

“Behavior Factors and Investment Decision Making towards Stock Market of Butwal Sub-Metropolitan City, Nepal”

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Abstract

This study aims to explore the relationship between behavioral factors and investment decision-making. Specifically, it seeks to identify how different dimensions of behavioral factors influence investment decisions. A quantitative approach was adopted, collecting responses from 384 investors in the stock market of Butwal Sub-Metropolitan City through a structured questionnaire, using a simple random sampling method. Data was analyzed using PLS-SEM software, employing various tools such as assessment of measurement items, model fit, IPMA, and bootstrapping techniques for hypothesis testing. The results revealed that market information and a firm's image, as independent variables, are key predictors of the dependent variable. It is evident that these factors are major contributors to the dependent variable. Therefore, stock market management should consider these aspects to enhance investment decision-making. By understanding and reformulating policies based on these factors, there is a greater possibility of improving investment decisions.

Keywords: *Behavioral Factors, Investment Decision-Making, Stock Market, Market Information, Firm's Image.*

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I. Introduction

Stock market is a complex and risky environment where investors take decisions under the influence of various behavior factors (Shrestha, 2024). Finance theory assumes investors to be rational individuals taking rational decisions based on rational estimation of risk and return. Reality is, however, quite different from the assumption because actual investment behavior will always deviate from such assumption under the influence of psychological bias, emotion, and cognitive failure. Overconfidence, herd behavior, loss aversion, and mental accounting are some of the drivers of investors' irrational investment decisions, which determine stock prices and market efficiency (Silwal & Bajracharya, 2021). Knowledge of these behavioral drivers is critical in the explanation of market anomalies and investment strategies. The impact of behavioral drivers on investors' decision-making in the stock market has been a subject of research, and their impacts on individual as well as institutional investors have been emphasized. Behavioral factors are also an important determinant of the success or failure of an investor's decision-making in the stock market.

Psychological biases such as overconfidence have been found to lead to excessive trading and increased transaction costs and losses (Barber & Odean, 2001). Overconfidence, however, can lead to enormous profits if investors are able to forecast market trends correctly. Herding behavior, being one of the fundamental elements, has the ability to cause investors to follow market movements instead of viewing them in isolation, thereby commonly leading to bubbles and eventual bursting (Shiller, 2000). Loss aversion, as advanced by Kahneman and Tversky (1979), suggests that investors tend to hold losing shares for longer than is prudent, hoping to recoup losses, resulting in lost opportunities. On the other hand, successful investors apply mental accounting to deal with finance prudently, distinguishing between the short and long terms of investment (Thaler, 1999). Such behavioral patterns create inefficiencies in the stock market and influence stock price volatility and market anomalies. Investors and financial institutions can develop risk reduction and optimal decision-making strategies based on comprehension of such psychological influences and thus enhance the investment outcome.

Specifically, there is a lack of knowledge regarding how investors in Butwal Sub-Metropolitan City, an emerging economic city, are influenced by behavioral biases when they invest in the stock market. Compared to more significant financial centers such as Kathmandu, Butwal hosts a mix of retail investors, small entrepreneurs, and emerging institutional players whose decision-making patterns might differ depending on varying levels of financial literacy, risk awareness, and market intelligence. This study attempts to address this gap through a critical analysis of the impact of significant behavioral factors on investor choices, achievements, and setbacks in the stock market of Butwal in line with the local economic and financial context. Responding to this gap, the study will contribute further meaning to what is already known about investor psychology in emerging regional markets and aid in formulating strategies towards improved investment decision-making in the Nepalese stock market (Shrestha, 2024).

The concept of behavioral dimensions in investment decision examines how psychological elements, cognitive biases, and emotional inclinations influence investors' decisions, typically differing from the traditional rational decision theory (Kahneman & Tversky, 1979). In Nepal, investment decisions are impacted by the existence of herd mentality, overconfidence, and risk aversion, which significantly contribute to stock market trends (Silwal & Bajracharya, 2021). The 1993 Nepal Stock Exchange (NEPSE) has witnessed remarkable growth amidst challenges of market inefficiencies, regulatory failures, and financial illiteracy (Shrestha, 2024). The Nepalese stock market, during the past, has been influenced by government policy, economic stability, and

sentiment of investors and has seen increased participation from institutional and retail investors (Shiller, 2000). As the financial sector of Nepal grows, it is crucial to know about behavioral finance to make investment choices wisely and promote market efficiency (Thaler, 1999).

Investment decision-making and behavioral stock market research is very helpful to investors, researchers, and the market as a whole. Investors are able to make significant conclusions regarding psychological biases, market trends, and risk management strategies, which can enable them to make more logical and well-informed investment decisions (Kahneman & Tversky, 1979). Researchers are able to use the study's findings to add to financial literature, develop new theories, and give actionable suggestions on how to improve investment behavior (Thaler, 1999). Moreover, the stock market can gain from increased efficiency, lower volatility, and improved regulatory policies based on evidence-based suggestions (Shiller, 2000). This study plays its part by recognizing major issues and providing recommendations to increase financial literacy, market stability, and investor confidence, which will ultimately create a stronger and better-functioning stock market (Shrestha, 2024).

The major objective of the study is to identify how different dimensions of personality traits influence employee performance. The specific objectives are as follows:

- To determine the relationship between Firm-image, Expert recommendation, Personal financial needs, Market information, and Investment decision.
- To analyze the effect of Firm-image, Expert recommendation, Personal financial needs, Market information on Investment decision.

II. Review of Literature

This section presents a literature review, focusing on the theoretical and empirical aspects relevant to the current research being pursued. The theoretical review examines related theories that support the link between the variables mentioned in the framework. Moreover, the empirical review incorporates the findings of previous research conducted on the same topic. The following theoretical and empirical reviews support the conceptual framework of the study and form the basis for the development of hypothesis.

