
Decision Making Behavior of Individual Stock Investors' in Nepal

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ABSTRACT

The study's primary objective is to explore the factors influencing the individual investors' decision making behavior of Nepalese stock investors and to examine the relative degree of influence of such factors with respect to various demographic and socio-economic characteristics. The study follows quantitative approach and exploratory and descriptive research designs. Survey was conducted during March through May, 2021 obtaining 505 usable responses. Factor analysis was performed to explore the influential factors. The factor "Accounting and stock market information" was revealed to be of highest influence in decision making behavior of individual stock investors. The effect of "Public and economic information" was found to be significantly different between male and female investors; surprisingly not among different age groups. "Accounting and stock market information" was found to be significantly different among investors with various educational qualifications. Classical rational criteria such as expected dividends, expected corporate earnings, dividends paid and condition of financial statements were found to be most influential variables. While most respondents seemed to be unaware of the consequences of the contemporary issues like environmental record, increase of firm's involvement in solving community problems and perceived ethics of firm, the need for relevant awareness and educational campaigns regarding the importance of social, ethical, environmental value of investments seems alarming.

Keywords: Accounting and stock market information, behavioral finance, personal confidence and firm information, psychological variables, public and economic information

1. INTRODUCTION

Investment decision-making is considered one of the key components of financial decision-making. In investment decision-making processes, there are two schools of thought. One is conventional finance theory, which holds that while making investment choices in financial markets, investors are rational. The primary tenet of finance theories for a long time was the

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rationality of investors. The investors were believed to base their investment decisions purely on risk-return analysis in order to achieve wealth-maximization goal in accordance with fundamental financial principles. They were believed to be unbiased in their forecasts of the future return of stocks. The second school of thought claims that when investors face uncertainty, they act irrationally, inefficiently and inadequately (Lowenstein et al., 1998).

Behavioral finance, which blends behavioral and psychological components of financial decision-making, calls into question conventional finance's understanding of why investors act in certain ways when investing in financial assets. It aims to comprehend and forecast the repercussions of psychological decision-making on the financial markets (Olsen, 1998). It believes that the investors are influenced by their own biases rather than being rational. Behavioral finance combines behavioral biases with an intellectual psychological component, as well as economics and finance, to create a solid supporting rationale for people's irrational behavior while making financial decisions (Javed et al., 2017). Even if investors are capable of accurately processing all available information, not all investors are rational and their investing decisions are influenced by behavioral preconceptions (Barberis & Thaler, 2003).

Empirical evidence in behavioral finance covers a large number of influential elements on an individual stock investor's decision making behavior. Investors' investment decisions in financial markets are influenced by psychological, behavioral, and biological factors (Ahmad et al., 2017). Seven homogenous sets of variables were found by Nagy & Obenberger (1994) which had influence on decision process of individual investors. According to Merikas et al. (2003), there is a certain degree of correlation between the factors that behavioral finance theory and the prior conventional theory identify as the influencing factors for the individual investors' investment decisions. When making investment decisions, lower perceptions of earnings quality are associated with a higher reliance on a company's audited financial statements (Hodge, 2003). Investors have a high desire for information regarding the company's environmental initiatives, product quality, and product safety (Epstein, 1994). Young people's investment behavior is greatly influenced by their familial environment, but this influence is short-lived as people mature and get more life experience (Barnea et al., 2010). Past performance of firm, anticipated bonus payment, growth potential, anticipated dividend payment, and firm profitability are influential factors on individual investor decision making (Rosemary & Bitrus, 2016). Owen and Qian (2008) stated the significant role of demographic features and non-financial motives, and a positive effect of social responsibility of a firm on individual investor behavior. The respondents' investment behavior and decision-making are influenced by their gender (Chavali & Mohanraj, 2016). Age, gender, income has impact on investment decision making (Patel & Modi, 2017).

These findings raise questions about the relative impact of various economic and behavioral factors on individual investor behavior. Thus, the objective of this study is to identify influential factors for decision making on stock investment of individual investors and assess their relative importance among various demographic and socio-economic characteristics of individual investors. This study is considered important for individual investors since it is a helpful resource to use when evaluating the current state of the stock market and choosing the right stocks to invest in. It also gives security organizations a solid foundation for forecasting future stock market trends and delivering investors more trustworthy information.

