Chapter- V

Perspectives of Revealed Investors Rationality

This chapter aimed to understand and investigate the investors’ behavior whether it is rational or irrational with respect to the IPO price performance in the stock market. During 1990’s the behavioral finance concept was given by Amos Tversky and Daniel Kahneman (1973) and (1979) who described the rule of thumb in the decision making. The three heuristics are defined in making judgments in uncertain conditions as representative bias, anchoring bias and availability of instances. After this behavioral finance, in 1979 it has described the S- shaped theory of gains and losses or prospect theory. After that, Richard Thaler (1980) defined the behavioral finance in terms of investors framing impact and how investors behaved on positive and normative information. The behavioral finance is the study of investor’s psychology of investing or psychology of analyzing the market information that how the investing is efficient.

But, this chapter would bring up the real life situations faced by the investors when the IPO market is volatile. Thus, it is assumed that the investors are totally rational. And the irrationality is related to the people emotions when investing in the IPOs. Without the emotions investors can’t invest and not able to make earnings through the stock market. It may be possible that, the investors would be too optimistic to invest or may be too pessimistic to sell or exit from the market due to the uncertainty. The investors always try to assume the return from the investment securities to be safe. For the calculation of real life complexities of the investors, this chapter uses the respondents’ answers which are collected through the five point scale (Likert scale) questionnaire. With the help of questionnaire answers, it would be evaluated whether the investors are willing to invest in the IPOs or not and the time period of investing is preferred by the investors and the degree of overreaction and underreaction of the investors’ on the price movements.

In this chapter, the questionnaire is based on the advice of investment advisors, undervalued shares and overvalued shares, past performing sectors, investors’ investment goals, risk and return, diversification of stock, purchase and sell decision, mental framing, optimistic reaction, pessimistic reaction and so on. The questionnaire is reported in the annexure II at the
end of this thesis. Moreover, from the observed phenomenon of the investors’ investing behavior, it is analyzed that the investors’ behavior is also fluctuating as the IPO prices are behaved upon listing. In the study of Chin (2012), it was presume that the investors are rational and using all the available information in making the investment decisions and expected that the stock prices movement is expected to be stable and efficient. In a view, the behavior of investors’ is observed through the earlier work that sometimes the investors become overconfident or say dependent on others that may cause losses. Saade (2012) Sir John Templeton said in a study that the best time to buy the shares is the time of pessimism and the best time to sell the shares is the maximum time of optimism of investors.

For the rational investors, most of the decisions are based on the calculations and away from the emotions because the emotional behavior is the enemy for the rational investor for investing in IPOs. The emotions make the investor unconscious and push them to make blind decisions without analyze the market circumstances. As it is seen in the above chapter that, the IPOs are opened with high price and even climb on the opening day but closes at the low price on the same day or a week after. So, in that case, the investors are exuberantly behaved on the opening day hike but with the closing day low level, the investors lose their money due to lack of stability in market. But the informed investors earned profit by sell their shares on the opening day of IPOs. The optimum strategy for the investors in this case is to invest in high profile IPOs, buy the shares at offer price and then sell instantly on the opening listing day and make short term gain. If you are a long term investor then buy the shares on the closing of listing day at low prices and hold for the near future unto the IPO price bounced back to the issue price.

As it is observed in previous chapter that before the listing day, the IPOs are recorded oversubscribed which means IPOs with high demand and the issuance of IPOs decided to fix the price at higher end of price band due to the optimistic behavior of investors for IPO. Saade (2012) described in study that when the market momentum is positively recorded then more the IPOs come up to go public due to the investors overconfidence in their own collected information and excess investors demand for the IPOs. The investor’s optimistic/exuberant and pessimistic/undereaction behavior is treated as the irrational sentiment of the investor for the IPOs. If this optimistic behavior has shown by the informed investors then it doesn’t affect the performance of IPOs due to the presence of high optimistic behavior of uninformed investors, they stay out from the IPO market after offering the IPO and if the optimistic behavior has
shown by the uninformed investors then it is negatively related to the IPOs performance. The uninformed investors are also considered as the noise trades who creates the noise of trading.

This chapter analyzes the investors’ behavior with respect to the IPO prices whether they behave exuberantly on the listing day and in long run or behave underreacted on the downfall in IPO prices. There are various reactions recorded in this chapter as diversification of savings in different stocks to optimize risk and return, pessimistic behavior, regret behavior, make strategies before investing, cognitive dissonance behavior, anchoring behavior, herding behavior likewise. Zoghlami and Matoussi (2009) described in study that majority of investors felt under confident, hesitant to come back in IPOs and found very particular to others opinions and reactions. It found that the investors are not worry about the buy price even they are willing to pay any price to purchase the IPO shares and this behavior leads them in losses. It is also recorded in this study that the investors are very conservative to pick the shares on changes in market conditions. They do not ignore the past data of shares and continue to underreact instead they ignore the current positive return information.

Tehrani and Gharehkoolchian (2012) described in study that the investors framed their mind to sell only those IPO shares which has no expectation of providing positive returns and simultaneously, invest in those IPOs shares which provide the good returns and hold the winners IPO shares as long as until the IPO company shows positive performance. Kabra et al. (2010) described in their paper that the majority of investors try to use some sources to collect information before making investment decisions. Though, the investors often trapped in their own cognitive illusions, when they identify the market momentum from multiple reasons before make investing transaction for IPO investment. It is noticed from the previous studies that when the market is rising, the recently come up IPOs also do well and make good returns. Alternatively, when the IPO prices recorded the plunge, the investors blame the market conditions rather than their own emotional decisions or their own poor selection of IPOs without research before investment.

