BEHAVIORAL FINANCE BIASES AND THEIR IMPACT ON INVESTMENT STRATEGIES AND DECISIONS OF INDIVIDUAL INVESTORS IN INDIA

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Declaration

I, Rahul Bagade, declare that this dissertation that I have submitted to Dublin Business School for the award of Masters of Science (MSc) is the result of my own investigations, except where otherwise stated, where it is clearly acknowledged by references. Furthermore, this work has not been submitted for any degree.

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Abstract

This dissertation is a study of the issue of behavioral biases from the perspective of individual investors. Its purpose is to ascertain how important this knowledge is to the individual investors. The behavioral biases problem can become more important due to the growth of number of individual investors over last few years and predictions are that it will continue to grow in the coming years.

Behavioral biases come from the behavioral finance theory, the theory that embraces finance and psychology. Behavioral finance theory started to gain significance since the moment it was discovered that investors and markets are irrational. It was established that individual investors are the ones who are more prone to behavioral biases as they belong from different professional backgrounds. It is generally understood that we all learn from our own mistakes, but the process can take too long that it can be too late.

This dissertation will enable individual investors to understand the challenges they are facing, namely to problems connected with behavioral biases. The aim of this dissertation is to investigate whether the behavioral financial biases impact the investment strategies and decisions of individual investors in India and also to examine whether the existence of psychological factors of individual investors in the Indian stock market is similar to that found in the other countries or not.

1. Introduction

1.1 Research Background

Finance can be broadly defined as the study of how scarce resources are allocated by humans, and how these resources are managed, acquired and invested over time. Investing in stock markets from a normative point of view has been studied extensively over the past decades, numerous theories being elaborated with regards to financial return, financial risk and both of the prior taken together in the practice of investing. As time evolved, scholars and intellectuals propounded various theories and came up with different propositions with respect to the stock markets. In the stock market, investors do not always make the decisions and actions based on reason, but they are motivated by psychological factors. When they are confident, they become more optimistic in assessment process. Nevertheless, they become more pessimistic if their mentality is not good. Standard finance does not explain the determinants of investment performance. The reason for the failure can be discovered with the assumptions that traditionalists generally take: the rationality of investors in the decision-making process. Unfortunately, investors do not always make their decisions rationally in real life. Behavioral finance seeks to explain the rationality or irrationality of financial decision-making and also to combine behavioral and cognitive psychology theory with finance to provide explanations for why people make irrational decisions (Yusuf, 2015, p. 85). When making decisions in the presence of complexity, humans tend to process information using shortcuts and emotional filters, which create the heuristics that allow individuals to simplify the decision-making process. They allow for problem solving based on experiential learning and thus often invoke intuition or rules of thumb. Earlier research indicates that the heuristics may be useful for simplistic problem solving but may result in severe and systematic errors when people are faced with the need to assess the probability of an uncertain outcome or value of an uncertain quantity (Jain, Jain and Jain, 2015, p. 9).

Decision making is a process of selecting the best alternative among a number of alternatives. Thus, the decision taken comes after a proper assessment of all the alternatives. Decision making is the most complex and challenging activity of individual investors. The outcome of poor knowledge is that investors allow behavioral biases to affect their decision-making process, thus potentially resulting in major losses. Cognitive errors and extreme emotions can cause investors to make bad investment decisions. Due to various factors such as demographic

factor, socio-economic background, level of education, gender, age and ethnic and religious background, each investor differs from others in all aspects. An optimum investment decision plays an active role and is a significant consideration. Investor is a rational being who will always act to attempt to maximize his financial gain. Yet individual investors are not rational. An integral part of humanity is the emotion among the investors. Indeed, investors actually make most of their life decisions on purely emotional considerations. In the financial world, investors sometimes base their decisions on irrelevant figures and statistics, e.g. some investor may invest in the stock that have witnessed considerable fall after a continuous growth in recent past. They believe that price has fallen which is only due to short term market movements, creating an opportunity to buy the stock cheap. However, in reality, stocks do quite often decline in value due to changes in their underlying fundamentals (Thomas, 2018, p. 33).

India being a developing country, the Indian capital market is experiencing a process of transformation in the operations being conducted in stock market standard equivalent to those in international developed markets. From 2002, Indian stock market experienced a structural bull market. This was followed by an equally abrupt downturn beginning March 2008. The Bombay Sensitive Index (SENSEX) rose by 350% during the period 2002 to March2008. By January 2009, the index had lost half of its market value compared to its peak in March 2008. The National Stock Exchange index, NIFTY, also lost in the same proportion during this period. Investments made by the individual investors during the years 2007, 2008 or later 2015 incurred losses and were finding it is very difficult to recover their losses. Hence, investors are very scared to invest substantial sums in stocks. But they are continuing their systematic investment plans to protect their investment from volatility. Most of the investors were lured by the record high of the stock market during 2007-08 and 2013-14 periods (Thomas, 2018, p. 28).

Behavioral finance seeks to explain the rationality or irrationality of financial decision-making and also to combine behavioral and cognitive psychology theory with finance to provide explanations for why people make irrational decisions (Yusuf, 2015, p. 85). Behavioral finance being the study of how people in general and investors in particular make common errors in their financial decisions due to their emotions plays a major role in capital market. So, it is important to understand the behaviour of these individual investors so that one can manage their perception and thereby, control the volatility of the market.

1.2 Theme 1 - Evolution of Finance

Standard Finance

Standard finance is the body of knowledge built on the pillars of the arbitrage principles of Miller and Modigliani, the portfolio principles of Markowitz, the capital asset pricing theory of Sharpe, Lintner, and Black, and the option-pricing theory of Black, Scholes, and Merton (Statman, 1999, p. 19). These approaches consider markets to be efficient and are highly analytical and normative. Modern portfolio theory and Capital Asset pricing Model assumes that investors are not puzzled regarding the size of information presented to them and not controlled by their behavioral finance factors. But several studies in the developed capital markets found that many phenomena regarding stock investment decisions cannot be explained. Investors in capital asset exchanges, typically taking many different and important decisions, the most common are taking investment decisions in order to maximize their wealth; others are considering seeking market timing techniques to maximize their wealth (Alqurran *et al.*, 2016, p. 159).

Modern financial economic theory assumes that the representative market actor in the economy is rational in two ways: the market actor makes decisions according to the principles of expected utility theory and makes unbiased forecasts about the future. According to the expected utility theory a person is risk averse and the utility function of a person is hollow, i.e. the marginal utility of wealth decreases. Asset prices are set by rational investors and thus rationality-based market equilibrium is achieved. In this equilibrium securities are priced according to the efficient market hypothesis, which is discussed in the next section.

Efficient Market Hypothesis

The Efficient market hypothesis is the cornerstone of rationality that purportedly governs the functioning of well-developed financial markets. According to efficient market hypothesis, financial prices integrate all available information and prices can be regarded as optimal estimates of true investment value at all times. The efficient market hypothesis is based on the notion that people behave rationally, maximize expected utility accurately and process all

available information (Shiller, 1998, p. 1). In other words, financial assets are always priced rationally, given what is publicly known. Stock prices approximately describe random walks through the time: the price changes are unpredictable since they occur only in response of genuinely new information, which by the very fact that is new is unpredictable (Shiller, 2000, p. 171). By 1953 Kendall examined the proposition that the market prices move efficiently. He was unable to detect any logical patterns, observing a market that evolved regardless of the past performance, indicating inconsistent psychological behaviour on the market. Further studies revealed that this should be considered logical. An example of the scenario if prices were predictable was used; if everybody knew that a stock is currently worth a hundred dollars would be worth a hundred and ten in three days, then everybody not owning the stock would want to buy the stock. However, those already owning the stock would not be willing to sell the stock for the current price since they know that it will be worth more in three days.

The only way to buy the stock immediately would be to pay the expected future price, leading to an instant price increase. So, a forecast of future performance improves current performance. In effect, prices are affected by any new information which by definition is unknown before it comes into existence. Prices are therefore unpredictable, leading to what is called the random walk of prices (Sairafi, Selleby and Ståhl, 2008, p. 12). Due to the fact that all the information comprised in stock prices it is impossible to make an above average profit and beat the market overtime without taking excess risk. Although individual investors may be swayed by emotional or psychological factors in making decisions, markets are essentially 'auction places' and there is a seller for every buyer. The Efficient market hypothesis does not necessarily require that every investor act in a rational manner once the economic dominance of rational investors acts to ensure that market prices reflect the fair value of traded assets.(Singh, 2012, p. 117)

Behavioral Finance

During the 1990s, a new field of Finance known as behavioural finance began to emerge in many academic journals, business publications, and even newspapers. The foundations of behavioural finance, however, can be traced back over several years. A field of finance that proposes psychology-based theories to explain stock market anomalies is known as behavioral finance. This is the study of how psychology affects financial decision making and financial

markets. Within behavioral finance, it is assumed that the information structure and characteristics of market participants systematically influence individual's decisions as well as market outcomes. Behavioral finance combines twin disciplines of psychology and economics to explain why and how people make seemingly irrational or illogical decisions when they spend, save, invest and borrow money. Most financial theories are based on the idea that everyone takes careful account of all available information before making investment decisions. Behavioural finance, a study of the markets that draws on psychology, is throwing more light on why people buy or sell the stocks they do - and even why they do not buy stocks at all (Singh, 2009, p. 89). Some people think that behavioral finance introduced psychology into finance, but psychology was never out of finance. Although models of behaviour differ, all behaviour is based on psychology.