2. LITERATURE REVIEW

According to Ritter (2003), behavioral finance is founded on psychology, which demonstrates that various cognitive illusions can affect how humans make decisions. These illusions are divided into two groups, which are combined in the prospect theory: those brought on by heuristic decision-making processes and those brought on by the adoption of mental frameworks (Waweru et al., 2008).

Heuristic Theory

Heuristics are guidelines to help decision-making, particularly in complicated and unpredictable contexts (Ritter, 2003). When time is limited, these heuristics are typically quite beneficial (Waweru et al., 2008), but they can also introduce biases (Kahneman & Tversky, 1974; Ritter, 2003). When introducing three elements: representativeness, availability bias, and anchoring, Kahneman and Tversky (1974) are the first writers to explore the heuristic factors. Waweru et al. (2008) propose two aspects, heuristic theory overconfidence and gambler misunderstanding. According to DeBondt and Thaler (1995), representativeness is the degree of resemblance between an event and its parent population. It also refers to how much an event resembles its population (Kahneman & Tversky, 1979). When people excessively exploit information that is readily available, availability bias occurs. Despite the fundamental concepts of so-called diversification of portfolio management for optimization, this bias is manifested in stock trading by the preference for investing in local companies that investors are familiar with or can quickly access information about (Waweru et al., 2003). When people utilize some initial values to construct estimates, a phenomenon known as "anchoring" occurs. However, because different starting points produce different estimates, these values are biased in favor of the early ones (Kahneman & Tversky, 1974). When individuals predict incorrectly the reversals that are thought to signal the end of favorable (or unfavorable) market returns, this mistake is known as the "gamblers' fallacy" in the stock market (Waweru et al., 2008). People who overestimate the dependability of their knowledge and abilities are likely to be overconfident (DeBondt & Thaler, 1995).

Prospect Theory

The focus of Expected Utility Theory (EUT) is on investors' logical expectations (Filbeck et al., 2005). The analysis of decision-making under risk is dominated by the EUT. However, critics of this idea point out that it does not address the reasons why people are drawn to both insurance and gambling. Regret aversion, loss aversion, and mental accounting are some of the mental states that have an impact on a person's decision-making processes, according to the prospect theory (Waweru et al., 2003). Regret is a feeling that people experience after making mistakes. Investors attempt to avoid regret by being willing to sell growing shares but unwilling to sell dropping ones. Additionally, investors regret holding losing stocks for a longer period of time than they regret selling winning stocks too quickly (Fogel & Berry, 2006; Lehenkari & Perttunen, 2004). The distinction between those who have experienced a similar loss or gain is known as loss aversion (Barberis & Huang, 2001). Evidence suggests that people are less fortunate than they think given the possibility of losses (Barberis & Thaler, 2003). Further, a loss

following a previous gain is less painful than usual, whereas a loss following a loss appears to be more painful than usual (Barberis & Huang, 2001). The term "mental accounting" refers to "the process by which people consider and assess their financial transactions" (Barberis & Huang, 2001). To be able to attend to the specific purposes of the investment, such as profit maximization and risk minimization, the investor adopts distinct investment rules for each mental account. This could eventually lead to the investor choosing portfolios that are not profitable but nonetheless gratify their emotions (Zahera & Bansal, 2018).

Market Factors

Price movements, market information, historical stock patterns, customer choice, overreaction to price changes, and the fundamentals of the underlying equities are among the market aspects that Waweru et al. (2008) identify as having an impact on investors' decision-making. Changes in the fundamentals of the underlying stock, market information, and stock price typically result in over- or under-reactions to price changes, which have been empirically shown to have a significant impact on investors' decision-making behavior. According to Caparrelli et al. (2004), when prices shift, investors are subject to the herding effect and tend to follow suit with the crowd. Market considerations are typically excluded from behavioral factors because they are outside influences on investors' behavior. Waweru et al. (2008) approach market factors equitably as psychological influences on stock market investors' choices.

Herding Effect

In the financial market, the herding effect is defined as the propensity of investor behavior to imitate that of other investors. Because low-ability individuals may imitate the behavior of their high-ability colleagues in order to establish their professional reputation, herding can help with the appraisal of professional performance (Kallinterakis et al., 2010). Herding results in an inefficient state of the market, which is typically identified by speculative bubbles. Generally speaking, herding investors behave in much the same way as early humans, who had little awareness of their surroundings and banded together to help one another and find safety (Caparrelli et al., 2004). Additionally, investor categories might influence the desire for herding; for instance, individual investors are more likely than institutional investors to follow the herd when making investment decisions (Goodfellow et al., 2009).

