

Household Savings and Investment Practices: A Study of the Bhakatpur District, Nepal

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Abstract

The aim of the study is to analyze the saving and investment behavior of households of Bhakatpur District, Nepal. Savings and investments patterns and behavior by the people are also varying from individual to individual and even with the same individual due to motive differences during two periods. The study is quantitative in nature. The study is based on descriptive and analytical research design. The population is the households of Bhakatpur district. Sample size of 200 respondents were selected for the study based on convenience sampling method. SPSS and Excel were used for the analysis of the data. Cronbach's alpha is calculated for the reliability of the data. The descriptive, correlation and multiple regression analysis are used to analyze the data. The study finds that financial literacy, personal factors and environmental factors have significant positive relationship with saving and investment behavior. Further, the study concluded that personal factors have more impact on saving and investment behavior in the household of Bhakatpur district in Nepal.

Keywords: Environmental Factors, Financial Literacy, Household Savings, Investments, Personal Factors

JEL Classification: D14, D15, D31, D91, G51, G53

Introduction

The savings, in many times, act as shock absorbers in the day-to-day life of investors (Gasti, 2017). In a healthy financial system, capital resources are transferred from savers to users in an active market. Savers allow users to use their investments and savings with the hope that users will multiply their returns over predetermined time periods. The state of the economy is both reflected in and influenced by investment. Investment environment directly affects the investment decision of the investors. Additionally, people now have to deal with new and more complex financial products due to the increase in the complexity of financial instruments. Three types of saving habits were proposed by Katona (1975) for average people: contractual saving, which is

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forced or obligatory and involves regular installment payments for an asset such as a home mortgage; discretionary saving, which is done consciously; and residual saving, which is saved by default because one does not spend all of their income. In order to better understand the characteristics related with residual and discretionary saving, this study compares two saver groups based on the categorization found in Katona's (1975) behavioral or psychological approach to saving.

The household savings and investment consist of physical savings, financial savings and marketable savings. The financial savings of people consists of currency, bank deposits, post office, life insurance, provident and pension fund, etc. The marketable savings of people comprise investments, shares, mutual funds and debentures, etc. In Nepal, there are numerous saving and investment avenues available such as bank account, money market funds, bank fixed deposit, post office savings schemes, public provident fund, company fixed deposits, bonds and debentures, mutual funds, life insurance policies, equity shares, gold, new pension scheme, real estate, government securities etc. Due to varying motivations, people's saving and investing habits varies from one another and even within the same individual over two time periods. However, some significant reasons for saving and investing in people include capital appreciation, consistent income, tax planning, risk diversification and minimization, family members' health and education, the performance of ceremonial activities like marriage, birth, and death, the acquisition of current and fixed assets, the building of homes, etc.

Moreover, the investment and saving behavior basically varies from one person to another person living in different geographical regions all over the world. A very few studies are conducted on saving and investment behaviors' including factors such as financial literacy, personal factors and environmental factors especially focusing on certain districts of Nepal. Due to expansion in the financial market, people do not have many ideas about which type of financial instruments, financial facilities and rules and regulations govern different investment and saving instruments. Nepalese capital market is very lean to provide investment alternatives like common stock, preferred stock, corporate bond and government bond are very limited and the total market is dominated by common stock. Nepal's financial system has expanded during the last 20 years, which has led to a sharp rise in the quantity and variety of financial intermediaries. Furthermore, although banks have become more stable as a result of recent reforms, many individuals in many regions of Nepal still have limited access to financial services, and this access has been deteriorating recently. The Nepali government has made significant efforts over the past four decades to expand low-income people' and small businesses' access to official financial services. The gap in provision of education and knowledge regarding the importance of investment and saving has been creating hurdles like losing hard earning. The restrictions made on the individual investors by several directives are also preventing them from freely playing in the market with different instruments or avenues.

Despite the low literacy rates seen among many individuals, only a small number seek assistance from professionals or financial advisors for making saving and investment choices. Financial education programs can help improve saving and financial decision-making, but much more can be done to improve the effectiveness of these programs. Thus, the main purpose of the study is to evaluate the impact of financial literacy on saving and investment behavior in the households of Bhaktapur district. The other objectives are to analyze the impact of personal factors on saving and investment behavior; to investigate the impact of environmental factors on saving and investment behavior and to identify the factors of saving and investment behavior among the households of Bhaktapur district.

Hypothesis

H1: There is a significant relationship between saving and investment behavior and financial literacy.

H2: There is a significant relationship between saving and investment behavior and personal factors.

H3: There is a significant relationship between saving and investment behavior and environmental factors.

Literature Review

Traditional Finance Versus Behavioral Finance

The traditional finance propositd the dominance of finance for over thirty years and purposed an efficient market hypothesis (EMH). There are three basic theoretical arguments on EMH. The arguments are: the investors are

rational and securities valued rationally, everyone takes careful account of all available information before making investment decisions and related to internal consistency. Each decision is made in a systematic way. The third argument is that the decision maker always pursue self-interest. Nevertheless, behavioral finance is a developing science and a new academic discipline that takes advantage of the irrational behaviors of investors.

Many investment choices are shaped, to a degree, by our biases and perceptions that do not align with rational standards. Nevertheless, behavioral finance is an evolving discipline, and a relatively recent and growing area of scholarly research that takes advantage of investors' irrational tendencies. A significant number of investment choices are affected, to a degree, by our biases and viewpoints that fail to align with rational standards. Behavioral finance focuses on illogical actions that may influence investment choices and market values. It seeks to gain a deeper understanding and clarify how emotions and cognitive biases affect investors and their decision-making processes. Behavioral finance examines the markets with insights from psychology, providing greater understanding of why individuals purchase or sell stocks, as well as why some choose not to buy stocks at all. The research on investor behavior aids in clarifying the different 'market anomalies' that question conventional theory. Behavioral finance includes research that challenges the conventional notions of expected utility maximization with rational investors in a market that operates efficiently. Cognitive psychology and arbitrage limitations are the two foundational elements of behavioral finance (Ritter, 2003).