Jains and Dashora (2012) analyzed the investors’ behavior during study period different market momentums. It found that the more number of investors favored to hold the stock with the expectation of gain more returns in future and some investors wanted to sell the shares due to
the unpredictable movements of the market. It is observed in studies that the investors considered their own collection information and own analysis while making investment decisions rather than the broker’s advice. Chun and Ming (2009) concluded in the study that the investors decisions for IPO investment influenced by the different behavioral biases. The representative and anchored behavior of investors regarding price of the shares affected the investors decision making. The overconfidence of the investors also influenced the investors investing decision. Despite, the overconfident investors had less information and knowledge for IPO investing. When the investors are overconfident, they make excessive investing with a belief that it is the right time to get hot stocks and get good returns. These biases are the reasons for the investors regret or losses. This loss aversion pushes the investors, to hold the losing shares or reluctant to do trade again rather than sell the underperforming IPOs.

The authors found that women were totally different in making investment decision. The women were more inclined to hold the low return investment too long and ready to wait for the long period to sell the gaining investment. They were more likely to invest too much money in a single IPO rather than diversify in more than one IPO and tried to purchase the hot IPO without before analysis of the company for future prospects. But the men affected from the overconfidence bias, greed of more return and more impatient in make investment decisions for IPOs. Thus, this chapter is the examination of the behavioral biases of the investors in relation to the IPO price and performance by taking into consideration different variables discussed below. This chapter is concentrated on the revealed investors’ behavior which defines as to understand the contours of the investors’ rationality as regards to their investment decisions in the IPOs.

**Description of Principal Components**

The principal component method has extracted the factors for analysis. After identifying of 10 extracted factors, the next step is to interpret and name the factors. The interpretation of the factors can be improved due to the factor rotation and the extracted factors were rotated orthogonally as recommended by Kaiser’s criterion of varimax rotation (1958). This is done by the process of identifying the factors that are associated with that of the original variables. This matrix contains the same information as the component matrix in SPSS. The factor rotation
matrix effectively rotates the axes so that the variables are loaded maximally on to the only one factor. It means the rotation maximize the loading of each variable on one extracted factor and minimizes the variable loading on all other factors. The factor loadings less than 0.30 have not been considered in the factor rotation matrix. All the factors have been given the appropriate names according to the variables which have been loaded on to each factor. The name of the factors, variable labels, the factor loadings and interpretation of the eight factors are reported in the table below. The below tables reported only those variables on the principal component matrix which are found significant at the 5.0 per cent level of significance. The principal component matrix has described the factors along with the eigen values, per cent variance and cumulative variance extracted after each factor shown in below 5.1 table.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Description of Principal Component</th>
<th>Eigen values</th>
<th>Per cent variance</th>
<th>Cumulative variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Investing Strategies</td>
<td>7.01</td>
<td>21.70</td>
<td>21.70</td>
</tr>
<tr>
<td>2</td>
<td>Inadequate Diversification</td>
<td>5.71</td>
<td>16.32</td>
<td>38.02</td>
</tr>
<tr>
<td>3</td>
<td>Regret Behavior</td>
<td>3.88</td>
<td>11.32</td>
<td>49.34</td>
</tr>
<tr>
<td>4</td>
<td>Anchoring Behavior</td>
<td>2.98</td>
<td>8.53</td>
<td>57.87</td>
</tr>
<tr>
<td>5</td>
<td>Investors Disposition</td>
<td>2.40</td>
<td>6.92</td>
<td>64.79</td>
</tr>
<tr>
<td>6</td>
<td>Cognitive Dissonance</td>
<td>1.85</td>
<td>5.31</td>
<td>70.10</td>
</tr>
<tr>
<td>7</td>
<td>Pessimistic Behavior</td>
<td>1.46</td>
<td>4.29</td>
<td>74.39</td>
</tr>
<tr>
<td>8</td>
<td>Herding Behavior</td>
<td>1.12</td>
<td>3.19</td>
<td>77.58</td>
</tr>
</tbody>
</table>

Thus, it is revealed from the extracted factors that the total variance is recorded 77.58 per cent, which defines the satisfactory value for the study. Kaiser (1960) and (1974) interpreted that the factor extraction was stopped at the eigen value come up to the 1. Further to explain the above table that the investing strategy factor has recorded highest loading of factors with 21.70 per cent variance accounted for the all eight factors which are extracted by principal component matrix.
procedure and with the eigen value 7.01. After the first factor, it is followed by remaining seven factors with their respective eigen values and per cent variance explained by this process. From this above table it is observed that the more attention captures by the first factor due to the highest loadings at eigen value and at per cent variance. Followed by all the factors and less attention paid to the last factor due to the less eigen value and percent variance explained in this process.

5.2 Investing Strategy

The investment in the IPO is one of the strategic decisions for the investors. The well planned strategy of investing is helpful before taking any investment decisions and to face the ongoing market challenges in the IPO investment. To develop an investment strategy, it is essential to make decision of choosing the IPO securities, constructive or diversification of stocks with the optimization of risk and return and determining the right time to invest, buy, hold and sell. The strategy means that the method used for the IPO investment. Every investor has its own investment strategy to invest in the IPO. Chander (2002) described that the investment strategy is decided after due consideration of IPO investment objective, market volatility, risk and return scenario, timings of buying and selling of IPO stock. In the buying, hold and sell investment strategy, the investors’ purchase the IPO stock and wait for the sufficient time up to when the stock gives the expected good returns then sell the stock with the profits. This is the rational strategy and consistent pattern of the investors’ decision making process. The results of the principal component matrix on investing strategy are reported in Table 5.2 which clearly depicts that Factor 1 is a linear combination of nine statements.

Hence, this factor ranked first and the rotated matrix has disclosed that the respondents have comprehended this factor very important and with highest percent variance explained 21.70 with eigen value 7.01 and nine variables are loaded on to this factor. Thus, this factor has variables as impact of IPO investment on the risk and return, frequency of IPO investing, seeking investment information on investment websites, emotional exuberance at higher prices, consideration of market volatility before investing in IPO stocks, selling of IPO stocks in case of overpricing, industry performance before IPO investing, revisit of investment goals before IPO
investing and loss aversion in selling the IPO stocks recorded at the positive loadings. Keeping in mind the nature of all the variables, the factor is named investing strategies.