Behavioral finance is a new paradigm of finance, which seeks to supplement the standard theories of finance by introducing behavioral aspects to the decision-making process. Contrary to the Markowitz and Sharp approach, behavioral finance deals with individuals and ways of gathering and using information. Behavioral finance seeks to understand and predict systematic financial implications of psychological decision processes. In addition, it focuses on the application of psychological and economic principles for the improvement of financial decision making(Olsen, 1998, p. 11). The awarding of the 2002 Nobel Prize in economics to psychologist Daniel Kahneman and experimental economist Vernon Smith vindicated the field. Kahneman studied human judgment and decision making under uncertainty while Smith studied alternative market mechanism through experimental research. This was the first time a psychologist was awarded the Nobel Prize and played a key role in convincing mainstream financial economists that investors can behave irrationally (Subash, 2012, p. 6).

Market efficiency, in the sense that market prices reflect fundamental market characteristics and that excess returns in the average are levelled out in the long run, has been challenged by behavioral finance. There have been a lot of studies pointing out market anomalies that cannot be explained with the help of standard financial theory, such as irregular price movements in connection with IPOs, mergers, stock splits and spin-offs. Investors have been shown not to react "logically" to new information but to be overconfident and to alter their choices when give superficial changes in the presentation of investment information (Olsen, 1998, p. 15). During the past few years there has, for example, been a media interest in technology stocks. As reviewed, there was a positive bias in media assessments, which might lead investors in making wrong investment decisions. These anomalies suggest that the underlying principles of

rational behaviour underlying the efficient market hypothesis are not entirely correct and that we need to look as well as at other models of human behaviour, as have been studied in other social sciences (Shiller, 1998, p. 2).

Theme 2 - Behavioral Biases

Behavioral biases can be divided into two categories: cognitive errors and emotional biases. Cognitive errors result from the inability to process the information accurately. Whereas, emotional biases are related to the feelings and impulses, which are usually more difficult for individual investors to correct for than cognitive errors (Garcia, 2018). Investors may be inclined towards different types of behavioral biases, which lead them to make cognitive errors. People may make predictable, non-optimal choices when faced with difficult and uncertain decisions because of heuristic simplification (Gongmeng Chen *et al.*, 2007, p. 426). Behavioral biases, abstractly, are defined in the same way as systematic errors are, in judgement. Behaviourally biased investors typically make poor decisions about fund style and expenses, trading frequency, and timing, resulting in poor performance (Bailey, Kumar and Ng, 2011, p. 1). Researchers distinguish a long list of specific biases, applying over fifty of these to individual investor behaviour in recent studies. When one considers the derivative and the undiscovered biases awaiting application in personal finance, the list of systematic errors seems very long indeed.

Researcher that is more brilliant seeks to categorize the biases according to some kind of meaningful framework. Some authors refer to biases as heuristics while others call them judgements, beliefs or preferences; still other scholars categorize biases along cognitive or emotional lines. While "this sort of bias taxonomy is helpful – an underlying theory about why people operate under bias has not been produced. Instead of a universal theory of investment behaviour, behavioral finance research relies on a broad collection of evidence pointing out to the ineffectiveness of human decision making in various economic decision-making circumstances" (Pompian, 2006, p. 49). By having a better understanding of how behavioral biases affect our investment decisions, individual investors can make rational investment decisions that can help to improve the efficiency of their portfolios and make better able to stick with their investment plans during adverse conditions (Garcia, 2018).

Overconfidence

The key behavioral factor and perhaps the strongest finding in psychology of judgement needed to understand the market anomalies is overconfidence. In its most basic form, overconfidence can be summarized as unwarranted faith in one's intuitive reasoning, judgements and cognitive abilities. The concept of overconfidence derives from a large body of cognitive psychological experiments and surveys in which subject overestimate both their own predictive abilities and the precision of the information they have been given. In short, investors think they are smarter and have better information than they actually do (Pompian, 2006, p. 51). Investors that exhibit overconfidence in their trading behaviour are likely to expect larger returns during periods of boom on financial markets and such investors also attribute their successes to their skills, while their failures are attributed to "bad luck" (Toma, 2015, p. 201).

Overconfidence can be defined as the tendency to overestimate the probability of achieving one's objectives as a result of presumptuous belief in one's abilities or attributes that may be used to bring about a particular outcome (Fabre and François-Heude, 2009, p. 80). People are generally overconfident of their own skills, and investors and analysts are especially overconfident in areas where they have some expertise. However, increasing levels of confidence frequently show no correlation with greater success. For instance, studies show that men consistently overestimate their own abilities in many areas including athletic skills, abilities as a leader, and ability to get along with others. Money managers, advisors, and investors are consistently overconfident of their ability to outperform the market; however, most fail to do so (Singh, 2009, p. 94). Investors become overconfident as they become more experienced. Extant research indicates that individual investors tend to overestimate their own abilities and chances for success, driving stock prices away from normal levels, and indulge in excessive trading. Investors tend exaggerate their talents and underestimate the likelihood of bad outcomes over which they have no control. Overconfidence occurs when investors exaggerate their predictive skills and ignore the impact of chance or external environmental factors which may result in an underestimation of outcome variability. Overconfident investors tend to overestimate the precision of the information leading them to overestimate their gains which cause them to trade too much and earning lower returns.(Jain, Jain and Jain, 2015, p. 10) The combination of overconfidence and optimism causes the investors to overestimate the reliability of their knowledge, underestimate risks and exaggerate their ability to control events which leads to extreme trading volume. Investors tend to overreact to unexpected and dramatic

new events. Consistent with the predictions of overreaction hypothesis, portfolios of prior "losers" are found to outperform prior "winners" (Bondt and Thaler, 1985, p. 804).

Overconfidence seems to be related to some set of psychological phenomena. Individual investors who are overconfident about their skills tends to believe that they are better than they actually are. The same applies to knowledge. According to (Thomas, 2018, p. 32) age and income has relationship with overconfidence bias which indicates that older people and people with higher income are overconfident in their investment abilities. Thus, these investors tend to invest in various asset chases at the wrong times and end up making huge losses. Individual investors who are overconfident about their level of knowledge tend to think they know more than they actually do. Overconfidence does not necessarily mean that individual investors are ignorant or incompetent. Rather, it means that their view of themselves is better than is actually the case. A common trait among investors is a general overconfidence of their own ability when it comes to selecting stocks, and to decide when to enter or exit a position. These trends were researched by (Odean and Keirstead, 1998, p. 1908) and it was found that individual investors that conducted the most trades tended, on average, to receive considerably lower yields than the market.

Excessive Optimism

Overconfidence involves in setting up a too high proportion for private information and overconfidence in personal skills. Excessive optimism stems from overconfidence, and trust related to the events happening in the future can be much better and positive than those of in the reality. According to the theoretical study conducted by (Gervais, Heaton and Odean, 2002, p. 2) excessive optimism often results in positive impact because it motivates the managers to implement the investment. This can be considered as positive effect because fear of risk might have negative effect on the value of the companies. However, excessive optimism can cause a negative impact because this may lead the companies or investors to accept opportunities to invest in negative Net Present Value or in highly risky assets. Investors tend to be excessively optimistic about the markets, the economy and the potential for positive performance of the investments they make. Many excessive optimistic investors believe that bad investments will not happen to them. This can cause investors to think they are above average investors simply because they are optimistic people in general (Pompian, 2006, p. 163). Based on their past successful experiences in stock investments, individual investors start thinking that they know

more than the average investor. So, they feel confident with their prediction capabilities and often deviate from the model predictions which might have predicted contrary to what they think. This results in more trading and heavy investment in some areas, thus further increasing the occurrence of bad results. (Johnsson *et al.*, 2002) conducted a research to investigate factors influencing investment decision-making of individual and institutional investors in Sweden. The behavioral biases such as excessive optimism, overconfidence, anchoring bias were explored. In his work, the results of the behavioral biases of individual investors with high percentage appearing in the research sample were optimism and overconfidence. Moreover, they determine relationships between overconfidence and excessive optimism.

Attitude Towards Risk

Risk has been still a controversial concept in the financial sector. In financial terms, risk is the chance or probability that a certain investment may be or may not be deliver the actual/expected returns. The risk and return trade off say that the potential return rises with an increase in risk. In investing, risk and return are highly correlated. Due to the fact that all the information comprised in stock prices it is impossible to make an above average profit and beat the market overtime without taking excess risk. Increased potential returns on investment usually go hand in hand with increased risk. There are many different methods of measurement of risk due to the existence of various definitions of risk. However, most of the arguments suggested that risk is an unexpected result and closely connected with uncertainty. Return refers to both gains and losses has made from trading a security.