Theories Influencing Investor Behavior

Heuristic Theory

Heuristics as the rule of thumb, makes decision making easier, especially in complex and uncertain environments (Ritter, 2003) by reducing the complexity of assessing probabilities and predicting values to simpler judgments (Kahneman & Tversky, 1974). In general, these heuristics are quite useful, particularly in time limitation (Waweru Munyoki & Uliana, 2008), but sometimes they lead to biases (Kahneman & Tversky, 1974; Ritter, 2003). The degree of similarity that an event has with its parent population is called as representativeness (DeBondt & Thaler, 1995) or the degree to which an event resembles its population (Kahneman & Tversky, 1974; Ritter, 2003). A phenomena used in the situation when people use some initial values to make estimation and biased toward the initial ones as different starting points yield different estimates, also termed as anchoring (Kahneman & Tversky, 1974). Overconfidence is believed to improve persistence and determination, mental facility, and risk tolerance. Overconfidence can enhance others' perception of one's abilities, that may help to achieve faster promotion and greater investment duration (Oberlechner & Osler, 2012). Availability bias happens when people make use of easily available information excessively. In the stock trading area, this bias manifests itself through the preference of investing in local companies that investors are familiar with or easily obtain information, despite the fundamental principles so-called diversification of portfolio management for optimization (Waweru Munyoki & Uliana, 2008). The major components of heuristics: overconfidence, availability bias, anchoring, and representativeness are used to measure their impact levels on the investment decision making as well as the investment performance of individual investors in this study.

Prospect Theory

Prospect theory, developed by Kahneman and Tversky (1979) is one of the most often quoted and best documented phenomenon in economic psychology. The theory stated that an irrational tendency to be less willing to gamble with profits than with losses. Prospect theory illustrates how people behave when encountering risk and uncertainty. Prospect theory outlined various psychological states impacting a person's decision-making processes, such as regret aversion, loss aversion, and mental accounting. Investors had sidestepped regret by not selling declining shares and being open to selling rising ones. In addition, investors often feel more regret over holding onto losing stocks for too long than over selling winning stocks too early (Fugal & Berry, 2006). Loss aversion referred to the varying degrees of psychological discomfort individuals experienced from a comparable magnitude of loss or gain (Barberis & Huang, 2001). Individuals experienced greater discomfort at the possibility of losses than they

felt satisfaction from similar gains, according to Barberis and Odean (2003). Furthermore, a loss that follows a prior gain has been shown to be less painful than expected, whereas a loss that occurs after another loss appears to be more painful than usual, according to Barberis and Huang (2001). Lehenkari and Pertinent (2004) discovered that previous positive and negative returns could enhance the negative connection between the selling trend and investor capital losses, indicating that investors experienced loss aversion. Mental Accounting, a term introduced by Richard Thaler, is defined by Thaler (1999) as a collection of cognitive processes employed by individuals and families to organize, assess, and monitor their financial activities. This led to a trend where individuals divided their funds into distinct accounts for various personal reasons. Rockenbach (2004) proposed that the links among various investment options were frequently overlooked because they were beneficial for arbitrage-free valuation.

Herding Behavior

Herding in financial markets can be defined as mutual imitation leading to a convergence of action. This would be the most common mistake where investors tend to follow the investment decisions taken by the majority. The main reason was pressure from or influence by peers. The Reliance Power IPO (2008) was an example of an instance where many investors had subscribed without having full information on the issue. Investors had applied to herd behavior because they were concerned of others thought of their investment decisions (Scharfstein & Stein, 1990).

Market Factor

DeBondt and Thaler (1995) suggested that the behavior of investors might influence financial markets. If the views of behavioral finance were accurate, it would be assumed that investors might overreact or underreact to changes in prices or news; extend previous trends into the future; neglect the fundamental factors of a stock; concentrate on trending stocks and seasonal price fluctuations. These market elements, in response, impacted the decision-making of investors in the stock market. Munyoki and Uliana (2008) identified various market factors influencing investor decision-making: price fluctuations, market information, historical stock trends, customer preferences, overreactions and underreactions to price changes, and the fundamentals of the underlying stocks. Kungu (2016) discovered that the investor's investment decision lacked rationality and was affected by behavioral factors. The financial experts exhibited reduced levels of overconfidence yet were influenced by self-attribution bias; investment consultants had lesser exposure, but they demonstrated hindsight bias, and the individual thought patterns were clarified by the behavioral biases of the investment advisors.

Behavior of Savers and Investors

Behavioral finance combines individual behavior and market phenomenon and used knowledge taken from both the psychology and finance theory (Fromlet, 2001). Kent (2001) stated that the most common behavior that investors did when making investment decision were investors often did not participate in all asset and security categories, individual investors exhibited loss-averse behavior, investors used past performance as an indicator of future performance in stock purchase decisions, investors traded too aggressively, investors behaved on status quo, investors did not always form efficient portfolios, investors behaved parallel to each other, and investors were influenced by historical high or low trading stocks.