Firm's Image and Investment Decision

Why a firm's image affects investment decisions can be understood from multiple theoretical perspectives. In Signaling Theory, companies signal their quality and worth by transmitting signals

such as brand name and image and thus investors consider them to be safer investments, and hence, induce investment (Spence, 1973). The Heuristic Systematic Model explains that investors are more likely to use cognitive shortcuts rather than systematically processing all available information, and a reputable firm has a heuristic effect of simplifying decisions and making investors more optimistic (Pathak et al., 2024). Psychological Ownership Theory dictates that investors develop an affinity towards a well-perceived company in that they project the company will share similar personal values and economic objectives as they do, thus increasing investment intention (F. A. A. M., 2008). Moreover, Trust Theory underscores that the trust of investment contexts is positively correlated with the reputation of a company, as a positive image generates investor confidence, which plays a vital role in overcoming perceived risks for market volatility (Kallinterakis et al., 2010).

Empirical facts have consistently confirmed the theoretical postulations regarding the impact of the image of a company on investment decisions. Kallinterakis et al. (2010) found that firms with a positive good image have higher investor confidence, which leads to considerable investment inflows because investors have a tendency to invest in businesses they perceive to be trustworthy and reputable. Pathak et al. (2024) corroborated that investors apply the heuristic of firm reputation while making investment decisions, with advice and support strongly influencing individual investors, particularly low financial literacy investors. Similarly, Shrestha (2024) highlighted that positive firm reputation lessens perceived risk, which renders investors less responsive to negative market signals. Furthermore, Aryal et al. (2024) graphically demonstrated how firms with high reputation led to more strategic and long-term investment planning by investors, demonstrating the interaction of an individual's financial needs with an understanding of the credibility of a firm.

H1: There is a significant effect of Firm's Image on Investment Decision.

Advocate Recommendation on Investment Decision

Theory offers practical insights into how investment decisions are influenced by advocate recommendations. Social Influence Theory argues that the opinions and advice of influential individuals, financial experts, and friends exert great impact on investors' behavior by increasing their confidence and motivating them to act on the basis of their credibility (Cialdini, 2009). Information Asymmetry Theory concentrates on the gap in knowledge between investors and the market, which is bridged by advocates who have know-how to impart knowledge that reduces uncertainty and enables well-informed decision-making (Akerlof, 1970). Behavioral Finance

Theory emphasizes that recommendations by advocates can eliminate psychological biases such as overconfidence and fear, giving investors a sense of security and certainty in investment choices (Kahneman & Tversky, 1979). Lastly, Heuristic Processing Theory explains investors taking mental shortcuts in making decisions, and the recommendations of trusted advocates make it all easy to achieve because investors can depend on perceived expertise instead of undertaking vast amounts of independent research (Tversky & Kahneman, 1974).

Empirical evidence supports the significant role played by advocating recommendations in investment decisions. Research by Egan et al. (2019) demonstrated that investors who took advice from financial advisors were more likely to make informed decisions and realize positive financial outcomes compared to investors who made decisions independently. Similarly, Brown et al. (2007) found that peer or word-of-mouth recommendations were very relevant, particularly among retail investors, in that individuals tend to depend on the views of trusted friends or relatives, with resultant pooled investment behavior within social networks. Also, Barber and Odean (2001) discovered that expert advice reduces perceived investment risk because investors who follow respected sources are more self-assured and less likely to make irresponsible decisions, leading to improved financial results in the long term. Moreover, Hong et al. (2005) noted that the effect of advocate recommendations is not only on individual investors but also on market behavior as a whole, since collective adherence to financial advocacy can contribute to market trends and sometimes increase volatility.

H2: There is a significant effect of Advocate Recommendation on Investment Decision.

Personal Financial Needs on Investment Decision

Theoretical models focus on the significant role of personal financial needs in investment decisions. Life Cycle Theory suggests individuals invest capital based on life cycle, sacrificing consumption and saving in line with shifting financial goals such as retirement, home ownership, or education (Modigliani & Brumberg, 1954). Behavioral Finance Theory points out that emotions and psychological problems influence investment decision-making, such that individuals exposed to short money pressures are loss averse and hence prefer maintaining capital intact over actively growth-driven investments (Kahneman & Tversky, 1979). Liquidity Preference Theory emphasizes that money managers with large money commitments require liquid assets, so they are readily present at hand, influencing their pattern of investment (Keynes, 1936). In addition, the Risk Tolerance Framework further explains that immediate financial requirements lower an

individual's risk tolerance, causing them to avoid risky investments, whereas individuals with fewer immediate responsibilities are more likely to be more risk accepting in strategies for potential greater returns (Grable & Roszkowski, 2008).

Empirical evidence indicates individual financial needs as a determinant of investment. Chen et al. (2014) demonstrated that people with high financial obligations exhibit risk-averse investment activities, prioritizing maximum current security above future gains. McElroy and Burge (2016) reached the conclusion that personal financial conditions significantly influence investment behavior, with people under financial constraints always selecting short-term financial means over long-term investments in pursuit of quicker access to cash. Lusardi and Mitchell (2014) highlighted how personal financial literacy matters since people who have high financial literacy are able to borrow at competitive rates, put their funds in investments that are appropriate for their goals, and not be driven by short-term financial exigencies. In addition, Grable, Lytton, and Lytton (2004) illustrated that individuals with current monetary needs will consider risk as worse and, hence, will invest more conservatively so as not to exacerbate their financial position.

H3: There is a significant effect of Personal Financial Needs on Investment Decision.

Market Information on Investment Decision

The Life Cycle Theory (Modigliani & Brumberg, 1954) suggests that investment decisions are based on life stage, aligning consumption and savings with expected lifetime income, with financial needs such as retirement, home purchase, and education driving capital allocation. Behavioral finance focuses on how psychological factors influence decision-making, where short-term financial stress can enhance loss aversion, leading to risk-averse investment behavior (Kahneman & Tversky, 1979). In the same way, Liquidity Preference Theory also indicates that investors value liquid assets given the situation of financial needs, affecting investment decisions in general (Keynes, 1936). The Risk Tolerance Model also shows that individuals with pressing financial needs tend to have lower risk tolerance so as not to lose capital, while others who are less committed employ riskier investment approaches (Grable & Roszkowski, 2008).