Table 5.2
Extracted Variables with Factor Loadings on Investing Strategies

<table>
<thead>
<tr>
<th>Statement no.</th>
<th>Description of variables</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>06</td>
<td>Impact of IPO investment on the risk and return</td>
<td>0.86</td>
</tr>
<tr>
<td>28</td>
<td>Frequency of IPO investing</td>
<td>0.84</td>
</tr>
<tr>
<td>05</td>
<td>Seeking investment information on investment websites</td>
<td>0.83</td>
</tr>
<tr>
<td>17</td>
<td>Emotional exuberance at higher prices</td>
<td>0.82</td>
</tr>
<tr>
<td>14</td>
<td>Consideration of market volatility before investing in IPO stocks</td>
<td>0.61</td>
</tr>
<tr>
<td>10</td>
<td>Selling of IPO stocks in case of overpricing</td>
<td>0.58</td>
</tr>
<tr>
<td>07</td>
<td>Industry performance before investing</td>
<td>0.50</td>
</tr>
<tr>
<td>01</td>
<td>Revisit of investment goals before IPO investing</td>
<td>0.34</td>
</tr>
<tr>
<td>20</td>
<td>Loss aversion in selling the IPO stocks</td>
<td>0.32</td>
</tr>
</tbody>
</table>

Variance = 21.70 per cent, eigen value = 7.01

From the above table, it concluded the various IPO investing strategies before enter the market. It is examined that due to their emotional behavior the investors make the strategy before investing into IPO that analyze the impact of risk and return on the investments. This can be said by the highest factor loadings along with high variable scoring (0.86) in this factor than other variables. The investors planned the optimization of risk strategy to invest into the IPO. This decision of the investors considers to as the rational decision before investing. After doing the IPO investments, the rational investors always want to know the frequency of IPO investing in the market. This is the second variable loaded in this factor with 0.84 positive scores. The investors have to keep updated from the market movements to earn good returns and try to know their own invested stock values that whether the IPO is raised or fallen with respect to the issue price. This also comes under the strategy of the investors.

Followed by this to next factor, the investors always try to seek the investment information on investment websites by indulge in investing and try to evaluate the position of the shares from investment websites on their own for the further movements whether to buy or sell the shares to get maximum returns. The next strategy of investing is emotional exuberance at higher prices of IPOs. The investors behaved exuberantly on listing day of IPOs and buy the
shares on higher prices before issuance of IPOs and feel pride on their right decision by gaining profits. This exuberance behavior of investors is not the rational decision but often this helps to make short term gains by sell the shares instantly on the opening of listing day. The next investing strategy is **consideration of market volatility before investing in IPO**. The investors always try to know the market momentum before investing in IPO. Because when the market moves up, the recent come up IPOs also shows upside movement.

On the contrary, if the market shows downside then the high profile IPOs also shows the negative returns. So, when the issue price is less than the listing price then the investors make strategy to sell at that time for earning profits and buy the shares at that time when the market starts growing for future. The investors always considered the stock market volatile behavior before investing in IPOs. If the investments are not arrived as the same results as expected then the investors make an effort to **sell the IPOs in case of low performance** to avoid the huge losses. The investor wants to determine the **industry performance before investing**. The investor has tried to know the last best performing sector before investing. While making decision of IPO investment, the investors have to clarify the every aspect of information also related to sectors from which the investor can get the best clues for more positive earnings. Thus, this is the strategic behavior of investors before investing.

The variable having low (0.34) factor loadings on this factor is **revisit of investment goals before IPO investing**. The investors check out the investment goals that as to why invest in the IPOs and to what extent either for short period or for long period. Sometimes the investors are found to invest their small investment only for their enjoyment purpose. All the investors have same goal of investment in IPOs that is to earn good returns. The **loss aversion in selling the IPO stocks** is also the investing strategy for the investors and recorded 0.32 lowest factor loadings. In this strategy, it is described that strongly avoid the losses, the investors try to sell the stocks before the market has moved downside. If the investors expect that the market is underperformed on the closing of listing day then sell the shares to neglect the loss because low gains are changed in losses.

Thus, this factor strategy of investing observed that the investors know that the IPO investment is full of risk and return and they have to evaluate the risk and return before make investing decision. It is recorded that the market momentum and IPO price performance has
positive relationship with each other. So, the investors keep in consideration the market volatility before make investment decision for IPO. The small investors make the strategies of when to buy, hold and sell the shares. But when the IPO starts trading, investors behave exuberantly which is the irrational decision often this decision pushes them in losses. So, it is suggested that try to make you calm and emotional free to make rational decisions for IPO investment. It can say that the investing strategy has played the important role for making investment decisions for IPOs due to the highest factor loadings showed by the rotation varimax matrix.

5.3 Inadequate Diversification

Diversification of the stock is another important aspect of the Indian Stock Market. This depends on the investors’ decision and also relates to the recognizing of the profitable opportunity. The investment decisions are taken out after the careful consideration of market performance. The diversification decision is related to the presence of number of profitable opportunities in front of the investors. With the increase in number of opportunities to diversify the savings so, that increase in the return and spread of the risk. As it is know that, IPOs diversification is not possible at the same time but the investors try to diversify their investments in different sector IPOs. The table 5.3 depicts that the six variables are loaded on to this factor as the linear combination of six statements. Thus this factor is named as inadequate diversification of stock.

