TO STUDY BEHAVIOUR BIASES AFFECTING INVESTORS TAKE DECISIONS IN THE INDIAN EQUITY MARKET

Vinita Sharma
Research Scholar, Gujarat technological University
25vinitasharma@gmail.com

Abstract
This study investigates the impact of “behavioural biases” on the “decision-making process” of the investors and it especially sheds light on three biases such as mental accounting errors, loss aversions and herd behaviour. The stock market is constantly evolving thus investors have to think rationally which is the main reason behind the disruption in making effective decisions regarding their investment in “the Indian equity market”. In this study, all the different dynamics of the changes in volatile market behaviour create challenging situations for the investors and impact their “decision-making process”. Besides that, with the help of SPSS analysis, this study has concluded all the factors which prove that the biases directly impact the “decision-making process” of the investors. However, the findings of this study are effectively helpful for the investors of equity market to understand different behaviours, identify their reaction while making decisions and take corrective decisions to improve their position in “the Indian equity market” and also help to reduce the “behavioural biases” of the investors from the stock market.

Keywords: “behavioural biases”, stock market, investments, Indian equity market, decision-making

1.0 INTRODUCTION

1.1 Introduction
As per the “traditional economic theory” investors of equity market rationally behave during the time of decision-making while investing in a market which establishes the behavioural bias among them. This behavioural bias affects the financial sectors of an organisation and as the emotional factors affect the economic and financial sectors of an organisation it disrupts “the decision-making process” of investors. The equity market refers to the market where different companies trade their shares through exchange or over-the-counter.

The investors in “the Indian equity market” need to make various decisions to maintain fairness and justice to balance equality while investing in different markets which psychologically impacts their behavioural changes and sometimes creates a behavioural bias in their “decision-making process”. The Indian stock market rates were raised by 17 billion dollars in the fiscal year 2021-22 which has positively impacted the financial sectors of “the Indian equity market” (Buchholz, 2022). In this study, all the relevant factors associated with the “behavioural biases” of investors while decision-making and their impact on the financial sectors in “the Indian equity market” have been evaluated and discussed in a detailed manner.

1.2 Aim of the study
This study aims to focus on the different factors of “behavioural biases” of an investor in “the Indian equity market” that affect their “decision-making process”.
- To identify the aspects and types of “behavioural biases” in “investment decision-making”
- To evaluate the impact of “behavioural biases” of investors in taking investment decisions in “the Indian equity market”
- To explore different strategies to prevent and mitigate future errors in “the Indian equity market”

2.0 LITERATURE REVIEW

2.1 Factors and types of behaviour bias in investment decision making
“Behavioural biases” in “investment decision-making” means the beliefs and preconceived notions that affect an investor’s decisions related to their investment actions in the stock markets. Different types of “behavioural biases” are seen in an investor while making decisions about their investment in the market such as overconfidence bias, trend-chasing bias, regret aversion bias, loss aversion bias, availability bias and many others which negatively impacts their financial growth in the equity market (De Bortoli et al. 2019). Confidence is good behaviour that helps to improve the working stability of a person but overconfidence negatively impacts the workflow of an investor.
Besides that, the regret aversion of an investor in the stock market after investing in a wrong platform always creates behavioural bias among them which impacts their working flow and also affects their financial stability in the stock market. Some investors chase the trending investment policies which sometimes cause them huge losses and create behavioural bias in them which affects their position in the stock market (Ainia, & Lutfi, 2019). However, many other “behavioural biases” disrupt the “decision-making process” of individual investors, hence, it is important for every investor to understand behaviour biases and to learn to deal with them to make wise and effective investment decisions.

2.2 Positive and negative factors influencing an investor’s behaviour in India

Behavioural finance is evolving with new technologies which help to emerge with new trends in investment sectors of India with a wide scope. There are many challenges that an individual investor has to face in the stock market but there are some effective factors that positively impact the behaviours of an investor and help to improve their decision-making regarding any investment (Patil, & Bagodi, 2021). However, accounting information helps to utilise both the internal and external factors before investing in a field and helps an investor to make appropriate decisions about their investment in the Indian stock market. Besides that, knowledge about the past performance of the firm before investing impacts positively making proper decisions of an investor about investing in the firm.