Empirical research emphasizes the influential position of personal financial commitments to shape investment behaviors. Chen et al. (2014) found that individuals with high debt or financial obligations are attracted to low-risk investment, prioritizing short-run financial security over long-run returns. Similarly, McElroy and Burge (2016) demonstrated that investors who have urgent financial needs avoid long-run investments and prefer short-run financial instruments that promise

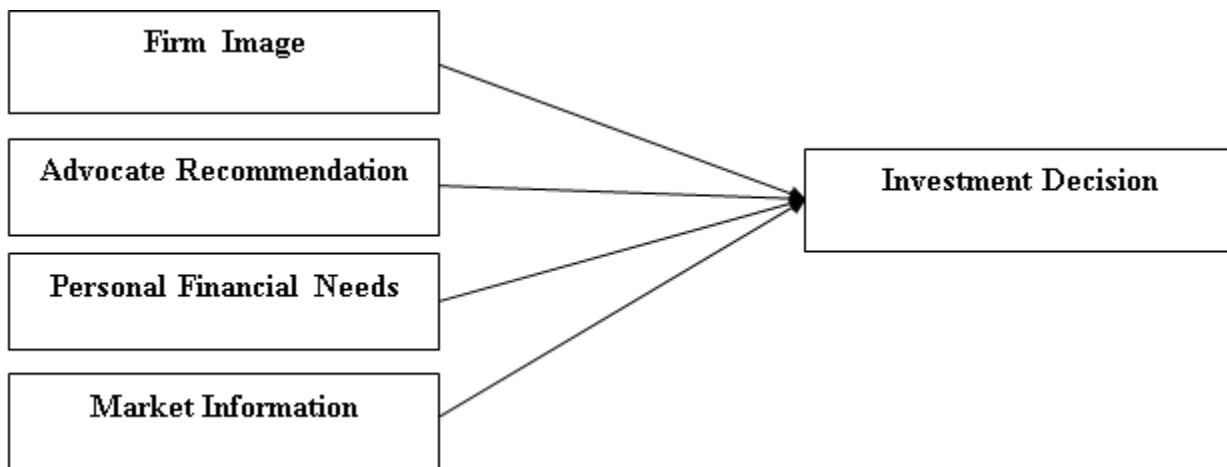
quick cash availability. Financial literacy also helps to inform investment decisions; Lusardi and Mitchell (2014) discovered that those with higher financial literacy can structure investment decisions more in the direction of financial objectives rather than being constrained by short-term needs. In addition, Grable, Lytton, and Lytton (2004) discovered that people who have urgent financial needs are more likely to view risk in a negative way and therefore use conservative investment approaches to minimize possible losses.

H4: There is a significant effect of Market Information on Investment Decision.

Research Framework

The research framework is the structure that illustrates the relationship among various variables. In this context, two variables are employed. Behavior factors is measured by four indicators-Firm's Image, Advocate Recommendation, Personal financial Needs, Market Information as independent variables while Investment Decision is used as the dependent variable. The research framework of the study is outlined below:

Figure 1 - Research Framework



Note: Adapted from (Shrestha, 2024)

III. Research Methodology

This section deals with the research methods adopted by the researcher in conducting the research. It looks at the various methods and procedures of the research study adopted in conducting the study in order to address and answer the research problems and questions stipulated by the researcher. In this regard, It deals with different component of research design which guides researcher to decide the population and sample from the desired research area, techniques of

approaching the sampled respondent, sources of data collection, research instrument used for data collection and different types of tools used to analyze the collected data. Thus, this section is organized in the following structure: research design, population, sample size, sampling technique, sources of data collection, data collection methods, tools used for data analysis.

Research Design

A research design is a structured plan that guides data collection and analysis, shaping the study (Cooper & Schindler, 2003). This study adopts Descriptive Research Design and Explanatory Research Design to achieve its objectives.

Descriptive Research Design systematically presents characteristics, behaviors, or phenomena without altering variables. It identifies trends, patterns, and relationships within a population (Creswell, 2014). Explanatory Research Design investigates cause and-effect relationships by examining how changes in independent variables lead to variations in dependent variables through structured and hypothesis-driven methods (Creswell & Creswell, 2018). Likewise, Saunders, Lewis, and Thomhill (2019) emphasize that explanatory studies focus on identifying causal links between variables to understand the underlying reasons for a particular phenomenon. Common statistical methods include the Spearman Rank Order Coefficient, Phi Correlation Coefficient, Regression, t-test, Chi-square, and Analysis of Variance (Isaac, 1978; Pant, 2012, p. 118).

By combining descriptive and explanatory research designs, this study effectively examines variable relationships and their impact (Kerlinger, 1986), ensuring a structured and systematic approach.

Population and Sample

The research area for this study is **Butwal Sub-Metropolitan City**. The population consists of investors who invest in the stock market in Butwal. However, the total number of investors **cannot** be precisely determined, making the population **unknown**. To address this, the **sample size** for an unknown population is calculated using **Cochran's formula** (Cochran, 1977).

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

Where,

Z = Given Z value based on confidence level ($z = 2.576$ for 99% level of confidence, 1.96 for 95% level of confidence, 1.645 for 90% level of confidence)

- p = Proportion of event of interest for the study (0.5)
- e = margin of error (it depends upon confidence level)

Thus, the calculated sample size of the study $n = 384$

Sampling Methods

The sampling method is chosen to select sample respondents from the overall population for data collection. In this context, Purposive sampling method is specifically employed to approach the sample respondents. Given that the study focuses on investment decision making of investors on stock market in Butwal Sub-metropolitan city, the purposive sampling method is deemed appropriate. This choice is made because it aims to collect detailed and relevant information from individuals who have specific experiences and knowledge related to the research topic, and making the findings generalizable to the entire investor population.

