

BEHAVIORAL BIASES OF STOCK INVESTMENT DECISIONS OF NEPALESE INVESTORS

A Dissertation submitted to the Office of the Dean, Faculty of Management, in partial
fulfilment of the requirement for the Degree of Masters of Business Studies

by

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Certification of Authorship

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled "Behavioral Biases of Stock Investment Decisions of Nepalese Investors". The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor has it been proposed and presented as part of requirement for any other academic purposes.

The assistance and the cooperation that I have received during this research work has been acknowledged. In addition, I declare that all information sources and literature used are cited in the reference section of the dissertation.

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30-11-2021

Report of Research Committee

Ms. Midha Shakya has defended research proposal entitled "Behavioral Biases of Stock Investment Decisions of Nepalese Investors" successfully. The research committee has registered the dissertation for the further progress. It is recommended to carry out the work as per and submit the thesis for evaluation and viva voce examination.

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Approval Sheet

We have examined the dissertation entitled "Behavioral Biases of Stock Investment Decisions of Nepalese Investors" presented by Ms. Midha Shakya for the degree of Master of Business Studies (MBS). We hereby certify that the dissertation is acceptable for the award of the degree.

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ABBREVIATIONS

NEPSE	Nepal Stock Exchange
NYSE	New York Stock Exchange
UAE	United Arab Emirates
TSX	Toronto Stock Exchange
SEC	Securities Stock Exchange
SEBON	Securities Board of Nepal
NRB	Nepal Rastra Bank
ASE	Athens Stock Exchange
NSE	Nairobi Stock Exchange
AM	Arithmetic Mean
CV	Coefficient of Variation
PCA	Principal Component Analysis
KMO	Kaiser-Meyer-Olkin Measure of sampling Adequacy

Abstract

The research aimed at examining behavioral biases of stock investment decision of Nepalese investors. Behavioural finance studied the irrational aspect of human as an investor in their investment decision process. This branch of discipline indicated that cognitive biases prevent investors from realizing a complete sense of rationality at the time of investment decision-making. An act of rationality linked with a magnitude of uncertainty and risk, which is associated with every investment decision option. Various behavioural biases influence these risk and uncertainty. These behavioural biases focus on investor's behaviour and their investment decision-making process. The present study was focussed mainly on formulation and analysis of four behavioural bias, namely, anchoring, overconfidence, disposition effect, and herding behaviour. The study has been conducted only among the investors of selected business sectors inside the Kathmandu Valley within a limited time period. The study used a limited number of analysis tools to study the impact of behavioral biases of the individual investors on their decisions. The study findings should provide important Behavioral Biases of Stock Investment Decision of Nepalese Investors. Moreover, the study can also further be elaborated to investigate the impact on a group or corporate investment decision making as well. Future studies may be elaborated by analysing other behavioural biases that too have a substantial impact on individual investment decision making in their unique way. The study can also further be elaborated to investigate the impact on a group or corporate investment decision making as well.

Key words: Behavioral biases, business sustainability, Investment Decision

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Investment decisions are influenced by many factors depending on individual investor's state of mind and investment environment. Investors commonly perform investment analysis process by making use of fundamental analysis, technical analysis and judgment. Investment decisions are often supported by decision tools. It is assumed that uniqueness of individual, information structure and factors in the market influence individual's investment decisions as well as market outcomes. Investor market behaviour derives from psychological principle of decision making to explain why people buy or sell stocks. Behavioural finance therefore has been used to throw more light on why individuals buy or sell stock and why they do not buy stock at all (Thaler, 2003).

In conventional financial theory, investors are assumed to be rational wealth maximiser following basic financial rules and basing their investment strategies purely on the risk–return consideration without including psychological factors. As a result, behavioural finance is taken as a new approach to explain individual's behaviour in the market. Behavioural finance recognizes human being from a practical lens accordingly individuals in the market are human hence are either partly or fully influenced by psychological factors (Thaler, 2005). Behavioural finance implies that the use of market behaviour of investor explains the reason why individual buy and sell stock derives from the psychological principle of decision making (Werah, 2008). Accordingly, investor's decision making is not always based on rational factors but also influence by psychological ones (Sehgal & Singh, 2012; Murgea, 2008).

Behavioural finance gained remarkable attention in recent years in explaining investor behaviour and its influence on decision making. Studies explaining the individual investor's behaviour were firstly emerged about 1970's. Behavioural finance investigates the decision-making process that deals in buying or selling of financial assets and provides a rational behind decision making

process. Its main focus is on psychological principals used by investor to make investment decision. Theory which defines behavioural finance is given by Kahneman and Tyeovsky (1979); Kahneman (1982). Kahneman and Tyeovsky (1979) states that investor may not always appear as rational for investment as supposed. These Behaviourists are of the opinion that investor may behave irrationally while making investment decisions. Shefrin (1999) defined behavioural finance as "a rapidly developing area that contracts with the influence of psychology on the behaviour of financial professionals". Number of studies in behavioural finance has examined the factors that influence stock selection process of individual investor. For instance, Meriks et al. (2004) used five categories namely: accounting information, subjective/personal, neutral information, advocate suggestion, and personal monetary needs to explain the factors that influence individual investor behaviour. Nagy and Obenberger (1994) used seven classifications: social relevance, self-image/firm-image coincidence, neutral information, classic wealth maximization, accounting information, advocate recommendation, and personal financial needs. Whereas Al-Tamimi (2005) used five categories including: self and firm-image coincidence, personal financial needs, neutral information, accounting information, and advocate recommendations to analysed the individual investor behaviour in UAE financial markets. However, inadequate research attempts have been endured so far in the field of investor's behaviour focusing on the stock market of developing countries.

This study aimed at analysing the factors affecting the investment decision of individual investors in stock market of Nepal. The research also seeks to explore the influence of individual's behaviours and how each factor affects their investment behaviours. Further, the study also investigated the influence of investor's general investment behaviour on each factor. By combining all these aspects of investor's behaviour, this research crafts exceptional appeal to the existing literature of behavioural finance in developing countries, especially in the context of Nepal.

1.2 Statement of the Problem

The decisions of investors on stock market play an important role in determining the market trend, which then affects the economy. To understand and provide an appropriate explanation for the investor's decisions, it is important to explore which behavioural factors influencing the decisions of investors at Nepal Stock Exchange (NEPSE). Security organizations may also use

this information for better understanding about investors to forecast more accurately and give better recommendations.

The research in behavioural finance is comparatively less in Asia when compared to other developed countries (Das, 2012). Within behavioural finance, it is assumed that information structure and characteristics of market participants systematically influence individual's investment decisions and market outcomes (Barberis & Thaler 2003; Hirshleifer 2001; Shleifer 2000).

Hence, this study explores the following research question:

-) What are the behavioural biases of individual investors impacting on their stock investment decision-making in Nepalese share market?

Enhancing the foreign and domestic investment in Nepalese share market would contribute to the economic development. Hence, there seem to be a necessity to carry out research on investor behaviour to identify the factor determinants which influence it, a dynamic confirmed by the pilot survey of the current study.

Further, literature review conveys that very few studies carried out in the Nepalese context conveys a clear profile of the individual investor behaviours. Hence, findings of the current study would provide significant information to understand the factor determinants of the Nepalese individual investor's behaviours.

1.3 Research Objectives

As evident from the above narrated facts, behavioural factors affect the individual investor's investment decisions. The major objective of this study is to identify and assess the behavioural biases in investment decisions of individual investors. Hence, to achieve the main objective, the study has formulated following objectives:

-) To identify the behavioural biases influencing the investment decisions of individual investors, and
-) To assess the impact of behavioural biases on the stock investment decision-making of individual investors in Nepalese share market

1.4 Research Hypothesis

To achieve the research objectives, the following Hypotheses have been formulated for the study:

H₁: There is no significant relationship between behavioural biases and stock investment decision making.

H₂: Overconfidence makes no significant influence on stock investment decision-making.

H₃: Anchoring makes no significant influence on stock investment decision-making.

H₄: Disposition makes no significant influence on stock investment decision-making.

H₅: Herding makes no significant influence on stock investment decision-making.

1.5 Rationale of the Study

This study has significance for the individual investors, financial advisors, companies listed in Nepal's stock exchanges and Government. For the investors, the factors that influence their decision making are crucial as this will influence their financial plans of future. For companies' identification of the most influencing factors that influence the behaviour of their investor will affect their future strategies and plans. For financial advisor's identification of these factors will help them to suggest investments that best fits them. And finally for the government, identification of the most influencing factors will help it to modify required legislation and other procedures that are needed for satisfying the desires of investors and also giving more support to the market efficiency.

1.6 Organization of the Study

This study has been divided into five chapters which are as follow

First chapter i.e. Introduction deals and includes the background of the study, brief profile of the sample companies, statement of the problem, objectives of the study, significance of the study, limitations of the study, and organizations of study.

Second chapter deals with the review of available literature. It takes in review of the related books, journals, articles and previous unpublished Master's Degree thesis etc.

Third chapter explains the research methodology used in the study. It includes research design, population and sampling, nature and source of data, data collection tools and instruments, method of data analysis and research variables etc.

Fourth chapter, the most important chapter of the study, is the presentation and analysis of data as well as the major findings of the study.

The fifth and the last chapter cover the summary of the study, the main conclusions that flow from the study and some recommendations as well as suggestions for further improvement. Finally, an extensive references and annexure is at the end of the study.

CHAPTER II

LITERATURE REVIEW

2. Introduction

The purpose of reviewing the literature is to develop some expertise in one's area to look what new contribution can be made, and to receive some ideas for developing a research design. Their relevant finding issues, arguments and suggestion will give glimpses, guideline to the further depth of the study. In other words, there has to be continuity in research. The continuity in research is ensured by linking the present study with the past research studies.

2.1 Review of Conceptual Framework

Investment behaviour is a complex and difficult subject to comprehend and has many dimensions to it. This research tries to present a conceptual framework for investment behaviour and the factors affecting investment decisions. However, the decisions regarding investments differ for each individual depending on his risk tolerance and the objective for which such investment is made. Individual investors select various investment avenues looking at various factors that influence his decision. Investors are influenced by overconfidence bias, anchoring bias, disposition effect bias and herding bias. Overconfidence is little diversification because of a tendency to invest too much in what one is familiar with. Selecting common stocks that will outperform the market is a difficult task. Anchoring is defined as the tendency of investors to rely on some piece of information to take decision. Disposition effect relying on general agreement that the investment decision is a complex one, suggest that investors are not only concerned about risk and return when buying shares, but also several other parameters taken into consideration. Herding in financial markets can be defined as mutual imitation leading to a convergence of action. This is the most common mistake where investors tend to follow the investment decisions taken by the majority.

Theories of Investors' Behaviour

2.1.1 Regret-Theory

Regret refers to people's emotional reaction on making mistake Plous (1993). According to DeBondt & Thaler (1987) regret avoidance is consistent with both the size and book-to- market

effect. Higher book-to-market firm tend to have depressed stock prices. These firms are "out of favour" and more likely to be in a financially precarious position. Similarly, smaller less well known firms are also less conventional investments. Such firm requires more courage on the part of investor which increases the required rate of return. If investors focus on the gains or losses of individual stocks rather than on broad portfolios they can become more risk averse concerning stocks with recent poor performance, discount their cash flows at higher rate and thereby create a value-stock risk premium.

Investors consistently engage in behaviour that they regret later Evans (2002). They avoid selling shares that have decreased in value, and readily sell shares that have increased in value (Shiller, 1998; Lebaron, 1999). Psychologists have found that individuals who make decisions that turn out badly have more regret (blame themselves more) when the decision was more unconventional. For example, buying a blue-chip portfolio that turns down is not as painful as experiencing the same losses on unknown start-up firm. Any losses on a blue-chip stock can be more easily attributed to bad luck rather than bad decision and cause less regret.

Shiller (2000) outlines psychological experiment by Deutsh and Gerrard where the human tendency to concur with the majority view was shown. In the experiment, people questioned their own opinions and found everybody disagreed with it. These human tendencies are individually sensible, but collectively can lead to irrational and herding behaviour. Any investor may feel more comfortable investing in a popular stock if everybody else believed that it is a good one however responsibility of it falling will be shared with the other investors who originally expected it to do well. When the market correction deflates investor's net worth, they are more hesitant to sell at the smaller profit margin. They create mental compartments for the gains they once had, causing them to wait for the return of that gainful period (Thaler, 2001).

2.1.2 Theory of Mental Accounting

Mental accounting affects not only the personal finances but is common phenomenon in the complex world of investment. When an investor buys a new stock, it starts maintaining a new virtual account for this stock in his mind. So has each investment of its own. Once an outcome is assigned a mental account it is difficult to view that outcome in another way. When interaction among assets indifferent accounts is overlooked, this mental process can adversely affect investment wealth (Chandra, 2008).

"Losing \$100 hurts more than gaining \$100 yields pleasure. The influence of loss aversion on mental accounting is enormous" According to Thaler (1999). "The positive counterpart to regret is pride. While closing a stock amount at a loss induces regret, closing at a gain induces pride. The quest for pride and the avoidance of regret leads to a disposition to realize gains and defer losses" (Shefrin & Statman, 1985). However, there is asymmetry between the strength of pride and regret and losses loom larger than gains (Kahneman & Tversky, 1979). Asymmetry between the strength of pride and regret (regret is stronger) leads inaction to be favoured over action (Kahneman & Tversky, 1979; Thaler, 1999). Thus, investors who are prone to this bias may be reluctant to realize both gains and losses (Shefrin & Statman, 1985).

During an economic boom and bull market, people get accustomed to healthy, albeit paper, gains. When the market correction deflates investor's net worth, they are more hesitant to sell at the smaller profit margin. They create mental compartments for the gain they once had, causing them to wait for the return of that gainful period (Thaler, 2001).