Diversification allows investors to reduce the overall risk associated with their portfolio but may limit potential returns. Making investments in only one market sector may, if that sector significantly outperforms the overall market, generate superior returns, but if the sector decline then investors might experience lower returns than could have achieved with a broadly diversified portfolio. It is important for an investor to decide on a balance between the desire for the lowest possible risk and the highest possible return. Several studies demonstrate that it is not the propensity to take risk which is important but rather the perception of risk in explaining why individuals take risk and why risk perception varies among investors. The differences in risk taking behaviour are only due to risk varying attitudes, more general risk-

value models argue that the three factors subjective risk perceptions, risk attitude and subjective return expectations can influence risky choices.

Standpoint of standard finance is associated objective factors with different quantitative measures such as variance, standard deviation, beta etc. and everyone has constant attitude towards risk. The majority of the individual investors are aware of the conception of risk measurement. However, very a few of them actually use while investing as they mostly rely upon the tips of brokers for investment. Besides, they judge the market price and the credit rating of the company before investment and majority of them apply portfolio management technique for managing the investment risk (Trivedi and Soni, 2014, p. 36). According to (Weber and Zuchel, 2003, p. 24) presentation format affects the risk taking behaviour of subjects. Analysing the effect of different presentation formats such as bar charts or density functions, they find that risk taking behaviour can be biased in systematic ways depending on the way information about an asset is presented. More specifically, they illustrate that differences in subjective risk perceptions and subjective return expectations affect the risk-taking behaviour. But, behavioral finance considers more subjective qualitative factors where this risk can be observed in both emotional and cognitive aspects. Two psychological states are afraid of risk and risk seeking that can exist in an individual investor under different conditions and circumstances.

According to (Tversky and Kahneman, 1974) prediction and uncertainty do not follow the law of probability. According to the Prospect Theory of Tversky and Kahneman investors tend to be risk aversion in gain area or when things are positive and be risk seeking in loss area. They also evaluated that people are fond of risk when facing the losses (Tversky and Kahneman, 1979). According to (Collard and Breuer, 2009, p. 15) attitude towards risk depend on factors such as personality, circumstances, level of financial knowledge and experience, and extent of financial product holding. Every investor has different ability to tolerate the risk. Ability to bear the risk highly depends upon the investor’s financial responsibilities, personality traits and environment. Young individual investors are having more risk appetite due to their age and less responsibility. So, they are ready to invest in more risky stocks to get higher returns. Since, India is emerging out as a youth nation, these young individual investors can prove much efficient in controlling monetary leakage from the economy and thus escalating the growth and development of economy (Kumari, Swain and Thakur, 2015, p. 3)

Herd Behaviour

Due to the fact that more and more information is spread faster and faster, life for decision makers in financial markets has become more complicated. Herding in financial markets can be defined as mutual limitation leading to convergence of action (Hirshleifer and Hong Teoh, 2003, p. 26). This is the most common error where investors tend to follow the investment decisions taken by the majority. That is why in financial markets, when the best time to buy and sell is in hand, even the investor who thinks he should take action experiences strong psychological pressure refraining him to do so. The main reason for this is pressure from or influence 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 of what other think of their investment decisions (Scharfstein and Stein, 1990, p. 465)

A fundamental observation about human society is that there is similarity in thinking of people who communicate regularly with one another. It is important to understand the origins of this similar thinking. Part of the reasons people’s judgement are similar at similar times is that they are reacting to same information. The social influence has immense power on individual judgement. When people are confronted with the judgement of a large group of people, they tend to change their “wrong” answers. Investors are influenced by their social environment and they often feel pressure to conform. Herd behaviour may be the most generally recognized observation on financial markets in a psychological context. Many investors in financial markets might think that a currency or equity is not priced, but they refrain nevertheless from contrary financial exposure. These investors simply feel that it is not worthwhile to combat the herd. This is an example of enforced herd behaviour. According to (Sairafi, Selleby and Ståhl, 2008, p. 15) whenever a group of individuals have common goal or purpose, and are able to find an opportunity where they can meet, a herd can be formed. It does not matter which individuals the herd consists of, whether they differ in personal values, level of intelligence, ethnicity or any other factor, when belonging to the herd they will change their behaviour. The transformation from an individual to a member of the herd will infuse the human with a collective way of thinking. This will result the individual think and act in a manner which considerably different from the way that person would have acted on his own. Thus, belonging to a group results in transferring the responsibility from the individual to entire group. They

follow the herd – not voluntarily, but to avoid being trampled and are therefore enforced into following the herd (Fromlet, 2001, p. 67).

According to (Barber, Odean and Zhu, 2009, p. 567) individual investors tend to contract the similar forms of deviant behaviour at or around same time. It is unnecessary for these investors to reject the each other's actions, instead their actions have overall potentiality. In that case, individual investors cannot be considered as noisy traders; and they all seem to be giant organization having considerable impact on the market. This can lead the stock prices to their real and appropriate value. Herd mentality is not only expressed in terms of the same action with the crowd, but also reflected in not acting against the crowd despite the information that they have.

Herd behaviour is the tendency individuals have to mimic the actions of a large group irrespective of whether or not they would make the decision individually. One reason is that people are sociable and generally tend to seek acceptance from the group rather than being a standout. Another reason is that investors tend to think that it is unlikely that a large group could be wrong. This could make him follow the herd under the illusion that the herd may know something he does not. Even completely rational people can participate in herd behaviour when they take into account the judgements of others, and even if they know everyone is behaving in a herd like manner. The behaviour, although individually rational, produces group behaviour that is irrational and causes fluctuations in the market. Another important variable to herding is word of mouth. Investors generally trust friends, relatives and working colleagues more than they do the media. The conventional media, printed information, televisions and radio have a profound capability for spreading ideas, but their ability to generate active behaviours is still limited talking to other people and other kinds of interpersonal communication are among the most important social connections humans have. It is therefore likely that news about a buying opportunity will rapidly spread. Even if people read a lot their attention and actions appear to be more stimulated by interpersonal communications (Johnsson *et al.*, 2002, p. 18).

Theme 3 - Major Issues of Individual Investors

Individual investors are probable to face more issues trying to make rational decisions about their investments than larger entities. Large investors have more resources to collect

information regarding their investment objectives. Processing information is challenging for small investors. Therefore, individual investors face more issues on making rational decisions as compared to large organisations (Chen, 2011, p. 2). The amount of data and information concerning financial instruments is enormous (Lu and C, 2010, p. 1). Experienced investors are probable to consider corporate governance as a major factor to evaluate firm's financial condition. While less-experienced investors often put more weight on financial information than on corporate governance information (Chang and Wei, 2011, p. 152). A minority of financial theories acknowledge more experienced investor's ability to utilize the information more effectively as compared to beginners. Individual investors is being misled by invalid information (Polak, 2012, p. 55). Under the influence of some or the other biases or combination of the biases noted above, investors develop some irrational tendencies such as holding too much fund in liquid form for too long, trading quite frequently, reluctant to be adequately diversified, buying only attention-grabbing securities, etc. People sometimes invest in the hottest stocks of the week which a large number of investors buy. If something goes wrong as a result, investors find it easy to justify their wrong decisions by associating themselves with the losers, suggesting that it happened to every investor (Jain, Jain and Jain, 2015, p. 13). There are various opinions concerning the worst errors of judgement of individual investors while implementing their investment strategies. Some investors rationalise their decision-making based on the fact that other investors are buying the same stocks. Depending on other investor's decision-making creates a feeling of security to investors. It suggests that their decisions are generating profit because it is a public opinion that a certain stock will bring value to the owner (Welch, 2000, p. 369).

Long-term financial planning is very important for lifetime financial security, but it also very difficult for most individual investors to implement it in a disciplined manner. Earnings, savings and investment choices of investors determine their lifetime consumption and wealth. Individual investors also face the "portfolio problem" when selecting investment as they save for future consumption. Individual investors think that they have full control in picking investments that will outperform the market. But in reality, more than fifty percent of stock picking is proved to be wrong. Thus, for many individual investors need proper advice from financial advisors. According to (Thomas, 2018, p. 29) by focusing only on price movements of the investments and not on valuation, individual investors tend to loss the principal. This emotional phenomenon can cause individual investors to ignore proper asset allocation. Professional investors know the value of proper asset allocation, and they rebalance whenever

necessary in order to maintain proper allocations. These individual investors often possess concentrated portfolio. Proper asset allocation is crucial to long term investment success.

There are two common mistakes that investors usually make. The first is the irrational obsession of holding value losing securities while selling the profitable securities. The second is excessive trading of securities (Singh, 2009, p. 90). According to (Singh, 2012, p. 116) the most common mistake of individual investors is to depend on the most recent information received which is often found on internet, magazines which is to be treated as invalid. One of the important approaches on irrational investment behaviour is to consider decision-making of investors once they have implemented their strategies. Irrational behaviour after losses and gains should be considered into even more illogical behaviour in the future. Investors have a tendency of avoiding the painful feeling of making losses and therefore, they may hold their value losing securities. Individual investors are prone to behavioral biases. This has serious implications in their short term and long-term investment decisions. The asset allocation by the individual investors is also based on various behavioural aspects they possess. Wrong asset allocations hamper the investment goals of individual investors. The individual investors, therefore, need to guard against their biases to avoid the investment losses. Correct asset allocation and well diversified portfolio are essential to achieve the long-term investment goals (Thomas, 2018, p. 32).