Various empirical studies show different rational as well as behavioral factors which has effect on stock investment decisions of investors. Nagy & Obenberger (1994) derived seven factors influencing the investment decision behavior. Despite the fact that investors employ varied factors when choosing the companies to invest in, their analysis showed that traditional wealth-maximization criteria are quite essential to investors. The study revealed that contemporary issues like regional or global activity, environmental history, and organizational moral standing appear to receive just minimal consideration. Inversely, Epstein (1994) found strong demand of individual investors about the environment-related activities, ethical and community involvement activities, and employee relations of the company. Similar to this, Owen & Qian (2008) argued that demographic traits and non-financial motivations are significant factors that influence investors' decisions on whether or not to consider socially responsible investing products. According to Merikas et al. (2003)'s survey of Greek investors, people base their stock purchase decisions on a variety of different categories of considerations rather than just one comprehensive

strategy. The results also indicated a certain degree of correlation between the elements designated by behavioral finance theory and prior empirical evidence as the influencing elements for individual investors' decision-making. Similar to this, Tavakoli et al. (2011) identified variables that control stock selection, including estimating stock risk, governmental policies, and economic variables. According to Maditinos et al. (2007), most investors place a greater emphasis on fundamental and technical analysis than on portfolio analysis. In contrast to Lilian Ng & Fei Wu's (2006) finding that peer effects in trading decisions are influenced by physical proximity, which allows for regular one-on-one interactions between individual investors, Khanam (2017) found that demographic factors like age, education level, occupation, trading experience, and income level of investors have a significant relationship with variable investment decisions to buy, sell, and hold stocks during dividend declaration.

Barnea et al. (2010) showed that the genetic composition of an individual significantly influences his/her investment behavior. Individual investors' trading activity may be influenced by psychological biases like as caution and a cautious attitude, conservatism, under-confidence, informational asymmetry, and financial addiction, according to Chandra and Kumar (2011). Gill et al. (2018) discovered a favorable and significant link between economic expectations and investment behavior. The relationship became insignificant and detrimental when information search was incorporated as a mediating variable.

In the context of Nepalese investors, Adhikari (2010) found stock investment decisions made for reasons related to both- financial and non-financial, was affected by behavioral aspects. The most significant influences on investment decisions, according to Kadariya (2012), are capital structure and average pricing technique, followed by political and media exposure and financial education. Pokharel (2018) showed market factor significantly affects the performance and choice of investment. Rana (2019) discovered that "Fundamental Market Factor" has a high relative importance on individuals. For making wise investment selections, the majority of investors consult electronic media and rely on advice from friends and family (Shrestha, 2020). Adhikari (2020) found accounting information consisting of variables "stock marketability, affordable share price, insiders' information, the results of technical analysis, condition of financial statements, information obtained from the internet, expected capital increase, expected corporate earnings, the dividend paid, and rumors" was the most influencing factor for stock investment decisions of individual investors.

Based on the review of literature and various empirical outcomes, the study uses 29 different rational and behavioral variables described in the following clusters:

The accounting-information

Nagy & Obenberger (1994) looked at how a mix of 34 different financial as well as non-financial variables influenced shareholders' perceptions with "accounting-information" factor as the most influential factor. Expected earnings and the condition of financial statements were found to be highly important to investors. Based on historical evidence, Baker & Haslem (1974) concluded that investors were largely concerned with forecasts of future profitability. Individuals use price and earnings uncertainty as major risk measures, according to Blume and Friend (1978). Lewellen et al. (1977) added that the most crucial information source for investors is fundamental

or technical analysis. To derive at the factors influential to individual investors' decision making behavior, the study uses the following "accounting-information" variables: "condition of financial statements", "expected corporate earnings", "expected dividends", "firm status in industry", "share price affordability", "dividends paid", "past performance of the firm's stock", "stock marketability".

Subjective/Personal

Based on various behavioral factors, the investors incline their decisions of investment based on their personal experiences, feeling towards economy and firm, and various subjective factors. The demand of individual investors for social information investigated by Epstein (1994) showed the importance of annual reports to shareholders and their want on information on corporate ethics, employee relations, and community involvement. Hence, the study uses the variables: "get rich quick", "gut feeling on the economy", "feeling for a firm's products and services", "perceived ethics of firm", "political party affiliation", and "religious reasons".