2.1.3 Prospect/Loss-Aversion-Theory

According to prospect theory, investor preference goes against the traditional utility function, where investments are viewed in the light of the expected utility. This theory was developed by psychologists, Daniel Kahneman and Amos Tversky in 1979 in explaining investors' behaviour in situations involving risks. According to these scholars, people view choices by evaluating the potential gains and losses from them, in relation to a particular reference point, mostly the purchase price of the investment, or the related history and expectations of the decision maker. The way people frame an issue or outcome influences the expected utility.

Prospect theory posits that individuals are more stressed about losses, as compared to the level of happiness derived from a gain of a capital amount. People put more effort in avoiding losses as compared to making gains, and as such will hold on to losing stocks hoping they will increase in value. Kahneman and Tversky asserted that people are risk averse for losses (Johnson, 2002). The utility function is concave for gains meaning that people feel good when they gain, but twice the gain does not make them feel twice good is convex for loss meaning that people experience pain when they lose, but twice the loss does not mean twice the pain.

2.1.4 Over/Under Reacting Theory

Much of recent research has dealt with two important phenomena that occur in financial markets on a regular basis: under-reaction and overreaction. The under-reaction can be defined as the phenomenon in which the prices of securities "under-react" to the new information in short term or move slowly and poorly in reaction to the announcement of the news concerning them. Generally, it occurs that the title under-reacts to the good news at the time of its publication of bad news. This may mean that the title under-reacts to the good news at the time of its publication, but corrects this error by offering higher returns in a period immediately which generally one year (Barberis, Shleifer & Vishny, 1998).

There is ample empirical evidence demonstrating the under-reaction phenomenon. Among the most important contributions, Culter, Poterba and Summers (1989) have examined and confirmed the existence of positive auto correlation of stock returns in short term, which implies the beginning under-reaction and then an adjustment of prices to new information. The over-reaction can be defined as phenomenon in which the prices of securities " over-react" to the new information in the long term, or excessively move in reaction to a series of news concerning them. Generally, it occurs that the average bond yield in the period after the publication of good news is lower than the average yield in the period following the publication of a series of bad news. This may mean that the title over-reacts to the series of good news when they are published but corrects this error by offering lower returns later (Barberis, Shleifer & Vishny, 1998). There is ample empirical evidence also demonstrating the phenomenon of over-reaction. Among the most notable contributions, De Bondt and Thaler (1985); Fama (1998) showed the existence of negative autocorrelation of return for 3-5 years following the series of ads, which implies at the beginning over-reaction and later a price adjustment to new information.

Theory of Overconfidence

Overconfidence According to Ritter (2003) manifests itself when there is little diversification because of a tendency to invest too much in what one is familiar with. Selecting common stocks that will outperform the market is a difficult task. Predictability is low; feedback is noisy. Thus, stock selection is the type of task for which people are most overconfident (Barber & Odean, 2001).

Many individuals have an excessive confidence in their own ability that overestimate their skills, their knowledge and accuracy of their information. The concept of overconfidence is one of the most studied phenomena by Behavioural Finance. The fundamental work was published by Lichtenstein, P (1977), later a vast literature has developed, through the work of many economists. In cognitive psychology applied in various professional fields such as engineering field, entrepreneurial, psychological, legal, and managerial.

The overconfidence greatly influences the behaviour of investor in the financial markets. It is useful to underline how the excess of sureness is characteristics of people, and not of the market. To be considered particularly skilled and competent leads the agents to carry out operations that do not normally would be. In particular, the rate at which an investor buys-sells its bonds appear significantly affected, plus an operator is overconfident, the more he will carry out purchases and sales on the market. Barber and Odean (1999), show that the presence of overconfidence in financial markets lead investors to make unprofitable trading.

2.2 Review of Related Studies

This section highlights the various types of behavioural biases that influence investor decisions based on previous research concerning behavioural finance and investment decisions. Theoretical and empirical reviews of the theories that explain the concept of behavioural finance.

Overconfidence Bias

Research in behavioural finance has developed rapidly in recent years. It provides evidence that investors' financial decisions are also affected by internal and external behavioural factors (Shleifer, 2000). Behavioural biases are generally classified as being of either a cognitive or emotional type. Some believe that a proper understanding of these biases and knowing the biases a person exhibits can allow these "irrationalities" to be predicted and modelled (Ariely, 2008). Cognitive biases and emotional biases are the most prominent biases of the behaviour finance. The availability, representativeness, confirmation bias, anchoring/conservation, overconfidence, illusion of money, house money effect, mental accounting and myopia are referred to cognitive biases. Similarly, emotional biases are loss aversion, fear of regret, optimism, aversion to ambiguity, endowment effect and snake bite effect. The researchers in behavioural finance believe that investors' decisions are affected by number of beliefs and preferences (Gitman & Joehnk, 2013). Among all biases, the overconfidence bias also affects investment decisions of

investors. Investors tend to be overconfident in their judgements, which frequently lead them to underestimate the level of risks in an investment (Gitman & Joehnk, 2013).

Overconfidence bias may affect experts and professionals more often than a novice investor. An overconfident investor may invest a greater portion of their portfolio in a single security. Overconfidence results in the investor not recognizing the possibility of being in error, and the risk of that error. Overconfidence may therefore result in a riskier portfolio than anticipated. In addition, overconfidence can cause financial analysts and money managers to make predictions that they are too bold, and it may give false sense of security to the investors. Experts, investment bankers and managers have detected the overconfidence bias (Russo & Schoemaker, 1992). Overconfidence is found to be toughest for questions of reasonable to thrilling difficulty (Griffin & Tversky, 1992; Yates, 1990), and it seems to increase with the personal importance of the job (Frank, 1935). Adhikary (2010) reported that the respondent investors are mostly overconfident about their self-reported level of investment-related knowledge, experience and their ability to pick stock. Dangol and Shrestha (2018) investigated the effect of personality traits on behaviour biases. These studies showed that all the investors analyse securities in the same way and share the same economic view of the world. Investors use the same assumption that is referred to homogeneous expectation or beliefs. These beliefs are concerned with the investor's perception and their behaviour including overconfidence. This overconfidence bias affects investment decisions of the investors. Thus, this study focuses the issues-how does individual's overconfidence can influence in investment decisions among Nepalese investors? And how do selected variables like level of education, gender, etc., effect on overconfidence bias among Nepalese investors in investment decision in Nepalese stock market?

Therefore, the major objective of this study is to analyse the influence of the individuals' overconfidence in investment decision-making. Further the study assesses the effect of educational qualification on individuals' overconfidence, and the link between gender and overconfidence among the individual investors in Nepalese stock market.

Anchoring Bias

While studying investment behaviour, the most common bias which impact the decision making is anchoring. Anchoring is defined as the tendency of investors to rely on some piece of

information to take decision. The present study made an effort to systematically review the literature available on the existence and effect of anchoring bias in stock market investments.

In behavioural economics research, the pioneer work to study anchoring effect is done by Tversky and Kahneman (1974). According to Tversky and Kahneman, decision makers are generally influenced by an initially presented value called anchor. And this influence is known as anchoring effect. Following the work of Tversky and Kahneman (1974), many studies discussed the anchoring effect in several domains and lead to the existence of robust and substantial anchoring effects. For example, Sudgen et al. (2013), Adaval and Wyer (2011), Bateman et al. (2008), Cricther and Gilovich (2008), Nunes and Boatwright (2004), Simonson and Drolet (2004), Ariely et al. (2003) and Mussweiler et al. (2000) studied the anchoring effect in price estimation and willingness to pay in different experimental settings for individuals of different countries. Also in credit market, anchoring appears to be important as the firm anchor the past credit spread to pay current credit spread. Moreover, Liao et al (2013) studied the anchoring effect in Foreign Institutional Investment and concluded that prior foreign ownership influences the momentum of foreign investments. Anchoring effect is also studied in different type of financial markets such as horse race betting (Johnson & Schnytzer ,2009) real estate investment (Einio, Kaustia & Putton,2008; Saieler et al.2010; Bucchianeri & Minson, 2013). The anchoring effect has also been found important in analyst's forecasting of firm's earning (Cen, Hillary & Wei, 2013) and in macroeconomic releases (Campbell & Sharpe, 2009; Hess & Orbe, 2013). A robust and rigorous review of all major studies of anchoring effect is done by Furnham and Boo (2011). This study tries to take the study of Furnham and Boo a step ahead by narrowing the type of market and anchor. This study systematically reviews the literature on anchoring effect in investment decision making of individuals particularly in stock market.

The results also revealed that there is a certain degree of correlation between the factors that behavioural finance theory and previous empirical evidence identify as the influencing factors for the average equity investor, and the individual behaviour of active investors in the Athens Stock Exchange (ASE) influencing by the overall trends prevailing at the time of the survey in the ASE. De Bondt *et al.*, (1985) published a paper about behavioural finance in which they asked the following question:

“Does the stock market overreact?” the article gave evidence to support the hypothesis that cognitive bias (investor over-reaction to a long series of bad news) could produce predictable mispricing of stocks traded on the NYSE.

Phau and Poon, (2000) explain that several factors influence the choice between a retail store and in-home shopping methods, such as mail order, telephone order and the Internet. These influences include socio-economic and demographic factors, product type and distribution methods, perceived purchase risk, personal characteristics and traits as well as shopping or delivery time.

Disposition Effect Bias

Baker and Haslem, (1973) argued that investors are primarily concerned with expectations about the future, considering earnings projection and historical data to be of high interest to investors. On the other hand, research by Lee and Tweedie, (1975, 1976, and 1977) reveals that the general public faces problems in understanding financial reporting in the corporate sector. Blume and Friend, (1978) provide evidence that both price and earnings volatility are the primary measures of risk employed by individuals, while Schlarbaum et al., (1978) compare individuals' performance with that of professional fund managers and find that the former exhibit considerable skill in their investment decision making. Lease et al., (1974) describe individuals as “investors” rather than “traders” since they are long-term minded and give little interest to short-term yields. Moreover, Lewellen et al., (1977) reveal that investors' main source of information is through fundamental or technical analysis. Antonides and Van Der Sar, (1990) argue that the perceived risk of an investment is lower if an asset has recently increased in value, consistent with (Blume and Friend's, 1978) findings. Nagy and Obenberger, (1994) investigated the extent to which a listing of 34 variables influences shareholders' perception and provide evidence of a role for a mix of financial and non-financial variables. Fisher and Statman, (1997), relying on general agreement that the investment decision is a complex one, suggest that investors are not only concerned about risk and return when buying shares, but also several other parameters taken into consideration.

Herding Bias

Epstein (1994) examined the demand for social information by individual investors. The results indicate the usefulness of annual reports to corporate shareholders. Furthermore, most of the shareholders surveyed also want the company to report on corporate ethics, employee relations and community involvement. Behavioural models proposed by Daniel, Hirshleifer, and Subrahmanyam (1998); Hong and Stein (1999) also predict short-run return continuations and long-run return reversals. Daniel et al. argue that informed investors are overconfident about the private signal they receive about a stock's value. Biased self-attribution reinforces their overconfidence when public information agrees with their private information. When public information is not in agreement with their private signal, biased self-attribution leads to dismissal of the information as noise.

The investor who already holds a stock may respond to an analyst recommendation in one of four ways: the investor may hold stock on a sell recommendation, the investor may sell stock on a hold recommendation, the investor may hold stock on a hold recommendation, or the investor may sell stock on a sell recommendation.

Prior accounting research has examined how the type of analyst and the nature of the analyst report affect investor behaviour (Francis, & Soffer, 1997). They found that because of the existence of incentives for analysts to issue favourable recommendations, investors weight other information in the analyst report more heavily when they observe a buy rather than a sell recommendation. This factor includes purchase recommendations from brokerage houses and individual stockbrokers. Recommendations from friends or co-workers marginally loaded on this factor as well. Malmendier and Shanthi (2003) tried to answer the question: Are small investors naïve? They found that large investors generate abnormal volumes of buyer-initiated trades after a positive recommendation only if the analyst is unaffiliated. Small traders exert abnormal buy pressure after all positive recommendations, including those of affiliated analysts. Krishnan and Booker, (2002) analysed the factors influencing the decisions of investor who use analysts' recommendations to arrive at a short-term decision to hold or sell a stock. The results indicate that a strong form of the analyst summary recommendation report, i.e., one with additional

information supporting the analysts' position further, reduces the disposition error for gains and reduces the disposition error for losses.

Prospect theory proposes that certain outcomes are over weighted relative to uncertain outcomes and that the value functions are different for gains and losses (Shefrin & Statman, 1985; Weber & Camerer, 1998). Rational logic suggests that when faced with a stock with unfavourable future expectations, individuals should sell the stock regardless of their current gain or loss condition. However, prior research on sunk costs and escalation of commitment shows that people can become stuck in losing courses of action even to the point of throwing good money after bad (Arkes & Blumer, 1985; Brockner 1992; Staw & Hoang 1995). Thus, individuals may prefer to hold a losing stock and gamble on the future rather than selling and taking a sure loss and may even become more committed to holding the stock.

Herding in financial markets can be defined as mutual imitation leading to a convergence of action (Hirshleifer & Teoh, 2003). This is the most common mistake where investors tend to follow the investment decisions taken by the majority. That is why, in financial markets, when the best time to buy or sell is at hand, even the person who thinks he should take action experiences a strong psychological pressure refraining him to do so. The main reason for this is pressure from or influenced by peers. The Reliance Power IPO, 2008 is an example of an instance where many investors subscribed without having full information on the issue. Investors apply to "herd behaviour" because they are concerned with what others think of their investment decisions.