1.3 Research Objective

The primary objective of this research is to find out whether these biases really affect the investment strategies or decisions of individual investors and also in what ways are they affecting. Even after having different financial models which help the investors to assess the risks and expected returns, why do their investment strategies or decisions go wrong? It will reveal the biases and factors which influence or impact the investment strategies and decisions of individual investors in India. It will also examine whether the existence of psychological factors of individual investors in Indian stock market is same as that found in the other countries or not. In this research, only behavioral biases at the individual level will be studied. The major contribution of the study in this area will be to highlight the importance of the topic for those investors who decided to invest directly and who are in control of their own money and to prove that the knowledge of behavioral biases will improve the performance of individual

investors. In long term identifying these factors will help in planning more effective investment strategies while investing in stocks.

According to these statements it was recognised the main objectives of the research are to establish:

- That there is a significant rise of individual investors, so it is worthwhile to conduct a research on their financial behaviour.
- If individual investors are aware of behavioral finance and behavioral biases.
- In what ways does the behavioral biases affect the individual investors.
- That the knowledge of behavioral finance and behavioral biases will benefit the individual investors in their future investment practices.

1.4 Research Problem

Financial professionals know very well that the investors' psychology impacts the financial markets. The investor's mood and its influence on the market movements is regularly discussed. As we all know that stock markets are volatile. The past twenty years have witnessed rise in volatility and fluctuations in the equity markets across the world. The surging effect of equity market bubble and uncertainty on the happenings around the globe. Financial markets are affected by several factors such as political and economic processes, yet the foremost important factor is the individual investors reaction to such events. In today's world investing in stocks and funds is made easy. Investors do not need any specific education or knowledge in order to purchase stocks. The concept of investing is seen as trendy. Therefore, people tend to make illogical decisions not based on true knowledge or information of a certain investment object. These decisions are explained via several behavioural finance theories.

The market comprises investors with various skills. While some investors have broad range of knowledge about trading and years of experience others are beginner who have little or do not have much financial literacy and trade in their spare time. Thus, behavioral finance has exposed different behavioral biases that influence investors decisions.(Itzkowitz and Itzkowitz, 2017, p. 180). Behavioral finance is a branch of finance that studies how the behaviour of investors in the financial market are influenced by psychological factors which can influence on decisions made while buying or selling the market, thus affecting the prices.

Behavioral biases potentially affect the behaviours and decisions of financial market participants. Due to lack of awareness about these behavioral financial biases and factors the individual investors tend to make errors in forecasting the values and behaving irrationally. Investors can educate themselves about the behavioral financial biases they are likely to show and then take steps towards avoiding it thus improving their effectiveness which might result in positive outcomes by the investment decisions made. Thus, it is very significant to understand whether, which, and in what ways does the behavioral finance biases can affect or influence the investment strategies and decisions of individual investors in India.

1.5 Research Question

Formulation of an applicable research question is necessary for directing the research in the required direction and fulfilling the core purpose of the study. Therefore, the question for this research is outlined as:

Do behavioral finance biases affect the investment strategies and decisions of individual investors in India? If yes, in what ways does it affect?

The research question is provided to investigate whether behavioral finance biases affect the investment decisions and strategies of individual investors in India. If these behavioral finance biases are affecting them, then the researcher wants to find out in what ways are these behavioral finance biases affecting the investment decisions and strategies of individual investors in India.

1.6 Roadmap for the Dissertation

The dissertation has been divided into 4 chapters – Introduction, Research Methodology, Results and Discussion.

In the Introduction chapter, firstly the research background will be discussed to have an overall idea about the topic. Next, the researcher will start with reviewing the literature with the evolution of finance. It will also address different behavioural finance biases as well as the major issues of individual investors. Due to the fact that the segment of individual investors

has been growing over the recent years because of different factors the researcher will try to establish the behavioral finance biases that influences individual investors. In this chapter, the research problem, research objective and research question will be addressed. The limitations of the research will also be stated.

The Research Methodology chapter will discuss the existing research methods that are used by researchers with the importance on the research methodology that has been selected from a variety of available options for the purpose of this particular research. Selected methodology will be discussed in detail and the discussion will include the research design, philosophies and approach as well as a detailed description of the ways of primary and secondary data collection. Further, data analysis techniques will be used to answer the research question. The ethical issues and limitations will be outlined in research methodology chapter.

Result chapter will present the results collected through primary data collection method. The results of the findings from questionnaire will be discussed here.

Discussion chapter will review the work done during the research process. It will also present interpretation of the results to answer the research question and objectives. Lastly, the conclusions which could be drawn out in relation to research objective and research question will be discussed.

1.7 Research Limitations

The researcher has identified a number of limitations to this study. One of the clearest limitations of this study is the sampling size of the target population. As the research will be carried out by conducting interviews, the main drawback is it will be time consuming and the progress might get delayed due to dependence on others for information. Investment decisions can be demanding due to various factors which could push the investor making irrational decisions and making errors at one point. However, during interviews, the same individuals are more relaxed and can try to avoid revealing the errors or wrong investment decisions made by them in past. Another limitation is that the investors have their own set of investing techniques which they prefer not to disclose to any other person, so obtaining appropriate information might be a problem.

2. Research Methodology

2.1 Introduction

Research Methodology refers to the theory of how research should be undertaken (Saunders, Lewis and Thornhill, 2007, p. 3). This chapter will discuss the existing research methods that are used by researchers with the importance on the research methodology that has been selected from a variety of available options for the purpose of this particular research. Selected methodology will be discussed in detail and the discussion will include the research methods, research participants, research design, approach and philosophies as well as techniques involved in collection and analysis of the data. The research will be conducted using qualitative method. To ensure richness of information 10 experienced investors will be interviewed. They will be interviewed through semi-structured interviews. It is a significant stage of a research as an improper matching of methodology to the research problem may produce false results and may ultimately have negative impact on the validity of the research. Each of these sections will be described and selection for each will be justified in the context of this research.

2.2 Research Methods

Research methods are the strategies, procedures or techniques used to gather data or evidence for analysis in order to reveal new information or create better understanding of the topic (Posker, 2019). There are two main types of research methods namely qualitative and quantitative.

Qualitative research collects information on experiences, emotions or behaviours and the meanings individual attach to them. It enables researchers to understand complex concepts, social interactions and cultural phenomenon better.

Quantitative research collects numerical data that can be classified, measured or categorized by statistical analysis. It helps to uncover patterns or trends and make generalizations. This type of research method is helpful to find out how many, how much, how often or to what extent.

The researcher has used qualitative research methods because it will help to gain insights of their stock investment experiences. Thus, it will help to understand whether behavioral biases affect their investment strategies or decisions. These insights will be collected through semi-structured interviews of 10 experienced individual investors.

2.3 Research Participants

Sampling techniques provides a range of methods that helps the researcher to reduce the amount of data that is needed to be collected from sub-group rather than all possible cases or elements. Full set of cases or elements from which a sample is taken is called population (Saunders, Lewis and Thornhill, 2009, p. 211). According to (Saunders, Lewis and Thornhill, 2009, p. 213) there are two types of sampling techniques available:

- Probability sampling
- Non-probability sampling

Probability sampling is most commonly used for survey research strategy where you need to make inferences from your sample about a population to answer the research question (Saunders, Lewis and Thornhill, 2016, p. 276).

Non-probability sampling provides a range of techniques to select samples based on researcher subjective judgement (Saunders, Lewis and Thornhill, 2016, p. 295)

India has vast number of investors, all from diverse culture. It is impossible to interview all the people from the investor population in limited available time. Hence, it is important to choose a sample who are representative of the population which will provide primary data. The chosen sample will allow the researcher to judge how the rest of the population think. Due to the difficulty of constructing a sampling frame from this large population, the respondents will be chosen in a non-random way. Non-probability sampling will be used. This will also allow the researcher to use purposive sampling which is also known as judgemental sampling. The sample will be based on the researcher's judgement, of who the researcher think would be best for the sample (Saunders, Lewis and Thornhill, 2009, p. 237). Regarding the decision on suitable sample size the researcher would like to conduct 10 semi-structured interviews of experienced individual investors.

2.4 Research Design

In any research project, research design plays a significant role. A clear and concise research design should be mentioned to carry out the research in an efficient way. The research design is known as the ultimate strategy of selecting and combining overall key elements related to the study in a logical, comprehensive and coherent manner thereby ensuring to address the research problem effectively.

Descriptive and Exploratory are two important categories of design. In the existing research work, exploratory research design would be the most suitable and applicable research design to discover what is happening and gain insights about the topic of interest. It will help to describe which and in what ways does the behavioral biases affect the investment decisions and strategies of individual investors in India. In this way, the exploratory design is helpful and relevant in addressing existing literature gaps by enabling newly explored data about a research topic to confirm an important contribution to the available literature and originality of present research study.

However, the descriptive design has a weakness as it is limited to certain aspects and attitudes whereas exploratory design is relatively more flexible to cover wider dimensions of the research and address the research problem. Therefore, exploratory design has been used in present research.