The neutral-information

Informational efficiency is not always present in financial markets (Ritter, 2003). The stock market, according to DeBondt & Thaler (1995), overreacts to information. Furthermore, Shefrin & Statman (1985) assert that even when selling the losing stocks is the wisest option, shareholders are more eager to sell winning stocks than losing ones. Investors appear to be underreacting to prior information as well as the information given by the event (Kadiyala & Rau, 2004). "Coverage in the press", "statements from politicians & governmental officials", "fluctuations/development in the stock index", "current economic indicators", "environmental record", "increase of the firm's involvement in solving community problems", "information obtained from the internet", and "reputation of the firm's shareholders" are the variables based on various empirical findings used in the study for further analysis.

The personal-financial-needs

Diversification requirements, the length of time until invested money are needed for other objectives, and considerations for competing financial needs were revealed to be highly relevant choice variables for individual investor behavior (Nagy & Obenberger, 1994). Equity investors believe they are relatively independent of any outside influences, yet it is unclear how the investors own subjective views were formed (Merikas et al., 2003). Hence, to explore the factors influencing individual investors' decision making behavior in the Nepalese stock market, variables pertaining to personal-financial-needs viz. "diversification needs", "ease of obtaining borrowed funds", and "minimizing risk" are taken into consideration for study.

The advocate-recommendation

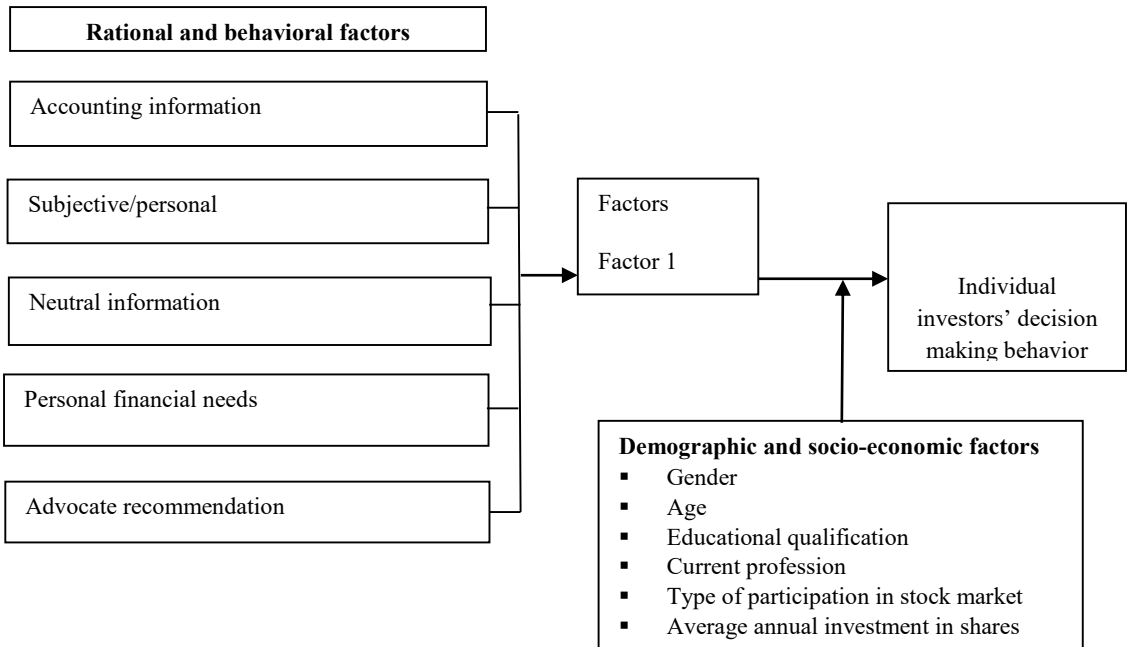
Krishnan & Booker (2002) investigated the factors that influence investor decisions based on analyst recommendations to hold or sell a company in the short term and the findings demonstrated a robust influence of analyst's recommendation. However, the study by Nagy & Obenberger (1994) revealed that although many investors clearly rely on professional advice, the majority of the investors appear to be suspicious of these sources of information. As the empirical evidence suggests, advocate recommendation is influencing factor for individual investor behavior and hence the variables: "broker recommendation", "family member opinions", "friend

or co-worker recommendation”, and “opinions of the firm’s majority stockholders” are included in the study.

Based on the given variables extracted from the empirical evidences as explained, the study's conceptual framework includes the notion of extracting influential factors for individual investors' decision-making and examining their relative importance based on demographic characteristics. The schematic diagram of the conceptual framework is depicted in Figure 1.

