

Investors' Sentiment on Stock Market Return from NEPSE

Simran Agrawal¹, Dr. Prity Birla²

¹PG Scholar, Lord Buddha Education Foundation, Kathmandu, Nepal

² PGD Manager, Lord Buddha Education Foundation, Kathmandu, Nepal

Abstract

This thesis investigates the correlation between investor sentiment and stock market returns on the Nepal Stock Exchange (NEPSE), recognizing the significance of behavioral finance and market psychology in shaping market dynamics. By employing a mixed-methods approach, combining quantitative analysis of historical market data with qualitative inquiries through surveys or interviews, the study aims to evaluate the impact of investor attitude on stock price movements and total market returns in Nepal. Statistical techniques such as regression analysis will be utilized to ascertain the extent to which investor sentiment influences stock market outcomes in NEPSE. The study's findings are expected to illuminate the behavioral factors driving market movements in Nepal, providing valuable insights for investors, policymakers, and market regulators to formulate more informed investment strategies and policies aimed at enhancing market efficiency and stability.\

1. Introduction

The stock market is a trading platform where investors and dealers buy and sell publicly listed corporations. In other terms, the stock market is a venue for many trades between buyers and sellers of publicly traded corporations. This marketplace enables traders to meet, interact, bargain, and transact with ease. The primary market is where initial public offerings of a company's stock are traded. The corporation sells its stock to the general public for a minimum face value that the company determines. In contrast, listed corporations are traded at market prices. All of these financial transactions take place through legitimate exchanges and OTC market locations, following the norms and restrictions established by authorities. (Introduction to Stock Market)

The stock exchange market comprises a wide range of enterprises. Investors in this market may purchase a company's stock with the intention of getting benefits such as price increases and dividends from the company's profits. They can also trade their current firm shares on the secondary market. They can purchase and sell their securities on the same market. Following the IPO, the company's shares are distributed to shareholders, and it is listed on the stock exchange for future trade. (How Stock Market works)

1.1 Problem Statement

The stock market serves as a platform for trading shares of listed companies, allowing investors to buy and sell securities. Investors' participation is pivotal in driving market dynamics, with companies issuing initial public offerings to raise funds and subsequently listing shares for trading, granting ownership to shareholders who benefit from dividends and price fluctuations. Investor sentiment plays a crucial role, representing expectations regarding future returns and risks in the capital market. NEPSE, Nepal's sole stock exchange overseen by SEBON, operates as a marketplace for Nepalese investors to engage in stock trading. The market's movements are heavily influenced by investor sentiment, whether bullish or bearish, although other factors also contribute to its unpredictability. Despite its complexity, investor sentiment remains a significant driver of short-term stock returns, albeit not a foolproof predictor of market movements.

1.2 Objectives of the Study

- a. To know the relationship between investors' sentiments and stock return.
- b. To study various roles of Nepalese investors' sentiment on stock return in NEPSE.

1.3 Research Questions

- a. Is there any significant relationship between investors' sentiments and stock return?
- b. How does Nepalese sentiments toward NEPSE influence short term fluctuations and long-term trends in stock market returns?

1.4 Scope of the Research

This study aims to examine the intricate relationship between investors' sentiment and stock returns in NEPSE, acknowledging the complexity of market movements influenced by various factors. Through both qualitative and quantitative methods, including the distribution of questionnaires among market participants, the study seeks to elucidate how investors' sentiment impacts stock returns theoretically and practically in the context of NEPSE. Drawing on established theories and concepts, the research aims to provide deeper insights into the functioning of NEPSE, the interplay between investors' sentiment and stock returns, and the specific roles Nepalese investors' sentiment plays in shaping stock returns within NEPSE. The anticipated findings hold the potential to enhance understanding of NEPSE dynamics and inform investment strategies in the Nepalese market.

1.5 Significance of the Research

This study delves into the critical role of Nepalese investors' sentiment in influencing stock returns within NEPSE, Nepal's primary stock exchange. Recognizing NEPSE as a sentimental market where investors' sentiments often outweigh other predictors of market movements, the research aims to elucidate the significant relationship between investors' sentiments and stock returns. Given Nepal's status as a developing country with a low literacy rate, understanding the impact of investor sentiment on market dynamics becomes crucial for those analyzing market movements, predicting trends, and conducting technical and fundamental analysis. The study's findings are anticipated to provide valuable insights for stakeholders seeking a deeper understanding of NEPSE, its market participants, and the expectations surrounding stock return in the Nepalese market.

2. LITERATURE REVIEW

Previously done learning and experiences becomes the base for another research work which is about to start. It becomes a strong base in form of secondary data as foundation, because of which similar topic related studies i.e., base papers can't be ignored.