Many negative factors impact the behaviour of investors and disrupt their “decision-making process” which negatively impacts their position in the Indian stock market. Many market risks such as interest risks, inflation risks, currency risks, volatility risks and many others impact the psychology of individual investors while making an effective decision about their investments in the stock market of India. Apart from that, there are liquidity risk factors, uniformity factors, credit risk factors and many others that negatively impact the behaviours of the investors (Shiva, Narula, & Shahi, 2020). The digitisation process in India increases the risks related to digital technologies which increase the risks that are associated with banking and affects the behaviours of the investors negatively.

2.3 Impact of behavioural bias in corporate finance decision making

Behavioural finance biases influence an investor’s judgements about their spending of money and investment tactics which sometimes have negative impacts on psychology which creates different “behavioural biases”. The common pitfalls include mental accounting errors, loss aversions and herd behaviour; hence, understanding these biases is very important for every investor to improve the “decision-making process” of individual investors in corporate finance detectors of India. Mental accounting helps to treat the money depending on where it came from and also helps an investor in investing it in a proper field. Besides that, loss aversion is a biased behaviour of the investors as they want to avoid losses and seeks to gain their stock market rates lastly, the herd behaviour in an investor is becoming overconfident which results in huge losses which create disruptions in their “decision-making process” and impacts their position in the Indian stock market (Roychowdhury, Shroff, & Verdi, 2019). Hence, these “behavioural biases” negatively impact the corporate detector of the country and disrupt the corporate “decision-making process” of an investor.

2.4 Strategies for enhancing “investment decision-making” in “the Indian equity market”

There are different effective strategies for enhancing “investment decision-making” of the investors in the “Indian stock market”. The establishment of effective strategies helps to improve the stock market position and also increases the market shares of an organisation in the global market. However, these strategies are selecting companies with strong fundamentals, avoiding emotional investment decisions, having knowledge about different investment sectors, selecting trusted and reliable stockbrokers and many others which positively help to improve the equity market rates of India. The implications of these strategies help to understand the market value rates and make a better understanding of the investment policies for the investors and positively reduce their “behavioural biases” which help to enhance their “investment decision-making” of the investors in “the Indian equity market” (Majid, 2020). A total number of 6,819 companies across India were listed in the “NSE (National stock exchange)” and “BSE (Bombay Stock Exchange)”, in 2022, which decreased from the previous year (Statista Research Department, 2023).
2.5 Theoretical overview
The “Theory of Planned Behaviour (TPB)” is a cognitive theory by Ajen (2007) and it has three variables such as personal attitudes, subjective norms and perceived behavioural control which help to find out the intentions of an investor regarding their investment and helps to conduct proper ways to make effective decisions about their investment (Alam, Kousar, & Rehman, 2019). Besides that, this theory helps to understand the past experiences of an investor regarding their investment and helps to improve their decision-making process by establishing better knowledge about the stock market values in them. Hence, implementing this theory in this study will enhance the effectiveness of the research and help to conduct a better research study about the “behavioural biases” of investors in “the Indian equity market”.

2.6 Literature gap
In this study, all the necessary aspects of the decision-making of investors regarding their investment have been evaluated in a detailed manner and collecting a significant amount of descriptive data due to lack of time has remained as a major gap. However, statistical data have been collected in this study and evaluated the major factors behind the “behavioural biases” of investors but due to the short period this study failed to conduct different approachable information about “the Indian equity market” which remained as a gap of this study.

4.0 MATERIALS & METHODS

4.1 Research design
Research design refers to the framework of conducting proper ways in which the information of the phenomenon of the study will be gathered and analysed to conduct a proper research study. The “descriptive research design” aims to provide information on the phenomenon of the study in a systematic way to improve the outcomes of the study (Strijker, Bosworth, & Bouter, 2020). In this study, the “descriptive research design” has been used for conducting this study systematically to gather data on the phenomenon of the study.