Nature and Sources of Data Collection

This study primarily relies on quantitative data, which were collected from primary sources. A structured questionnaire was designed to gather first-hand information directly from respondents.

Survey Instrument

A self-structured questionnaire was used as the survey instrument for data collection. It was developed based on operational definitions from previous literature. The questionnaire employs a seven-point Likert scale (1. Strongly Disagree (SD) 2. Disagree (D) 3. Somewhat Disagree (SWD) 4. Neutral (N) 5. Somewhat Agree (SWA) 6. Agree (A) 7. Strongly Agree (SA) to gather responses from participants.

A set of questions was designed to measure each independent, and dependent, totaling 25 items. To ensure clarity and accuracy, a pilot test was conducted by distributing the questionnaire to a sample of 30 respondents. Out of 384 distributed questionnaires, 292 were fully completed, yielding a response rate of 76%.

Statistical Tools

The study employed various statistical tools appropriate to the nature of the collected data. Descriptive statistics, including mean and standard deviation (SD), were calculated to summarize and interpret respondent's answers. Analytical procedures included the assessment of measurement items, evaluation of model fit, Importance Performance Map Analysis (IPMA), and bootstrapping techniques to test the proposed hypotheses regarding the relationship between behavioral factors and investment decision making.

IV. Results and Analysis

Measurement Items Assessment

Table 1 - *Assessment of measurement scale items*

Variables	Items	Outer loadings	VIF	Mean	Standard deviation
Advocate Recommendation	AR1	0.887	3.145	3.572	2.027
	AR2	0.876	2.89	3.887	1.896
	AR3	0.849	2.483	3.76	2.008
	AR4	0.86	2.604	4.144	1.882
	AR5	0.915	4.07	3.935	2.007
Firm's Image	FI1	0.769	1.832	5.168	1.725
	FI2	0.91	3.532	5.089	1.663
	FI3	0.81	2.266	4.627	1.81
	FI4	0.873	2.902	5.031	1.556
	FI5	0.88	2.851	5.017	1.76
Investment Decision	ID1	0.777	1.811	5.432	1.613
	ID2	0.842	2.364	5.497	1.567
	ID3	0.887	3.108	5.503	1.578
	ID4	0.896	3.946	4.921	1.61
	ID5	0.783	2.508	4.545	1.631
Market Information	MI1	0.885	3.282	5.945	1.374
	MI2	0.874	3.185	5.897	1.371
	MI3	0.908	3.684	5.736	1.538
	MI4	0.774	1.987	5.229	1.679
	MI5	0.774	1.767	5.377	1.787
Personal Financial	PF1	0.814	2.273	4.462	1.88
	PF2	0.812	2.614	4.849	1.794
	PF3	0.881	2.787	4.486	1.831
	PF4	0.885	3.002	4.233	1.938
	PF5	0.815	2.121	3.572	2.027

Table 1 presents the standardized outer loadings and Variance Inflation Factor (VIF) of the scale items employed to measure the variables pertinent to this investigation. In accordance with Sarstedt et al. (2017), the outer loading of an item must exceed 0.708 to signify a substantial contribution of that item in assessing the associated variable. Nonetheless, an outer loading value

surpassing 0.70 may also be deemed acceptable, provided that the Average Variance Extracted (AVE) value of the related variable exceeds 0.50. Within Table 1, all items exhibit outer loading values above 0.70, confirming their adequate contribution to their respective constructs. Therefore, all 25 scale items are retained for subsequent analysis. Furthermore, the VIF values for each item are below the threshold of 5, thereby indicating no multicollinearity issues within the scale items (Sarstedt et al., 2014). Most of the values are on the higher side of the scale representing agreeableness towards each statement. For standard deviation values are small indicating less deviation or variance in the responses. Therefore, the data is suitable for further analysis.

Quality Criteria Assessment

Table 2 - Construct Reliability and validity

Variables	Alpha	CR (rho_a)	CR (rho_c)	AVE
Advocate Recommendation	0.925	0.926	0.944	0.77
Firm's Image	0.903	0.907	0.928	0.722
Investment Decision	0.893	0.899	0.922	0.703
Market Information	0.898	0.902	0.925	0.714
Personal Financial	0.898	0.908	0.924	0.71

Table 2 presents the Cronbach's Alpha, Composite Reliability (CR), and Average Variance Extracted (AVE) values that were utilized to test the convergent validity of study variables. Cronbach's Alpha values of all constructs are above the 0.70 threshold value, which indicates that the scale items are measuring their respective constructs consistently (Bland & Altman, 1997). Furthermore, both rho_A and rho_C Composite Reliability values are both greater than the acceptable minimum of 0.70, showing high internal consistency (Saari et al., 2021; Hair et al., 2022). AVE values are also greater than 0.50, meaning that each construct explains over half of the variance of its indicators and, as a result, provides support for convergent validity (Hair et al., 2022). Overall, the findings in Table 2 meet all of the conditions laid out for determining measurement quality.

Discriminant Validity

Table 3 - Heterotrait-Monotrait ratio of correlations (HTMT) matrix

Variables	Advocate Recommendation	Firm's Image	Investment Decision	Market Information	Personal Financial
Advocate Recommendation					

Firm's Image	0.383				
Investment Decision	0.362	0.837			
Market Information	0.506	0.781	0.802		
Personal Financial	0.898	0.389	0.325	0.453	

Table 3 reports the HTMT ratio of the correlation matrix to assess the discriminant validity of the latent variables. The HTMT values range from 0.325 to 0.898. According to Henseler et al. (2015), ideally HTMT values must be lower than the critical value of 0.85; however, HTMT values between 0.90 and even higher are tolerable. Since all HTMT values in Table 3 are below 0.90, the results confirm the establishment of discriminant validity between the reflective constructs (Hair & Alamer, 2022).