Determinant of Saving and Investment Behavior

Saving and Investment Style

Nyaki (2015) discovered that the majority typically make their initial purchase based on suggestions from a family member or friend. This initial trade typically involves a limited number of shares. If it goes well, the individual usually adheres to the next suggestion from the friend or relative and purchases more shares than before. Ultimately, this cycle concludes suddenly when the individual loses a significant part, if not all, of the invested funds. Certainly, investing in stocks is often less thrilling than speculating on them. For the typical investor, a long-term perspective generally leads to reduced anxiety and a lower requirement to monitor the investment on a

daily basis. There are three types of saving behaviors observed in average individuals: contractual saving, which involves making regular payment installments for an asset such as a home mortgage, representing enforced or mandatory saving; discretionary saving, which is when one intentionally sets aside money; and residual saving, which occurs when one doesn't use up all of their income, resulting in savings by default. This classification, which reflects a behavioral or psychological perspective on saving, serves as the foundation for two of the saver categories analyzed in this research, intending to gain a clearer insight into the elements linked to discretionary and residual saving.

Investment and Saving Avenues

Gasti (2017) discovered that numerous investment opportunities exist for investors looking to allocate their savings in the current market situation; however, these opportunities are largely focused on urban regions. Awareness programs and the presence of institutional agencies in rural regions can assist rural communities in enhancing their financial well-being and quality of life. Chaturvedi and Khare (2012) found that the majority of investors favored bank deposits as their primary investment option, with small saving schemes coming in second and life insurance policies in third. Mohanta and Debasish (2011) indicated that individuals were willing to invest to satisfy their financial, social, and psychological requirements. However, the investor consistently maintained a perspective focused on safety and security, greater capital appreciation, a stable future, tax advantages, receiving regular returns or dividends, straightforward purchasing, and addressing future uncertainties.

Singh (2000) determined that the household's investment in stocks, bonds, and mutual funds was under ten percent, and the equity investor household's portfolio was of modest worth and lacked diversification. It was discovered that a group of households, despite their lower income and reduced ownership of consumer durables, participated in the securities market, while another group of households with higher income and greater ownership of consumer durables did not invest in the securities market. Mohan and Kanika (2010) emphasized the key sources of information that respondents relied on to make their investment choices. Moreover, the research showed that a significant portion of the participants had put their money into securing investments such as employee provident funds, public provident funds, and post office savings schemes, with even bank employees viewing insurance more as an investment vehicle than a means of risk protection. Devi et al. (2008) demonstrated that the primary motivation for investors to save is to reduce their tax liability. Therefore, the study suggested taking steps to create awareness among the investors about other savings schemes and investment avenues.

Individuals Investment Decision

An individual investor refers to persons who do not spend all of their income on consumption but also invest partially for the future, taking actions on their own behalf in the market (Aron & Maelbaer, 2000). An individual investor refers to someone who trades for themselves, engaging in a limited volume of transactions, and seeks to manage their own finances with minimal or no professional assistance (Agrawal, 2009). It can be demonstrated that individual investors are typically those who invest under their own names and accounts, engage in relatively small transaction amounts, and are influenced by various personal, financial, and environmental factors in their investment choices (Kathuria & Sighania, 2010).

Demographic Factors Influence

The ET Retail Equity Investor Survey (2004) indicated that distinctions existed between active and passive investors regarding demographics and psychographics, investment traits, and investment practices. Suriya (2012) uncovered that women investors led the investment market in India and were observed to be utilizing two or more sources of information for their investment choices. The majority of investors had consulted with their family and friends prior to deciding on an investment. Nagy and Obenberger (1994) found that risk perception varied based on demographic and socio-economic factors. The older people were more prone to risk than the younger ones, and retirees faced greater risks than workers; women displayed less risk than men. The relationship between income

and risk was both positive and negative, while the education level exceeded that of high school graduates who tended to take more risks.

However, the risk-taking behavior of university graduates was lower compared to that of graduate and doctoral graduates. Kelly and Williamson (1968) discovered that the age of the household head significantly influenced household savings in rural areas, noting that both average and marginal saving rates increased alongside the proportion of agricultural income and the positive interplay between wealth and saving. Nonetheless, Shultz (2005) discovered no notable correlation between savings and age distribution. Boskin (1978) discovered that the tendency to save from non-agricultural earnings was greater than the tendency to save from agricultural earnings. Nagy and Obenberger (1994) recognized seven main homogeneous groups influencing individual investment behavior: neutral information, accounting information, traditional or personal financial needs, social interest, recommendations from friends, and conflicts between personal image and corporate image.