Review of Related Studies

Research in behavioural finance is relatively a new branch of study. According to scholars of behavioural finance, it is assumed that investors' market behaviour derives from psychological principles of decision making to explain why people buy or sell stocks. Potter (1971) identifies six factors: dividends, rapid growth, investment for saving purposes, quick profit through trading, professional investment management and long-term growth that affect individual investor's attitudes towards their investment decisions.

Cohn (1975) provided tentative evidence that risk aversion decreases as the investor's wealth increases, while Riley and Chow showed that risk aversion decreases not only as wealth increases, but also as age, income, and education increase.

Statman (1988) observed that people trade for both cognitive and emotional reasons. They trade because they think they have information, when in reality they make nothing but noise and trade only because trading brings them joy and pride. Trading brings pride and when decision made are profitable, but it brings regrets when they are not. Investors try to avoid the pain of regret by avoiding realization of losses, employing investment advisors as scapegoats, and avoiding stocks of companies with low reputations.

Harlow and Brown (1990) observed that psychologists would tend to believe that an individual's choice is primarily determined by factors unique to the particular decision-setting, whereas economists would assume that there were some individual specific mechanisms playing a common role in all economic decisions.

Nagy and Obenberger (1994) also analysed factors affecting behaviour of individual investor and if investors prefer wealth maximization. They also hold that attributes such as firm's ethical behaviour, international and local business, track record relating to environment are given cursory attention by individual equity investors.

Epstein (1994) examined the investor's demand for disclosure of information of social responsibility in annual report. The study analysed the usefulness of annual report to shareholders regarding the disclosure of information. Results indicate that shareholders demand for information regarding the products safety and quality. They demand for product safety as to save their investment. If the product quality is good and is properly protected, then a company can generate revenue by maintaining a good margin for profit. The study has found that some shareholder also demands for the information about business practices, code of ethics, employee's relation, company culture and corporate social responsibility by the company. And the shareholders demand for these disclosures to be audited.

According to Shefrin (1999), behavioural finance as a rapidly growing area that deals with the influence of psychology on the behaviour of financial practitioners. Behavioural finance achieved impressive strides in explaining the behavioural aspects of investment decisions.

Merikas (2003) also checked the factors affecting behaviour of on Athens equity market and concluded that individuals make their decisions of stock purchase using economic variables combined with other different variables. The result of Merikas et al. (2003) indicated that the factors are correlated to each other as provided in previous empirical studies on behavioural finance.

Hodge (2003) investigated the investor's perception of earning quality, auditor independence and the usefulness of audited financial information. It defined the earning quality as the extent to which actual and reported earning differ. The study was analysed that earning quality and auditor independence have declined over time. The research was considered whether the perception of earning quality has decreased due to reliance on the audited financial statement and its usage while making an investment decision. It found that perceived earning quality declined with the passage of time as the perceived independence of auditor and the reliability of the financial information has decreased. In addition, low perception of earning quality is related with greater reliance on financial statement has increased for decision making.

Anna, Andreas, George and Prasad (2004) examined empirical factors that influence the individual investor behaviour have varying degree of effects on the investors of Greeks Stock Exchange. The variables accounting information, subjective/personal, neutral information, advocate recommendation and personal financial needs were subdivided into other 27 variables. This study indicated the factors that have significant influence and the factors that have least influence on the Greek Stock Exchange investors. The research result showed the accounting information has significant and personal financial needs have least influence in Greek.

Lucey (2005) analysed the effect of investor feeling on decision making process. This study investigates the effect of variations in feelings of investors" decision making process. The study analysed the investor feelings in two areas. First area deals with the mood misattribution. This analysed the effect of environmental factor such as weather, social factors on equity pricing. People in good mood take the more positive decision due to the good weather conditions. The second area deals with the impact of stocks image on investor decision making. Image of stock provoke the emotions in investors to some extent derivative of the investment behaviour. The study concludes that the investor sometimes invests in a company based on whether he likes or dislikes a company.

Williams (2007) surveyed on 5170 investors across five countries, namely Australia, Canada, United Kingdom and United States of America, to analyse determinants of socially responsible investments. The results showed that investors took company environmental and social behaviour into consideration in making investment choices. Which is reflected through the stakeholders' attitude towards the company from different sides of company performance.

Chandra (2008) investigated investor psychology and different aspects of behaviour in decision making. The basic purpose of this study is to find the impact behavioural aspects and the relationship between investors' behaviour and risk. The study found out that investors are not always rational unlike the theories of standard finance. They are subject to several cognitive and emotional errors; they are suffering from several biases while taking the investment decision. Due to different investors' biases their perception change about risk taking. Results show that investors who are risk-averse in their characteristics show the risk seeking behaviour by holding the losing investments.

Mishra and Dash (2010) investigated that people living in the same society and having same income level are different in their investment behaviour. The research indicated about factors influencing the decisions in India used two factors age and gender. They admit that various factors affect the investor's behaviour. People with different age and gender have different investment behaviours. People with different ages and gender have varying persecutions. The risk level of people of different age differs as well as gender also contributes to the level risk tolerance in decision making of investments.

Mahmood (2011) conducted a study to address the impact of various factors such as financial literacy of the individual investor, accounting information available and the asymmetry of information in the market on the investment decisions made by these investors. While greater experience in the market leads to lower degree of risk undertaken by the investors. Most importantly the study inferred that perception of risk influences the investment decision process the most.

Sultana (2012) analysed the factors influencing individual equity investor's decision making and their behaviour. Decision making is the cognitive process and before taking a final decision we evaluate number of alternatives, weight them and finally select the best alternative. While taking

the decision we are influenced by different factors and change our behaviour. Same is the case for the investor's decision-making process. The most influencing factors found was stock marketability, past performance of the stock, recent price fluctuation, risk minimization, wealth maximization, social responsibility, and expert recommendation.

Kadariya (2012) investigated factor's impact on the investor decision. These factors include capital structure, political and media coverage, luck and financial education and trend analyses in the Nepalese capital market. Findings of the study shows that majority of the investors are youngsters, and they take decision considering the media coverage and friend's recommendations as good source of information. Dividend, earning, equity contribution and government control are considered the most important factors while taking the decision. Investors when bears the loss blame to the market and when earns profit take whole credit to their own abilities.

Usmani (2012) incorporated a study by taking 30 variables from diverse decision criteria including contemporary concerns. Results revealed seven homogenous groups among these 30 variables which were grouped into seven factors that address major investor considerations. The finding suggests that individual's base their stock purchase decisions on wealth-maximization criteria combined with past and present stock performance along with other diverse variable: they do not performance along with other diverse variables; they do not rely on a simple approach.

Bhushan and Medury (2013) conducted a study the role of gender in influencing the investment decision made. The study involved 118 respondents on which 55 percent were male and 45 percent females. The overall outcome of the study indicated a general inclination towards safer investment while gender difference in preferences were observed in certain investment decisions. It was also observed that overall satisfaction towards recurring deposits, fixed deposits and life insurance was extremely high.

Rao and Chalam (2013) assessed the role of socio-economic variables on the equity decision undertaken by the investors. The study was conducted that certain factor such as age did not significantly cause a difference in the level of importance attached to different investment avenues, while gender, income and occupation did significantly affect the investment decisions made. It also observed that the motive of the investment (Long Term vs Capital Gains) did have

a significant impact on the investor's decision. Finally, it was also noted that the experience of the individual investor in the markets affected their decisions about investing.

Hirshleifer (2014) observed to understand the application of psychology for finance, with a focus on individual level cognitive biases. This finding indicated that a healthy environment to run field experiments creating replicas of real-life investment decisions was a key thing to be done to boost behavioural finance. Also, found that central role of feelings in decision-making has only partially been incorporated into behavioural finance. More theoretical and empirical study is needed of how feelings affect financial decisions and the implications of this for prices and real outcomes.

Makrani and Abdi (2014) observed the effects of book value, net earnings and cash flow on stock prices of 129 selected firms listed on Tehran Stock Exchange over the period 2007-2012, the study has determined that the effects of book value net earnings as well as cash flow decreases over the time although the effects of book value in bigger market has significant role in allocating saving fund to the financing sources in need of money that will run for the economic growth and development of the country. Financial market, characterized as capital market and money market, contains investment opportunities for individuals and businesses with surplus funds, at the same time it is the cheapest sources of financing for businesses with deficiency of capital. Capital market is composed of equity and long-term debt instruments of the companies. Money market represents securities with short-term maturity period that also meet up the working capital requirements of firms. Apart from banking system, financial market is a formal channel of loan able fund in the economy.

Mutswenje (2014) conducted the survey on the Nairobi Stock Exchange. The study was conducted on the 42 investors out of 50 investors that constituted the sample size. The objective of the study was to identify the factors influencing investment decisions in NSE. Results of factor analysis revealed that the most important factors were: Firms position and performance; Third party opinion; The goodwill of the firm and accounting information; Perception towards the firm; Environmental factors; Firms feeling and Risk minimization.

Islamoglu, Apan and Ayavali (2015) revealed that individuals asking for information follow-up display traditional investment behaviour. It was found that investors' interests in investment instruments change in parallel with the level of income and their level of income was influential

to decide on investment maturity. Furthermore, investors decided by considering their experiences and expert opinions. The results of the analysis showed that investors are affected by several factors such as income level, past investment experiences, expert and other investors' opinions and financial stability.

Aduda, Oduor and Onwonga (2017) determined the financial performance and behaviour of individual investors when in the NSE listed shares. Questionnaire survey and secondary data retrieved from CMA and NSE were used in study. Some investors were found to be irrational in decision making, and they often made losses in their investment as result of herding and irrationality. Most of the investors who responded were male, signifying men's confidence in their ability to outperform the market. A majority of the investors were Bachelor's degree holders hence sufficiently educated to make investment decisions. Other factors that were found to determine investment behaviour included improved stock exchange, influence from friends, family and colleagues, inflation, management stability, number of available shares, stock capitalization level and family and religious background.

2.3 Research Gap

Nepalese investors have developed an increasing interest in the primary market, especially the primary market, has been fast growing. The investor should be aware of risks and returns. However, there are many research works related to individual investor's decision in Nepal. Furthermore, previous studies had use limited and demographic variables only on investors' investment decision. Thus, with this several of research gap found in previous studies, the research has been conducted to analyze the investor's decision to made investment in stock, preference over investment sector, investor's preference on the performance of the company or market information. For the primary data analysis this research has tried to involve more and more people from various sectors like bank, university, business. Also, this research has tried to analyse the influencing factor s for investment decision and the role of whim and rumor to investing decision of investors while investing on the stock market.

Pandit (2021) investigated that Behavioral finance studies the psychological and sociological factors that influence the financial decision making process of individuals, groups, and entities. Small investors, portfolio manager and board of trustee member are included in individual,

portfolio investors (Mutual fund) and a group of shareholders are included in the group and financial institutions and non-profit organizations are included in entities.

Sthapit et al. (2018) concluded that stock market index, incoming remittance and interest rate are the major macroeconomic variables explaining the investment opportunities in the IPO activities for Nepalese investors. The stock market index and the incoming remittance have statistically significant, optimistic impact on the investor for the application on number of IPOs issued. But in contrast, the interest rate has negative impact on the IPO activities, as it has a significant, negative fundamental relationship with the number of IPOs issued in the Nepalese primary market. Likewise, this study has discovered significant impact of remittance on the primary market activities in Nepal; reiterating the importance of remittance in Nepalese economy, as firms have relied on the liquidity brought in by inward remittances to cater to their fund requirements met through IPOs. The findings have made the study valuable, as it has analyzed the impact of remittance on the primary market activities, more particularly on IPO activities and reveals that interest rate as a macroeconomic situation indicator has a negative impact on IPO activities and all its proxy. Since investors consider IPOs to be safer and high yielding investment opportunity, a lower interest rate in the market means that investors are able to borrow more and invest more on IPOs implying that a larger number of firms are willing to issue IPOs, that too in a larger amount of issuance.

Rana (2019) conducted a study to explore the factors associated with individual investors' stock investment decision in the context of stock market in Nepal. The study also aims to examine the relative importance of investment decision factors as perceived by investors based on their demographic characteristics. The study uses a sample response of 106 individual investors obtained through structured questionnaire survey during the period January to April, 2019. The study employs exploratory factor analysis to extract the common factors affecting stock investment decisions of the sample investors. The results of factor analysis show that six factors, namely Earnings and Image Factors, Corporate Governance and Positioning Factors, Goodwill and Market Share Factors, Industry Competition and Size Factors, Fundamental Market Factors, and Decision-Making Factors are the common factors affecting stock investment decision of the sample investors in Nepal. The results also show that among the six factors extracted, Fundamental Market Factors have high relative importance as perceived by the sample investors.

Dangol and Manandhar (2020) conducted a study to assess the impact of heuristics on the investment decision by analyzing the effect of four heuristic biases, i.e., representativeness, availability, anchoring and adjustment, and overconfidence bias on rationality of Nepalese investors' investment decision-making and also examined the moderating effect of the internal locus of control in between. The study result indicates that there is a significant relationship between irrationality in investment decision making and all four heuristic biases. In addition, the study also concludes that locus of control has significant moderating effect in the relationship between investment decisions and three heuristic biases, i.e., availability, representative and anchoring bias. However, the study documents no moderation effect in case of relationship of investment decision with overconfidence bias.