2.5 Research Philosophy

Research philosophy is one of the important aspects of research process. It helps to improve the understanding of the ways in which a research topic can be approached. The key for the research process is understanding the philosophical position as it can influence the way in which you think about it. Research philosophy is a system of beliefs and assumptions about the development of knowledge (Saunders, Lewis and Thornhill, 2012, p. 127). There are two significant ways of thinking about research philosophy which is ontology and epistemology.

Ontology is related to the nature of reality and assumptions researchers have about the way the world operates and commitment held to a particular view (Saunders, Lewis and Thornhill, 2009, p. 110)

Epistemology is related with the study of knowledge and what we accept as valid knowledge (Saunders, Lewis and Thornhill, 2009, p. 112)

The research question which is “Do behavioral finance biases affect the investment strategies and decisions of individual investors in India? If yes, in what ways does it affect?” will help in making suitable choice of the research philosophy.

The researcher is considering the epistemology as the most suitable way of thinking for the purposes of this research as the research question is related to the study of specific knowledge.

According to (Saunders, Lewis and Thornhill, 2016, p. 127) epistemology is concerned with the assumptions about knowledge, what constitutes valid legitimate knowledge and how we can communicate knowledge to others. Epistemological approaches to research philosophies would be either of positivism, realism or interpretivism nature. According to the researcher, the most suitable research philosophy for this research study will be interpretivism which is a part of epistemology. It is concerned with individual’s experience about society and create interpretation of external reality. Thus, it will help the researcher in asking “how” questions and understand how respondents notice, interpret and react to certain situations in reality. It is the belief that individuals are influenced by their environment and thus each individual will have their own perception. Interviewing respondents will therefore be appropriate primary data collection method in interpretivist studies. However, due to subjective nature of this approach there can be concerns about bias on the behalf of the researcher. Primary data collected through interpretivists studies cannot be generalized as it can be affected through researcher’s personal viewpoint.

2.6 Research Approach

Research approach plays a crucial role in producing a research plan and arrange the research procedures in relation to wide suppositions and beliefs related with appropriate methods of research. In order to understand which research approach is the most appropriate to follow, the researcher should have a clear understanding of the two different approaches which are deduction and induction.

An Inductive approach is in contrast to a deductive approach. In a deductive approach the hypothesis is developed based on an existing theory and through the research methodology, the

hypothesis will be tested to prove if it is right or wrong (Saunders, Lewis and Thornhill, 2016, p. 146)

Due to the interpretivist nature of the research, this study will adopt inductive approach as it involves generation of theory which will be emerging from the data (Saunders, Lewis and Thornhill, 2016, p. 147). The focus of the study will be on individual investors of India and behavioral finance biases and factors. This approach is appropriate for the research as it will be used to explore patterns in the data collected which will result in formulation of theory. It is infeasible to use deductive approach as it improves rigidity and is more inclined to support quantitative data.

2.7 Data Collection Method

In any research project collecting appropriate and useful data is very important. The collected data helps in forming a potential information platform which allows executing the research study under a defined purpose. The data collection approaches are categorized in two types that are known as primary and secondary data collection approaches. Primary approaches to obtain information includes interviews, surveys, focus groups and observations. By implementing these methods, first- hand data can be collected from the selected respondents. The primary data acquired may be theoretical or numerical.

As compared to the above, the secondary approach of obtaining research information is relevant in the form of case study examination and systematic review. Secondary approach offers theoretical based descriptive information to the specified research purpose. The nature of the current research study appears to be qualitative and descriptive information is needed in specific reference to the individual investors of India for investigating whether behavioral finance biases affect their investment strategies and decisions. Therefore, it is justified to apply the interview method to collect primary and qualitative data regarding the research subject. The reason for using the interview technique in this study is that a small number of respondents in the research offers reliable first-hand information.

According to (Saunders, Lewis and Thornhill, 2016, p. 391) interviews are categorised in two types : standardised and non-standardised. The researcher has chosen non-standardised technique which will consists of semi-structured interviews. As this study is exploratory in nature, semi-structured interviews are a useful tool in finding out detailed information about

the investing experience of the individual investors in India. It will lead to interesting and positively to some unknown aspects of the area which will further allow me to elaborate more on a response. Interviews will be performed one-on-one which will give the researcher control over questioning. Another advantage of one-on-one interviewing is that the researcher can collect information regarding their experience of their previous investing strategies and decisions in the stock market. Quantitative approach for obtaining data through survey is not used as there is no need to gain numerical data and examine the hypothesis. In addition, secondary research methods are not used as real information, and these techniques do not provide first-hand information. However, literary information is obtained by journals, peer-reviewed articles and books to support the primary data gathered by interviews.

2.8 Research Ethics

Research ethics is an essential part of research process. According to Eriksson et. al. (2008), research ethics cover the ways in which a research is conducted, reported and concerned with the whole research process, starting from the relationship between the research and the research objective and ending with writing and publishing the report. Ethical concerns can occur at any stage of the research; when seeking access to individual investors during data collection, during analysis and report of the findings. It is important that the research is carried out in a responsible manner. This includes respecting the privacy and maintaining confidentiality of all respondents who has volunteered to assists in this study. No pressure will be applied to any participant of the research. They will be approached by the researcher himself otherwise they will be contacted through e-mail. In this way, sincere efforts have been put for avoiding ethics issues in the research.

2.9 Data Analysis

Data analysis is a significant part of the research project as it draws accurate information from the data collected and involves the interpretation of the information obtained. Removing sections of unwanted and unprocessed information is important to develop a refined research study. This can be accomplished by analysing the obtained information by selecting suitable data analysis techniques. There are two main types of data analysis techniques known as

statistical and descriptive data analysis. Firstly, the descriptive technique includes thematic analysis in which the qualitative and detailed information acquired is analysed by formulation of distinct research themes.

Apart from it, numerical and quantitative data is analysed using graphical elements with the help of Ms-Excel under statistical data analysis. As the current research study is qualitative, therefore thematic analysis technique will be applied. The reason for choosing thematic analysis is that it eases the process of analysing the descriptive interview responses. Other data analysis techniques such as statistical analysis is not applied in the current research study because numerical data is not collected, and graphs cannot be used to represent and analyse the main findings of the interview.

Overconfidence bias –

In order to understand the overconfident bias of the respondents we will need to analyse the answers to questions that include overconfident factor in them –

- According to you is it important / necessary to take any training courses before you start investing in stock market?
- How do you evaluate your potential of stock investment as compared with that of others?
- Do you think that you have better ability to choose the stocks as compared to others?

The responses from the investors suggested that they think any training courses before you start investing in stock market is not necessary because ultimately it depends on the person who understands this business with having good patience can invest in stocks without having any professional training. While one of the investors think that as there is low quality of information available one should not take any training courses.

The investors evaluated their potential of stock investment on the basis of certain parameters like knowledge, experience and skills. One of the investors thinks that as there are two ways of making investments which is fundamental and technical, he has better knowledge of technical analysis of stocks and this makes him better as compared to others. Some investors think that they have better potential as compared to others due to their past experience on whatever they have invested and the performance of their shares over a period of time. As some of the investors started stock investing as their career they believe that due to their research

about the companies they want to invest, their peers, their competition they are able to generate good returns and are well equipped to understand the risk of the market which makes them better as compared to others.

When the investors were asked to compare their ability in choosing the stocks as compared to others, most of the investors think that they have better ability as compared to others because of their experience and updated research they do about the stocks before choosing it.

Excessive Optimism bias –

In order to understand the excessive optimism bias of the respondents the researcher will need to analyse the answers to questions that include optimistic factor in them –

- How do you think about the present stock market of India?
- What will you do when the stock market is going down?
- How do you evaluate the Indian Stock Market in next few years?

The responses from the investors suggested that they think the present stock market of India is very well poised because one of the reasons being extreme rise in participation of individual investors if compared to last 10 years. Earlier only foreign institutional investors and larger corporations used to dominate the market. But due to the awareness of stock market and its benefits has increased the participation. Even globally if the individual investors participation improves then it helps the stock market to be more mature.

The investors will still keep on investing in the market even if it is declining because they think that it is the time when the stocks are available and cheaper price so that they can buy at lower price and sell it at higher price in the future which will help them to generate good profits. When the stock market is declining some investors think that it is an opportunity to invest more in better stocks.

The investors think that the Indian Stock Market will go up in next few years because of the political stability. It was seen in the responses that in India the government is playing one of the major roles in influencing the Indian stock market because the current GDP size of India is 2.6 trillion rupees and there are reports that the government is planning of 5 trillion GDP in next 5 years and 10 trillion by 2030. The factors which were not allowing Indian market to grow were corruption and transparency but now all these have been brought into reforms and

policies. On the other hand, some investors think that the population is an important factor because it results in higher consumption which helps the business to earn more. Thus, India is going to overtake China in next 5 years so population and consumption story will help the Indian Stock Market to grow further and will outperform in the global markets.

Attitude Towards Risk –

In order to understand the attitude towards risk bias of the respondents the researcher will need to analyse the answers to questions that include risk factor in them –

- How do you respond when the stock market fluctuates considerably?
- How do you respond if the price of your shares is decreasing? Will you hold it longer or sell it off?
- What do you rely upon when making the decisions towards your desired shares?