Figure 1

Conceptual Framework on Factors Influencing Individual Investors’ Decision Making Behavior



Note. Developed by author based on literature review and empirical findings

Research Hypotheses

This study makes an effort to test the following hypothesis in light of the provided conceptual framework.

H1: There is no significant difference in the gender and degree of influence of factors on individual investors’ decision making behavior.

H2: There is no significant difference in the age group and degree of influence of factors on individual investors’ decision making behavior.

H3: There is no significant difference in the educational qualification and degree of influence of factors on individual investors’ decision making behavior.

H4: There is no significant difference in the profession and degree of influence of factors on individual investors' decision making behavior.

H5: There is no significant difference in the type of participation in the stock market and degree of influence of factors on individual investors' decision making behavior.

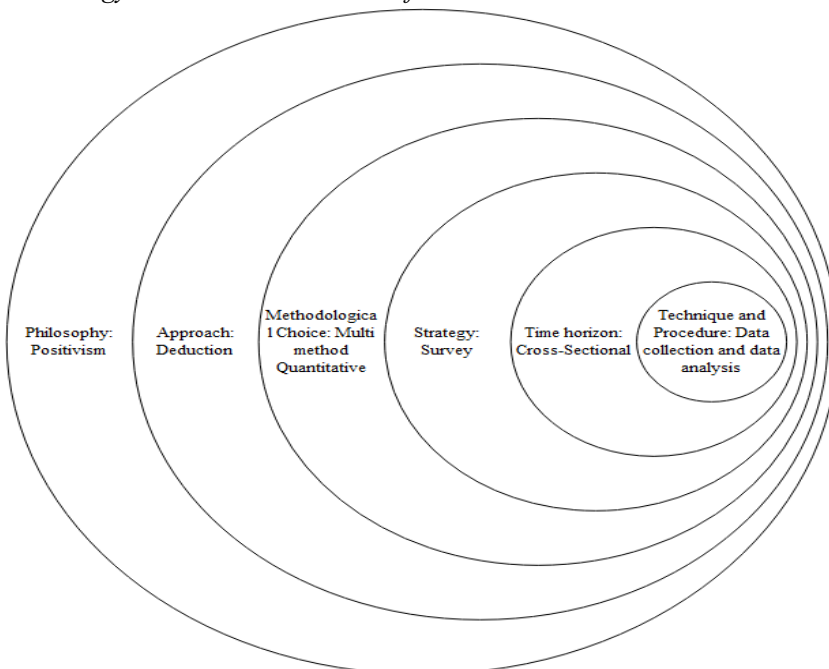
H6: There is no significant difference in the average annual investment in shares and degree of influence of factors on individual investors' decision making behavior.

3. METHODOLOGY

The research methodology for the study, which is constructed on the “research onion” presented by Saunders et al., (2009) is depicted in Figure 2. The study employs deductive research approach and quantitative research strategy. As this study uses a questionnaire survey with a mix of closed and open ended questions to try to explain individual investors' decision-making behaviors, it can be classified as a hybrid of exploratory and descriptive research design. For understanding the common behaviors of individual investors, the study uses cross-sectional time horizon.

Figure 2

Research Methodology Presented in the Form of ‘Research Onion’



NOTE: DEVELOPED BY AUTHOR BASED ON SAUNDERS ET AL. (2009)

Four of the largest stock brokerage firms' clients served as the source of the sample of Nepalese stock investors of the only stock exchange in Nepal, Nepal Stock Exchange (NEPSE). A sample population of 2000 individual investors was selected. Survey through electronic means was conducted during the month of March through May 2021. There were 505 total valid responses, for a response rate of nearly 25.25 percent. Given the technicality (only investors could understand and fill up the questionnaire), length (nearly six pages) and depth (2 sections, 29

variables, 1 optional open-ended question) of the survey, this response rate is favorable to the survey through mail and electronic means. The study adopted convenient and purposive sampling technique in order to collect the survey responses. The use of the stated technique can be explained by following two reasons. First, it is quite challenging to determine the precise number of individual investors because there are many of them dispersed throughout the survey's coverage region. Second, many of the investors who were asked to take part in the survey refused to respond. Such reluctance could be attributed to individuals' nature to be skeptical and sensitive in financial matters.