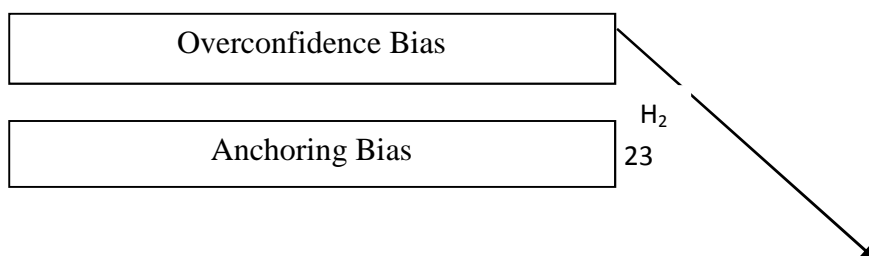
Shrestha (2020) conducted a study focuses on the factors influencing investment decisions of Nepalese investors in the stock market, with a sample size of 110 respondents of Surkhet Valley. The factors influencing investing decision are grouped into three main variables, i.e., company related variable (CRV), risk and return related variable (RRV), and market related variable (MRV). In company related variable factors such as management team, financial performance, size, EPS, DPS are included, in risk return related variable expected return, past return, risk of the company, liquid securities etc. are included, and in market related variable factors such as market information, market price per share, dividend growths, etc., are included. This study found that investment decision of Nepalese investor is more influenced by company related variable (CRV) than market related variable (MRV) and risk and return related variable (RRV). Positive and significant coefficient of company related variable (CRV) is observed in all regression models. It can, therefore, be concluded that the Nepalese investor makes investment decision observing the company related variable of Nepalese companies.

2.4 Conceptual Framework

This section briefly discusses the theoretical framework of this study by identifying the study variables.

Independent variables

Dependent variables



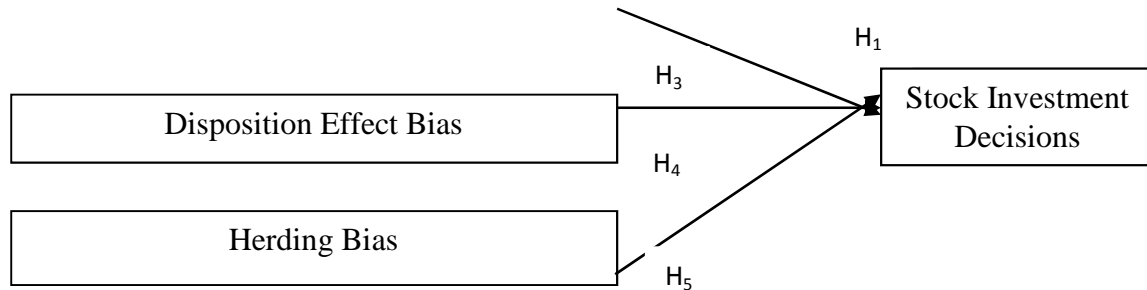


Figure 2.4: Study Framework (Conceptual Framework)

Independent Variables

In this study, the independent variable included four components: Overconfidence bias, Anchoring bias, Disposition effect bias and Herding bias

Overconfidence bias: There are several dimensions to confidence. It can give more courage, and is often viewed as a key to success. Although confidence is often encouraged and celebrated, it is not the only factor to success. The investors who are cautious and analytical can achieve success and others have to withdraw. Yet, confidence, especially self-confidence, is often viewed as a positive trait. Sometimes, the investors overestimate their predictive skills or assuming more knowledge than they have. Many times it leads excessive trading. (Nepali, 2019).

Anchoring bias: It describes the common human tendency to rely too heavily, or ‘anchor’ on one trait or piece of information when making decisions. When presented with new information, the investors tend to be slow to change or the value scale is fixed or anchored by recent observations. They are expecting the trend of earning is to remain with historical trend, which may lead to possible under reactions to trend changes (Pandey, Chaubey, & Tripathi, 2016).

Disposition effect bias: As per Regret Theory, people anticipate regret if they make a wrong choice, and take this anticipation into consideration when making decisions. This probably makes them loss-averse. When thinking ahead, they may experience anticipatory regret, as they realize that they may regret in the future. This can be a powerful dissuader or create a specific motivation to do one thing in order to avoid something else. (Pokharel, 2018).

Herding bias: Neutral information refers to the recent movement of price in a firm's stock, current economic indicators, information obtained from the Internet, fluctuation/developments in the stock index, statements from government officials, coverage in the press, and government holdings (Kadariya, 2012).

The short term decision making process directly and simultaneously contributes to over confidence, Social Contagion and Representative Heuristic whereas it has a negative effect on Risk aversion, Disposition Effect and Cognitive Dissonance. This is because, overconfident investors tend to overestimate their private information and it further leads to more aggressive trade. In other words, their attitude towards risk is consistent, regardless of whether their assets have appreciated or lost. Therefore, a higher overconfidence implies lower risk aversion and the findings are consistent with this notion in the context of short term investors.

Dependent Variable: Level of individual investment decision is dependent variable of this study. individual investment decision is a psychometric instrument specially designed to measure financial behaviour of investor.

Stock Investment Decisions: This study investigated the role of behavioural finance and investor psychology in investment decision-making at the Nepal Stock Exchange with special reference to institutional investors. Using a sample of 23 institutional investors, the study established that behavioural factors such as representativeness, overconfidence, anchoring, Disposition effect bias and Herding bias affected the decisions of the institutional investors operating at the NEPSE. Moreover, these investors made reference to the trading activity of the other institutional investors.

The research has the usual limitations of a survey study. First, the respondents are not randomly selected. While the respondents are selected to match the general population, those who join the survey may be analytically different in ways that limit the generalizability of the results. It is also possible that the preferences stated in surveys may differ from actual behaviour. For two reasons, we propose that the results of this research are relevant. First, the results support almost all the hypotheses, which were developed for the study. Second, an important question is whether the behavioural aspects that influence investing among the short term investors are different from the traits that influence investing among the long term investors. While the respondents were not

required to provide information on how long they held individual stocks, information on their intentions towards long term/ short term profits were collected, since it is highly correlated with investment decision making. Stock investors who focus on long-term capital appreciation are probably very different from day traders.

CHAPTER-III

RESEARCH METHODOLOGY

3.1 Introduction

The study adopted a descriptive research design. The descriptive research design is a fact-finding operation searching for adequate information. It is undertaken to ascertain and be able to describe the characteristics of variables of interest. It is a type of study, which is generally conducted to assess the opinions, behaviours, or the characteristics of a given population. According to Oso and Onen (2009) prior to carrying out the study there is need to determine the respondents, the data collection procedures, tools and instruments which would aid in data collection.

3.2 Research Design

The research design identifies the procedures by which the population was selected, how these subjects were used to yield the required data. Mugenda (1999) notes that a survey research attempts to collect data from members of a population and describes existing phenomena by asking individuals about their opinion, attitudes, behaviour, or values. This design is suitable for this kind of study because the researcher intended to collect data meant to ascertain facts investment decisions in Nepal. This kind of research methodology makes use of surveys to

solicit investors Inform opinion. It is often used to study the general condition of people and organizations as it investigates the behaviour and opinion of people usually through questioning them (Cooper & Schindler, 2003).

3.3 Nature and Sources of Data

Data is a piece of fact, the wholesome aggregate of which gives the information. This information in fact contributes to the inquiry of truth and approaches towards the reality. Data will be collected through five-point Likert scale structured questionnaire. Since, this study has adopted a descriptive approach to analyse the causal relationship between the study variables; the data are helpful for generalization.

Reliability of the data obtained from questionnaire will be examined by experts. A construct composite reliability co-efficient (Cronbach alpha) of 0.6 or above for all the constructs will be considered adequate for this study.

In this study validity of the data collected through questionnaire will check on face validity, experts were consulted for improving the validity of the questionnaire, following which a few sections of the questionnaire were modified.

3.4 Population and Sample

Sample is defined as a smaller representation of a larger whole, whereas sampling is defined as the process of selecting a subset of randomized number of the members of population of the study. As for this present study, since the population size of the individual investors of NEPSE was unknown, a convenience sampling technique was chosen, as it is deemed to be the preferable technique to receive the highest rate of response the respondents are highly scattered and largely unknown. The sampling data was collected from people investing in the stock market.

3.5 Data Collection Tools and Instruments

Primary data was collected using questionnaires (appendix I) which were examined by the researcher personally. The questionnaire items represented four categories: overconfidence bias, disposition effect bias, anchoring bias, and herding bias. The questionnaires were administered to the individual investors personally. This method was appropriate since it encouraged prompt responses from the respondents. The questionnaire was structured into two sections. Section 1

sought to capture the general data (Biodata) about the investor. Section 2 was concerned with the data on factors that affect individual investment decisions. The developed questionnaire included items which corresponded to overconfidence bias, disposition effect bias, anchoring bias and herding bias. Respondents were asked to indicate their degree of how they are influenced by each of the items on five-point Likert scale.

3.6 Data Processing and Presentation

Most of the data collected were not in the same form that this study requires. That is why the data has been processed or changed from its original form to the required form where necessary and where it is not necessary the original form of data has been used throughout the study and these data were presented in chart with supporting interpretations, to find meet the present objectives of the study.

3.7 Data Analysis Tools

Analysis and presentation of the data is the core of each research work. In order to get correct result from this research, data were analysed by using different types of descriptive and analytical tools. In this study, various mathematical and statistical tools have been used to achieve the objective of the study. The various tools applied in this study, have been briefly presented as under:

3.7.1 Statistical Tools

The relationship between two or more variables can be measured by using statistical tools. In this study, the following statistical tools are used such as, mean, standard deviation, coefficient of variation, correlation co-efficient and Cronbach's' Alpha.

Cronbach's' Alpha ()

Cronbach's' alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. It is a measure of scale reliability. A "high" value for alpha does not imply that the measure is unidimensional. If, in addition to measuring internal consistency, you wish to provide evidence that the scale in question is unidimensional, additional analyses can be performed. Exploratory factor analysis is one method of checking dimensionality. Technically

speaking, Cronbach's alpha is not a statistical test- it is a coefficient of reliability (or consistency).

3.7.2 Proposed Study Model (Regression-based model)

The study model is based on a regression equation. Regression is a statistical measure that attempts to determine the strength of the relationship between one dependent variable and one or more independent variables. It includes many techniques for modelling and analysing several variables to understand the relationship between variables.

In this study, the proposed regression equation formulated to examine the direction of relationship between independent variables and dependent variables for all samples and their causal relationship. The theoretical model for the relationship is formulated as equation below:

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + e_i \dots\dots\dots (i)$$

Where,

β_0 = Intercept, β_1 = Coefficient

$$SID = \beta_0 + \beta_1 OCB + \beta_2 AB + \beta_3 DEB + \beta_4 HB + e_i$$

SID= Stock Investment Decision

OCB= Overconfidence Bias

AB= Anchoring Bias

DEB= Disposition Effect Bias

HB= Herding Bias

e_i = error terms E

3.8 Limitations of the Study

-) Respondents are confined to the Kathmandu Metropolis, thus the results and findings can be viewed in that context only.
-) The respondents have been interviewed personally to get their maximum responses. Hence, Responses may be personally biased.

-) Only limited analytical tools were used; it may constrain the extent the data results could be generalised.
-) The study has been conducted employees of selected investors inside the Kathmandu valley. Thus, the findings may not be generalizable to the whole investors.
-) Only four independent variables i.e. Overconfidence bias, anchoring bias, disposition effect bias and herding bias have been considered for the entire study.
-) The validity of the study depends on the accuracy of information provided by the respondents to be covered on the study.

CHAPTER-IV

PRESENTATION AND ANALYSIS OF DATA

Presentation and analysis of data is an important stage of the research study. The main purpose of analysing the data is to change it from the unprocessed form to an understandable presentation. The analysis of data consists of organizing data by tabulating and then placing the data in presentable form by using figures and table. In this chapter, the available data are presented for the evaluation of investor's behaviour. For the accomplishment of the objectives, defined course of research methodology has been followed and effort has been made to analyse the Investor's behaviour in Nepal stock exchange.

The purpose of this chapter is to analyze and interpret the data collected during the study and present the results of the questionnaire survey. The main objective of this research study will be fulfilled with the outcomes derived from the analysis of the data. This chapter also covers the test of hypotheses which have been set in the chapter one. Each hypothesis is tested and analyzed individually and also taking into account the background and demographics of the respondents.

This section is further sub-divided into four sub-sections. The first part deals with the respondents' profile. The second part analyzes and interprets the tendency, standard deviations, minimum and maximum of the responses. The third section determines and analyzes the collected data through correlation of dependent and independent variables. This section is test of hypotheses already set in previous chapter. And, the final part is the discussion of the results obtained through analysis.

4.1 ANALYSIS OF DATA

Data was collected and analysed in systematic way to derive the empirical findings. This section includes the empirical investigation which was conducted in the form of field survey of respondents through structured questionnaire distributed to the sample selected.

For establishing reliability of the study, the questionnaire was developed carefully along with use of correct word and meaning. A study was conducted for pre-test among certain number of respondents to detect any kind of misunderstanding in the question. Cronbach's Alpha coefficients were also calculated to identify the reliability of the instruments used.

The study comprised of results and interpretation of the data. First, the Cronbach's alpha test for measurement of reliability done. Secondly, the correlation coefficient among the behavioural biases and investment decision making is studied. The results of the reliability test (Table 1) indicated that the value of Cronbach Alpha is 0.746. Therefore, the scale is reliable as the value of Cronbach alpha is more significant than 0.6.

4.1.1 Reliability Statistics

The table 1 displays the Cronbach's alpha test for measurement of reliability. Reliability of the questionnaire was evaluated through administration of the said instrument to the pilot group. A construct composite reliability co-efficient (Cronbach alpha) of 0.6 or above, for all the constructs, was considered adequate for this study. The acceptable reliability coefficient is 0.6 and above. Cronbach Alpha was used to test the reliability of the research instrument. Validity and reliability are the criteria for good measurement. The main purpose of testing validity and reliability is testing error. Validity results from careful planning of questionnaires. Reliability means the consistency between measurement scores.