The responses from the investors suggested that they think that it is a good sign as other people do not have a clear view of what is going on in the market and using asset allocation as a tool to diversify the portfolio trying to take advantage of the volatility can help in generating good returns. Some investors think that stock market fluctuation is an opportunity rather than a threat because stocks of good companies are available at lower prices, so it is an opportunity for investors to buy quality stocks at lower prices and sell them at higher prices.

The investors will still hold their investments even if the prices of their shares are decreasing so that when the price of their share rise again, they can sell it off. Some of the investors think that if the fundamentals are strong, no corporate governance issues or external threats like government policies which can directly affect the shares and if the business is good then they definitely hold the shares longer even if the prices of their shares is decreasing.

The investors rely upon financial statements of past 2-3 quarters, market research, performance and potential of that company, management of the company and also growth of the company over a period of time before making a decision towards their desired shares.

Herd Behaviour –

In order to understand the herd bias of the respondents the researcher will need to analyse the answers to questions that include herd factor in them –

- What do you often do when making a decision on buying-selling shares?

The responses from the investors suggested that some of them used to consult stockbrokers or take advices from their relatives or friends. While some of the investors used to rely upon the data of the company and the facts and figures as well.

Awareness of behavioral biases –

In order to understand whether the individual investors are aware about behavioral biases the researcher will need to analyse the answers to questions that include bias affecting factor in them –

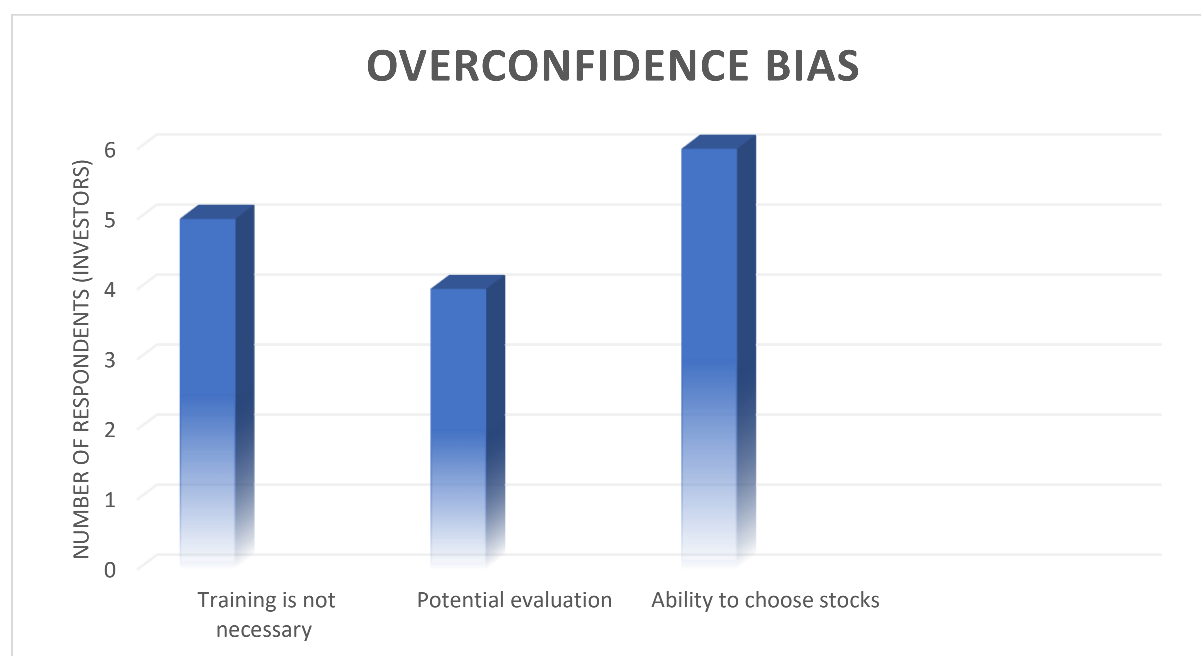
- Do you think that any behavioral finance biases affect your investment strategies or decisions?

The responses from investors suggested that some of the investors think that their investment strategies and decisions get affected because of behavioral finance biases. But they are not aware of exactly which biases are affecting them. They think that these biases lead them to make irrational decisions. While some investors think that their investment strategies and decisions are not affected by any kind of behavioral finance biases.

3. Results

This chapter will provide results of the interviews conducted and analysed. As previously mentioned in ***2.9 Data Analysis*** chapter the analysis of interviews was carried out using thematic analysis method and five themes emerged which will be interpreted in this chapter. These themes were: Overconfidence bias, Excessive Optimism bias, Attitude Towards Risk, Herd Behaviour bias and Awareness of behavioral biases. The data will be presented using graphical presentation and interpretation of results will be provided for the same.

Overconfidence bias –

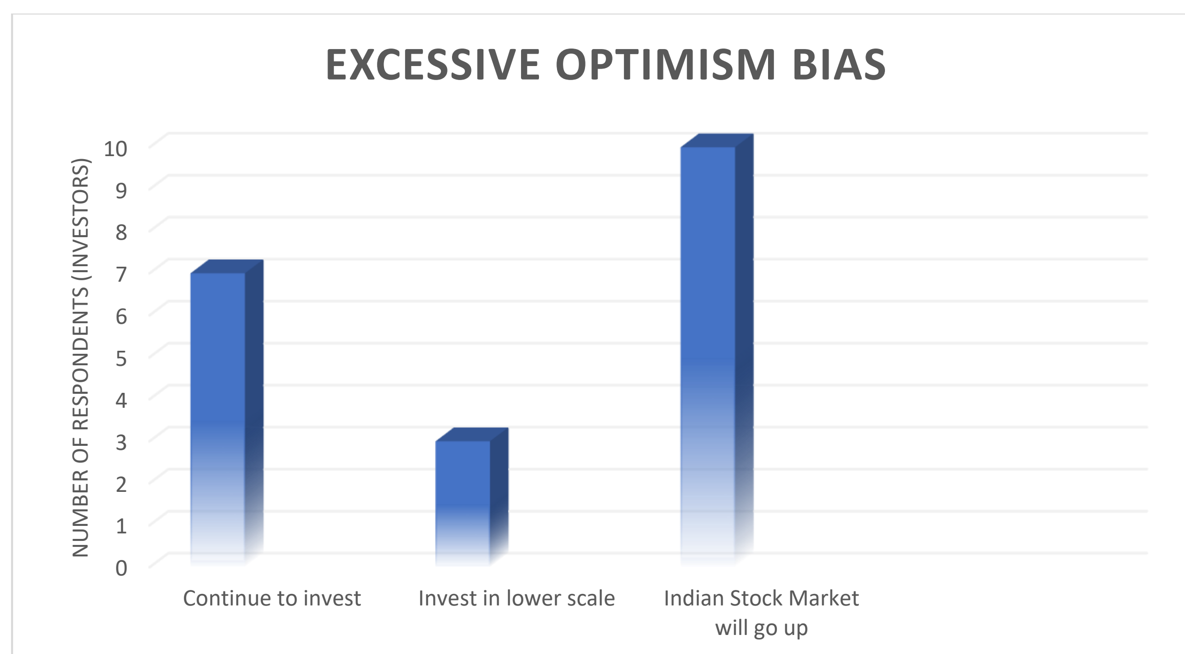


Graph 1: Overconfidence bias

The analysis showed that overconfident bias was clearly expressed in the opinions of investors themselves. In the above graph it can be seen that 5 out of 10 investors said that it is not necessary to take any training courses in professional knowledge of stock investment before investing in the shares. 6 out of 10 investors evaluated their potential of stock investment on the basis of the experience they have in stock investment. While 4 out of 10 investors (40%) evaluated their potential of stock investment based on their knowledge and skills of stock

investment. 6 out of 10 investors (60%) said that they have better ability to choose the stocks as compared to others. Thus, all 10 investors stated that they had knowledge and experience of stock market. It is evident through interviews that overconfidence bias is one the common characteristics of investors.