<table>
<thead>
<tr>
<th>Statement no.</th>
<th>Description of variables</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Excessive diversification for IPO investment</td>
<td>0.66</td>
</tr>
<tr>
<td>31</td>
<td>Undue influence of financial advisor for IPO investment</td>
<td>0.65</td>
</tr>
<tr>
<td>12</td>
<td>Accumulation of IPO stocks in beaten down markets</td>
<td>0.53</td>
</tr>
<tr>
<td>34</td>
<td>Emotional in IPO investing</td>
<td>0.49</td>
</tr>
<tr>
<td>01</td>
<td>Revisit of investment goals before IPO investing</td>
<td>-0.30</td>
</tr>
<tr>
<td>03</td>
<td>Consideration of tax implications before IPO investing</td>
<td>-0.77</td>
</tr>
</tbody>
</table>

Table 5.3

Variance = 16.32 per cent, eigen value = 5.71

This factor recorded the six statements in which four have positive loadings like excessive diversification for IPO investment, undue influence of financial advisor for IPO investment, accumulation of IPO stocks in beaten down marketsand emotional in IPO investing.
The two variables have carried the negative loading revisit of investment goals before IPO investment and consideration of tax implications before IPO investing. In this second factor, the highest proportion of per cent variance is recorded as 16.32 and eigen value 5.71 as reported in table 5.3 and along with the extracted variables of this factor. The investigation in this regard has revealed that the investors diversify the investments in more than one to increases the return and reduces the risk.

From the above table 5.3, according to the results of excessive diversification for IPO investment variable with 0.66 factor loadings, it is found that as the excess investing in IPOs are not always given the better outcomes because sometimes the investments came in the downturn situation and indulge in loses. In this context, the investors have to spread their investment into more IPOs with anticipation of high profits but invested without the analysis and then it causes the chances of losses. The next variable undue influence of financial advisor for IPO investment has also laid down the investors into lower valued shares. The investment advisors often pressurize investors to sell, buy and invest in new companies’ shares which created the problem for the investors. Behind this pressurize behavior, the investors forget to analyze the market movements and IPO companies conditions. Hence, the inadequate diversification is done by the investors.

The next variable accumulation of IPO stocks in beaten down markets have revealed that the investors has tried to purchase the shares in down market with the hope of increasing the shares prices above the issue price in near future. This decision may happened by the undue pressure of advisors as shown in the above figure as high score recorded by this variable or by their own misjudgment. It is called the irrational investors decision and inadequate diversification in the IPOs. The investors’ behavior is full of emotions and the next variable is emotional in IPO investing. Without the emotions, the investors are not able to invest in IPO. The investors’ decisions are full of senses, use of emotions, mental strength and often based on experience. Due to these emotions, the investors diversify their investments in low return IPOs due to less analysis of IPO companies’ market position and may be they believe that the past poor performed companies will be future outperformed in market. This referred as inadequate diversification and irrational behavior of investors. The two statements in this factor have recorded negative loadings. The review of investment goals before IPO investing is recorded negatively loadings on factor inadequate diversification. When the investors make investments,
they try to diversify the investments into more than one. But in the absence of the goal to make more profits, the investments are inadequately diversified.

The investors are not considered the tax implications of IPO investing and recorded negative loadings. The investors try to analysis tax implications before investment then diversify the investments into those IPOs which have less tax implications on earning profits. This variable has paid less consideration on the IPO investments by the investors. But unfortunately the tax implications are not determined before earnings so it is considered as to the inadequate diversification. Thus, the analysis from the principal component matrix, this inadequate diversification is concluded that the investors’ influences of excessive investment in one investment without analysis of risk and return, sometimes influence the financial advisors to invest into IPO or to accumulate the IPO shares in overpriced markets with the anticipation of more return but these all emotional decision of investors created the situation of inadequate diversification of IPO investment.

5.4 Regret Behavior

The investors experience the regret behavior when the investments give them a negative performance and the other alternatives are showing the positive performance. The investors feel regret on selling the winners stock and holding the losing stock. The bad decisions for the IPO investment made them to feel regret. The investors deal with the emotional decisions and face the error in judgment decisions. Tehrani and Gharehkoolchian (2012) demonstrated the regret behavior that this behavior affected the investors and feels that if taken another decision in the past then earned better results from investing. This identification of loss is called the irrational decision or misjudged decision of the investor. In this factor, the above table 5.1 describes the eigen value and per cent variance loaded for this factor as 11.32 per cent variance and 3.88 eigen value recorded.

The below 5.4 table of this factor has shown the factor loading along with the different variables related to this factor. This factor has loading five statements as regretting the sell decision on IPO investment and regretting the investment decision in overpriced IPOs in the long run on the positive loadings. The remaining three statements as revisit of investment goals before IPO investing, IPO investment for capital appreciation and satisfactory IPO price performance
have loaded on the negative ratings. The factor is named regret behavior by the nature of the variables and loaded on third number through factor rotation varimax matrix.

Table 5.4
Extracted Variables with Factor Loadings on Regret Behavior

<table>
<thead>
<tr>
<th>Statement no.</th>
<th>Description of variables</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Regretting the sell decision on IPO investment</td>
<td>0.89</td>
</tr>
<tr>
<td>19</td>
<td>Regretting of investment decision in overpriced IPOs in the long run</td>
<td>0.87</td>
</tr>
<tr>
<td>01</td>
<td>Revisit of investment goals before IPO investing</td>
<td>-0.37</td>
</tr>
<tr>
<td>32</td>
<td>Satisfactory IPO Price Performance</td>
<td>-0.88</td>
</tr>
<tr>
<td>30</td>
<td>IPO investment for capital appreciation</td>
<td>-0.89</td>
</tr>
</tbody>
</table>

Variance = 11.32 per cent, eigen value = 3.88

The nature and extent of the above table 5.4 variables totally matches the factor as regret behavior. After the inadequate diversification in IPOs by the investors they feel regret from the investments. The above analysis table 5.4 of factor regret behavior is described that the investors are **regretting the sell decisions on IPO investment**. The investors sell the winners shares too early or may sell those shares whose value is depreciated. Due to the negative returns recorded in IPO investments by their wrong sell decision, in this situation the investors are regretted for the IPO investments. And also the investors feel regretted on the decision of sell too early. If they hold the investment for long time then this incurred losses are changed into the earnings in short run by the sell decision when the market was hot.