Conceptual Framework

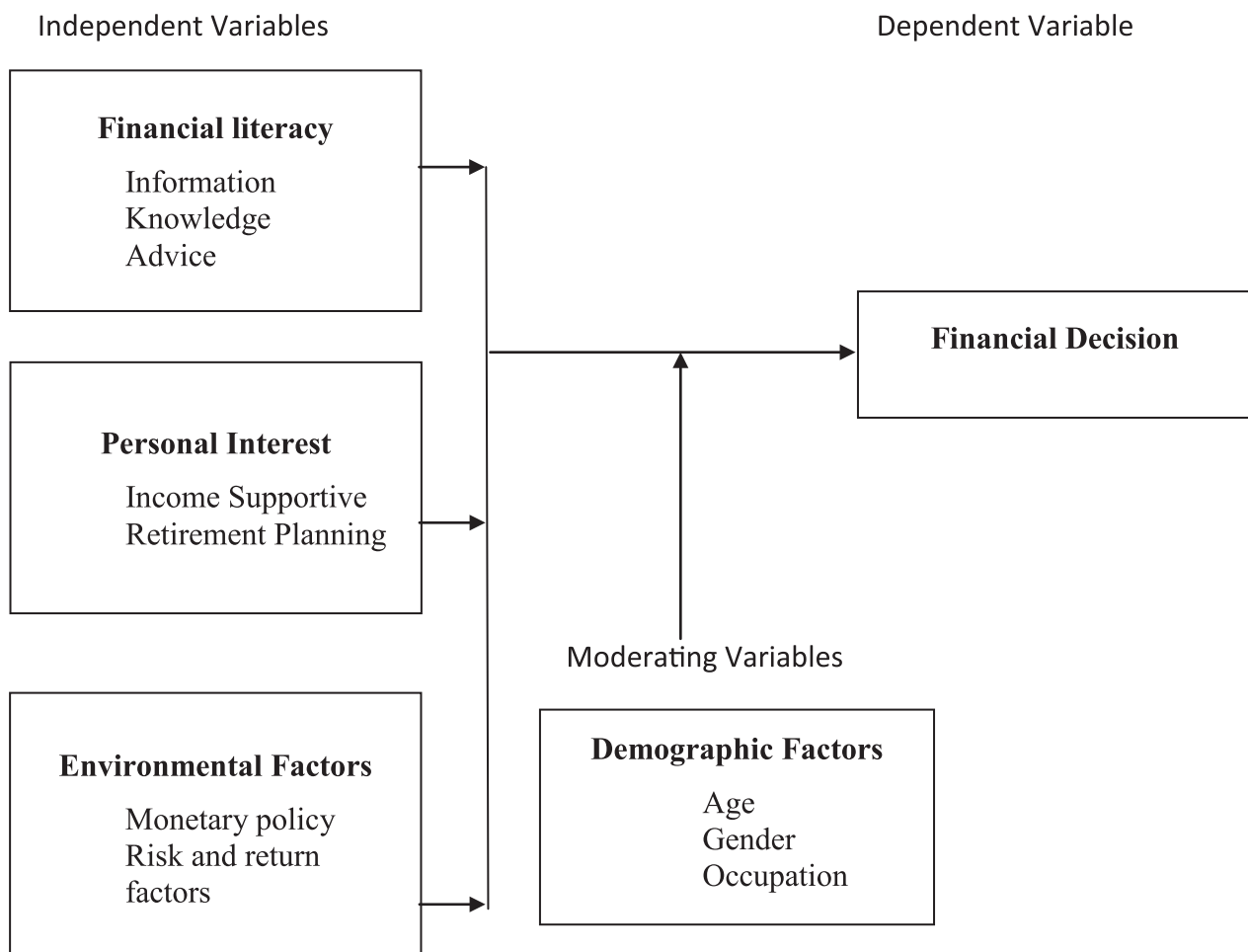


Figure 1: Conceptual Framework

Source: Divanoglu and Bagci (2018).

Operational Definitions

Saving and Investment Behavior

In this study, households that practice discretionary saving are viewed as saving consistently, as they habitually set aside a part of their income. Residual saving is described as irregular saving, where consumers automatically

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save by not spending their entire income and setting aside whatever remains. Contractual saving is not utilized as a foundation for establishing a saving habit because such a measure is absent in the saving habit construct present in the data, yet home ownership and wealth accumulation, which are likely outcomes of contractual saving, are included as independent variables to forecast the probability of having one saving habit instead of another. The third group consists of individuals who do not put aside any savings. Certain individuals fail to save intentionally or inherently by utilizing their entire earnings. Individuals often confuse savings with investment, perceiving investment as a form of saving. This serves as a factor that diminishes people's inclination to invest (Lokhande, 2015). Wang (2011) highlighted that factors such as awareness, income level, and skills have a significant impact that could affect the younger generation's choice to invest in particular financial instruments.

Financial Literacy

Financial literacy refers to the capacity to read, interpret, and analyze, manage finances, discuss personal financial situations influencing material well-being, calculate, form independent opinions, and make decisions based on those processes to succeed in our intricate financial landscape. Financial illiteracy is prevalent in the general populace and especially severe among particular demographic segments, including women and younger individuals. Insufficient information, limited knowledge, and poor guidance hinder the capacity to save, achieve a comfortable retirement, and invest in opportunities that yield higher returns in the future.

Adequate Information and Knowledge

Lodhi (2006) found that financial literacy and accounting information reduces information asymmetry and gives confidence to invest in risky instruments.

Advice

Merikas (2011) identified five factors, such as accounting information, subjective/personal factors, neutral information, advocate recommendation and personal financial needs influencing the individual investor's in the Greek stock exchange

Heuristics

The emotional characteristics of the investors lead to biases like representativeness, overconfidence, anchoring and adjustments, conservatism and aversion to ambiguity, euphoria, despondency and depression on investment decisions and which are playing a vital role in the success of investors' investment decisions.

Personal Factors

Personality is the unique combination of behavioral patterns, interests and inclinations, abilities and directions. Since personality traits hold significance from a behavioral perspective, they also play a crucial role in finance regarding the expectations of the actions involved in investment choices. Certain investors opt for higher risk in pursuit of greater returns, while others prefer safer investments due to their fear of loss (Armagan, 2007; Tufan, 2008).

Supportive Income

Investors who have significant income can easily take on risky investments compared to those with lesser incomes. To put it differently, as individuals grow older and their income rises, it can be stated that their confidence and optimism in themselves and their investments also grows. The laws, capabilities, and values of individuals in society are primarily influenced by their educational attainment. Consequently, education, lifestyle, and income level will influence investor behavior (Aksulu, 1993).

Investors Optimism

Based on the idea that women have a greater risk perception than men regarding gender's influence on investment choices, it is believed that there could be variations between male and female investors concerning the degree of psychological factors (optimism) that influence risk perception (Kahyaoglu, 2011). Financial satisfaction relies on a cognitive evaluative process, much like life satisfaction (Diener, 1985).