Table 1

Reliability Statistics test using Cronbach's alpha

<i>Factors</i>	<i>Cronbach's alpha</i>
<i>Overconfidence</i>	
Stock Market Value	
Expected Dividend	0.621
On the basis of Liquidity	
Volatile Stock	
<i>Anchoring Bias</i>	
Current Economic Indicators	
Information obtained	
General and financial press coverage	
Fluctuation/developments in the stock index	
Government Holdings	0.609
Recent price movement of a firm's stock	
Firm's commitment Responsibility	
Current Economic Indicators	
Information obtained from internet	
General and financial press coverage of stock	
<i>Disposition Effect Bias</i>	
Expected corporate earnings	
Dividend Paid	0.608
Regular Financial statement condition	
Expected corporate earnings	
<i>Herding Bias</i>	
Ease of obtaining borrowed funds	
Expected Losses in financial markets	0.719
Diversification Needs	
Attractiveness of non-stock investment	

The result of reliability analysis is presented in table 1. The higher values of Cronbach's alpha suggested that the instruments were reliable. The overall Cronbach's alpha which is also known as internal consistency estimate of reliability of test scores for 4 factors were 0.746 and the individual Cronbach's alpha were also meeting the acceptable value 0.6.

4.1.2 Respondents' Profile with Demographic Variables

The Table 2 displays the respondents profile from those participated in the questionnaire Survey on the strata of age, gender and name of the organization. The respondents were given questionnaire in which they filled from their perspective. The Table 3 displays the respondents profile from those participated in the questionnaire Survey on the strata of age, gender and name of the organization. The respondents were given questionnaire in which they filled from their perspective.

Table 2

Respondents' Profile with Demographic Variables

<i>Demographic Components</i>	<i>Frequency</i>	<i>Percentage</i>
<i>Age</i>		
18-25	84	35.8
25-30	73	28.4
30-35	17	7.5
Above 35	77	26.8
<i>Gender</i>		
Male	207	85.9
Female	29	11.8
<i>Level of Education</i>		
Undergraduate	58	25.8
Graduate	84	34.5

Postgraduate	88	38.7
Other	7	2.6
<i>Profession</i>		
Business	127	52.8
Salaried	114	49.2
<i>Experience</i>		
Under 5 years	89	38.2
6-7 years	30	13.1
8-10 years	45	17.8
11-15 years	40	16.7
Above 15 years	33	13.2

Note: Field survey, 2021

Table 2 depicts that 4/5th of the respondents are male of young age mostly from age 26-35 years old having minimum PLC level education with less than half were having investment education with experience of investing minimum 1 years invested their saved money for the investment. As per the above-mentioned table and field survey the data is collected on the basis of age, gender, level of education, profession and experience. Whereas the age is categorized in the four level it starts from 18-25 which have the highest frequency level and highest percentages, next is 25-30 which have frequency level of 73 and 28.4 percentage, next one is 30-35 where the frequency level is 17 and the 7.5 percentage and final the last category is above 35 and percentage 26.8. We can assume that higher the frequency higher the level of percentage and vice versa. As per the base of gender it is categories in two parts male and female where the male category has frequency level of 207 and percentage 85.9 and the female has only 29 level of frequency and 11.8 level of percentage. It shows the male have higher level of frequency then the female.

As per the base of level of education it is categorized in four parts undergraduate, graduate, postgraduate and others. Where the undergraduate has 58 level of frequency and the level of 25.8 level of percentage, whereas graduate have 84 level of frequency and 34.5 level of percentage, whereas the postgraduate has 88 level of frequency and 38.7 level of percentage and

the last one is categorized as the other level which have frequency level of 7 and 2.6 level of percentage. The another bas is profession which has categorized in two parts business and salaried whereas the business has 127 level of frequency 52.8 level of percentage and salaried has the 114 level of frequency and 49.2 level of percentage. So we can say that the salaried has the highest level of frequency and percentage than the business. The last base is on the experience which is categorized in the parts they are under five years which has highest level of frequency 89.92 and the highest level of percentage 38.2.

Whereas another category is 6 to 7 year of experience which have 30 level of frequency and 13.1 level of percentage. Another category is 8 to 10 year of experience which have 45 level of frequency 17.8 level of percentage. The second last category is 11 to 15 year of experience which have 40 level of frequency and 16.7 level of percentage. And the last category is above 15 year of experience which have 33 level of frequency and 13.2 level of percentage.

4.1.3 Behavioural Biases on Investment Decisions

The recent behavioural finance literature has proposed a number of behavioural factors. However, some previous studies typically focus on only one behavioural factor. One of our contributions is to examine different behavioural factors jointly, and measure how they relate to each other and to other investor characteristics. Figure 1 depicts the standardized output of the structural model. All the coefficients have statistically significant values. The first variable “*Herding*” has a coefficient of 0.05 for long term investors and 0.44 for short term investors. This construct has substantial positive loadings on Social Contagion and Representative Heuristic. The results suggest that this construct reflects that short term investors have a tendency to follow crowd more than long term investors.

Table 3

Overconfidence Bias

	<i>Mean</i>	<i>Standard Deviation</i>	<i>Coefficient of Variation</i>
Stock Market Value	3.6224	0.7011	0.1935

Expected Dividend	3.9375	0.6433	0.1634
On the basis of Liquidity	3.3542	1.0933	0.3260
Volatile Stock	3.3229	0.8850	0.2663

Note: Field survey, 2021

Table 3 depicts that most of the respondents are significantly influenced by the dividend which the firms will announced at each year after the financial year ends though their investment decision is also guided by market value of firm's stock. As per the above mentioned table and calculation of behaviour basis of investment decision. The behaviour base is mainly based on the four categories they are stock value, expected dividend, on the basis of liquidity and the volatile stock. As per the result calculated in the table stock value mean, standard deviation and coefficient of variation are respectively 3.6224, 0.7011 and 0.1935.

Whereas the expected dividend mean, standard deviation and coefficient of variation are respectively 3.9375, 0.6433 and 0.16338. As per the on the basis of liquidity mean, standard deviation and coefficient of variation are respectively 3.3542, 1.0933 and 0.3289. And as per the last category volatile stock mean, standard deviation and coefficient of variation are respectively 3.3229, 0.8849 and 0.2663. Expected dividend have highest level of mean and volatile stock have lowest level of mean. On the basis of liquidity highest level of standard deviation and the stock value have the lowest level of the standard deviation. On the basis of coefficient of variation on the basis of liquidity has the highest level of coefficient of variation and expected dividend has the minimum level of CV.

Table 4

Anchoring Bias

	<i>Mean</i>	<i>Standard Deviation</i>	<i>Coefficient of Variation</i>
Current Economic Indicators e.g. Inflation rate	3.3307	0.5893	0.1769
Information obtained from internet and existing shareholders	3.5104	0.6381	0.1818
General and financial press coverage of the firm's stock	3.7292	0.5355	0.1436

Fluctuation/developments in the stock index	3.5651	0.6140	0.1722
Government Holdings	3.9297	0.5434	0.1382
Recent price movement of a firm's stock	4.6875	0.5515	0.1177
Firm's commitment toward Corporate Social Responsibility	2.0703	0.6445	0.3113

Note: Field survey, 2021

From the above table 4 it was inferred that most of the respondent's investment decision is highly impacted by recent price movement of firm's stock and government holdings on firm. As per the table on the anchoring bias there are mainly seven base where the results are interpreted they are inflation rate, information obtained from internet and existing shareholders, General and financial press coverage of the firm's stock, development in the stock index. Government holdings, recent price movement of a firm's stock & Firms commitment towards corporate social responsibility.

Whereas the mean of inflation rate, information obtained from internet and existing shareholders, General and financial press coverage of the firm's stock, development in the stock index. Government holdings, recent price movement of a firm's stock & Firms commitment towards corporate social responsibility are respectively 3.3307, 3.5104, 3.7292, 3.5651, 3.9297, 4.6875 and 2.0730.

Like as the standard deviation of Inflation rate, information obtained from internet and existing shareholders, General and financial press coverage of the firm's stock, development in the stock index. Government holdings, recent price movement of a firm's stock & Firms commitment towards corporate social responsibility are respectively 0.5893, 0.6381, 0.5355, 0.6140, 0.5434, 0.5515 and 0.6445. And finally the Coefficient of variation of the Inflation rate, information obtained from internet and existing shareholders, General and financial press coverage of the firm's stock, development in the stock index. Government holdings, recent price movement of a firm's stock & Firms commitment towards corporate social responsibility are respectively 0.1769, 0.1818, 0.1436, 0.1722, 0.1382, 0.1177 and 0.3113.

As per the analysis of mean recent price movement have highest level & Firm's commitment toward corporate social responsibility have the lowest level of mean. Like as the analysis of standard deviation development in the stock index have maximum level and general and

financial press coverage of the firm's stock have minimum level of standard deviation. Finally, analysis as per the coefficient of variation firm's commitment towards corporate social responsibility have the maximum level and recent price movement of firm's stock have the minimum level of standard deviation.

Table 5

Disposition Effect Bias

	<i>Mean</i>	<i>Standard Deviation</i>	<i>Coefficient of Variation</i>
Expected corporate earnings	3.7005	0.6515	0.1761
Dividend Paid	1.1797	0.5226	0.4430
Regular Financial statement condition	3.0964	0.6288	0.2031

Note: Field survey, 2021

Table 5 depicts that expected corporate earnings significantly impact the individual investment decisions but individual investor also look for regular financial statement condition of firms too. As per the above mentioned table there are three disposition effects bias they are the expected corporate earnings. Dividend paid and Regular financial statement condition. Whereas the expected corporate earnings have mean standard deviation and coefficient of variance respectively 3.7005, 0.6515 and 0.1761. Whereas the Dividend paid have mean standard deviation and coefficient of variance respectively 1.1797, 0.5226 and 0.4430 respectively.

And finally, the financial statement condition has mean standard deviation and coefficient of variance respectively 3.0964, 0.6288 and 0.2031. As per the mean analysis Expected corporate have maximum level and dividend paid have minimum level of mean. On the analysis of Standard deviation expected corporate earnings have maximum level and Dividend paid have minimum level of Standard deviation. And final on the analysis of Coefficient of variation Dividend paid have maximum level and expected corporate earnings have minimum level of Coefficient of variation.

Table 6

Herding Bias

	<i>Mean</i>	<i>Standard Deviation</i>	<i>Coefficient of Variation</i>
Ease of obtaining borrowed funds	3.0833	0.9873	0.3202
Expected Losses in national and international financial markets	3.1224	1.0261	0.3286
Diversification Needs	2.6589	1.1566	0.4350
Attractiveness of non-stock investment	2.5078	0.8791	0.3505

Note: Field survey, 2021

Table 6 depicts that expected losses in national and international financial markets and ease of obtaining borrowed funds significantly influences the investor investment decisions. As per the table there are mainly four base where the results are calculated and interpreted. They are Ease of obtaining borrowed funds, expected losses in national and international financial markets, Diversification needs and Attractiveness of non-stock investment. Whereas the mean of Ease of obtaining borrowed funds, expected losses in national and international financial markets, Diversification needs and Attractiveness of non-stock investment are respectively 3.0833, 3.1244, 2.6589 & 2.5078.

Like as the standard deviation of Ease of obtaining borrowed funds, expected losses in national and international financial markets, Diversification needs and Attractiveness of non-stock investment are respectively 0.9873, 1.0261, 1.1566 & 0.8791. And at last the coefficient of variance of Ease of obtaining borrowed funds, expected losses in national and international financial markets, Diversification needs and Attractiveness of non-stock investment are respectively 0.3202, 0.3286, 0.4350 & 0.3505.

As per the analysis of mean expected losses in national and international financial markets has higher level & Attractiveness of non-stock investment has the minimum level of mean. Like as the analysis of Standard Deviation Diversification needs have higher level & Attractiveness of non-stock investment have minimum level of Standard deviation. And finally as per the analysis of coefficient of variance Diversification needs has higher level and Ease of obtaining borrowed funds have minimum level of coefficient of variation.

Table 7

Ranks of behavioural biases (independent variables) in influencing the share investment decisions

	<i>Mean</i>	<i>Ranks</i>
Herding bias	3.5461	1
Over-confidence Bias	3.5508	2
Disposition Effect Bias	2.6589	3
Anchoring Bias	2.8431	4

Note: - Field survey, 2021

From the above table 7 it inferred that the classical wealth maximization is the major factors which influences significantly individual investment decisions. As per the above maintained table the mean of the four bias herding bias, overconfidence bias, Anchoring Bias & Disposition Effect are shown are ranked on the basis of mean. The mean of herding bias, overconfidence bias, Disposition effect Bias and Anchoring Bias are respectively 3.5461, 3.5508, 2.6589 & 2.8431. And rank is given on the basis of rank the respectively as per herding bias, overconfidence bias, Disposition Effect Bias and Anchoring Bias 1, 2, 3 & 4. Higher the mean initial rank and vice versa.

4.1.4 Relationship between variables for all samples: Correlation coefficient

Basically, correlation is the study of relationship or association between two or more variables. A positive correlation indicates the extent to which those variables increase or decrease in parallel; a negative correlation indicates the extent to which one variable increases as the other decreases whereas zero correlation indicates that there is no relationship between the variables. The table 8 depicts the correlation analysis of the major variables under study. In our study, the correlation analysis is conducted to find out the impact of the independent variables (Overconfidence Bias, Anchoring Bias, Disposition Effect Bias and Herding Bias) on dependent variables (Stock Investment Decisions). The table presents correlation analysis between different variables under study where Overconfidence Bias refers to behavioural bias of individual investors towards Stock Investment Decision, anchoring bias refers to behavioural bias of individual investors towards Stock Investment Decision, Disposition effect bias refers to behavioural bias of

individual investors towards Stock Investment Decision and Herding bias refers to behavioural bias of individual investors towards Stock Investment Decision.