The next variable **regretting of investment decision in overpriced IPOs in the long run** is also noted as positive loadings by 0.87. The investors feel regretted when the IPO investment is held too long but it is worthless because the share has already lost its value and no chance to reverse back to match the issue price. The investors have felt regretted by the wrong decision to hold in long run. This decision makes the investors irrational. The next three variables recorded negative loadings which mean that these statements match the nature or extent of the regret behavior factor negatively.

By the variable **revisit of investment goals before IPO investing** has negative loadings as -0.37. Through the negative loadings is proved that it is also the reason of regretted because without the investment purpose, the investor shifted from one investment to another investment to get the more positive return from IPO investment rather than keep an candid eye on the market.
movement for future predictions. The investment without the expectation of profits is the decision of irrational investor. The negative loading variable is **satisfactory IPO price performance** with -0.88. The investors felt that they are not satisfied from their investments due to the negative return IPO price performance. After done the IPO investments, the investor always believe that the investment decisions are provided the good returns. The rational investor made the decisions after evaluating the current situation of the market but unfortunately, the investors face the situation of losses due to downturn in market momentum.

The last lower loading variable is **IPO investment for capital appreciation** with -0.89. The investors always want to invest into those shares which provide the big profits and the reason of capital appreciation. The negative loading of the variable clearly depicted that the investors regretted on the investment for capital appreciation. The investors are over reacted sometimes to earn more returns and try to make capital appreciation then they regret because of their optimistic behavior. Thus, from this rotated factor analysis, it is concluded that the investors who are affected by losses, they are indulged in the state of regret from their own misjudgment and emotional investing decision for IPO. This is the wrong decision taken by the investors that if they took another decision in past then earns more returns in present and feels pride due to the more positive returns. But the regret behavior is the reason of irrational decision of the investors.

5.5 Anchoring Behavior

The anchoring behavior refers to as the decisions of the investors based on the current information. Babajide and Adetiloye (2012) described the investors’ psychology regarding the security market. They have described that the people intend to focus on the recent information for making the predictions for future possible share prices outcomes. The investors strongly rely on the present information offered while making the investment decisions. In this, the investors rely on the recent market events and assumed that this information is the correct information and predict future prices on that information. The below table 5.5 has summarized the factor analysis with different aspects which accounts for 8.53 as per cent variance and 2.98 as the eigen value recorded. This factor has recorded five statements as investing in underpriced IPO stocks, seeking investment advisory before IPO investing, self proclaimed believe for IPO investment, investing in beaten down overpriced IPO stocks on positive values and long term periodicity of IPO investing along with the factor loadings. The factor is named the anchoring behavior.
Table 5.5
Extracted Variables with Factor Loadings on Anchoring Behavior

<table>
<thead>
<tr>
<th>Statement no.</th>
<th>Description of variables</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>Investing in underpriced IPO stocks</td>
<td>0.83</td>
</tr>
<tr>
<td>04</td>
<td>Seeking investment advisory for IPO investing</td>
<td>0.53</td>
</tr>
<tr>
<td>33</td>
<td>Self proclaimed believe for IPO investment</td>
<td>0.51</td>
</tr>
<tr>
<td>23</td>
<td>Investing in beaten down overpriced IPO stocks</td>
<td>0.31</td>
</tr>
<tr>
<td>09</td>
<td>Long term periodicity of IPO investing</td>
<td>0.31</td>
</tr>
</tbody>
</table>

Variance = 8.53 per cent, eigen value = 2.98

This above table 5.5 results has pointed out the anchoring behavior of investors. This factor has highest loadings 0.83 under the variable as investing the underpricing IPO stocks. From the initial piece of information the investors try to invest into IPO and try to predict the future movements of the shares. With the help of their first collected information, the investors influenced to invest in overperforming stocks which have high listing price than the issue price. The investors are exuberantly behaved while investing in underpriced IPO stocks. The next variable seeking investment advisory for IPO investing has 0.53 positive variable loadings in this regard. The majority of investors take advice from the investment experts to be sure. Before making any beliefs, decisions or predictions, the investors tend to collect the information from the investment advisory. With the consultation of investment experts, the investors have confirmed their current collected information and invested in the underpriced IPO stocks as shown in above variable.

The investors behave as self proclaimed believe for IPO investments. When investing in the IPOs, the investors have reacted on the current positive announcements and believe that the decision is totally rational for investing. This decision leads into the gaining situation if the market moves upward but if the market goes down then the investor’s investments recorded the negative returns or found IPOs underperformed. The investor always tries to buy the loser’s stock and sell the winning investments too soon when market is up. The next is followed by the variable as investing in beaten down overpriced IPO stocks with 0.31 factor loadings. In this variable, the investors are not willing to invest in the beaten down overpriced IPO stocks. This leads the investors into loses. The anchored behavior of investors induces internally to avoid the investment in cold market and the investors behaved pessimistically in this regard.
The next low loading 0.31 variable long term periodicity of IPO investing has proved that the investors are less willing or prefer to invest in IPOs for long run time periods. The investors brought the shares and hold the shares for the long time with the expectation of appreciation in stock prices. They affected from the anchored behavior and predicted that hold for the long run unto the stock prices bounce back but not to invest in overpriced stocks. The investors invested for the long run but found not satisfied from their decisions due to the low returns recorded in the IPO. So, the investors are found active traders in the stock market rather than the long term traders. In this, the investors make their IPO investment decisions based on the current information rather than react after collect the all available information of IPO. This behavior of investor consider as irrational behavior in making IPO investment decisions.