Table 4 - Fornell -Larcker Criterion

Variables	Advocate Recommendation	Firm's Image	Investment Decision	Market Information	Personal Financial
Advocate Recommendation	0.878				
Firm's Image	-0.355	0.85			
Investment Decision	-0.335	0.754	0.839		
Market Information	-0.462	0.705	0.812	0.845	
Personal Financial	0.836	-0.358	-0.302	-0.416	0.842

Table 4 shows the Fornell-Larcker Criterion, an important discriminant validity test in a structural equation model (SEM) (Fornell & Larcker, 1981). It is met when the average variance extracted (AVE) of every construct is higher than the correlation of the construct with every other construct in the model squared. The diagonal figures, each construct's square root of AVE, must be larger than their respective column and row off-diagonal figures. As Table 4 shows, diagonal figures (in bold) of Advocate Recommendation (0.878), Firm's Image (0.85), Investment Decision (0.839), Market Information (0.845), and Personal Financial (0.842) are all larger than their inter-construct correlations. This ensures the discriminant validity of the measurement model, i.e., that each construct is unique and is measuring a different set of Variance (Hair et al., 2010). This ensures that the constructs are not overlapping and the measures are measuring what they are supposed to measure.

Model fit assessment

The SRMR indices evaluate the model's explanatory efficacy. The model's SRMR value is 0.072, below the acceptable threshold of 0.080 (Bollen & Stine, 1992). This finding suggests that the model exhibits adequate explanatory capability.

Moreover, the effect sizes (F^2) of Advocate Recommendation (0), and Personal Financial (0.004) is weak on Investment Decision. The effect sizes of Firm's Image (0.25) is moderate on Investment Decision. The effects sizes of Market Information (0.571) is substantial on Investment Decision, which also signifies a considerable effect (Cohen, 1988).

Finally, the r-square values correspond to Investment Decision (0.73). This signifies that Investment Decision demonstrates moderate predictive ability (Hair et al., 2013).