4.2 Data collection
Data collection is a research framework in which information on the research phenomenon is gathered to understand the depth of the study. The “quantitative data collection process” is one of the most significant methods for gathering data from realistic sources such as surveys and interviews (Klein, & Müller, 2019). In this study, the primary quantitative data collection method has been followed throughout the study to conduct a proper research study through experiments and surveys to improve the outcomes of the study.

4.3 Sample size
It is important to gather information from the participants who have adequate knowledge about the research topic and as the number of investors in “the Indian equity market” is increasing it is very important to understand the reasons behind the “behavioural biases” of individual investors. Thus, people between 18 to 50 years have been selected for this study to conduct survey. A total number of 10 questions regarding the research phenomenon have been established of which 101 participants were surveyed and they provided their respective opinions regarding the research topic. However, only 51 relevant samples are collected among all
the findings as only they have adequate knowledge about investing in the equity market. Besides that, similar answers and opinions that are not relevant to the topic were excluded from the findings.

4.4 Data analysis
The data analysis process helps to analyse the gathered data in a manner to understand the depth of the phenomenon of study. SPSS is a software package which is used for analysing statistical data associated with the phenomenon of the study (Sen, & Yildirim, 2022). In this study, SPSS analysis has been followed to conduct proper outcomes of the study through the analysis of the gathered information about the research topic in a statistical way to understand the depth of the study.

5.0 RESULTS

<table>
<thead>
<tr>
<th>Table 5.1: Descriptive statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Descriptive Statistics</strong></td>
</tr>
<tr>
<td><strong>N</strong></td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>3. Behavioral biases have some positive and some negative effects on investment decision making</td>
</tr>
<tr>
<td>4. Overconfidence bias is highly and negatively effective on decision making of investors in the Indian equity market</td>
</tr>
<tr>
<td>5. Loss Aversion is a bias that makes the investors uncomfortable to face loss and not is effective on their decision making</td>
</tr>
<tr>
<td>6. Anchoring is another critical behavioral bias factors that influence the decision making of Indian investors</td>
</tr>
<tr>
<td>7. Herd mentality develops the bias of mental accounting which affects the decision making of investors in Indian equity market</td>
</tr>
<tr>
<td>8. Endowment bias is highly influential towards investment decision of investors in equity market due to adding more values to the processes</td>
</tr>
<tr>
<td>9. Behavioral biases leads to the decisions which are more based on emotions than logic which prevents making rational decisions</td>
</tr>
<tr>
<td>10. Behavioral biases can be the barriers to make wise decisions in the Indian equity market</td>
</tr>
</tbody>
</table>

Valid N (listwise) 61

Figure 5.1: Descriptive statistics
(Source: Refer to SPSS)
Descriptive statistics is all about the evaluation of the reactions of the participants as an average through the mean values (Kaur et al. 2018). As per the requirements, the mean values of the variables should be more than 1 for ensuring that most of the participants in the survey have provided positive responses. Calculated mean values are presented through the descriptive statistics table above which are 1.90, 1.69, 1.86, 1.78, 1.61, 1.82, 1.90 and 1.73. All the mean statistics are larger than 1 which indicates that the maximum numbers of the participants have provided positive reactions to the statements on “behavioural biases” effect on investment decisions.
Correlation statistics is all about the evaluation of the relationship between the variables of a study through the Probability (P) values of the variables (Obilor & Amadi, 2018). As per the requirements, the P values of the variables require to be less than 0.05 for ensuring there is a positive relationship among the variables. Identified P values of the variables are 0.587, 0.920, 0.709, 0.502, 0.853, 1 and 0.628. It is noticeable that all the identified P values are less than 0.05 and that signifies that there are positive relationships among the variables of this study. This ensures “behavioural biases” are highly impactful on the decision-making of the investors in “the Indian equity market”.

Reliability is critical for examining whether all the findings are reliable or not through the Cronbach alpha value of the components (Taber, 2018). The value needs to be less than 0.70 for ensuring that all the collected and evaluated findings are reliable. As per the figure above, the value of cronbach alpha is 0.958 which is less than 0.70 and that indicates all the used data in this study are reliable. The use of reliable data sustains the significance of this study and makes it relevant.
Figure 5.4: Age of the participants
(Source: Refer to SPSS)
People from 26-50 years old were allowed to participate in the survey and all the respondents were divided into five groups. The groups were 26-30 year old group, 31-35 year group, 36-40 year group, 41-45 year group and 46-50 year group. As per the figure above, about 23.53% of the participants were in the first group, the second group consists of 29.41% of the participants, third group consists of 21.57% of the respondents, fourth group includes 15.89% of the participants and 9.80% of the respondents were in the fifth group.