Involvement

The personal attitude toward money is highly emotional, as noted by Shefrin and Statman (1985). In contrast to consumer goods, when deciding to buy a financial product, individuals typically do not prioritize a brand; instead, they rely on the guidance of financial intermediaries for their final choice. If an individual lacks adequate income, they may become less informed about financial opportunities and their decision-making may be affected.

Environmental Factors

The primary market begins with wide-ranging environmental elements affecting the industry, which impacts share prices and ultimately leads to an analysis of knowledge potential while accounting for the risks related to securities in public investment.

Market Factors

An effective monetary policy would provide guidance and impact the investment firm in addressing potential investor needs. Price inflation would undermine the purchasing power of investments; therefore, effective monetary policy would change perceptions and motivate prospective investors to invest, as the current investment practices can be seen on a broad spectrum. Savers continually avoid inflation while making investments. Although inflation may drive up the book value of assets, this rise will not lead to an increase in the entity's equity price. In fact, it could lead to a decline in stock prices (Akgün, 1996). To protect the value of their savings from inflation and interest rates in their economic predictions, holders have allocated their investments toward tools that safeguard their savings against other investment options (Schaof, 1993). When evaluated in this context, it was evident that a cash asset would be more appealing, and consequently, the demand would increase as other factors remain constant (Mishkin, 2010).

Risk and Return Factor

Dwyer et al. (2002) discovered that knowledge of financial markets and investments reduced the impact of gender on risk-taking, revealing that women exhibited lower financial risk tolerance than men, which was partially attributed to their level of financial information. Married individuals exhibited a greater tolerance for financial risks (Amber & Eker, 2009), whereas other studies indicated that single people possess more financial risk tolerance compared to those who are married.

Herding Effect

Reference groups were among the environmental elements that influenced individuals' behavior. It was found that eighty of the individual's purchasing choices were made based on the direct recommendation of another person (Hsu et al., 2006). Individual investors were influenced by the groups they belonged to when making investment choices.

Research Methods

The study is based on descriptive and analytical research design. The data was collected from the households of Bhaktapur district by using a structured questionnaire survey. The questionnaires were distributed among the respondents and self-administered to collect proper responses from them. The entire number of households living

in Bhaktapur district was considered to be population where study was conducted on different places of Bhaktapur district. The population of this research includes all the households of Bhaktapur district. Sample size of 200 respondents were selected for the study based on convenience sampling method. In this research study both primary and secondary data were collected and analyzed. Regarding questionnaires, there are single response, multiple choice and likert scale questions. “ five point Likert scale is named after its developer, Rensis Likert, is a widely used rating scale that requires the respondent to indicate a degree. After gathering all the questionnaires from the respondents, SPSS and Excel were used for the analysis of the data. Cronbach’s alpha is calculated for the reliability of the data. After finding the reliability, the data are analyzed using different statistical tools such as frequencies and descriptive analysis which were used for the purpose of generation of results. For testing the hypothesis, correlation between dependent and independent variables are calculated and evaluated on the basis of p-value. The descriptive statistical techniques like frequencies, percentage, mean, median, standard deviation, and variance were used in a sensible way. The one-way analysis of variance (ANOVA) is used to determine whether there are any statistically significant differences between the means of two or more independent (unrelated) groups (although you tend to only see it used when there is a minimum of three, rather than two groups). Correlation analysis was used to identify between two or more variables. It is useful for determining the strength and direction of association between two variables. Multiple regressions analysis was performed to test the relationship between dependent variable and independent variables acting together (Cohen et al., 2003).

Model Specifications:

$$SIB = \alpha + \beta_1FL + \beta_2PF + \beta_3EF + E$$

Where, SIB = Saving and Investment Behavior

FL= Financial Literacy

PF= Personal Factors

EF= Environmental Factors

E = Error Term

Results

Respondent Profile

A total of 14 questions were asked to the respondents. Occupation wise distribution was one of the important factors as occupation of the individual directly affects the behavior of investors. The occupations of the respondents were analyzed to study the present situation of the investment and saving behavior. Table 1 shown that among the total respondents, majority of the respondents were engaged in jobs and business. The gender of the respondents was analyzed in order to determine the present situation and preference toward investing avenues. Among the total number of respondents, 92 respondents were female however 108 respondents were male. This distribution shows that male was actively participating in investing activities compared to female. Among the respondents, the majority of the respondents were aged ranged from 20-40 years implied that the majority of the respondents were adult. The 59.5% of the respondents were married. The analysis implied that the majority of the households were married. The 78 percentages of the households taken for the study were university graduated. It had indicated the representation of educated respondents in the survey. The percentage of respondents income level below 20,000 was only 9.5% which was lowest among all. The majority of the households had income ranged from rupees 20000 to rupees 40000. It had indicated that respondents had averaged income status. Table 1 depicted that only 5.5% of the respondents annual saving was in between Rs 40,000 to Rs 50,000 which was lowest among all. But respondents whose annual saving was between Rs 25,000 to Rs 30,000, their percentage of participation was highest among all. The analysis had indicated that households were good savers according to their level of income.