2.1 Review of Previous Studies

2.1.1 Investor sentiment and stock return volatility: evidence from the Indian Stock Exchange (Sreenu N, 2021)

Sreenu N and Suresh Naik combinedly researched on investor sentiment and stock return volatility taking evidence from Indian Stock Exchange. This article aims to show the relationship between investor sentiment and stock return volatility. The finding of this study shows the relationship between both investor sentiment and stock return volatility is complex

and the change in one complexly affects the other. Also, this study deals with association between investors' sentiment and stock return, in case of volatility behavioral finance. It can significantly explain the behavior of stock returns on the Indian Stock Market.

2.1.2 Investor sentiment, customer satisfaction and stock returns (Chi-Lu Peng, 2015)

Chi-Lu Peng, Kuan-Ling Lai, Maio-Ling Chen, and An-Pin Wei collectively worked together in completing this research on analyzing investor sentiment, customer satisfaction and stock return. This study aims to investigate how and whether different sentiments of investors affect stock market return's reaction to American Customer Satisfaction Index (ACSI) data. Investors tend to drive the market in a sentimental way having low or high satisfaction with the aim of gaining maximum benefit.

2.2 Research Framework

a. Independent Variable: Investors' Sentiments, Market Volatility and Political Events

Investor sentiment reflects the beliefs and expectations of market participants regarding future returns and risks. This sentiment influences investment decisions, acting as a kind of gut feeling alongside more objective analysis. It's also known as market sentiment and is shaped by both fundamental factors and technical analysis. Various indicators are used like high low index, and bullish percent index. Market Volatility reflects to the fear and greed behaviors or standard deviation of returns to risk market uncertainty. Political Events such as announcement from government, budget, monetary policy, political changes impacts stock market return.

b. Dependent Variable: Stock Market Return

Investors participate in the stock market with the goal of making money. They meticulously track their investment returns, which represent the profit or loss on their investments over a specific period. This return is driven by the performance of their holdings in the stock market. A positive change reflects a gain, while a negative change signifies a loss. The total return considers all the benefits an investor receives, including increases in stock prices, cash dividends, and any interest earned. Various indicators like price to earnings ratio, price to book ratio, debt to equity ratio and so on.

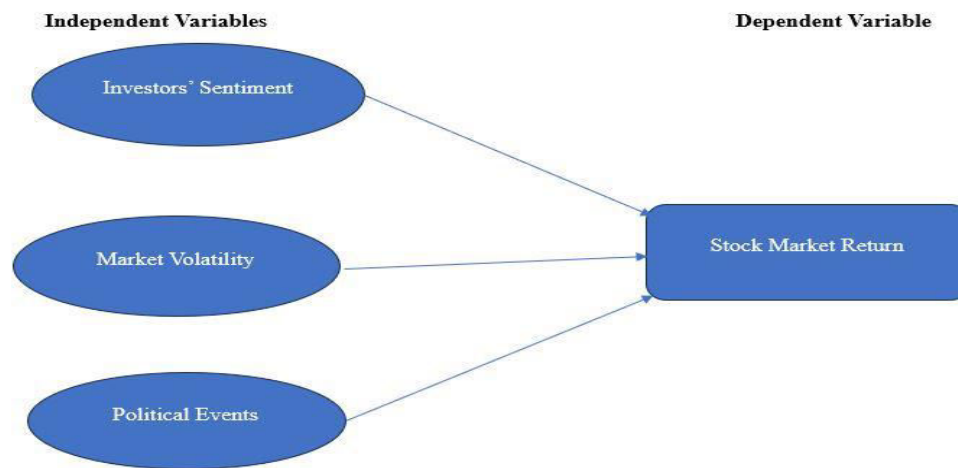


Figure 1: Research Model showing the dependent and independent variable

The research framework for this study includes independent variables i.e. Investors' Sentiment, Market Volatility and Political Events and one dependent variable i.e. Stock Market Return. Hence, the relationship and effects of both variables are tested in this thesis.

3. RESEARCH METHODOLOGY

The term “research” refers to the collection of data and information systematically in proper analytical manner. It is also a proper gathering of information and analyzing the information for advancing the knowledge in any subject matter. Likewise, the term “research methodology” is a combination of two different words, research and methodology.

3.1 Research Design

The research used both qualitative and quantitative methods, with a mix of descriptive and exploratory approaches. The questionnaire for the survey contained Likert-type, single and multiple-choice questions for descriptive research, and two open-ended questions for exploratory research. This helped to obtain a clear viewpoint of the respondents on the subject matter and identify the importance of security features in m-payment applications.