Figure 5.5: Gender of the participants
(Source: Refer to SPSS)
About 84.31% of the participants were male and 15.69% of the respondents were female in the survey. This signifies that majorly males are interested in investment in the equity market of India.

Figure 5.6: “behavioural biases” have some positive and some negative effects on “investment decision-making”
(Source: Refer to SPSS)
The first questions related to behavioural bias was about whether these biases are positive or negatively impactful on investment decisions in “the Indian equity market”. About 94.12% of the participants have positively stated that “behavioural biases” have some positive and some negative effects on investment decisions. Sometimes the biases bring profit as well as sometimes it leads to poor decisions and brings loose. Apart from that, 3.92% of the respondents did not agreed with the statement and stated that most of the time “behavioural biases” have negative impacts on investment decisions.
The next statement was about whether overconfidence is a behaviour bias and its impacts on the investment decisions of investors in "the Indian equity market". Nearly 82.35% of the participants have "agreed" with the statement and stated overconfidence is one of the common "behavioural biases" among senior investors who have previously experienced profits. This behavioural bias is negatively impactful on investment decisions and can lead to losses. Besides, about 13.73% of the respondents have "disagreed" and opinionated that confidence is important for making the right decision and that might not be negatively effective all the time.

Next, the participants were asked about another behavioural bias among the investors of "the Indian equity market" which is negatively impactful on decision-making. Almost all the participants, about 92.16% of them, have stated that loss aversion is a behavioural bias which makes the investors unable to face the losses and that negatively affects their decision-making regarding investment in "the Indian equity market". On the other hand, 5.88% of the participants have "disagreed" with the statement and stated this particular behavioural bias disrupts the making of poor decisions which signifies the positive impacts of the bias on decision-making of investors.

Finally, the participants were asked if anchoring is another critical behavioural bias factor that influence the decision-making of Indian investors. Nearly 88.6% of the participants have "agreed" with the statement and stated anchoring is another critical behavioural bias factor that influence the decision-making of Indian investors.
This question was related to another behavioural bias that is impactful on investment decisions in the Indian equity market. About 88.24% of the participants have positively stated that anchoring is another common behavioural bias among Indian investors which brings greater profit. Apart from that, 9.80% of the respondents did not agree with the statement and stated anchoring sometimes leads to the loss of great deals therefore this bias is negatively impactful on decision-making.

Figure 5.10: Herd mentality develops the bias of mental accounting which affects the decision-making of investors in Indian equity market
(Source: Refer to SPSS)

The next statement was about mental accounting and its effect as a behavioural bias on decision-making of investors in the Indian equity market. Nearly 78.43% of the participants have “agreed” with the statement and stated herd mentality is essential in investment decisions as it makes the investors capable of predicting profit or loss which signifies its influence towards decision-making. Besides, about 17.65% of the respondents have “disagreed” and opinionated that herd mentality is also a reason for losing great deals and that is a negative effect of the bias on decision-making.

Figure 5.11: Endowment biases is highly influential towards investment decision of investors in equity market due to adding more values to the processes
(Source: Refer to SPSS)

Next, the participants were asked about another behavioural bias which was endowment and its effects on investment decision-making. About 88.24% of the respondents have stated that endowment refers to adding more values to the processes and that influences decision-making of the investors. On the other hand, 5.88% of the participants have “disagreed” with the statement and stated adding more values to the processes might lead to more losses and therefore endowment is negatively effective as a behavioural bias on the decision-making in the Indian equity market.
Figure 5.12: “behavioural biases” leads to the decisions which are more based on emotions than logic which prevents making rational decisions  
(Source: Refer to SPSS)  
This question was related to the impacts of “behavioural biases” on decision making of investors in the equity market. About 94.12% of the participants have stated that “behavioural biases” are the emotions of investors which sometimes profitably affect decision making of investors but the decisions are not based on logic. Apart from that, 3.92% of the respondents did not agree with the statement and stated making decisions based on logic and data is important for avoiding losses and making decisions based on emotions is risky.