Table 1

Demographic Analysis

Occupation	Frequency	Percentage (%)
Own Business	69	34.50
Job holder	93	46.50
Service provider	38	19.00
Total	200	100
Gender	Frequency	Percentage (%)
Female	92	46.0
Male	108	54.0
Total	200	100.0
Age	Frequency	Percentage (%)
Below 20 Years	1	0.50
20 - 30 Years	85	42.50
30 - 40 Years	91	45.50
40 - 50 Years	19	9.50
50 and Above	4	2.00
Total	200	100.00
Marital Status	Frequency	Percentage (%)
Single	64	32.0
Married	119	59.5
Widowed	10	5.0
Divorced	7	3.5
Total	200	100.0
Education	Frequency	Percentage (%)
SEE/+2	42	21.0
Bachelor	100	50.0
Master	56	28.0
Other	2	1.0
Total	200	100.0
Monthly Income (Rs)	Frequency	Percentage (%)
Below 20,000	19	9.5
20,000 to 30,000	51	25.5
30,000 to 40,000	61	30.5
40,000 to 50,000	26	13.0
50,000 and Above	43	21.5
Total	200	100
Annual saving (Rs)	Frequency	Percentage (%)
Less than 20,000	57	28.5
25,000 to 30,000	89	44.5
30,000 to 40,000	25	12.5
40,000 to 50,000	11	5.5
Above 50,000	18	9.0
Total	200	100.0

(Source: Field Survey, 2019)

Main Motivators of the Saving

Table 2

Motivators of Saving

Main Motivator of Saving	Frequency	Percent
To meet future contingencies.	111	55.5
To finance children's education.	29	14.5
To be secured at old age.	12	6.0
To purchase assets in future.	48	24.0
Total	200	100.0

(Source: Field Survey, 2019)

Table 2 shown that the majority of the households thought the main motivator of the saving was to meet the future contingencies followed by to purchase assets in future. The old age security and childrens' education financing were less prioritized by the respondents.

Income Used for Saving

Table 3

Basis of Income Used for Saving

Percentage of Income use for Saving	Frequency	Percentage (%)
Less than 20%	80	40.0
20 -30%	92	46.0
30 - 40%	17	8.5
40 -50%	4	2.0
Above 50%	7	3.5
Total	200	100.0

(Source: Field Survey, 2019)

Table 3 portrayed that the distribution of percentage of income for saving purposes in various categories. The 40% of the respondents had saved less than 20% of their income for their future references. However, 46% of the respondents had used 20-30% of their income for saving.

Engagement in Investing Activities

Table 4

Investing Activities

Engagement in Investing Activities	Frequency	Percentage (%)
Yes	100	100
No	0	0.00
Total	200	100.0

(Source: Field Survey, 2019)

Table 4 shown that all the households were engaged in investing activities. The analysis had indicated that households were good savers.

Investment Alternatives Preferences

Table 5

Investment Alternatives Preferences

Investment Alternatives	Frequency	Percentage (%)
Stock market	58	29.0
Real estate	20	10.0
Mutual fund	40	20.0
Insurance policies	77	38.5
Other	5	2.5
Total	200	100.0

(Source: Field Survey, 2019)

Table 5 shown that the majority of the households had chosen insurance policies followed by stock market, mutual fund and real estate as an investment alternatives. It had indicated that the households were interested in capital market and purchasing insurance policies. It meant, the households were active investors.

Investing Option Satisfaction

Table 6

Satisfaction-Wise distribution

Satisfaction	Frequency	Percentage (%)
Yes	148	74.0
No	52	26.0
Total	200	100.0

(Source: Field Survey, 2019)

Table 7 depicted that whether respondents were satisfied with their present investing option or not, the analysis had shown that the majority (74%) of the respondents were satisfied with their present investing avenues.

Monitoring Frequencies of Investors.

Table 8

Monitoring Frequency of Investors

Monitoring Frequencies	Frequencies	Percentage (%)
Daily	33	16.5
Monthly	118	59.0
Occasionally	49	24.5
Total	200	100.0

(Source: Field Survey, 2019)

Table 8 presented that the majority of the household investors monitor their investment activities on monthly basis. It had indicated their awareness and concern towards their investment.

Reliability Analysis

Cronbach's Alpha was calculated for each of the scales to determine internal consistency reliability. Table 14 depicted the reliable data that could be used for interpreting the behavior of investors and savers.

Table 9

Reliability Analysis

Code	Variables	Cronbach's Alpha
SIB	Saving and investment behavior	0.736
FL	Financial literacy	0.709
PF	Personal factors	0.782
FF	Environmental factors	0.744

Saving and Investment Behavior

Table 10

Saving and Investment Behavior

Code	Statements	Min	Max	Mean	SD
SIB1	I have been saving money since my childhood.	1.0	5.0	3.455	.9812
SIB2	Saving is a way to reach my future financial goal.	1.0	5.0	4.230	.7811
SIB3	I prefer to save money on bank accounts rather than in a secret place at home.	1.0	5.0	4.315	.7803
SIB4	I am interested in different ways of saving method	1.0	5.0	4.035	.7660
SIB5	I would save more if I had a bigger income.	1.0	5.0	4.035	.8932
SIB6	I feel family pressure to save money.	1.0	5.0	3.140	1.0420
SIB7	I consult with family before taking investment decision.	1.0	5.0	3.680	.9912
SIB8	I borrow money for investing purposes.	1.0	5.0	3.770	1.0209
SIB9	I prefer investment where there is no loss in capital.	1.0	5.0	4.055	.8399
SIB10	I feel I am making a good investment decision.	1.0	5.0	3.790	.8831
SIB11	Good investment opportunities induce positive investment behavior.	1.0	5.0	3.640	.8568

Mean was also used to check the reliability of the scale. Generally, the mean value more than 3.5 meant positive response and mean value less than 3.5 meant negative response. All the scale's means had come out more than 3.5 indicated the reliability of scale. The highest mean of 4.315 indicated that the respondents had preferred to save money on bank accounts rather than in a secret place at home. Lowest mean of 3.14 indicated that respondents felt family pressure to save money.