Excessive Optimism –



Graph 2: Excessive Optimism bias

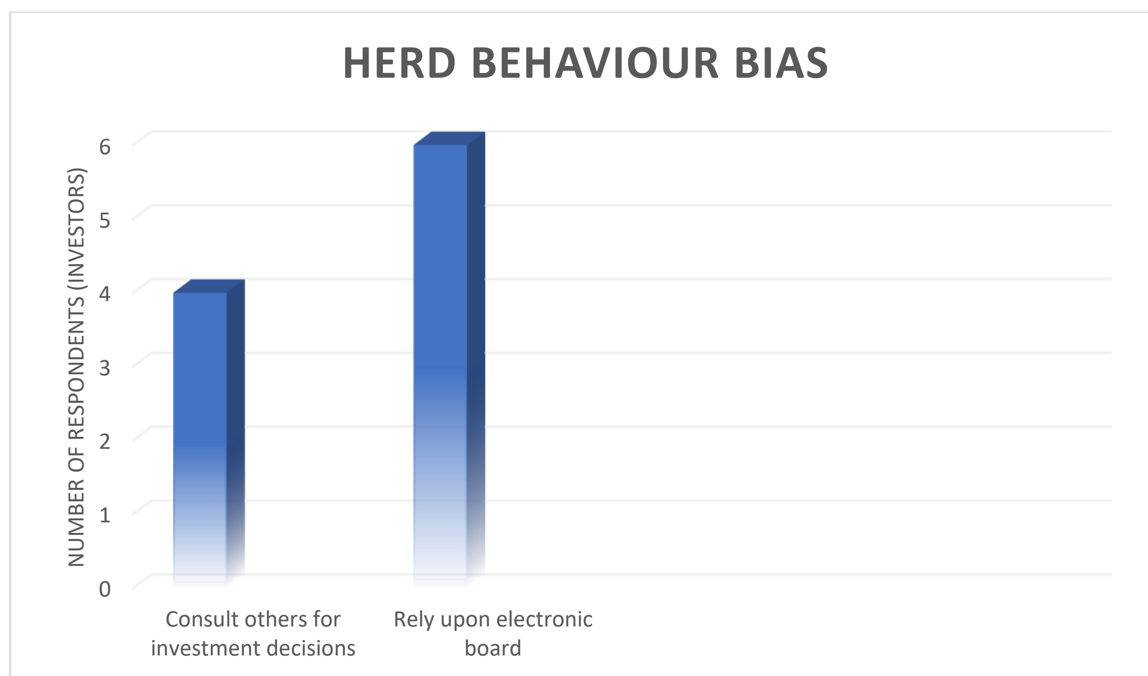
The analysis showed that the investors showed optimistic attitude towards the Indian Stock Market. The above graph illustrates that of 10 investors interviewed, 7 investors (70%) stated that they will continue to invest in the market although it is declining because in that situation good quality stocks are available at lower prices for buying and then when the market goes up, they can sell it and earn good profits. While 3 investors (30%) stated that they will invest on a lower scale or shift to safer stocks. All of the 10 investors stated that the Indian Stock Market will go up in next few years due to the political stability and policies that have been implemented by the government. The above findings revealed the positive attitude showed in the assessment of potential of Indian Stock Market.

Attitude Towards Risk –

Graph 3: Attitude Towards Risk

The above graph illustrates that 7 out of 10 investors (70%) said that it is an opportunity during strong fluctuation as they can take advantage of that volatility by investing in good quality stocks at lowers prices to earn good profits in future which shows their risk-seeking attitude. While the prices of their shares are decreasing 7 out of 10 investors (70%) stated that they will hold the share for a longer period of time and won't sell it off until the price of their shares rises again. 9 out of 10 investors (90%) rely upon financial data, familiarity of the companies and their business growth and be knowledgeable when making a decision towards their desired shares. This showed a cautious attitude and fear of risk or familiarity of investors. These opinions show the attitude towards risk of individual investors in Indian Stock Market.

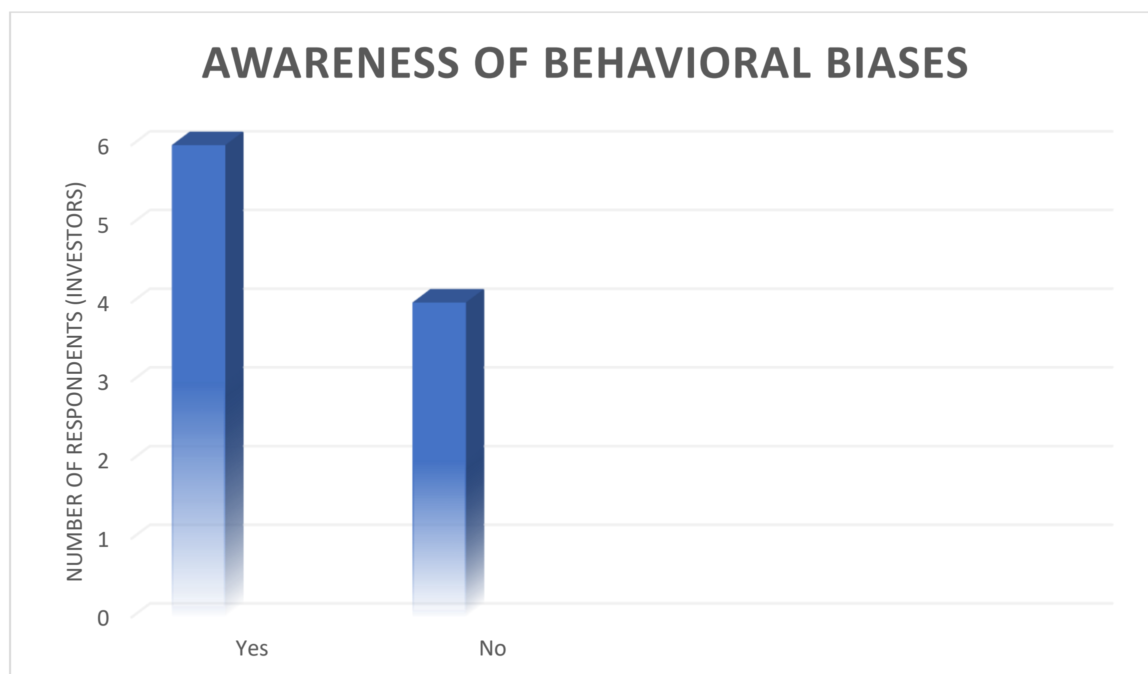
Herd Behaviour –



Graph 4: Herd Behaviour bias

In the above graph it can be seen that 4 out of 10 investors (40%) often used to consult others when making an investment decision of buying-selling shares. While 6 out of 10 investors (60%) stated that they rely upon certain models, signals on electronic board to make investment decisions. Obviously, individual investors tend to observe the behaviour of others when making investment decisions. This suggests that investors do not entirely depend on market situations to decide which can be an overconfident manifestation if they think that their own research and information is worth. On the other hand, it is evident that some investors consult others before making a decision. This demonstrates the herd behaviour of individual investors.

Awareness of behavioral biases –



Graph 5: Whether behavioral biases affect investment decisions of individual investors?

The above graph illustrates that 6 out of 10 investors (60%) said that their investment strategies or decisions get affected because of behavioral finance biases which also leads them to make irrational decisions. While 4 out of 10 investors (40%) stated that their investment strategies or decisions does not get affected because of any kind of behavioral finance biases. This shows that some investors are aware about behavioral finance biases and about their irrational decision-making process. But this result also demonstrates that some investors are denying the fact of behavioral biases affecting their investment strategies or decisions.

4. Discussion

The discussion chapter will include the detailed explanation of the main purpose of the dissertation. It will review the research process and will evaluate the work done in reaching the purpose of the research. Interview results will be further discussed in this chapter with the aim to answer the research question. The limitations of the research will be addressed. Lastly, the conclusions which could be drawn out in relation to research objective and research question will be discussed. This chapter will also contain recommendations for the future work to be done in relation to the subject of the research.

General observation of results suggests that individual investors who took part in the interview are prone to biases. Interestingly enough is that individual investors come from different professional backgrounds. Some investors find that availability of technology opened a possibility for them to trade directly without the need of intermediary. While some investors stated that rather saving money in banks with low interest rates, investing in equity market is a good option to earn high returns and grow money in fast mode. Innovations are usually aimed to enhance people’s life and make it easier. Innovations such as automatic financial advisors and other are becoming more and more popular that can suggest that more people will be attracted to this type of business and will choose to do it directly.

The main aim of the research is to find out whether these biases really affect the investment strategies or decisions of individual investors and also in what ways are they affecting. Also, whether the existence of psychological factors of individual investors in Indian stock market is same as that found in the other countries or not. The subject of behavioral finance and its aspects are widely known however the researcher wanted to demonstrate the benefits of this area of finance in relation to the Indian context which is a huge emerging market. Very few researchers have actually done a comprehensive research on this subject taking India into consideration.

The analysis suggests that some investors are aware of behavioral biases and irrationality in decision making. Importantly, is the fact that they consider that the knowledge in this subject can improve their investment strategies and decisions. Thus, this fact adds more value to the research.

Overconfidence bias –

The results suggest that investors are overconfident. They believe that it is not necessary to take training courses in professional knowledge of stock investment as one can understand and learn about the market through knowledge and experience. Some of the investors evaluated their potential on the basis of their experience, knowledge and skills. While majority of investors believed that they have better ability to choose the stocks as compared to others because of the market research and knowledge they have about the companies, their peers, competition and financial aspects of the company. They believe that the additional information they collect is adding value to their forecasts, so they are unable to view it through the perspective of validity and relevance. Since, you start believing that you are an expert, you start to believe in your forecasts. Obviously, this is not good for decision making process as it can lead to unfavourable results.

Excessive Optimism bias –

Excessive optimism stems from overconfidence, and trust related to the events happening in the future can be much better and positive than those of in the reality. The results suggest that the investors are highly optimistic towards Indian Stock Market. They stated that they will continue to invest even if the market is declining as they believed that it can be a good opportunity to buy or add more quality stocks in their portfolio. They also believed that investing on a lower scale or shifting to a safer stock can help them to survive in the market for long term rather than being greedy and investing more. Majority of the investors stated that the Indian Stock Market will go up in next few years due to the political stability. They specifically stated two factors for the future growth of Indian Stock Market. They believed that population being an important factor will help in higher consumption which will result in business growth and ultimately as the business grows, it will influence the Indian Stock Market in a positive manner. On the other hand, they believed that reports from government officials suggest that the government is planning of 5 trillion GDP in next 5 years and the factors that were not allowing the Indian Stock Market to grow were brought into control by reforms and policies. Thus, investors being excessively optimistic think that the market will behave in their interest which can lead them to take more riskier decisions resulting into future losses.