Figure 5.13: “behavioural biases” can be the barriers to make wise decisions in “the Indian equity market”  
(Source: Refer to SPSS)  
The last question for the participants was about the challenges for investors due to “behavioural biases”. About 84.31% of the respondents have positively stated that “behavioural biases” become the barriers to making wise decisions and that has negative impacts. On the other hand, 5.88% of the participants have “disagreed” with the statement and stated “behavioural biases” are sometimes positively effective on making effective decisions for investment.

6.0 DISCUSSION

The participants were asked different questions regarding the influence of “behavioural biases” towards the “investment decision-making” of the investors in “the Indian equity market”. It is identified that most of the participants have agreed with almost all the questions or statements. The respondents were asked about the positive and negative impacts of different “behavioural biases”. It is identified that some of the biases are positively effective as well as some of the biases are negatively impactful on the financial stability of the investors (Zahera & Bansal, 2018). About 94% of the participants have also opined that “behavioural biases” have some positive and some negative effects on decision-making. Furthermore, overconfidence, loss aversion are the “behavioural biases” that are negatively effective on decision-making while anchoring, herd mentality and endowment are the “behavioural biases” which are sometimes positively impactful on decision-making (Christie, 2019). Nearly 82% of the participants have stated that overconfidence is negatively effective on “investment decision-making” as well as about 92% of the respondents stated that loss aversion makes people uncomfortable to experience losses and the fear of loss negatively impacts the “decision-making process”. Anchoring refers to sticking to a specific amount and that is sometimes beneficial for larger profits (Roychowdhury et al. 2019). Around 88% of the participants have recognised anchoring as an influential factor towards the decision-making of investors. Hence, “behavioural biases” are highly influential towards investment decision making which leads to decisions based on more emotions than logic and that mostly have negative impacts on financial performances.

7.0 CONCLUSION

The “behavioural biases” of investors affect their “decision-making process” which impacts “the Indian equity market” in both ways positively and negatively. In this study, all important aspects that are associated with investment and the factors that affect the “decision-making process” of the investors have been gathered as quantitative data and evaluated in a detailed manner to understand the negative impact on “the Indian equity market”. This research brings out several characteristics of the investment behaviours of the investors such as overconfidence in reducing their effectiveness in making proper decisions.

Besides that, the loss aversion of the investors also reduces their power of making effective plans to improve their position in the stock market. Apart from these factors, there are many other risk factors such as credit risk, market value risks, fraud risks and many other reasons but with their implication of effective strategies, they can be reduced over time and improve the market shares of the country. Hence, all the effective strategies...
have emerged in this study in a manner to enhance the “decision-making process” of individual investors in “the Indian equity market”.

REFERENCES


Appendix: Survey questionnaire

Section 1: Demographic

1. Age
   a) 26-30
   b) 31-35
   c) 36-40
   d) 41-45
   e) 46-50

2. Gender
   a) Male
   b) Female

Section 2: Behavior biases affecting investors to take decision in Indian equity market
(Please provide your opinion based on the Likert scale: 0 = disagree, 1 = Neutral, 2 = Agree)

<table>
<thead>
<tr>
<th>Statements</th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Behavioral biases have some positive and some negative effects on investment decision making</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Overconfidence bias is highly and negatively effective on decision making of investors in &quot;the Indian equity market&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Loss Aversion is a bias that makes the investors uncomfortable to face loss and that is effective on their decision making</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Anchoring is another critical behavioral bias factors that influence the decision making of Indian investors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Herd mentality develops the bias of mental accounting which affects the decision making of investors in Indian equity market</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Endowment biases is highly influential towards investment decision of investors in equity market due to adding more values to the processes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Behavioral biases leads to the decisions which are more based on emotions than logic which prevents making rational decisions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Behavioral biases can be the barriers to make wise decisions in &quot;the Indian equity market&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>