Table 11

Financial Literacy

Code	Statements	Min	Max	Mean	SD
FL1	I get information from friends and relatives regarding investing activities.	1.0	5.0	3.975	.8047
FL2	Technology provides me fruitful investment and saving information	1.0	5.0	4.245	.7053
FL3	I follow financial news in newspapers and magazines.	1.0	5.0	3.920	.8931
FL4	I get advice from a financial adviser before making any investment decisions.	1.0	5.0	3.525	.8907
FL5	I prefer to invest on alternatives on the basis of Market Trend	1.0	5.0	3.980	.7566
FL6	I go through the financial statement of the company before making an investment decision.	1.0	5.0	4.110	.8899

Table 11 depicted that all of the given statements of financial literacy variables were reliable. FL2 had highest mean i.e 4.245 and FL4 had lowest mean i.e 3.525. FL2 statement was more reliable than other statements of

financial literacy. The highest mean of 4.245 indicated that the technology provided them fruitful investment and saving information. Lowest mean of 3.14 indicated that the respondents would get advice from financial advisers before making any investment decisions.

Table 12

Personal Factors

Code	Statements	Min	Max	Mean	SD
PF1	I have a supportive income to invest in various alternatives.	1.0	5.0	3.530	.9073
PF2	Income is important while considering investment decisions.	1.0	5.0	4.175	.8047
PF3	I would invest on more Investment alternatives if my income increases.	1.0	5.0	4.205	.8163
PF4	I plan to increase my investment options in next 6 months	1.0	5.0	3.920	.8469
PF5	Now, I will stay invested in present Investment Alternatives.	1.0	5.0	3.795	.8224
PF6	I will get more return if I get more aware about investment alternatives.	1.0	5.0	3.920	.8167
PF7	In future, I will increase my involvement in investment activities	1.0	5.0	3.980	.7698
PF8	The past performance is an indicator of future performance in stock purchase decisions.	1.0	5.0	4.005	.8536
PF9	I form an efficient portfolio before investing.	1.0	5.0	3.650	.8725

Table 12 depicted that all of the given statements of personal factors variable were reliable. PF3 had highest mean i.e 4.205 and PF1 had lowest mean i.e 3.530. PF3 statement was more reliable than other statements of Personal factors. The highest mean had indicated that the respondents would invest in more investment alternatives when income increased. Lowest mean of 3.53 indicated that the respondents had a supportive income to invest in various alternatives.

Table 13

Environmental Factors

Code	Statements	Min	Max	Mean	SD
EF1	Monetary policies influence the behavior of investors.	1.0	5.0	4.250	.7814
EF2	Price inflation will destroy the purchasing power of investors.	2.0	5.0	4.215	.8558
EF3	Tax policies affect Investment Behavior.	2.0	5.0	4.220	.7446
EF4	I invest in the company with stable expected returns.	1.0	5.0	3.880	.8301
EF5	I don't invest in risky investment alternatives.	1.0	5.0	3.480	.8325
EF6	I understand risk characteristics of my investment alternatives.	1.0	5.0	3.710	.7803
EF7	Behavior of one investor surely influences the other investors.	1.0	5.0	3.840	.7729
EF8	Media, financial rumors play a significant role in Investment decisions.	1.0	5.0	3.965	.7918
EF9	Nepalese share market is influenced by investors' sentiments.	1.0	5.0	3.630	.8584

Table 13 depicted that all of the given statements of environmental factors variable were reliable. EF1 had highest mean i.e 4.25 and EF5 had lowest mean i.e 3.48. EF1 statement was more reliable than other statements of environmental factors. The highest mean of 4.25 had indicated that the monetary policies influenced the behavior of investors. Lowest mean of 3.48 had indicated that the respondents did not invest in risky investment alternatives.

Correlation Analysis

The extent or degree of relationship in between the study variables have been explained through correlation matrix.

Table 14

Correlation Matrix

Variables	Saving and Investment Behavior	Financial Literacy	Personal Factors	Environmental Factors
Saving and Investment Behavior	1			
Financial Literacy	.425**	1		
Personal Factors	.697**	.382**	1	
Environmental Factors	.541**	.371**	.531**	1
	.000	.000	.000	.000

** . Correlation is significant at one percentage level of significance.

Table 14 shown that strong significant relation was found between saving and investment behavior and personal factors. The association between saving and investment behavior and environmental factors was significant and moderate. Similarly, significant moderate correlation was found between saving and investment behavior and financial literacy. The significant but weak relationship was found between financial literacy and personal factors and environmental factors.

Regression Analysis

Multiple Regression Model

$$\hat{Y} = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + e_i$$

Where,

\hat{Y} = Saving and Investment Behavior (Dependent variable)

X1 = Financial Literacy

X2 = Personal Factors

X3 = Environmental Factors

α = Constant

β_i = Coefficient of slope of regression model

e_i = Error term

Table 15

Model Summary

Model	R	R Square	Adj. R Square	SE of Estimate	F-Statistic
1	.737	.544	.537	.32058	77.878 (0.000)

Predictors: (Constant), Financial Literacy, Personal Factors and Environmental Factors

Table 15 shown that R-square value 54.4% indicated a variation in saving and investment behavior (SIB) was explained by the explanatory variables. The adjusted R-square 53.7% had meant variation in saving and investment behavior (SIB) was explained by explanatory variables after the adjustment of the degree of freedom (df). Model summary indicated the standard error of the estimate of 0.32058 that had shown the variability of the observed value of saving and investment behavior from the regression line was 0.32058 units. Based on ANOVA, F- statistic was found significant (P-value =0.000), therefore, the model was a good descriptor of the relation between the dependent and independent variables.