Table 1*Demographic Profile of Respondents*

Characteristic	Number	Percentage
Gender		
Female	134	26.5
Male	371	73.5
Age distribution		
Less than 25	42	8.3
25 to 35	295	58.4
36 to 45	152	30.1
46 to 55	16	3.2
Educational qualification		
SLC or below	1	0.2
Intermediate or +2	27	5.3
Bachelors	220	43.6
Masters	245	48.5
Above masters	12	2.4
Current profession		
Bank and financial institution	102	20.2
Government and public sector	54	10.7
Private sector	252	49.9
Self-employed	76	15.0
Others	21	4.2
Participation in stock market		
As an active trader (Regularly watch and trade)	380	75.2
As a passive trader (Occasionally or rarely watch and trade)	125	24.8
Average annual investment in shares		
Up to 5 lakhs	138	27.3
5 to 9.99 lakhs	100	19.8
10 to 14.99 lakhs	101	20.0
15 to 19.99 lakhs	101	20.0
20 lakhs and above	65	12.9

Informed consent, breach of privacy, and harm to participants are some of the ethical issues (Fisher, 2010; Blumberg et al., 2005) that have been carefully considered in this study. Furthermore, the issue of anonymity is resolved. Private information is kept private at all times. In addition, respondents were made aware of the survey's anonymity and confidentiality. All data is presented in a statistical way. As a result, there is no risk of any physical and mental harm to participants. Alternative ethical consideration at this juncture is the accuracy of data collection, processing, and reporting (Sarantakos, 1998). Data is only used for research purposes, not for personal gain. The report accurately reflects the data obtained, with no data being changed or created to fulfill desired objectives (Blumberg et al., 2005).

With the aim of eliminating biases brought on by the questionnaire and maximizing response rates, the survey was created based on a comprehensive review of the literature. As suggested by Devellis (1991) for content validity, the draft survey was distributed to a group of eminent academicians and a brokerage house for feedback and revisions were made incorporating the feedbacks.

The significance of the variables under investigation is initially described using simple descriptive statistics. With the aid of Cronbach's Alpha, the survey instrument's reliability was evaluated. From the initial 29 items, two elements were removed in the process of increasing the reliability. Internal consistency is regarded as good because the Cronbach's Alpha of the remaining items was 0.930. Additionally, the exploratory factor analysis utilizing principal component analysis (PCA) is a foundational component of the data analysis. To further support the statistically significant variations in the mean scores representing the relative relevance of investment choice factors across diverse demographic and socioeconomic parameters, the study also employs independent sample t-test and one-way ANOVA test.

Table 1 provides the summary of demographic profile of the respondents to the survey.

4. RESULTS AND DISCUSSION

Table 2 ranks the variables according to how often respondents believe they have a “very high influence” on stock buying decisions. The results show some remarkable points to consider. First, majority of the variables ranked significant are traditional “rational” standards like "expected dividends," "expected corporate earnings", “dividends paid” and "condition of financial statements". Second, a sizable number of respondents did not believe that “rational” criteria were the only factor that influenced their decision. This lends credence to the idea that when choosing stocks to buy, investors consider a wide range of selection criteria. Third, it is clear that contemporary issues like "environmental record" are accorded little weight by stock investors.

The investors were asked to list out variables, other than mentioned in the questionnaire, which had influence in their investment decision making. The major variables pointed by the sample investors included: flow of money in the market, investor education, ongoing political movements, bullish or bearish market trend, EPS and book value of firms, board capacity of firm, buying and holding capacity of investors, brand value in the market, initial public issues, global scenario, inflation, interest rates, insider trading, perception as saving for future, run-out in the market, seasonal effect, investors’ passion, trading volume, growth prospectus of firm, etc.

Table 2

Frequency Distribution of Variables that Significantly Influence Individual Investors' Decision Making Behavior

Rank	Item	Frequency	Percent
1	Expected dividends	366	72.5
2	Fluctuations/development in the stock index	304	60.2
3	Expected corporate earnings	298	59.0
4	Dividends paid	288	57.0
5	Condition of financial statements	242	47.9
6	Broker recommendation	226	44.8
7	Stock marketability	198	39.2
8	Share price affordability	169	33.5
9	Ease of obtaining borrowed funds	152	30.1
10	Firm status in industry	150	29.7
11	Minimizing risk	146	28.9
12	Past performance of the firm's stock	142	28.1
13	Statements from politicians & government officials	128	25.3
14	Friend or co-worker recommendation	125	24.8
15	Opinions of the firm's majority stockholders	114	22.6
16	Information obtained from the internet	106	21.0
17	Reputation of the firm's shareholders	104	20.6
18	Diversification needs	99	19.6
19	Feeling for a firm's products and services	90	17.8
20	Increase of the firm's involvement in solving community problems	83	16.4
21	Coverage in the press	72	14.3
22	Family member opinions	71	14.1
23	Current economic indicators	59	11.7
24	Gut feeling on the economy	55	10.9
25	Political party affiliation	53	10.5
26	Perceived ethics of firm	48	9.5
27	Get rich quick	39	7.7
28	Religious reasons	38	7.5
29	Environmental record	22	4.4