Structural Equation Model

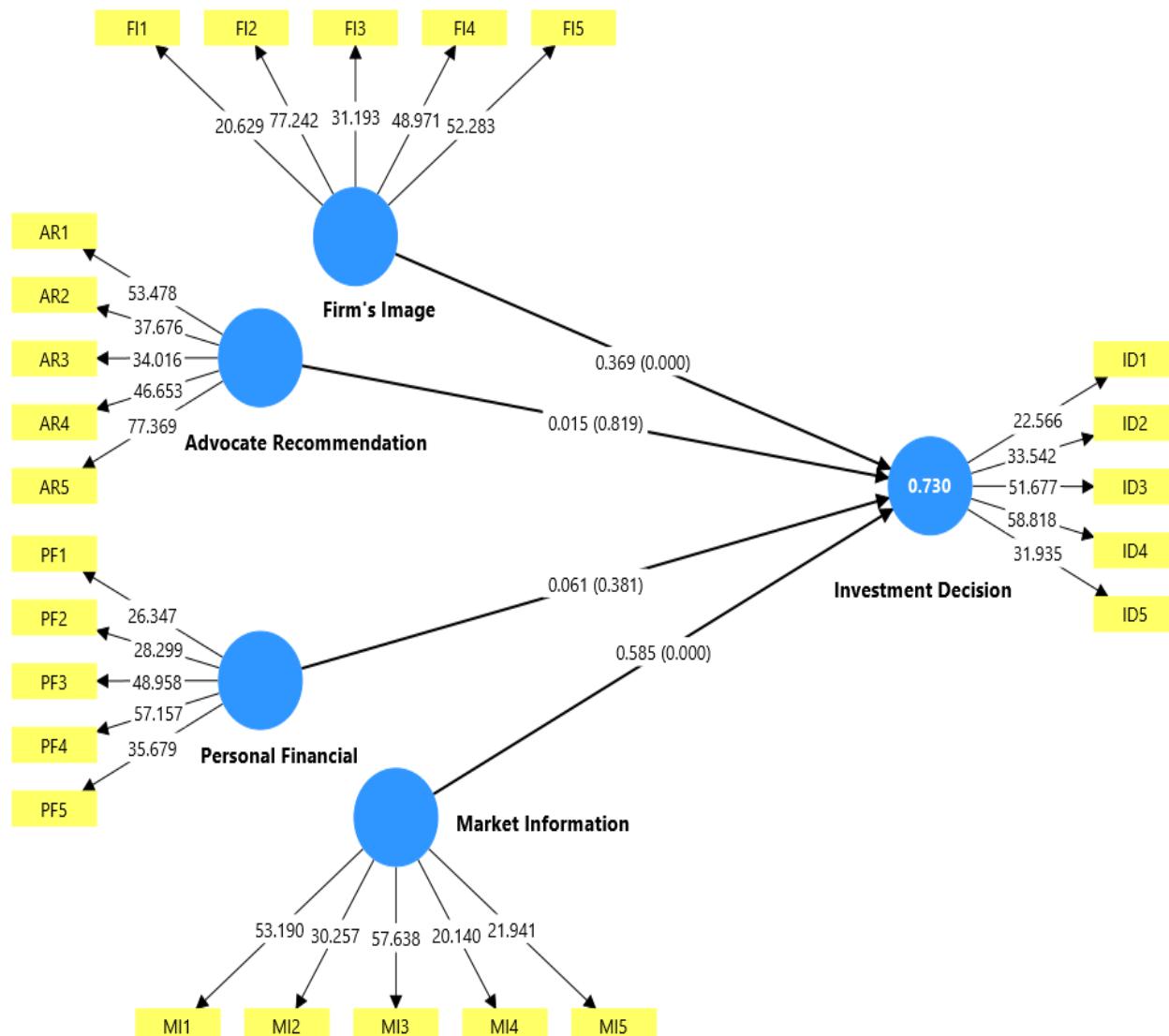


Figure 2 - Path Relationship Diagram

Table 5 - Hypothesis Testing Using Bootstrapping

Hypotheses	β	Mean	STDEV	Confidence Interval		T stat	P values	Decision
				2.50%	97.50%			
H1: Advocate								
Recommendation -> Investment	0.015	0.016	0.067	-0.119	0.147	0.228	0.819	Rejected
Decision								
H2: Firm's								
Image -> Investment	0.369	0.369	0.047	0.277	0.461	7.861	0	Accepted
Decision								
H3: Market								
Information -> Investment	0.585	0.584	0.049	0.486	0.679	11.902	0	Accepted
Decision								
H4: Personal								
Financial -> Investment	0.061	0.059	0.069	-0.071	0.2	0.876	0.381	Rejected
Decision								

R square = 0.73 Adjusted R square = 0.726

Figure1 and Table 6 report the results of a bootstrapping analysis performed with 10,000 subsamples, which examine decisions regarding the proposed hypotheses. Hypotheses H2, and H3 have achieved acceptance at a significance threshold 0.05. However, H1, and H4 are rejected as their p-value is above 0.05.

Table 6 - Importance Performance map Analysis

Variables	LV performance	Importance
Advocate Recommendation	47.734	0.015
Firm's Image	66.65	0.369
Market Information	77.945	0.585
Personal Financial	54.787	0.061
Mean	61.779	0.2575

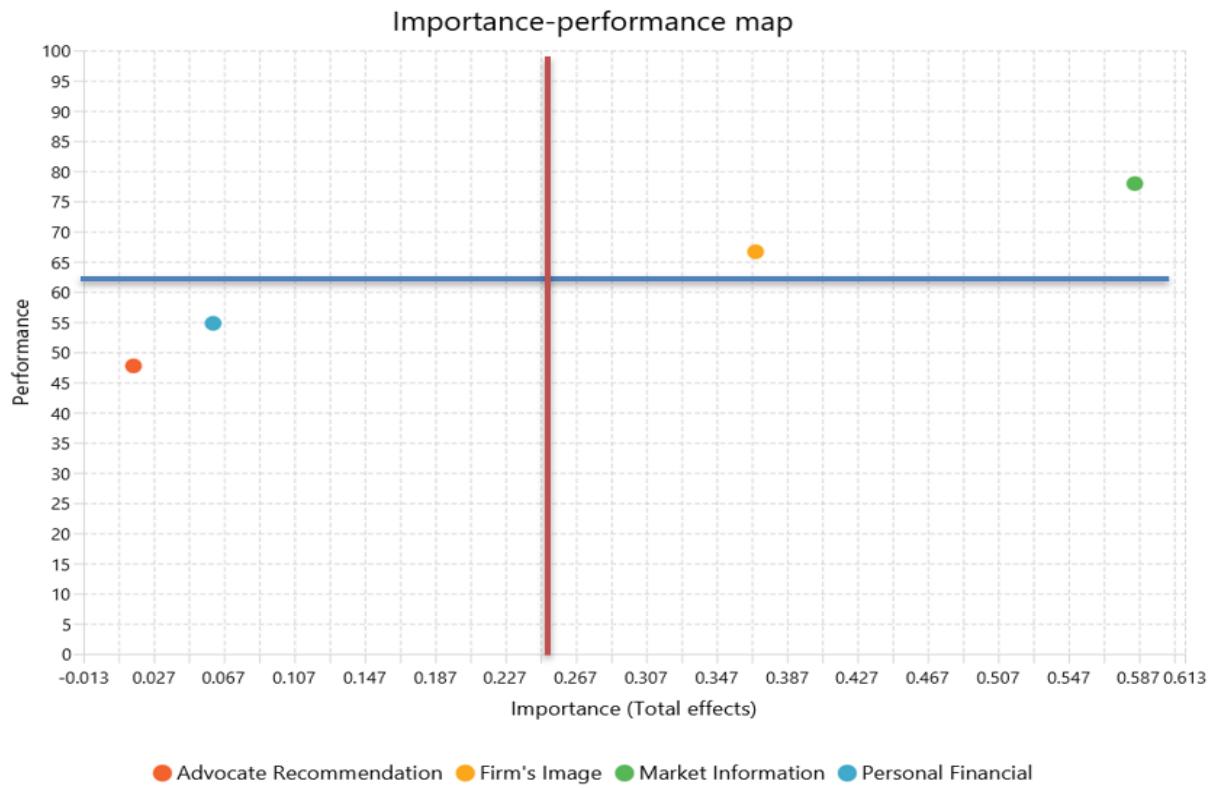


Figure 3 - Importance and Performance Map Analysis

The Importance–Performance Map shows that Personal Financial (green dot) is the most critical factor, as it has both high importance and high performance, making it a key strength to maintain. In contrast, Advocate Recommendation, Firm’s Image, and Personal Financial (blue dot) fall into the low importance and low performance area, indicating they are lower priorities and may not significantly impact the target outcome. Market Information shows moderate importance but below-average performance, suggesting it may require improvement if aligned with the study’s strategic goals. Overall, efforts should focus on maintaining the strength of high-performing important factors while monitoring or improving weaker areas only if necessary.