Table 8

Correlation between the variables under study

	<i>Overconfidence Bias</i>	<i>Anchoring Bias</i>	<i>Disposition Effect Bias</i>	<i>Herding bias</i>
Overconfidence Bias	1			
Anchoring Bias	0.370** (0.001)	1		
Disposition effect Bias	0.457** (0.001)	0.502** (0.001)	1	
Herding Bias	0.445** (0.001)	0.465** (0.001)	0.530** (0.001)	1

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

Note: Figures within the parenthesis indicate p-values

Note: Field survey, 2021

Table 8 depicts that correlation analysis shows all the independent variables: overconfidence bias, anchoring bias, disposition effect bias and herding bias significantly influences the investor investment decisions. As per the above mentioned table correlation of different variables are shown they are overconfidence Bias, Anchoring Bias, Deposition effect Bias and Herding Bias shown the correlation with each other. The correlation of overconfidence Bias, Anchoring Bias, Disposition Effect Bias & Herding Bias with Overconfidence are respectively are 1, 0.370, 0.457 & 0.445. Like as the correlation of overconfidence Bias, Disposition Effect Bias & Herding Bias with Anchoring bias are respectively (0.001), 1, 0.520 & 0.465.

Whereas the correlation of correlation of overconfidence Bias, Anchoring Bias, Disposition Effect Bias & Herding Bias with anchoring bias are respectively (0.001), (0.001), 1 & 0.530 & Finally the correlation with correlation of overconfidence Bias, Anchoring Bias, Disposition Effect Bias & Herding Bias with deposit effects are respectively (0.001), (0.001), (0.001) & 1.

4.1.5 Regression Analysis of the variables

In the study, regression analysis helps to find out the impact of independent variables on the dependent variables where all the independent variables at the same time to find out their combine impact on the dependent variable. The table presents regression analysis of the impact of independent variables (Overconfidence Bias, Anchoring Bias, Disposition Effect Bias and Herding Bias) on dependent variables (Stock Investment Decision). Business sustainability can be understood as business success in the long term.

The values in parentheses are p-value. A p-value less than 0.05 (typically 0.05) is statistically significant. It indicates strong evidence against the null hypothesis, as there is less than a 5% probability the null is correct (and the results are random). Therefore, we reject the null hypothesis, and accept the alternative hypothesis.

The regression analysis is presented in Table 9.

Table 9

The table presents regression analysis of the impact of independent variables on dependent variable (business sustainability) of commercial banks. The values in parentheses are p-value.

Regression Analysis of variables under study

Regression of behavioural biases of Stock Investment Decisions	
Dependent Variable: Stock Investment Decision (SID)	
SID = + OCB+ AB+ DEB+ HB+ e _i	
Coefficients	
(Constant)	1.006** (0.008)

Factor 1: Overconfidence Bias (OCB)	0.253 (0.006)
Factor 2: Anchoring Bias (AB)	0.251 (0.003)
Factor 3: Disposition Effect Bias (DEB)	0.329* (0.001)
Factor 4: Herding Bias (HB)	0.329 (0.001)
F-value	28.198* (.000)
R-square (R ²)	0.235
Adjusted R-square (R ²)	0.218

Significant at the 0.01 level (2-tailed). *p<.01, **p<0.05

Note: Figures within the parenthesis indicate p-values

Note: Field survey, 2021

Table 9 depicts the strength of the relationship between one dependent variable and one or more independent variables i.e. overconfidence bias, anchoring bias, herding bias and disposition effect bias. And includes techniques for modelling and analysing several variables to examine the relationship between variables. As per the above mentioned table the regression of overconfidence Bias, Anchoring Bias, Herding Bias and Deposit effect are calculated any analysed shown the face value 28.198. Whereas the Coefficient and constant of overconfidence Bias, Anchoring Bias, Herding Bias & Deposit effect are respectively 1.066 and (0.008), 0.253 and (0.006), 0.251 and (0.003), 0.329 and (0.001). Like as face value is 28.198. Where the R² and adjusted R² are respectively 0.235 & 0.128. As per the result Since the value of F is greater than 5, the given regression model is fit and significant at the 0.01 level (2-tailed).

4.2 Discussion and findings

The present study mainly aimed to find out the impact of different independent variables that studied relationship or association between two or more variables. A positive correlation indicates the extent to which those variables increase or decrease in parallel; a negative correlation indicates the extent to which one variable increases as the other decreases whereas zero correlation indicates that there is no relationship between the variables.

While dealing with different investment options, there is one fundamental question people face that what is the best plan of action for investing in the financial instruments and to what magnitude can the historical price movements in the stock market can be used to forecast of the future price movements? Based on the assumption of rationality, it appeared that investors would choose those financial instruments that maximize gains and minimize losses. People are considered partly rational and irrational in their investment behaviour. Behavioural finance studied the irrational aspect of human as an investor in their investment decision process. This branch of discipline indicated that cognitive biases prevent investors from realizing a complete sense of rationality at the time of investment decision-making. An act of rationality linked with a magnitude of uncertainty and risk, which is associated with every investment decision option. Various behavioural biases influence these risk and uncertainty.

These behavioural biases focus on investor's behaviour and their investment decision-making process. Behavioural biases are considered to be building blocks of behavioural finance that combine individual behaviour and market phenomenon. In behavioural finance domain, various biases exist. For the present research, four biases have considered for a study that is overconfidence, anchoring, disposition effect, and herding bias. After studying research papers on various behavioural biases, it documented that most of the financial and economic theories displayed that individuals behave rationally in the process of investment decision making only when they have all available relevant information. When information is not fully available to them in that case, empirical evidence indicated repeated patterns of irrationality that appeared like the way individual investors arrive at decisions and choices when confronted with risk and uncertainty.

The four common behavioural biases also documented that their presence exists in the stock market or portfolio selection during decision making. Their presence leads to excessive trading volume and results in higher transaction cost. The present study also throws light on market psychology whereby it indicated that investors buy or sell stocks and why sometimes they do not buy or sell at all hence, the most critical challenge faced by investors is in the field of investment decisions. It reflected in the present study that the gains and losses realized by investors mainly depend on his investment decision-making competences. It observed that in the present scenario, investment decision-making process needs a better understanding of individual investor's

behavioural biases as the existence of these behavioural biases have also been found both before and during the global financial crisis as well.

The focus in the present study was on individual investors as they found to have limited knowledge about the application of conventional finance theories in decision making and hence more inclined towards making psychological errors. The result of our study shows that from four independent variables only two variables namely Overconfidence and herding bias have a significant impact on investment decision making with t-values of 3.759, 2.561 respectively while other variables namely disposition and anchoring have no significant impact on investment decision making.

The present study was focussed on mainly formulation and analysis of four behavioural bias, namely, anchoring, overconfidence, disposition effect, and herding behaviour. In future study can be elaborated by analysing other behavioural biases that too have a substantial impact on individual investment decision making in their unique way. Moreover, the study can also further be elaborated to investigate the impact on a group or corporate investment decision making as well.

A new era of understanding of human emotions, behaviour and sentiments has been started which was earlier dominated by the study of financial markets. Moreover, this area is not only attracting the attention of academicians but also of the various corporates, financial intermediaries and entrepreneurs thus adding to its importance. The study is more inclined toward the study of individual and institutional investors and financial advisors' investors but the behaviour of intermediaries through which some of them invest should be focused upon, narrowing down population into various variables, targeting the expanding economies to reap some unexplained theories

) The major factors which influence the individual investor's investment decisions are Interest rate, Ease of obtaining borrowed funds and Management, Volatile stock, Opinion of firm's majority shareholders and General and Financial press coverage of firm's stock, Current economic Indicator and Contribution of firm towards social causes, Firm's commitment toward Corporate Social Responsibility, Stock Market Value.

) The interest rate is inversely proportional to the individual investor's investment decisions.

-) Overconfidence, anchoring, disposition effect and herding bias effect on investors' investment behaviour on Firm's reputation in industry stock market value and government holdings factors mostly.
-) Herding Bias is the major factor which influences the individual investment decisions.
-) Investors generally invested in few selected sectors only.
-) Most of the investors are agree that their investment decision is tally with their investment objectives.
-) Recent price movement of firm's stock, interest rate and stock market value factors are the highly influential factors which effects the individual investment decision.

CHAPTER –V

SUMMARY, CONCLUSIONS, AND IMPLICATION

The objective of this study was to identify the factors influencing individual investment decisions in NEPSE. This chapter presents the summary, discussions, and conclusions from the research findings as per the objective of the study. Based on the findings of this study, recommendations have been given on the factors influencing individual investment decisions in NEPSE. The limitations of the study as well as suggestions for further research have also been discussed.

5.1 Summary

The study was conducted to collect data, the researcher used a structured questionnaire that was personally administered to the respondents. The questionnaire constituted 28 items. The respondents were the individual investors. In this study, data were analysed using mean, standard deviation, coefficient of variation, correlation co-efficient, regression and Cronbach's' Alpha. techniques.

The objective of the study was to identify the factors influencing investment decisions in NEPSE. Results of regression revealed that the most important factors were: Firms position and performance; Interest rate, Ease of obtaining borrowed funds and Management, Volatile stock, Opinion of firm's majority shareholders and General and Financial press coverage of firm's stock, Current economic Indicator and Contribution of firm towards social causes, Firm's commitment toward Corporate Social Responsibility, Stock Market Value. Overconfidence bias, anchoring bias, disposition effect bias and herding bias influences on investor investment behaviour on Firm's reputation in industry stock market value and government holdings factors mostly. Most of the investors are agree that their investment decision is tally with their investment objectives.

The data was collected through personal visit and through electronic means, i.e., Google docs. The collected data were then analyzed using Statistical tools. Reliability analysis, coefficient correlation analysis and regression analysis were conducted to examine the responses and to test

the hypotheses. For the purpose of conducting the study, questionnaire was developed that included questions representing the identified variables which measure behavioral biases in investment decisions of individual investors in Nepal. Those variables were also used in order to see behavioral biases in investment decisions of individual investors as stated by related literature. Survey was carried out using convenience sampling and the sample obtained included the respondents who are studying in the universities which aimed to describe the economic and behavioral factors that influence individual investors decision making process in Nepal stock exchanges. From the sample of 121 respondents the possible relationship between dependent and independent variables were examined. Respondents answered on a 5 point Likert scale ranging from strongly disagree to strongly agree.

Out of the total respondents, the number of male respondents was higher than that of female respondents. Similarly, age wise analysis of the total respondents depicts that the larger portion of respondents were represented by students of below 25 years. While, out of 121 respondents 47.1 percent and 52.9 percent were from Bachelors Level and Master Level respectively. These responses were then arranged and analyzed using Microsoft Excel and statistical software to come up with the results and conclusion. The reliability statistics analysis and the hypothesis test were conducted and the final result was presented.

The present study was focussed on mainly formulation and analysis of four behavioural bias namely anchoring, overconfidence, disposition effect, and herding behaviour. In future study can be elaborated by analysing other behavioural biases that too have a substantial impact on individual investment decision making in their unique way. Moreover, the study can also further be elaborated to investigate the impact on a group or corporate investment decision making as well.

5.2 Conclusions

In conclusion, this study tested the tenets of the behavioural finance theory on the factors that influence investment decisions under conditions of uncertainty. The analysis performed on the data collected appears to give a fairly accurate view of the average equity investor in the NEPSE. Experienced and knowledgeable investors would readily admit that the structure and relative weights of the chosen categories reflect on the average, a still unsophisticated and immature investor profile.

The discipline of behavioural finance has emerged in response to handle the difficulties faced by the traditional finance discipline. In essence, behavioural finance explains that investment choices not always influenced based on rationality. Behavioural finance also tried to understand the investment market anomalies by unwinding the two assumptions of standard finance, that is, (i) investors fail to update their beliefs precisely and (ii) there is a systematic variation from the normative process in making investment choices (Kishore, 2004).

In the 1960s, Kahneman and Tversky concentrated on different fields of research. After the energy crisis of the 1970s, they came together and conducted research and found inconsistent results with the Efficient Market Hypothesis and Expected Utility theory (Daniel Kahneman & Amos Tversky, 1979). In the 1980s, behavioural finance has emerged as an alternative perspective that combined the behavioural and psychological aspects in economic and financial decision-making or in another way we can understand that this field of behavioural finance provides behavioural and psychological explanations (Abay, Blalock, & Berhane, 2017). Scientific work on the normative theory by Tversky and Kahneman's 'psychophysical emphasis on the difference between objective stimulus and subjective sensation' combined precisely to suffice the motive (Heukelom, 2007). Behavioural finance helps the academicians, economists, and researchers to study financial markets in complex and uncertain circumstances (Shleifer, 2000).

To understand the irrational behaviour of investors in financial markets, researchers draw on knowledge from cognitive psychology theories. Researchers have developed "prospect theory" and "heuristics" to explain the behaviour of individual investors in financial or economic decisions. Behavioural finance involves various behavioural biases based on an individual's social and emotional recognition and tolerance.

The present study aims to determine the influence of behavioural biases on investment decision making of individuals. Mainly four behavioural biases are taken into current research for identification of impact, namely, Overconfidence, Anchoring, disposition effect, and Herding. The study concluded that two, namely overconfidence and herding, have a strong influence on the investment decisions of individuals. The current research also emphasized that participants in financial markets are not rational in their decision-making process, and even their choices are limited.

This study has provided evidence that investors have overconfident biases due to positive coefficient in the model tested. This overconfidence bias influences the decisions with respect to investor's investments. Overconfident investors believe that they are better investors than both their peers and a stock market index.

The results revealed by our sample of 122 respondents confirm that there seems to be a certain degree of correlation between the factors that behavioural finance theory and previous empirical evidence identify as the influencing factors for the average equity investor, and the individual behaviour of active investors in the NEPSE influenced by the overall trends prevailing at the time of the survey in the NEPSE.