3.2 Data Collection

Primary data was collected through an online survey questionnaire developed on Google Survey. The survey included Likert-type questions, pre-coded or single-choice questions, and two open-ended questions. The Likert-type questions helped in deriving the research outcomes, while pre-coded questions ensured uniformity of responses. Open-ended questions helped in analyzing the impact of features on usage patterns. Secondary data was also used to provide guidance and create the fundamentals of the research work.

3.3 Sample Selection

The sample was collected from different people involved in NEPSE. All types of investors engaged in NEPSE either from primary market or secondary market were sent the questionnaire prepared for the online survey procedure. This helped to obtain a clear viewpoint of the respondents on the subject matter and identify the importance of an investor's sentiment on stock market return from NEPSE.

3.4 Sampling Method

This research paper uses a convenience sampling method for collecting data from an investor engaged in NEPSE. The target audience was long term investors, short term traders, and all types of people engaged in NEPSE.

3.5 Data Validation

For the reliability of the research, validation of the prepared survey questionnaire was done from the supervisor as well as from every investor engaged in the NEPSE. The prime intent was to ensure the relevance of prepared questions to the subject matter. Likewise, some of the prepared questionnaires were adapted from past research activities which helps in validation of research. The referred journals also assisted in finalizing the research variables.

4 Findings and Data Analysis

4.1 Feedbacks from Respondents

Number of Questionnaire	
Distributed	1083
Collected (All Online)	475
Usable	385

Table 4: Feedbacks from Respondents

4.2 Reliability Test

Variables of Study	Number of items	Cronbach's Alpha
All Variables	25	0.934
Stock Market Return (D/V)	7	0.881
Investors Sentiment (I/V)	8	0.893
Market Volatility (I/V)	5	0.754
Political Events (I/V)	5	0.794

Table 5: Reliability Test

4.3 Descriptive Analysis

4.3.1 Gender

The table below shows tabular and graphical representation of gender frequency is given below:

	Frequency	Percentage
Male	266	69%
Female	119	31%
	385	100%

Table 6: Frequency and Percentage of Gender of investor**4.3.2 Age**

The below table shows graphical bar diagram and tabular representation of data collected for age through questionnaire:

	Frequency	Percentage
Under 18	46	12%
18-50	212	55%
Above 50	127	33%
	385	100%

Table 7: Frequency and Percentage of Age of investor**4.3.3 Education**

The below table shows graphical bar diagram and tabular representation of data collected for educational qualification through questionnaire:

	Frequency	Percentage
High School or below	58	15%
Graduate	231	60%
Post Graduate and above	96	25%
	385	100%

Table 8: Frequency and Percentage of education level of investors**4.3.4 Years of Experience at Stock Market**

The below table shows graphical bar diagram and tabular representation of data collected for years of experience at stock market through questionnaire:

	Frequency	Percentage
1 year	23	6%
2 years	85	22%
5 years	162	42%
10 years and above	115	30%
	385	100%

Table 9: Frequency and percentage of years of experience at stock market**4.3.5 Size of investment**

The below table shows graphical bar diagram and tabular representation of data collected for size of investment through questionnaire:

	Frequency	Percentage
NPR 100,000 and below	54	14%
NPR 1000,000	127	33%
NPR 2500,000	181	47%
NPR 5000,000 and above	23	6%
	385	100%

Table 10: Frequency and percentage of size of investment of investors

4.4 Descriptive Statistics of Variables

All Variables	Mean	Std. Deviation	N
Stock Market Return (D/V)	3.30	0.45	385
Investors Sentiment (I/V)	2.00	0.77	385
Market Volatility (I/V)	4.10	0.30	385
Political Events (I/V)	1.75	0.69	385

Table 11: Descriptive Statistics of Variables

4.5 Correlation Analysis

		Stock Market Return (DV)	Investors Sentiment (IV)	Market Volatility (IV)	Political Events (IV)
Pearson Correlation	Stock Market Return (DV)	1.000	0.807	0.755	0.31
	Investors Sentiment (IV)	0.807	1.000	0.822	0.294
	Market Volatility (IV)	0.755	0.822	1.000	0.278
	Political Events (IV)	0.306	0.294	0.278	1.000
Sig. (1-tailed)	Stock Market Return (DV)	-	0.000	0.000	0.000
	Investors Sentiment (IV)	0.000	-	0.000	0.000

	Market Volatility (IV)	0.000	0.000	-	0.000
	Political Events (IV)	0.000	0.000	0.000	-

Table 12: Pearson Correlation Analysis

4.6 Multiple Regression Analysis

4.6.1 Model Summary Table

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.89	0.649	0.647	0.47939
a. Predictors: (Constant), Investors sentiment, Market Volatility, Political events				
b. Dependent Variable: Stock Market Return				

Table 13: Model Summary Table

4.6.2 ANOVA

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	220.63	3	65.008	226.159	<.001 ^b
	Residual	75.48	357	0.175		
	Total	296.11	360			
a. Dependent Variable: Stock Market Return						
b. Predictors: (Constant), Investors Sentiment, Market Volatility, Political Events						

Table 14: ANOVA Table

4.6.3 Coefficient Table

The analyzed equation of this study including dependent and independent variable based on regression equation is:

Coefficients ^a				
Model	Unstandardized Coefficients	Standardized Coefficients	T	Sig.