5.6 Investor Disposition

The analysis has rightly brought the light to the disposition of investors in the IPO investing. It accounts the percent variance 6.92 with eigen value 2.40 recorded from the principal component analysis for the table 5.6, along with the extracted variables and factor loadings. The variables have load on this factor as the linear combination of five statements. This factor includes statements as loss aversion by selling the IPO stocks, IPO investing for privileged information, selling of IPO stocks in case of overpricing, diversification for IPO investment at positive loadings and regretting the trading in IPO stocks recorded in negative loadings. This factor is named the investor disposition behavior.

The investors’ disposition for IPO investing reveals that the investors framed up their mind before investment and believed that they have the valid information and the investment decision is always being the right investment. They make their disposition that they withdraw from the investment if the market falls and excessive investing in the IPO shares on the settlement of positive news and make up the framework of investment according to their own collected information. Murthy and Joshi (2012) suggested that the disposition behavior is the framed behavior of the investors that, to hold the declining stock too long and sell the rising stock too soon. In this regard, the investors behaved irrationally in making investment decisions for IPO investments.

### Table 5.6

Extracted Variables with Factor Loadings on Investor Disposition
<table>
<thead>
<tr>
<th>Statement no.</th>
<th>Description of variables</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Loss aversion by selling the IPO stocks</td>
<td>0.71</td>
</tr>
<tr>
<td>29</td>
<td>IPO investing for privileged information</td>
<td>0.67</td>
</tr>
<tr>
<td>10</td>
<td>Selling of IPO stocks in case of overpricing</td>
<td>0.44</td>
</tr>
<tr>
<td>15</td>
<td>Diversification for IPO investment</td>
<td>0.40</td>
</tr>
<tr>
<td>21</td>
<td>Regretting the trading in IPO stocks</td>
<td>-0.33</td>
</tr>
</tbody>
</table>

Variance = 6.92 per cent, eigen value = 2.40

The above table results demonstrated the four positive loadings variables and the investors believed that they have the correct information of investment and unfortunately indulge in losses; this situation has moved the investors back to invest in the IPO market. The investors make up their mind that if the prices are expected to fall then underreacted or sell the stock instantly and in this regard, face **loss aversion by selling the IPO stocks**. The next variable is named **IPO investing for privileged information** and accounts the 0.67 factor loadings. This variable defines that the investors make effort to make more trade or overreacted when the investment carry positive news than the other investments. The rational investor assessed the positive information for the IPO investment before making investment.

The investors always try to invest in the privileged information which provides the higher returns. The investors framed the beliefs that they make more investment if they have privileged information for investment otherwise does not prefer to make more investment for the IPOs. They sold the shares when they have adverse information for the stock in which they had invested. This is the disposition of the investors in this variable. The factor loading (0.44) variable in this factor is **selling of IPO stocks in case of overpricing**. The investors believed that the investments if not arrived at the same results as expected, it means the IPOs are recorded negative returns then the investors try to sell the IPO investments due to the low performance of the shares and to avoid the pain of loss. This is the investor’s disposition before investing in IPO.

The 0.40 lowest factor loading has on the variable as **diversification for IPO investment**. The investors have framed up their mind according to the savings. Before make their mind for IPO investment, the investors made allocation in their minds that how to diversify their money. The last variable is rightly been named in above table as **regretting the trading in IPO stocks** recorded negative loadings. The investors felt regret in trading in IPO because of the investors disposition behavior. When the decisions come up wrong in IPO investments then the
investors are reluctant to invest again due to the emotions of investors. Thus, the investors have build up the decisions according to the perception of the recent experience from market, observation from others and from the experts’ advice. This influenced the investors for framing the decisions to buy, diversify the savings into IPO investments and buy & sell the IPO investment decision.

5.7 Cognitive Dissonance

Cognitive dissonance refers to the behavior that the investors are uncomfortable to make decisions on IPO investments. The investors have two opposite ideas in their minds simultaneously. The investors are totally confused to make choices whether to go with this investment or other alternative investment which is to accept or reject. This kind of behavior also affects investors decisions for IPO investment. The investors are facing the inner mental conflict which makes the investor uncomfortable in taking the investment decisions. They feel that their beliefs and assumptions of portfolio might be wrong.

Sharma (2014) described the feeling of disharmony which results in contradictory beliefs, actions, and reactions on the IPO investing. The table 5.7 has reported the results of this factor which accounts the 5.31 as per cent variance and 1.85 as eigen value. This factor has four variables as confirmatory cognitive dissonance for IPO investment, holding IPO investment unto price recovery, expert advisory for IPO investment unable to deliver upon listing and leveraged investing to magnify the IPO returns along with the positive factor loadings. Thus, this factor is named cognitive dissonance.

<table>
<thead>
<tr>
<th>Statement no.</th>
<th>Description of variables</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>Confirmatory cognitive dissonance for IPO investment</td>
<td>0.61</td>
</tr>
<tr>
<td>22</td>
<td>Holding IPO investment unto price recovery</td>
<td>0.52</td>
</tr>
<tr>
<td>11</td>
<td>Expert advisory for IPO investment unable to deliver upon listing</td>
<td>0.34</td>
</tr>
<tr>
<td>13</td>
<td>Leveraged investing to magnify the IPO returns</td>
<td>0.33</td>
</tr>
</tbody>
</table>

Variance = 5.31 per cent, eigen value = 1.85

The above analysis of variables has rightly brought in light that the investors are totally confused with their framed investing decisions. In this regard, it is identified as the variable
confirmatory cognitive dissonance for IPO investment. This variable showed that the investors feel uncomfortable in making decisions because of the two contradictory ideas in mind at the same time. The investors are not cleared at the decisions of investing in IPO about which investment is to accept and which is to reject. So it is said confirmatory cognitive dissonance on IPO investments. Followed by next loadings, the variable is **holding the IPO investment unto price recovery** with extracted 0.52 loadings in above table. This variable identified that the investors have to hold the IPOs for next month’s with the hope of market bouncing back in coming days.