This study was aimed at identifying the variables that have most and the least influence factors on the investor's investment behaviour. There were 28 items which belonged to five main categories taken as independent: overconfidence, anchoring, disposition effect and herding bias. The results according to calculated mean shown that all variables are somewhat affecting the decision-making behaviour of individual investors of Nepal.

The categories by the order of importance were overconfidence, anchoring, disposition effect and herding bias. And out of all variables the most influencing 6 items by the order of importance were, recent price movement, Interest rate, stock market value, expected dividend, Government holdings and firm's reputation in industry. And the 6 least influencing factors with the other classes of selected variables were Firms perceived Ethics, Dividend Paid, Diversification Needs Attractiveness of non-stock investment, Firm's commitment toward Corporate Social Responsibility and Ease of obtaining borrowed funds. The reason for least influencing factors is the people of Nepal mostly have no knowledge of these factors like the creation of the organized market. There is no organized market in Nepal, so the investors do not know about the effect of it on the investment decision.

In a period of stock market losses, the overconfident investor would hold losing investments and may even add to the losing positions, because s/he believes the stock price is lower due to the ignorance of other investors, rather than accept the fact that he made a bad investment decision. In the present study, the analysis and discussion brought forward many issues for further research. In the future, investigations can be performed to study other biases that are not included

in the present study this time. Also, the impact of decisions of individuals and institutions can be reviewed on mutual funds as well.

5.3 Implications

The researcher recommends that the investors need to analysis the investment factors carefully using the reasonable business knowledge before making an investment decision. The investors should also be able to interpret the market and economic indicators since they influence the performance of the share on the market.

They should evaluate all the variables in the environment instead of considering only one variable. Investors do also need to diversify their investment in different companies by developing a portfolio of investments to minimize risks and maximize returns.

Implications for Future Research

This study examined the factors that appear to exercise the greatest influence on the individual stock investor and included not only the factors investigated by previous studies and derived from prevailing behavioural finance theories, but also introduced additional factors generated through personal interviews that have been found to influence the stockholders' investment decisions in Nepal.

First, future research should attempt to explain the relative importance of decision variables have for individual investors making stock purchase decisions, Secondly, the study was conducted among investors in Kathmandu. The findings can be verified by conducting the same study in the rest of the country, and thirdly, whether there are homogeneous clusters or groups of variables that form identifiable decision determinants that investors rely upon when making stock investment decisions.

The suggestions are summarized as follows:

-) The first thing they can do is to consider other factors determining influence on the individual stock investor and included not only the factors investigated by previous studies and derived from prevailing behavioural finance theories.

-) The major focus of the study was explaining the relative importance of decision variables have for individual investors making stock purchase decisions. The study should also focus on identifying the variables that have most and the least influence factors on the investor's investment behaviour.
-) The future researcher studies should assess the impact of behavioural biases on the stock investment decision-making of individual investors in Nepalese share market.

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ANNEXURE

Annexure 1

Questionnaire on "Behavioral Biases of Stock Investment Decisions of Nepalese Investors"

Dear Sir/Madam,

I am a student of Masters in Business Studies (MBS) at People's Campus, Paknajol. The survey on the mentioned title is designed to analyse Behavioral Biases of Stock Investment Decisions of Nepalese Investors. You are kindly requested to fill up the questionnaire with relevant information. The information provided by you will remain confidential and your identity will not be exposed anywhere. Your cooperation is expected to add academic value and will be highly appreciated.

Regards,

Midha Shakya

People's Campus

General Background

1- Faculty: _____

2- Gender: Male(0) Female (1) .

3- Age Group: 18-25 (1) 26-35(2) 36-45 (3) 46-60(4) 61 & above(5)

3- Education: SLC (1) PLC(2) Bachelor(3) Master (4) Doctorate (5)

4- Investment Education: - YES(0) NO (1) .

5- Investment Experience: - Fresher (1) 1-5years(2) 5-10years(3) 10-15years(4) 15years & above (5)

6. Source of fund used for investment.....

Below are a few statements; please mark them on a scale of 1-5. (1= Strongly disagree 2= Disagree 3= Moderate 4=Agree 5=Strongly agree)

S.N.	Factors	1	2	3	4	5
7	Overconfidence Bias					
7.1	Stock Market Value					
7.2	Expected Dividends					
7.3	On the basis of liquidity					
7.4	Volatile Stock					
8	Anchoring Bias					
8.1	Current economic indicators e.g. inflation rate.					
8.2	Information obtained from internet and existing shareholders.					
8.3	General and financial press coverage of the firm's stock.					
8.4	Fluctuation/developments in the stock index.					
8.5	Government holdings.					
8.6	Recent price movement of a firm's stock					
8.7	Firm's commitment toward Corporate Social Responsibility.					
9	Disposition Effect Bias					
9.1	Interest Rate					
9.2	Firm's reputation in industry.					
9.3	Preference for a firm's product and services					
9.4	Management (Board of Directors & Professional management team).					
9.5	Contribution of a firm toward social causes.					
9.6	Firms perceived ethics.					
10	Herding Bias					
10.1	Ease of obtaining borrowed funds.					
10.2	Expected Losses in national and international financial Markets.					
10.3	Diversification needs.					
10.4	Attractiveness of non-stock investment					
11	Investment Decisions					
11.1	Usually I get my expected return on my investment decisions					
11.2	My investment holding periods are spread over long span of time					
11.3	In most of the cases my investment decisions my investment objectives					
11.4	I have risk tolerance towards my investment decisions					
11.5	My reactions towards loses are normal					

Thank you

BEHAVIORAL BIASES IN INVESTMENT DECISIONS OF INDIVIDUAL INVESTORS IN NEPAL

Presented by

Midha Shakya

People's Campus

Campus Roll No:8/074

Symbol No:7325/18

T.U. Regd. No: 7-2-271-141-2013

A Thesis Proposal

Presented to:

Head of Research Department

Faculty of Management,

Tribhuvan University

In Partial Fulfillment of Requirements for the Degree of
Master in Business Studies (M.B.S)

Kathmandu, Nepal

December, 2019

1.1 INTRODUCTION

Much of economic and financial theories presume that individual acts rationally and would consider all available information in the investment decision making process. Investors commonly perform investment analysis process by making use of fundamental analysis, technical analysis and judgment. Investment decisions are often supported by decision tools. It is assumed that uniqueness of individual, information structure and factors in the market influence individual's investment decisions as well as market outcomes. Investor market behavior derives from psychological principle of decision making to explain why people buy or sell stocks. Behavioral finance therefore has been used to throw more light on why individuals buy or sell stock and why they do not buy stock at all (Thaler, 2003).

In conventional financial theory, investors are assumed to be rational wealth maximizer following basic financial rules and basing their investment strategies purely on the risk–return consideration without including psychological factors. As a result, behavioral finance is taken as a new approach to explain individual's behavior in the market. Behavioral finance recognizes human being from a practical lens accordingly individuals in the market are human hence are either partly or fully influenced by psychological factors (Thaler, 2005). Behavioral finance implies that the use of market behavior of investor explains the reason why individual buy and sell stock derives from the psychological principle of decision making (Werah, 2008). Accordingly, investor's decision making is not always based on rational factors but also influence by psychological ones (Sehgal & Singh, 2012; Murgea, 2008).

Behavioral finance gained remarkable attention in recent years in explaining investor behavior and its influence on decision making. Studies explaining the individual investor's behavior were firstly emerged about 1970's. Behavioral finance investigates the decision making process that deals in buying or selling of financial assets and provides a rational behind decision making process. Its main focus is on psychological principals used by investor to make investment decision. Theory which defines behavioral finance is given by Kahneman and Tyeovsky (1979); and Kahneman (1982). Kahneman and tyeovsky (1979) states that investor may not always appear as rational for investment as supposed. These Behaviorists are of the opinion that investor may behave irrationally while making investment decisions. Shefrin (1999) defined behavioral finance as "a rapidly developing area that contracts with the influence of psychology on the

behavior of financial professionals". Number of studies in behavioral finance has examined the factors that influence stock selection process of individual investor. For instance, Meriks et al. (2004) used five categories namely: accounting information, subjective/personal, neutral information, advocate suggestion, and personal monetary needs to explain the factors that influence individual investor behavior. Nagy and Obenberger (1994) used seven classifications: social relevance, self-image/firm-image coincidence, neutral information, classic wealth maximization, accounting information, advocate recommendation, and personal financial needs. Whereas Al-Tamimi (2005) used five categories including: self and firm-image coincidence, personal financial needs, neutral information, accounting information, and advocate recommendations to analyzed the individual investor behavior in UAE financial markets. However, inadequate research attempts have been endured so far in the field of investor's behavior focusing on the stock market of developing countries.

This study aimed at analyzing the factors affecting the investment decision of individual investors in stock market of Nepal. The research also seeks to explore the influence of individual's behaviors and how each factor affects their investment behaviors. Further, the study also investigated the influence of investor's general investment behavior on each factors. By combining all these aspects of investor's behavior, this research crafts exceptional appeal to the existing literature of behavioral finance in developing countries, especially in the context of Nepal.

1.2 Statement of the Problem

The research in behavioral finance is comparatively less in Asia when compared to other developed countries (Das 2012). Within behavioral finance, it is assumed that information structure and characteristics of market participants systematically influence individual's investment decisions and market outcomes. (Barberis & Thaler 2003)

Hence, this study explores the research questions listed below:

-) What are the investor's behavior influence the individual investor's when making investments in Nepalese Share Market?
-) Do these factors change according to the investor's demographic factors?

Enhancing the foreign and domestic investment in Nepalese Share Market would contribute to the economic development. Hence, there seem to be a necessity to carry out research on investor

behavior in order to identify the factor determinants which influence it, a dynamic confirmed by the pilot survey of the current study.

Further, literature review conveys that very few studies carried out in the Nepalese context conveys a clear profile of the individual investor behaviors. Hence, findings of the current study would provide significant information to understand the factor determinants of the Nepalese individual investor's behaviors.

1.3 Research Objectives

The research aims to achieve the following objectives:

-) To identify the possible behavioral factors influencing the investment decisions of individual investor.
-) To identify the impact level of behavioral factors on the investment decisions and performance of individual investors.

1.4 Rationale of the Study

This study has significance for the individual investors, financial advisors, companies listed in Nepal stock exchange (NEPSE) and Government. For the investors, the factors that influence their decision making are crucial as this will influence their financial plans of future. For companies' identification of the most influencing factors that influence the behavior of their investor will affect their future strategies and plans. For financial advisor's identification of these factors will help them to suggest investments that best fits them. And finally for the government, identification of the most influencing factors will help it to modify required legislation and other procedures that are needed for satisfying the desires of investors and also giving more support to the market efficiency.

1.5 Limitation of the Study

-) Respondents are confined to Kathmandu city, thus the results and findings must be viewed in that context only.
-) The respondents have been interviewed personally to get their maximum response. However, some responses are liable to be personally biased.

J More responses could not be collected because of lack of time and the nature of data collection that is personal interview.

1.6 Research Methodology

The study adopted a descriptive research design. According to Oso and Onen (2009) prior to carrying out the study there is need to determine the respondents, the data collection procedures, tools and instruments which would aid in data collection. The survey research design was adopted with a population of approximately 1.5 million investors from whom a sample of 200 investors was randomly selected for study. Primary data was collected using questionnaires (appendix i) which were examined by the researcher personally and collected data was coded and tabulated for analysis.

Research Design

The research design identifies the procedures by which the population will be selected, how these subjects will be used to yield the required data. Mugenda and Mugenda (1999) notes that a survey research attempts to collect data from members of a population and describes existing phenomena by asking individuals about their opinion, attitudes, behavior or values. This design was suitable for this kind of study because the researcher intended to collect data meant to ascertain facts investment decisions in Nepal. This kind of research methodology makes use of surveys to solicit investors Inform opinion. It is often used to study the general condition of people and organizations as it investigates the behavior and opinion of people usually through questioning them (Cooper and Schindler, 2003).

Target Population

Nature and Types of Data

Data is a piece of fact, the wholesome aggregate of which gives the information. This information in fact contributes to the inquiry of truth and approaches towards the reality. The natures of data that will be used as per research question are: -

Primary data:

Primary data are the first hand data collected for the first time for a particular purpose of investigation. In the due course of my research, primary data are collected viz. observation, interview, and questionnaire as per the convenience to aid to my study.

Since, my study is more about descriptive backed by causal relationship; the primary data are helpful for generalization. The primary data can be assembled.

Secondary Data:

Secondary data are collected from the sites of Nepal Stock Exchange and other share market oriented sites like merolagani.com, sharesansar.com & nepalipaisa.com.

Sampling Design and Sample Size

A simple random sample of four brokerage firm was selected from which 200 individual investors from it were randomly selected targeting one questionnaire each. Random numbers can be obtained using a calculator, a spreadsheet, printed tables of random numbers, or by the more traditional methods of drawing slips of paper from a hat, tossing coins or rolling dice (Neville and Sidney, 2004). The researchers study adopted the random number tables. Simple random sampling helps ensure that the sample represents the entire population, and is not biased or prejudiced toward any particular groups within the population. It also helps eliminate the tendency to select based on a basing factor (Cooper and Emory, 1995).

Data Collection Tools and Instruments

Primary data was collected using questionnaires (appendix I) which were examined by the researcher personally. The questionnaire items represented four categories: were overconfidence, anchoring, disposition effect and herding bias. The questionnaires were administered to the individual investors personally. This method was appropriate since it encouraged prompt responses from the respondents. The questionnaire was structured to capture the general data (Bio-Data) about the investor. It was concerned with the data on factors that affect individual investment decisions. The developed questionnaire included items which corresponded to were

overconfidence, anchoring, disposition effect and herding bias. Respondents were asked to indicate their degree of how they are influenced by each of the items on five point Likert scale.

