. *Research Journal of Finance and Accounting, 6*(9), 5-12.

Fauzi, R. & Wahyudi, I. (2016). The effect of firm a returns: Stock market crash analysis. *The Journal of Finance and Data Science, 2*(2) 112-124.

Gill, S., Khurshid, M. K., Mahmood, S. & Ali, A. (2018). Factors affecting investment decision making behavior: The mediating role of information searches. *European Online Journal of Natural and Social Sciences, 7*(4) 758-767.

Gunathilaka, C. (2014). Factors influencing stock selection decision the case of individual investors in Colombo stock exchange. *International Conference on Business Management, 11*, 107-115.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Planning, 46*(1), 1-12.

Jagongo, A. O., & Mutswenje, V. S. (2014). A survey of the factors influencing investment decisions: the case of individual investors at the NSE. *International Journal of Humanities and Social Science, 4*(4), 92-102.

Kothari, C. R., & Garg, G. (2014). *Research Methodology: Methods and Techniques*. New Delhi: New Age International Publishers.

Krishnan, R. & Booker, D. M. (2002). Investors' use of analysts' recommendations. *Behavior Research in Accounting, 14*, 129-158.

Lam, J. (2014). *Enterprise Risk Management: From Incentives to Controls*. Hoboken, NJ: John Wiley & Sons.

Mehta, S., & Chaudhari, J. (2016). The existence of behavioral factors among individual investors for investment decision in stock market: Evidence from Indian stock market. *Global Journal of Research in Management, 6*(1), 57-76.

Ngahu, A. N. (2017). Factors influencing investment decisions in equity stock among retail investors in Kenya. URL: https://shorturl.at/itSQx

Obamuyi, T. M. (2013). Factors influencing investment decisions in capital market: A study of individual investors in Nigeria. *Organizations and Markets in Emerging Economies, 4*(1) 141-161.

Rathnayaka, R. M. K. T., Seneviratna, D. M. K. N., & Nagahawatta, S. C. (2014). Empirical investigation of stock market behaviour in the Colombo stock exchange. In Proceedings of the 3rd International Conference on Management and Economics (pp. 209-216). Faculty of Management and Finance, University of Ruhuna. https://doi.org/10.13140/2.1.3006.8002.

Risal, N. & Khatiwada, N. (2019). Herding behaviour in Nepali stock market: Empirical evidences based on investors from NEPSE. *NCC Journal, 5*(6) 1-10.

Sarwar, S., & Hussan, W. (2016). Factors Affecting the individual decision making: A case study of Islamabad stock exchange. *European Journal of Economic Studies, 15*(1), 242- 258.

Wendo, C. (2015). Factors influencing individual investors' participation in the Nairobi Securities Market: A case of advocates in Nairobi County, Kenya (Unpublished master's thesis). United States International University.

Yusuff, N. (2020). Information sources and investment decision among Malaysian investors. *Journal of Critical Review, 7*(8), 1738-1742.