Table 16

Impact Analysis

Variables	Coefficients	SE	t-value	p-value
(Constant)				
Financial Literacy				
Personal Factors				
Environmental Factors	.556	.230	2.417	.017
	.130	.048	2.727	.007
	.497	.055	9.092	.000
	.209	.059	3.513	.001

Based on the coefficients, the regression equation would be:

$$\hat{Y} = 0.556 + 0.13FL + 0.497PF + 0.209EF + u$$

Regression coefficients of FL, PF, EF are 0.13, 0.497 and 0.209 respectively were found significant indicated that one unit increased in FL, PF and EF would bring 0.13, 0.497 and 0.209 units increased in SLB respectively. The beta of PF was found highest, it indicated that PF had the most dominant influence in SIB. Hence, the study had accepted all the alternative hypothesis stated in the study.

Discussion

The study finds that most of the investors of Bhaktapur district are male with the highest number of respondents' officers and farmers. The investors use around 20-30% of their income to meet their future contingencies. The result is consistent with findings of Jain (2017) study which emphasizes that investors invest and save money to meet family needs in future. Likewise, most of the investors of the district prefer to invest in insurance policies. This result contradicts with Jain (2017) study, which emphasizes that respondents are mostly more interested in Banks Term deposits than other alternatives. The study finds that most of the investors are short-term profit makers rather than long-term profit makers and monitor their investment occasionally. Also the study shows that most of the investors seems to be satisfied with their investment option. The financial literacy has significantly affect the saving and investment behavior. These results are consistent with Azizah et al., (2013) study that emphasizes on the importance of financial literacy in terms of interpreting and managing money. The result also shows that technology and tools provide fruitful information regarding saving and investment behavior of the households of Bhaktapur district. The result is consistent with Lusardi (2008) study which concluded that low literacy and lack of information affect the ability to save and to secure a comfortable retirement; ignorance about basic financial concepts can be linked to lack of retirement planning and lack of wealth. Through this study it has been seen that investors feel confidence in getting information from their relatives and friends than from financial advisor. The findings of the study is consistent with findings of Gast (2017) study which emphasis on personal sources of information have played greater role as compared to official sources in bringing awareness regarding institutional investments. The respondents indicated that if they were to invest, they needed to have supportive and incremental income to invest on various alternatives; they prefer to use past performance as an indicator of future performance in stock purchase decisions. Most of them also like to invest in different alternatives if they get more return in future time. This study is consistent with Boushey (2005) study that the society should have been more careful in managing personal interest such as the desire to have family and to purchase home as those are significantly related to investment awareness and behavior. The environment factor is found significant because the respondents are more concerned on investing and saving activities. Hence, they have knowledge on the environment in terms of political, social, and economic situation. This result is consistent with the findings of Prasana (2012) and Chander and Singh (2004) studies.

Conclusion

The analysis suggests that female participation needs to be improved. Households appear to overlook the monitoring of investment activities, as they do so only occasionally. Households need to collect additional details regarding investment options in the market and select the optimal choice based on information that aligns with their income level to achieve greater returns and increased satisfaction. In this growingly competitive market, investors need to concentrate on accurate information about financial markets and investment concepts that reveal the investors' needs, resulting in their positive actions and heightened commitment to investment choices in the financial market. Financial literacy is strongly linked to behaviors related to investing and saving. A factor that prevents people from participating in planning or understanding saving and investment options, the investment process, and the specifics of their financial agreements is their limited financial literacy. Limited literacy and insufficient information hinder the capability to save and ensure successful investment activities; a lack of understanding of fundamental financial principles can be associated with detrimental saving and investment behaviors.

Financial education initiatives can enhance savings and financial choices, yet there is significantly more that can be achieved to boost the efficiency of these initiatives. Today, competition in the financial market is fiercer, making the need for accurate information, knowledge, and advice more significant than before. Additionally, income, self-optimism among investors, and their involvement (Personal Factors) significantly influence investor behavior and their investment actions. Investors should also pay attention to their personal factors (Internal Factors) when investing in various opportunities. Outstanding investors possess their investment portfolio, ready to invest in high-quality information, and remain optimistic about their returns. These characters may represent the optimistic and engaged traits of the investors.

Environmental factors like monetary policy, inflation and tax policies must be taken into consideration while doing investment as it directly affects the saving and investment behavior. Some other factors like risk and returns and their characteristics also play an important role in investment decisions. Hence, the households should have alternative plans to reduce risk and give importance to invest in innovation financially. To sum up, majority of all investors in Bhaktapur district have positive responses toward saving and investment behavior. Financial literacy, personal factors and environmental factors have significant influence on saving and investment behavior of households in Bhaktapur district.

Implications

It is recommended that various issuers of financial products, financial law and local government should initiate effective awareness programs to investors of Nepal to inculcate the saving and investment habits. Looking at the trend and investment style of female investors, financial instruments with the features of low risk, regular income, etc., should be floated to enhance their savings and investments. Investment decision relates to the decision made by investors with respect to the fund amount of funding to be deployed in investment opportunities where investment behavior plays important role in investors to grab that opportunities. The research threw light on the uncharted field of saving and investment behavior of investors of Bhaktapur district with the motive of earning more profit, every single individual becomes an investor. Financial market has become very complicated and competitive, hence investors should always select the best and suitable option from several alternatives. Consequently, active involvement, optimism and adequate knowledge and advices are considered to be vital for the success of the investors' investment decision from the financial market. Given the different factors, financial literacy, personal factors and environmental factors affect the saving and investment decision, hence, these factors should be studied constantly to enhance investing activities.

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