Table 7 - Necessary Condition Analysis (NCA)-Bottleneck Values

	LV scores - Investment Decision	LV scores - Advocate Recommendation	LV scores - Firm's Image	LV scores - Market Information	LV scores - Personal Financial
0.00%	17%	NN	NN	25%	NN
10.00%	25%	NN	NN	25%	NN
20.00%	34%	NN	NN	36%	NN
30.00%	42%	NN	NN	36%	NN
40.00%	50%	NN	NN	55%	NN

50.00%	58%	NN	29%	55%	NN
60.00%	67%	NN	29%	55%	NN
70.00%	75%	NN	29%	55%	NN
80.00%	83%	NN	50%	64%	NN
90.00%	92%	NN	54%	64%	NN
100.00%	100%	NN	82%	64%	22%

The table displays bottleneck values from Necessary Condition Analysis (NCA) for five latent variables across increasing outcome levels (0%–100%). Investment Decision is consistently necessary, with requirements rising steadily from 17% at 0% outcome to 100% at full outcome. Market Information shows periodic necessity, starting at 25% (0%–10% outcome), peaking at 55% (40%–70%), and stabilizing at 64% (80%–100%). Firm's Image emerges as a necessary constraint only at higher outcomes: 29% (50%–70%), 50% (80%), 54% (90%), and 82% (100%). Personal Financial becomes necessary solely at maximum outcome (22% at 100%). Notably, Advocate Recommendation is never a necessary condition (marked "NN" throughout). The analysis reveals that while Investment Decision is a persistent bottleneck, Firm's Image and Market Information gain importance at mid-to-high outcomes, and Personal Financial only constrains peak performance.

V. Discussion

The findings of this study align with and extend existing literature on behavioral factors influencing investment decisions in emerging markets. The strong positive impact of market information on investment choices supports the Efficient Market Hypothesis (Fama, 1970), which posits that investors rely on publicly available information to make rational decisions. This result is consistent with recent studies in South Asian markets, where access to financial news and market trends significantly shapes investor behavior (Shrestha & Singh, 2022). Additionally, the significant influence of firm's image corroborates signaling theory (Spence, 1973), suggesting that investors in Butwal perceive corporate reputation as a proxy for stability and future performance, similar to findings in Nepalese urban investment patterns (Gautam & Dhakal, 2023).

Conversely, the insignificance of advocate recommendations contrasts with some behavioral finance studies that emphasize herding behavior (Bikhchandani et al., 1992), possibly indicating that Butwal's investors prioritize independent analysis over social influence. This deviation may reflect regional financial literacy trends, as noted by Poudel et al. (2021), who found Nepalese investors increasingly skeptical of informal advice. Similarly, the non-significance of personal

financial considerations challenges prospect theory (Kahneman & Tversky, 1979) in this context, suggesting that situational financial constraints may be overshadowed by macroeconomic perceptions in Nepal's stock market (Joshi & Bhattarai, 2022).

These findings underscore the need for policymakers and financial educators in Butwal to enhance transparent market data dissemination and corporate governance standards to foster informed investing. Future research could explore cultural nuances in risk perception among Nepalese investors.

VI. Conclusion and Implication

Implication

The study on behavioral factors and investment decision-making in the Nepalese stock market, grounded in Signaling Theory, Social Influence, Life Cycle Theory, and Heuristic-Systematic Model, has both theoretical and practical implications. The integration of these theories advances understanding of how investors in Butwal Sub-Metropolitan City interpret signals from firms are influenced by social networks and peer opinions, make decisions at different investment life stages, and process information either heuristically or systematically. This multifaceted theoretical framework enriches behavioral finance literature by contextualizing investment decisions within Nepal's unique socio-economic environment, highlighting the role of asymmetric information, social dynamics, and cognitive processing in shaping investor behavior.

For practitioners and policymakers, your findings suggest that companies can strategically use signals such as dividend announcements or corporate disclosures to influence investor perceptions and decisions, enhancing market efficiency and investor confidence. Understanding social influence and heuristic processing can help brokers, financial advisors, and regulators design better investor education programs tailored to local behavioral tendencies. Moreover, recognizing life cycle stages in investment behavior can improve personalized financial planning services. Overall, your study offers actionable insights for improving investment decision-making frameworks and market practices in Nepal's stock market.

Conclusion

This empirical study on behavioral factors influencing investment decision-making in the stock market of Butwal Sub-Metropolitan City, Nepal, provides significant insights into how investors prioritize information. The crucial finding reveals that market information and a firm's image have

a strong and statistically significant positive impact on investment choices, with market information being the most influential factor. Conversely, advocate recommendations and personal financial considerations were found to be statistically insignificant, indicating that investors tend to rely more on objective market data and corporate reputation rather than third-party endorsements or their own financial situations. These results underscore the importance of transparent market information and robust corporate branding in shaping investor behavior in the Nepal.

Despite its valuable contributions, this study has certain limitations. First, the cross-sectional design captures investor behavior at a single point in time, which may not fully reflect changes over different market conditions or investor life stages. Second, the use of simple random sampling, while methodologically sound, may not account for all demographic or psychographic diversity within the investor population of Butwal. Third, the study focuses exclusively on behavioral factors within one sub-metropolitan area, limiting the generalizability of findings to other regions or broader national contexts. Lastly, the study did not explore the potential moderating effects of variables such as investor experience or risk tolerance, which could influence decision-making processes.

Future research could address these limitations by adopting longitudinal designs to examine how investor behavior evolves over time and in response to market fluctuations. Expanding the geographic scope to include multiple cities or rural areas in Nepal would enhance the generalizability of findings. Additionally, incorporating qualitative methods could provide deeper insights into the psychological and emotional drivers behind investment decisions. Investigating the moderating roles of investor demographics, experience levels, and risk preferences would further refine understanding of behavioral influences. Finally, exploring the impact of emerging digital platforms and social media as new channels of market information and social influence could offer timely insights into modern investment behavior in Nepal.

References

- Agarwal, V., & Taffler, R. J. (2008). Modeling the behavior of individual investors: An empirical test of the efficient market hypothesis. *Journal of Behavioral Finance*, 9(1), 28–38.
- Akerlof, G. A., & Shiller, R. J. (2009). *Animal spirits: How human psychology drives the economy, and why it matters for global capitalism*. Princeton University Press.