The positive loading of this variable has recorded that the hold behavior unto price recovery is not the right decision for the investment because the low performed IPO are revert back their prices in long run but not covers the issue price to make positive returns. From this loading, it is clear that most of the investors are confused on making investing decisions in IPO. The next variable as **expert advisory for IPO investment unable to deliver upon listing** has loading with lowest scoring as 0.34. This variable described that the due to the cognitive dissonance behavior, the investors preferred to take expert advice when the IPO investments are showing negative performance before framing any conclusions. This expert’s advice is helpful for the investors’ confused decision that which is to accept or reject. The next variable is recorded with 0.33 factor loadings and described the **leveraged investing to magnify the IPO returns**. In this point, the investors collect the money from outsiders to invest in IPO anticipation of good returns. Due to the cognitive dissonance behavior, the investors believed that the leveraged investing is helpful in earning more returns and prefer to invest on loan into IPOs but this is not a good decision of investors for IPO investment and considers as irrational decision of investors.

**5.8 Pessimistic Behavior**

Chin (2012) noted that the pessimistic behavior is also the psychological biases in which investors are very slow to accept the changes in the market. The pessimistic investors are underreacted and insufficiently to react on the new information and beliefs. The investors are very slow to invest into the market due to the pessimistic behavior and fear of indulge in the losses whether the market is overperforming. The investors behaved pessimistically if the issue price is more to the listed price of the IPO. This behavior is the negative or worse behavior of the
investor and it is just opposite to the optimistic behavior. Mamun (2012) examined in study that the investors behaved optimistic when the market actually moves up and behaved pessimistically when the market moves down. This mispriced of the IPOs happened when the investors fear of loss and greed of earn more profits play a important role in making investment decisions. At times, this fear of loss created the underperforming market.

Table 5.8
Extracted Variables with Factor Loadings on Pessimistic Behavior

<table>
<thead>
<tr>
<th>Statement no.</th>
<th>Description of variables</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Expert advisory for IPO investment unable to deliver upon listing</td>
<td>0.52</td>
</tr>
<tr>
<td>27</td>
<td>Panic selling for IPO investment</td>
<td>0.31</td>
</tr>
<tr>
<td>15</td>
<td>Diversification for IPO investment</td>
<td>-0.41</td>
</tr>
<tr>
<td>02</td>
<td>Explore investment alternatives before IPO investment</td>
<td>-0.83</td>
</tr>
</tbody>
</table>

Variance = 4.29 per cent, eigen value =1.46

The table 5.8 comprehended the results of factor in this regard. It shows the extracted factor accounts with 4.29 per cent variance and 1.46 eigen value from the principal component matrix. This factor has four statements in which only two have positive loadings and remaining two have recorded negative loading. The variables are expert advisory for IPO investment unable to deliver upon listing and panic selling for IPO investment on positive loadings and diversification for IPO investment and explore investment alternatives before IPO investment on negative factor loadings as shown in below table. The above table described the variables of pessimistic factor in which first variable has loaded with 0.52 factor loadings. The high attention is recorded on the variable seeking expert advisory when IPO investment fails to deliver upon listing in this factor.

The investors behave pessimistically or expert advisory for IPO investment unable to deliver upon listing. When the IPOs are overpriced, the investors are not willing to invest into it. The investors try to move back or underreacted on the underperformance of the IPOs. This underperformance of IPOs enforce them to take expert advise for make further decisions. The next two variables are showing the negative loadings in this factor. The panic selling for IPO investment seeks less attention due to the low (0.31) factor loadings. When the IPO performance declined from the issue price then the investors become more panicky and make the sell decision...
for IPO shares instantly. This behavior is related to the pessimistic behavior of the investors and it is also the irrational decision of investors. It is suggested that the investors try to react without being panicky at the crash prices of IPO, the investors try to sell the shares on the listing day and earn short term gain.

In this factor **diversification for IPO investment** has negative 0.41 factor loadings. It means that the investors behaved pessimistically on the diversification of investments in IPO. It is suggested to the investors that before investing determine the various opportunities for spreading the investment in different sectors to minimize the risk and return. The investors try to make right allocation of IPOs which provide high returns rather than put their money in high risky investments or invest only in one IPO. The right allocation can be done by careful analysis of market momentum. The next variable is in this factor **explore investment alternatives before IPO investment** recorded at negative loadings as 0.83. This variable described that the investors are not exploring alternatives to invest the IPO investment with the expectation of more return.

The investors do not explore the different alternatives for investment which provide more return and have less risk before investing. This factor is related to the pessimistic reaction. But it is suggested to the investors; try to explore other various opportunities which give them more return in future. In a whole, due to the face of losses in their investments, the pessimistic investors take expert opinions to move further with the expectation of earn profits. The investors are undereacted and sell the investments instantly due to their panic behavior when the market moves downside. And conservative investors always try to diversify the investments into many different sector alternatives after the analysis of the industry IPO performance. The pessimistic reaction of investors is considered as to the irrational behavior of investor.

5.9 Herding Behavior

The herding behavior of investors is referred to as the behavior in which investors follow the others decisions and with their imitation behavior, buy the overpriced stocks which pull them to the losses if the market price starts to declines. Sherif (1966) has described the herding behavior as that the investors blindly follow the decisions of the majority investors rather than the believing on the decisions of their own. This kind of behavior affected the investors risk and return when the stock prices are fluctuating. Ton and Dao (2014) suggested that the mentality of
investors who imitates the movements or actions of other investors rather than relying on their own positive information. The results of the analysis of herding behavior are presented in table 5.9 and accounts the 3.19 as per cent variance and 1.12 as eigen values recorded.