Attitude towards risk –

Attitude to risk can significantly affect investor's performance. In case, of risk takers if the investment decision turns out to be success the investor tries to believe in his knowledge and skills or in other words, he becomes overconfident. This overconfidence can lead to even riskier investment strategies or decisions. The results suggest that the investors demonstrate risk-seeking attitude and in some cases the investors are risk cautious in making investment decisions. They believed that it is an opportunity for them during strong fluctuation as good quality stocks are available at lower prices. They also believed that when the price of their shares is decreasing, they will hold it for longer period of time until the price of their shares increases again rather than selling it and exiting the market. It can be stated that investors become greedy when others are fearful which shows their risk seeking attitude. Majority of investors stated that they select familiar companies, rely upon their financial aspects, business growth and be knowledgeable while making investment decisions for their desired shares. This shows that investors become risk cautious when making investment decisions about their desired shares. The investors should realise that attitude to risk is connected to success and failure in investments. The risky investing decisions can cause either success or failure and if the investor chooses risky investing strategies then he should be prepared for both the outcomes.

Herd Behaviour bias –

Investors generally trust friends, relatives and working colleagues more than they do the media. The conventional media, printed information, televisions and radio have a profound capability for spreading ideas, but their ability to generate active behaviours is still limited talking to other people and other kinds of interpersonal communication are among the most important social connections humans have. The results suggest that the investors often consult others if they are not sure about their investment decisions. They also use research inputs from stockbrokers and believe that it is a better idea to approach an advisor and follow them. Majority of investors rely upon financial models, reversal signals on electronic boards to make investment decisions. It suggests that investors are not entirely dependent on market situation as they research and gather information before making investment decisions, but it can make them overconfident if they think that their own research and information is worth. Being dependent on how other

investors act in certain situations and trying to do the same without having knowledge can lead to bad decisions resulting in unfavourable results.

Awareness of behavioral biases –

Behavioral biases potentially affect the behaviours and decisions of financial market participants. Due to lack of awareness about these behavioral financial biases and factors the individual investors tend to make errors in forecasting the values and behaving irrationally. The results suggest that some investors are aware that behavioral finance biases affect their investment strategies or decisions but as they do not have much knowledge about these behavioral finance biases, they do not know exactly which behavioral biases affect them. They also stated that emotions have led them to make irrational decisions in their overall investment history. They believe that if they are able to control their emotions and biases then their overall experience could be much better in future. While some investors denied the fact that behavioral biases affect their investment strategies or decisions. Thus, due to lack of awareness about these behavioral financial biases and factors the individual investors tend to make errors in forecasting the values and behaving irrationally.

There have been several limitations identified during research process. Due to the fact that data was collected using semi-structured interviews it was not as wide ranging as it could be if collected using other methods. There was a limit to the number of questions that a questionnaire could contain, it could not be too long but at the same time it had to be long enough so to get benefits out of it. Moreover, the number of individual investors were limited. It was quite challenging task to conduct interview and so to include appropriate questions which reveal the biases of individual investors. However, as the survey method could facilitate relatively more accurate data as the interviews raised a query about results authenticity and validity due to being dependent highly on subject information.

The findings of the research suggest that the subject of behavioral finance is important for individual investors in the case of this research and further study would benefit this segment of investors. Since, we have discovered that the subject is important we can continue to explore it further and it will be beneficial for the readers. The tools and techniques might be missing that could aim to explain in detail what exactly has to be done in order to avoid these major

pitfalls. This study is just at the qualitative results. Therefore, in order to have reasonable explanation, it is essential to conduct the research using quantitative method based on the results of this qualitative research. This may be very useful to confirm the evidence of the existence and the impact level of the behavioral biases on the investment strategies and decisions of individual investors in Indian Stock Market.

The concluding observation is that majority of respondents suffer from behavioral biases. These behavioral biases affect them in their own way. The greatest challenge for individual investors is the control of their own mind and ways the decisions are made. Investors who are aware of the existence of behavioral biases are at least able to control it to some degree. The researcher was able to analyse the data in an appropriate manner so to get to the conclusions on the subject. Interviews enabled the researcher to structure the questions in such a way as to address the research objectives and analyse the results for the purpose of this research.

This research determines four prominent behavioral biases of individual investors in the Indian Stock Market including Overconfidence, Excessive optimism, Attitude towards risk and Herd behaviour. It sends them a caution about influence of behavioral biases in decision making process. Therefore, investors should have knowledge in behavioral finance, to realise which behavioral biases influences their investment strategies or decisions. Research result can be considered as basis for next deep researches in behavioral finance in India. The psychological factors including overconfidence, excessive optimism, attitude towards risk and herd behaviour are likely to exist naturally that people cannot realise them. Nevertheless, they have significant impact on making investment decisions of investors. It is obvious that further research is needed to emphasize these methods and techniques and this type of research could be very beneficial.

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6. Appendices

A) Interview Questionnaire

Could you please tell me your name, age & years of experience you have in stock investment?

Why did you started investing in stock market?

Did you take any training courses in professional knowledge of stock investment before investing in shares?

According to you is it important / necessary to take any training courses before you start investing in stock market?

How do you evaluate your potential of stock investment as compared with that of others?

Do you think that you have better ability to choose the stocks as compared to others?

How do you think about the present stock market of India?

What will you do when the stock market is going down?

Would you continue to invest in market even if it is going down?

How do you evaluate the Indian Stock Market in next few years?

Why do you think that the Indian Stock market will go up/ down in next few years?

How do you respond when the stock market fluctuates considerably?

What is your approach towards strong fluctuation in stock market, do you look towards it as an opportunity or as a threat?

How do you respond if the price of your shares is decreasing? Will you hold it longer or sell it off?

According to a research, women are said to be more risk averse than men i.e. women are less likely to take risk as compared to men, what do you think about this?

What do you rely upon when making the decisions towards your desired shares?

What do you often do when making a decision on buying-selling shares?

Do you think that any behavioral finance biases affect your investment strategies or decisions?

B) Information Sheet

INFORMATION SHEET FOR PARTICIPANTS

PROJECT TITLE

Behavioral Finance Biases and their impact on Investment Strategies and Decisions of Individual Investors in India

My name is Rahul Bagade. I am currently pursuing MSc in International Accounting and Finance. This research topic has been approved but at this stage any supervisor has not been allotted.

The aim of this study is to investigate whether the behavioral financial biases impact the investment strategies and decisions of individual investors in India and also to examine whether the existence of psychological factors of individual investors in Indian stock market is as same as that found in the other countries or not. This proposed research study will reveal the biases and factors which influence or impact the investment strategies and decisions of individual investors in India. In long term identifying these factors will help in planning more effective investment strategies while investing in stocks.

WHAT WILL HAPPEN

Behavioral finance is a branch of finance that studies how the behaviour of investors in the financial market are influenced by psychological factors which can influence on decisions made while buying or selling the market. With regards to this research, the participants will be asked to provide information about their investing experience in the stock market and how do they deal with certain investing situations. In depth interviews will be conducted and questions about investing will be asked to reach on the conclusion whether behavioural finance biases affect the investments strategies and decisions of individual investors.

TIME COMMITMENT

In-depth interview will be conducted. The interviews usually take 30-40 minutes and so the participation of the participants will be for the time being. If more information is required, you will be contacted.

PARTICIPANTS' RIGHTS

You may decide to stop being a part of the research study at any time without explanation required from you. You have the right to ask that any data you have supplied to that point be withdrawn / destroyed.

You have the right to omit or refuse to answer or respond to any question that is asked of you.

You have the right to have your questions about the procedures answered (unless answering these questions would interfere with the study's outcome. A full de-briefing will be given after the study). If you have any questions as a result of reading this information sheet, you should ask the researcher before the study begins.

CONFIDENTIALITY/ANONYMITY

The data I collect does not contain any personal information about you except your investing experience in the stock market. Your participation in the study will be for professional use only.

FOR FURTHER INFORMATION

I or / and Philip Hickey will be glad to answer your questions about this study at any time. You may contact my supervisor at Philip.hickey@dbs.ie or +353-14177500.

C) Consent Form

Research Topic – Behavioral Finance Biases and their impact on Investment Strategies and Decisions of Individual Investors in India

Consent to take part in the research

1. I _____________ voluntarily agree to participate in this research study.
2. I have had the purpose and nature of study explained to me and I had the opportunity to ask questions about the study.
3. I agree to my interview being audio recorded.
4. I understand that if I inform the researcher that myself or someone else is at risk of harm, they may have to report this to the relevant authorities.
5. I understand that this interview will be transcribed, and all the identifying information will be further used for dissertation purpose.
6. I understand that I am entitled to access the information I have provided at any time while it is in storage.
7. I understand that I am free to contact any of the people involved in the research to seek further clarification.

Signature of Research Participant Date

Signature of Researcher

I believe the participant is giving informed consent to participate in this study