Data analysis and Findings

Introduction:

This chapter deals with data analysis and interpretation of the research findings. The data in this study was coded and tabulated. The data were analyzed which enabled data interpretation and making of statistical inferences. The chapter documents the factors that influence individual investment decision in NEPSE. Out of the two hundred investors targeted, only sixteen investors were not reached to provide response. All the investors reached provided responses and therefore giving a response rate of 92%. The chapter is divided into two sections. Section I concerns the respondents’ gender data, Section II concerns the factors influencing individual investment decision in NEPSE.

Descriptive statistics involves use of absolute and relative (percentage) frequencies, measures of central tendency and dispersion (mean and standard deviation respectively). Quantitative data was presented in tables and explanation in prose. In addition, the study conducted a multiple regression analysis. This provided the generalization of the findings on impact of behavioral biases on investment decisions in kenya. The regression equation given below was used:

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + e_i \dots\dots\dots (i)$$

Whereby the variables will be identified as follows

Y- The dependent variables represent the individual investor decision and is measured by an analysis of the individuals" risk adjusted returns resulting from such decisions. Scores were derived from Likert scale for each behavioral factor.

Where,

β_0 = Intercept, β_1 = Coefficient

$$SID = \beta_0 + \beta_1 OCB + \beta_2 AB + \beta_3 DEB + \beta_4 HB + e_i$$

SID= Stock Investment Decision

OCB= Overconfidence Bias

AB= Anchoring Bias

DEB= Disposition Effect Bias

HB= Herding Bias

e_i = error terms E

In the model, the dependent variables were operationalized and measured as shown in appendix.

II. β_0 is the constant (intercept), and X_1, \dots, X_n the Predictors ϵ_i is the error term The coefficients from the equation above represent the strength and direction of the relationship between the independent and dependent variables. Assuming that the error term in the linear regression model is independent of x , and is normally distributed, with zero mean and constant variance, by testing the null hypothesis that $\beta_0 = 0$, it will be realized that there is a significant relationship between x and y , at 0.05 significance level.

1.7 Literature Review

Numerous studies focused on the importance of behavioral factors on the individual equity investor decision making process. Behavioral finance achieved impressive strides in explaining the behavioral aspects of investment decisions. Lewellen (1977) found capital gain, overall return and dividend yield preferences of investor differs with age, education, sex and income levels. Blume and Friend (1978) gave good inferences about equity investor preferences. De Bondt (1985) worked on behavioral finance and provided evidence in support of previous studies regarding cognitive bias resulting in stocks mis-pricing at NYSE. Barnwell (1987) provided that lifestyle characteristics: occupation, risk-aversion and control orientation are helpful in predicting individual investor behavior.

Cohn et al. (1975) provided tentative evidence that risk aversion decreases as the investor's wealth increases, while Riley and Chow showed that risk aversion decreases not only as wealth increases, but also as age, income and education increase. LeBaron, Farrelly and Gula (1992) added to the debate, by advocating that individual's risk aversion is largely a function of visceral rather than rational considerations. On other hand, Baker and Haslem contended that (1977) went a step further by purposing that investors behave rationally, taking into account the investment's risk/return tradeoff.

Nagy and Obenberger (1994) also analyzed factors affecting behavior of individual investor and provided that investor prefer wealth maximization. They also hold that attributes such as firm's

ethical behavior, international and local business, track record relating to environment are given cursory attention by individual equity investors. Epstein (1994) provided that individual investors consider social information given in the annual general report or CSR report regarding corporation product quality and safety information, and activities relate to environment in their investment decision making. Merikas (2003) also checked the factors affecting behavior of on Athens equity market and concluded that individuals make their decisions of stock purchase using economic variables combined with other different variables. The result of Merikas et al. (2003) indicated that the factors are correlated to each other as provided in previous empirical studies on behavioral finance. Al Tamimi (2005) conducted study on UAE investor behavior is least affected by neutral information, religious reasons and family member's opinion. Potter (1971) identifies six factors: dividends, rapid growth, investment for saving purposes, quick profit through trading, professional investment management and long-term growth that affect individual investor's attitudes towards their investment decisions.

Kadariya (2012) investigated factor's impact on the investor decision. These factors include capital structure, political and media coverage, luck and education and trend analysis in the Nepalese capital market. Finding of the study shows that majority of the investors are youngsters and they take decision considering the media coverage and friend's recommendations as good source of information. Dividend, earning, equity contribution and government control are considered the most important factors while taking the decision. Investors when bears the loss blame to market and when earns profit take whole credit to their own abilities. Lodhi (2014) examined the impact of financial literacy, high experience, use of accounting information, importance of analyzing financial statement and age on the investment decision of any individual by applying a survey in Karachi, Pakistan. According to empirical results, financial literacy and accounting information were considered to be significant in lowering information asymmetry and allowing investors to invest in risky instruments. Additionally, it was verified that investor's preference for risky investments decreases, as age and experience increase.

Conceptual Framework

This section is developed to discuss briefly about the theoretical framework, which are closely related to this study.

Conceptual framework

Independent variables

Dependent variables

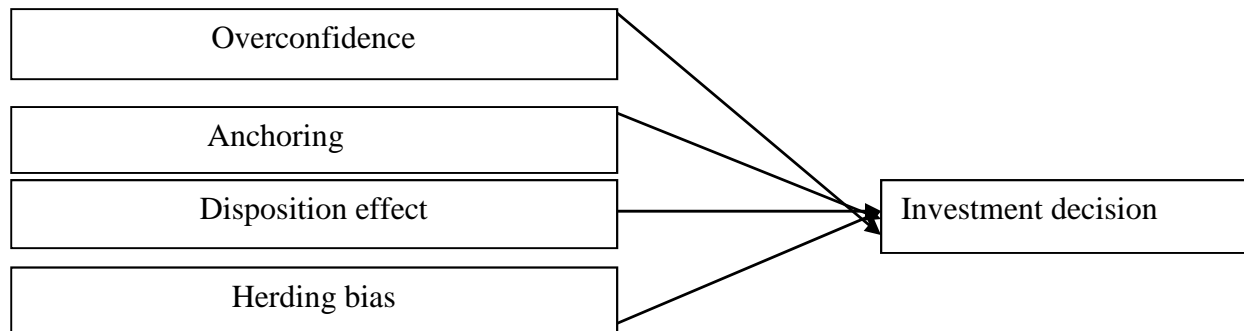


Figure 1: Source: developed for the study

Research hypothesis can draw from the above literature review:

H₁: There is no significant relationship between behavioral biases and stock investment decision making.

H₂: Overconfidence makes no significant influence on stock investment decision-making.

H₃: Anchoring makes no significant influence on stock investment decision-making.

H₄: Disposition makes no significant influence on stock investment decision-making.

H₅: Herding makes no significant influence on stock investment decision-making.

Review of Previous Research

Research in behavioral finance is relatively a new branch of study. According to scholars of behavioral finance, it is assumed that investors' market behavior derives from psychological principles of decision making to explain why people buy or sell stocks. Potter (1971) identifies six factors: dividends, rapid growth, investment for saving purposes, quick profit through trading, professional investment management and long-term growth that affect individual investor's attitudes towards their investment decisions.

Mishra & Dash (2010) investigated that people living in the same society and having same income level are different in their investment behavior. The research indicated about factors influencing the decisions in India used two factors age and gender. They admit that various factors affect the investor's behavior. People with different age and gender have different investment behaviors. People with different ages and gender have varying perceptions. The risk level of people of different age differs as well as gender also contributes to the level risk tolerance in decision making of investments

Dangol and Shrestha (2018) investigated the effect of personality traits on behavior biases. These studies showed that all the investors analyze securities in the same way and share the same economic view of the world. Investors use the same assumption that is referred to homogeneous expectation or beliefs. These beliefs are concerned with the investor's perception and their behavior including overconfidence. This overconfidence bias affects investment decisions of the investors. Thus, this study focuses the issues - how does individual's overconfidence can influence in investment decisions among Nepalese investors? And how do selected variables like level of education, gender, etc., effect on overconfidence bias among Nepalese investor's in investment decision in Nepalese stock market? Therefore, the major objective of this paper is to analyze the influence of the individuals' overconfidence in investment decision-making. Further the study assesses the effect of educational qualification on individuals' overconfidence, and the link between gender and overconfidence among the individual investors in Nepalese stock market.

Mahmood et al. (2011) conducted a study to address the impact of various factors such as financial literacy of the individual investor, accounting information available and the asymmetry of information in the market on the investment decisions made by these investors. While greater experience in the market leads to lower degree of risk undertaken by the investors. Most importantly the study inferred that perception of risk influences the investment decision process the most.

Sultana (2012) analyzed the factors influencing individual equity investor's decision making and their behavior. Decision making is the cognitive process and before taking a final decision we evaluate number of alternative, weight them and finally select the best alternative. While taking the decision we are influenced by different factors and change our behavior. Same is the case for the investor's decision making process. The most influencing factors found was stock marketability, past performance of the stock, recent price fluctuation, risk minimization, wealth maximization, social responsibility and expert recommendation.

Kadariya (2012) investigated factor's impact on the investor decision. These factors include capital structure, political and media coverage, luck and financial education and trend analyses in the Nepalese capital market. Findings of the study shows that majority of the investors are

youngsters and they take decision considering the media coverage and friend's recommendations as good source of information. Dividend, earning, equity contribution and government control are considered the most important factors while taking the decision. Investors when bears the loss blame to the market and when earns profit take whole credit to their own abilities.

Usmani (2012) incorporated a study by taking 30 variables from diverse decision criteria including contemporary concerns. Results revealed seven homogenous groups among these 30 variables which were grouped into seven factors that address major investor considerations. The finding suggests that individual's base their stock purchase decisions on wealth-maximization criteria combined with past and present stock performance along with other diverse variable: they do not performance along with other diverse variables; they do not rely on a simple approach.

Puneed & Yajutu (2013) conducted study the role of gender in influencing the investment decision made. The study involved 118 respondents on which 55% were male and 45% females. The overall outcome of the study indicated a general inclination towards safer investment while gender difference in preferences were observed in certain investment decisions. It was also observed that overall satisfaction towards recurring deposits, fixed deposits and life insurance was extremely high.

Rao & Chalam GV (2013) assessed the role of socio-economic variables on the equity decision undertaken by the investors. The study was conducted that certain factors such as age didn't significantly cause a difference in the level of importance attached to different investment avenues, while gender, income and occupation did significantly affect the investment decisions made. It also observed that the motive of the investment (Long Term V/s Capital Gains) did have a significant impact on the investor's decision. Finally, it was also noted that the experience of the individual investor in the markets affected their decisions about investing.

Hirshleifer (2014) attempted to understand the application of psychology for finance, with a focus on individual level cognitive biases. His findings indicated that a healthy environment to run field experiments creating replicas of real life investment decisions was a key thing to be done to boost behavioral finance. Also he found that central role of feelings in decision-making has only partially been incorporated into behavioral finance. More theoretical and empirical study is needed of how feelings affect financial decisions and the implications of this for prices and real outcomes.

Makrani & Abdi (2014) observed the effects of book value, net earnings and cash flow on stock prices of 129 selected firms listed on Tehran Stock Exchange over the period 2007-2012, the study has determined that the effects of book value net earnings as well as cash flow decreases over the time although the effects of book value in bigger market has significant role in

allocating saving fund to the financing sources in need of money that will run for the economic growth and development of the country. Financial market, characterized as capital market and money market, contains investment opportunities for individuals and businesses with surplus funds, at the same time it is the cheapest sources of financing for businesses with deficiency of capital. Capital market is composed of equity and long-term debt instruments of the companies. Money market represents securities with short-term maturity period that also meet up the working capital requirements of firms. Apart from banking system, financial market is a formal channel of loan able fund in the economy.

Mutswenje VS (2014) conducted the survey on the Nairobi Stock Exchange. The study was conducted on the 42 investors out of 50 investors that constituted the sample size. The objective of the study was to identify the factors influencing investment decisions in NSE. Results of factor analysis revealed that the most important factors were: Firms position and performance; Third party opinion; The goodwill of the firm and accounting information; Perception towards the firm; Environmental factors; Firms feeling and Risk minimization.

Islamoglu, Apan and Ayavali (2015) revealed that individuals asking for information follow-up display traditional investment behaviour. It was found that investors' interests in investment instruments change in parallel with the level of income and their level of income was influential to decide on investment maturity. Furthermore, investors decided by taking into account their past experience and expert opinion. The results of the analysis showed that investors are affected by several factors such as income level, past investment experiences, expert and other investors' opinions and financial stability.

Aduda, Oduor and Onwonga (2017) undertook a study to determine the financial performance and behaviour of individual investors when in the NSE listed shares. Questionnaire survey and secondary data retrieved from CMA and NSE were used in study. Some investors were found to be irrational in decision making, and they often made losses in their investment as result of herding and irrationality. A majority of the investors who responded were male, signifying men's confidence in their ability to outperform the market. A majority of the investors were Bachelor's degree holders hence sufficiently educated to make investment decisions. Other factors that were found to determine investment behaviour included improved stock exchange, influence from friends, family and colleagues, inflation, management stability, number of available shares, stock capitalization level and family and religious background.

1.8 Organization of the study

The whole study is divided into five different chapters. They are:

This is first chapter; it includes the Introduction and General back round, Statement of problem, Objective of study, Significant of study, Focus of study and limitation of the study. Second chapter include review of supportive texts and review of previous studies. Third chapter includes the research design, sources of data, data collection, procedure, general introduction of tools used in the research and others. Fourth chapter deals with presentation of data using appropriate table and graph as well analysis of data and the analysis as requirement of provide as well as major findings.

This is the last chapter it includes brief sketch of the study, conclusion and suitable recommendations on the basis of the study.

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