The descriptive statistics, as explained above, show that investors use a variety of factors rather than a single, integrated approach. On the basis of these findings, however, it cannot be said with certainty how significant the variables are that affect stock market investor behavior. To clearly understand the factors that influence individual investor behavior in the Nepalese stock market, it is essential to apply more sophisticated analytical techniques. Consequently, factor analysis is opted for further analysis.

Exploratory factor analysis (EFA) identifies groups of observable variables that are constantly trending in the same direction. Field (2000) recommends an average of 300 sample cases. The number of samples is above the recommended average. Similarly, Anderson (1990) claims that any correlation coefficient more than 0.8 suggests a possible problem between variables. To check the pattern of relationships, the table of correlations matrix was scanned, which does not reveal any such issue.

The adequacy of the data for factor analysis was assessed using the Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity. The KMO value was 0.866, which provided strong evidence for sampling adequacy for available data. Similarly, Bartlett's test had significant results ($p < 0.001$), and consequently factor analysis was considered suitable.

PCA was executed using the Varimax rotation method, referred to as the standard method by Kaiser (1958). Table 3 showing the rotated component matrix and communalities summarizes the final results of factor analysis. Due to low extraction power or cross loading of variables with different components, the final rotated solution was reached by eliminating 9 variables. During the analysis, factor loadings less than 0.40 were suppressed (Field, 2005). Finally, only 14 variables out of 27 were organized into three components.

Table 3
Rotated Component Matrix and Communalities

Variables	Components			Communalities
	F1	F2	F3	
X25	0.810			0.708
X24	0.801			0.679
X26	0.798			0.673
X19	0.784			0.638
X17	0.716			0.551
X18	0.713			0.601
X9	0.618			0.533
X11		0.874		0.772
X7		0.777		0.644
X15		0.772		0.626
X10		0.738		0.613
X5			0.833	0.788
X6			0.750	0.665
X4			0.748	0.602

The three pertinent components obtained as a result of PCA were named as follows: “personal confidence and firm information”, “accounting and stock market information”, and “public and economic information” as detailed in Table 4. The first of the three elements, which accounts for roughly 30% of variance, is the main factor determining individual investors' investment behavior in the Nepalese stock market. Cronbach's alpha for the first factor was 0.896, 0.813 for the second, and 0.773 for the third factor, indicating that the items in each factor were reliable. After extraction of factors and nomenclature, the study proceeded further to test the relative importance of the factors with respect to various demographic details of the respondents. The second factor extracted i.e. “accounting and stock market information” seemed to have high

influence in individual investors' decision making behavior with mean score 4.394 followed by "public and economic information" (mean score 3.211) and "personal confidence and firm information" (mean score 2.869).

Table 4
Factors Influencing Individual Investors' Decision-making Behavior

Label	Key variables
Personal confidence and firm information	<ul style="list-style-type: none"> ▪ Environmental record ▪ Get rich quick ▪ Gut feeling on the economy ▪ Increase of the firm's involvement in solving community problems ▪ Perceived ethics of firm ▪ Political party affiliation ▪ Religious reasons
Accounting and stock market information	<ul style="list-style-type: none"> ▪ Dividends paid ▪ Expected corporate earnings ▪ Expected dividends ▪ Fluctuations/development in the stock index
Public and economic information	<ul style="list-style-type: none"> ▪ Coverage in the press ▪ Current economic indicators ▪ Diversification needs

The evaluation of factors based on various characteristics are presented in Table 5 in concise way. The results of independent sample t-test comparing mean differences between gender categories show that the perceived influence of the factor "Public and economic information" differs significantly between male and female investors. The results of one-way ANOVA show that the relative influence of the factors are not significantly different among four age groups of sample investors. Similarly, the relative influence of the factor "Accounting and stock market information" is significantly different among the educational categories of investors. Further analysis using LSD post hoc test (at significance level of 0.05) show significant differences among investors with educational qualification of intermediate or below with that of Bachelors level and with that of Masters level. Surprisingly, the individual investors incline to have no significant differences on the comparative influence of the factors by their current profession. The independent sample t-test of mean differences of the relative importance of the factors across the individual investors' type of participation in the stock market indicate significant difference of influence caused by the factors "Personal confidence and firm information" and "Accounting and stock market information" in their decision making behavior. For example, active traders are highly influenced by accounting and stock market information in comparison to passive traders who are relatively less influenced.