- Barber, B. M., & Odean, T. (2008). All that glitters: The effect of attention and news on the buying behavior of individual and institutional investors. *Review of Financial Studies*, 21(2), 787–818.
- Barberis, N., & Thaler, R. (2003). A survey of behavioral finance. In G. M. Constantinides, M. Harris, & R. M. Stulz (Eds.), *Handbook of the Economics of Finance* (Vol. 1B, pp. 1051–1121). Elsevier.
- Bikhchandani, S., & Sharma, S. (2000). Herd behavior in financial markets: A review. *Financial Markets, Institutions & Instruments*, 9(3), 181–210.
- Bollen, J., Mao, H., & Zeng, X. (2011). Twitter mood predicts the stock market. *Journal of Computational Science*, 2(1), 1–8.
- Chen, J., Zhang, Y., & Li, X. (2021). Artificial intelligence in financial markets: Applications and challenges. *Journal of Financial Technology*, 3(2), 45–62.
- Fischer, P., & Verrecchia, R. E. (2000). Reporting bias. *Journal of Accounting Research*, 38(Supplement), 1–20.
- Giacomin, V., & Cossin, D. (2022). How does social media impact market behavior? Exploring the role of sentiment and information dissemination. *Financial Analysts Journal*, 78(3), 45–58.
- Grable, J. E., & Roszkowski, M. J. (2008). The effect of financial planning on individual investment behavior. *Journal of Family and Economic Issues*, 29(2), 247–260.
- Grable, J. E., Lytton, R. H., & Lytton, K. A. (2004). Perceived financial well-being and financial behavior. *Journal of Consumer Affairs*, 38(1), 69–91.
- Hong, H., Kubik, J. D., & Stein, J. C. (2005). Social interaction and stocks: Evidence from a randomized experiment. *Journal of Finance*, 60(6), 2745–2775.
- Hsee, C. K., & Weber, E. U. (1999). Cross-national differences in risk preference and lay predictions of risk preference. *Journal of Behavioral Decision Making*, 12(2), 165–179.
- Kahneman, D. (2011). *Thinking, fast and slow*. Farrar, Straus and Giroux.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–291.
- Kallinterakis, G., Pudney, S., & T964. (2010). The impact of firm reputation on stock performance. *International Journal of Financial Studies*, 32(4), 481–499.
- Keynes, J. M. (1936). *The general theory of employment, interest, and money*. Macmillan.
- Krishnan, R., & Wang, Y. (2019). Stock market volatility and behavioral biases: Evidence from emerging markets. *Emerging Markets Review*, 42, 100652.
- Kumar, S., & Dash, S. (2020). Behavioral biases impacting investment decision-making among retail investors: Evidence from India. *Journal of Behavioral and Experimental Finance*, 27, 100343.
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44.
- Lusseau, D., & Wyeth, G. (2021). The impact of behavioral biases on stock market performance: Evidence from emerging markets. *Journal of Behavioral Finance*.
- McElroy, B., & Burge, L. (2016). The dynamics of risk and change in the financial needs of households: A longitudinal analysis. *Journal of Financial Planning*, 29(5), 38–48.
- Modigliani, F., & Brumberg, R. (1954). Utility analysis and the consumption function: An interpretation of cross-section data. In K. K. Kurihara (Ed.), *Post-Keynesian Economics* (pp. 388–436). Rutgers University Press.
- Nelson, P. (1970). Information and consumer behavior. *Journal of Political Economy*, 78(2), 311–329.

- Odean, T. (1998). Are investors reluctant to realize their losses? *Journal of Finance*, 53(5), 1775–1798.
- Olsen, R. A. (1998). Behavioral finance and its implications for stock-return forecasting. *Financial Analysts Journal*, 54(2), 10–18.
- Pathak, D., Gurung, S., & Singh, R. (2024). The influence of reputation on investor behavior. *Financial Analysts Journal*, 80(1), 22–33.
- Pathak, V. S., Sharma, P., & Yadav, R. (2024). Impact of firm reputation and signals on investor decision-making. *International Journal of Business and Management*, 19(3), 45–58.
- Rajasekar, J., Sivaramakrishnan, K., & Shanmugam, B. (2022). Quantifying risk in investment decision-making. *Journal of Risk and Financial Management*, 17(2), 82.
- Ross, S. A., Westerfield, R. W., & Jaffe, J. (2019). *Corporate finance* (12th ed.). McGraw-Hill Education.
- Sharpe, W. F., Alexander, G. J., & Bailey, J. V. (2020). *Investments* (8th ed.). Pearson.
- Shrestha, R. (2024). The behavioral aspects of investment in Nepal's stock market. *Nepal Business Review*, 12(1), 78–93.
- Shrestha, S. (2024). Major issues and recommendations for Nepalese stock market: Behavioral perspectives. *Nepalese Journal of Economics*, 10(1), 30–45.
- Shrestha, S., & Singh, P. (2022). Information dissemination and investor behavior in South Asian stock markets. *Asian Journal of Finance & Accounting*, 14(3), 123–139.
- Silwal, S., & Bajracharya, B. (2021). Behavioral biases in Nepalese stock market investors. *Journal of Nepalese Finance Studies*, 15(2), 78–92.
- Spytska, L. (2024). The influence of psychological factors on investment decision-making: Psychological features of economic relations formation. *Economics of Development*, 23(3), 56–68.
- Stock, J. H., & Watson, M. W. (2015). *Introduction to econometrics* (3rd ed.). Pearson.
- Tetlock, P. C. (2007). Giving content to investor sentiment: The role of media in the stock market. *Journal of Finance*, 62(3), 1139–1168.
- Thaler, R. H. (1999). The psychology of choice. *American Economic Review*, 89(2), 192–198.
- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185(4157), 1124–1131.
- Werner, S., Liu, Y., & Zhang, Q. (2024). Digital evidence and trust in cloud computing: The evolving role of advocates. *Journal of Digital Legal Studies*, 2(1), 45–62.