		B	Std. Error	Beta		
1	(Constant)	0.429	0.136		2.713	0.01
	Investors Sentiment	0.305	0.05	0.415	8.489	0
	Market Volatility	0.568	0.051	0.462	9.164	0
	Political Events	0.011	0.023	0.036	0.881	0.049
a. Dependent Variable: Stock Market Return						

Table 15: Coefficient Table

The equation was derived to evaluate how minor change in dependent variable takes place when a single unit increment in independent variable. Substituting the values in the simple linear equation,

$$\text{Stock Market Return} = 0.429 + 0.305 * (\text{Investors Sentiment}) + 0.568 * (\text{Market volatility}) + 0.011 * (\text{Political Events})$$

Therefore, we can conclude that all three independent variables, investors sentiment, market volatility and political events, have positive impact on stock market return.

4.6.4 Hypothesis testing and results

The interpreted results of hypothesis are shown in the table below:

Developed Hypothesis	Sig. (P-Value)	Impact	Status of Developed Hypothesis
<i>H1: There is a significant relationship between investors' sentiment and stock market returns on NEPSE.</i>	.000	Positive	Supported
<i>H2: Short-term and long-term investors' sentiment have distinct effects on stock market returns on NEPSE, with short-term sentiment impacting short-term fluctuations and long-term sentiment influencing overall trends.</i>	.045	Positive	Supported

Table 16: Hypothesis Testing Results

From the above calculations and findings, we can conclude that there is a positive relationship between dependent variable: Stock Market Return and independent variables: Investors sentiment, market volatility and political events. As P value is less than 0.05, we accept the alternative hypothesis statements in the study based on evidence from above calculations.

5. Conclusion

The "Investor Sentiment on Stock Market Returns from NEPSE" study has provided significant insight into the relationship between stock market returns and investor sentiment within the framework of NEPSE. Through the use of a combination of qualitative inquiry and quantitative analysis, the study has improved our understanding of the forces driving market behavior in Nepal.

The study's findings emphasize how crucial investor sentiment is for forecasting stock market performance's long- and short-term patterns. It has been observed that optimistic views are associated with increased purchasing activity and upward pressure on stock prices, whilst pessimistic attitudes may lead to selling pressure and downward price swings. Persistent views also influence investor confidence and NEPSE membership by shaping long-term patterns in market performance.

These findings have important implications for many people involved in the Nepalese financial system. By leveraging their understanding of sentiment patterns, investors can effectively mitigate risks and make more informed investment choices. Regulators and legislators can utilize the findings to develop regulations that uphold stability, integrity, and investment protection. Furthermore, the study contributes to the ongoing discussion regarding market efficiency by highlighting the role that behavioral factors play in stock market outcomes.

In summary, the study has advanced our knowledge of investor sentiment and its relationship to NEPSE stock market performance. The study's comprehensive analysis of this link has paved the way for additional research and practical initiatives aimed at fostering a more resilient and productive market environment in Nepal. Ultimately, the insights gleaned from this study could contribute to enhancing NEPSE's overall financial well-being, investor confidence, and market transparency.

6. Recommendations

Some of recommendations are:

a. Initiatives for Investor Education: Put together educational resources and training programs to help investors better understand the workings of the market, including how sentiment impacts stock returns. Making smarter investment decisions can be facilitated by providing investors with the tools to interpret sentiment indicators and manage market fluctuations.

b. Monitoring and Analysis: Analyze data on a regular basis and keep a watchful eye on investor sentiment indicators to spot patterns in market sentiment. Developing effective methods for sentiment research can provide valuable insights into the market's condition and potential shifts in investor sentiment.

c. Investment Strategies: Develop investment strategies that take fundamental analysis and sentiment-driven variables into account. Sentiment analysis can help investors in the Nepalese stock market make better decisions by helping them identify opportunities and lower risk.

d. Regulatory Interventions: Consider the regulatory measures aimed at curbing excessive speculation and addressing market manipulation techniques that may exacerbate sentiment-driven volatility. Adopting regulations that enhance investor protection, market integrity, and transparency may lead to a more robust and stable market environment.

e. Market Research and Development: Encourage research designed to understand the dynamics of sentiment and behavior among investors in NEPSE. Promote collaboration among academic institutions, corporate associates, and governmental organizations to advance this field's comprehension and develop innovative solutions for market challenges.

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