Table 5

Factors Influencing Individual Investors' Decision Making Behavior with Respect to Various Demographic and Socio-economic Characteristics

Factors	Characteristics	Mean	Std. Dev.	t-statistics / F-statistics	Sig. (2-tailed)	Test
Gender						
Public and economic information	Female	3.035	1.099	-2.301	0.022	Independent sample t-test
	Male	3.275	1.012			
Education qualification						
Accounting and stock market information	Intermediate or below	4.036	0.988	3.275	0.021	One way ANOVA
	Bachelors	4.418	0.785			
	Masters	4.433	0.751			
	Above Masters	4	0.657			
Participation in stock market						
Personal confidence and firm information	As an active trader	2.938	0.966	2.736	0.006	Independent sample t-test
	As a passive trader	2.662	1.015			
Accounting and stock market information	As an active trader	4.52	0.619	6.577	0.000	Independent sample t-test
	As a passive trader	4.01	1.062			
Average annual investment in shares						
Personal confidence and firm information	Up to 5 lakhs	2.656	1.017	3.1	0.015	One way ANOVA
	5 to 9.99 lakhs	2.873	1.01			
	10 to 14.99 lakhs	2.959	0.95			
	15 to 19.99 lakhs	3.085	0.89			
	20 lakhs and above	2.842	1.002			
Accounting and stock market information	Up to 5 lakhs	4.082	1.014	8.755	0.000	One way ANOVA
	5 to 9.99 lakhs	4.533	0.672			
	10 to 14.99 lakhs	4.545	0.49			
	15 to 19.99 lakhs	4.552	0.623			
	20 lakhs and above	4.365	0.799			

Likewise, the findings of a one-way ANOVA show that there is substantial difference in the degree of influence caused by the factors “Personal confidence and firm information” and

“Accounting and stock market information” in individual investors’ decision making behavior based on annual investment category. For the factor personal confidence and firm information, post hoc analysis using LSD test show significant differences (at 0.05 significance level) of investors investing up to 5 lakhs annually with that of investors investing from 10 to 14.99 lakhs as well as with that of investors investing from 15 to 19.99 lakhs annually. Similarly, accounting and stock information was found to be significantly difference among all annual investment category of investors as depicted by LSD post hoc test with a 0.05 level of significance.

5. CONCLUSION AND RECOMMENDATION

The findings advise that traditional wealth-maximization parameters, the use of fundamental analysis and expected earnings and dividends are vital to individual investors, even though investors are influenced by assorted variables while making stock investment decisions. Religious reasons were ignored by investors, probably due to negligible religious issues in Nepal while most respondents were found to be unaware of the consequences of the contemporary issues like “environmental record”, “increase of firm’s involvement in solving community problems” and “perceived ethics of firm”. This hints towards the classical mindset of the individual investors in Nepal regarding emerging issues. While the socially responsible investment has been viewed of utmost importance even from the past few decades in the developed economy by individual investors (Owen & Qian, 2008), the ignorance of the same in developing economies like Nepal is highly alerting to the regulatory and government authorities. The need for relevant awareness and educational campaigns regarding the importance of social, ethical, environmental value of investments seems alarming.

The factors identified, with a blend of various rational and behavioral variables, entails that Nepalese individual investors’ concern toward firm specific fundamental and behavioral practices are also growing. The government and regulatory authorities should provide information to potential investors that more effectively takes into account these three factors and the associated variables. When measuring and addressing individual investor concerns, the traits described in this study may also be useful for financial professionals that work with retail clients. The study recommends a scope for future study to: include the causal comparative design to assess the magnitude of the impact of investing choice variables on the behavior of individual investors; examine and assess the influential factors and their relative influence in a larger sample of individual investors; include elements of various variables not considered in this study; conduct similar study in different international markets or a number of stock exchanges to compare the results and increase the confidence of generalizability.

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