<table>
<thead>
<tr>
<th>Statement no.</th>
<th>Description of variables</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>Herding behavior for IPO investment</td>
<td>0.65</td>
</tr>
<tr>
<td>11</td>
<td>Expert advisory for IPO investment unable to deliver upon listing</td>
<td>-0.38</td>
</tr>
<tr>
<td>22</td>
<td>Holding IPO investment unto price recovery</td>
<td>-0.37</td>
</tr>
<tr>
<td>08</td>
<td>Preference of stock trading over IPO investing</td>
<td>-0.67</td>
</tr>
</tbody>
</table>

Variance = 3.19 per cent, eigen value = 1.12

This table has four variables recorded as herding behavior for IPO investment on positive loadings and the statements are expert advisory for IPO investment unable to deliver upon listing, holding IPO investment unto price recovery and preference of stock trading over IPO investing on negative loadings. The herding behavior is named to this factor by checking the variables loadings. The above table has resulted with four new variables with positive and negative factor loadings. The first variable with 0.65 factor loadings has shown the positive but low consideration on the **herding behavior for IPO investment**. This is the variable that affects the behavior of investors by the social interaction of the people. This social interaction also plays as vital role in investing in IPOs. This interaction has influenced the people to follow the beliefs, opinions, instincts of others. The investors act in accordance with majority at the time of investment to feel safer. The investors follow the others instincts and motivated to invest into the heard stock or move in the same direction as other investor move. They intended to make more investment, where others are moving.

The next three variables are related to the negative loadings which means that they are not related to this factor. The variable **seeking expert advisory when IPO investment fails to deliver upon listing** has -0.38 factor loadings. This variable is different from the herding behavior. In the herding behavior, the investors are not interested in accepting the experts’ advice on the loser investment. Because they are influenced with the behavior of others and blindly follow the others direction whether it takes into profits or loses. So this variable is negative
consideration on the factor. The next negative variable is holding IPO investment unto price recovery with -0.37 factor loadings. The investors do not hold the investments unto price recovery. The investors tend too much attention on the others opinions, instincts, emotions or decisions. So that the investors do whatever the other investors do either to hold investment for price recovery.

The next last variable in this factor is preference of stock trading over IPO investing with -0.67 factor loadings. When the investors blindly follow the others reactions then he/she is not in a state of mind to think about preferred stock which provide more profits. The investors totally follow the behavior of others without using their own mind or emotions in making decisions just like the animals. If other investors move and prefer to stock trading then the investors shifted with them except the IPO investing either it is profitable at that time. So from these above four variables, it can be said that the investors if believe others then they blindly move with the others’ decisions. This is called as the herding and irrational behavior of the investors in the IPO investments. This is the last factor of the chapter extracted from the rotated component matrix which defines that this is the also irrational investor behavior.

After the analysis the hypothesis is redefined as the investors are wholesome rational in making investment decisions for IPO investment (both for observed rationality as obtained in above parameters and revealed in the primary survey). The investors are assumed to be rational but from the above factor analysis it is concluded that the investors are not rational and rejected the null hypothesis. The investors’ rational behavior is rejected in making investment decisions for IPO investment. It is considered that before investing, the rational investors always evaluated the all available privileged information, risk and returns on the investment, analyze the positive and normative announcements. But the investors sentiments, intuitions, emotions, psychology also play a important role for make IPO investing decision. The investors are emotional and played with the emotional behavior which indulges them into critical situation and this behavior is referred to as the irrational behavior of the investors. The use of the heuristics or shortcuts in investing makes the investor behave as in irrational ways.

The past experience of person, feelings of the investors or painful experience of the investor has influenced the investor’s decisions. This biased behavior created the various sentiments while making investing decisions as heuristics, pain of loss, regret, framing the
decisions, mental accounts, over reaction, under reaction, disposition effect, social interaction, overconfidence on their own information, cognitive dissonance and so on. The instincts and analysis of the human brain, work together in making the balanced investment decisions. This bias of the investor has leaded them into wrong decisions which are worthless. This is the irrational behavior of investors influenced by the emotions or psychology of the investors.

**Conclusion**

This paragraph is the complete view of above defined factors in this chapter. This conclusion page is the overall view of the investors’ behavior as the investor’s pessimistic, optimistic, disposition, conservative, representative bias, mental accounting, diversification of stock and the volatile prices, regret on wrong decisions, confusion on decisions and herding behavior. All the factors are reflection of the emotional biases of the investors. To avoid these biases, the investor has to keep the careful analysis of all available information of the IPOs before making investments. Here below, this conclusion page has developed a model of this chapter factors.

![Figure: 5.1](image_url)

Study Results of Confirmatory Factor Analysis on the Investors’ Rationality

From the above factors, the first factor **investing strategies** results described that the investors determined the risk and return pattern on investment, check the running status of the investments on the investment websites in which investments they invested, behave exuberantly
on the higher prices from the issue price, consider the fluctuations of IPO before investing, sold
the IPO shares at a gain, invested only on the positive announcements, before the downturn in
market sell the investments and avoid losses and determine the profit oriented goal before
investing in IPOs. For each and every investor, try to make strategies for earning gain in IPOs
was an important part for the investor.

The next confirmatory factor is **inadequate diversification** in the IPOs. The
diversification was the more prominent tool for optimizing the return and risk of the IPOs
investment. This factor laid emphasis on the investors’ behavior that invests into IPO after
checking the tax implications. To make more investment diversification in IPOs with the
anticipation of more return, undue influence of investment advisors in the investor’s investing
decision make them irrational. The investors aggressively purchase of more shares on the beaten
down markets is also an inadequate diversification of investment.

The investors found more emotional influence in IPO investing and invested without
analysis of the IPO performance these were the reasons of the inadequate diversification. The
**regret behavior** concluded that the investors felt regret on the decisions of sale or purchase of
shares too soon without being sure. The investors regretted to invest for the long time. Because
in the long run, the IPOs are underperformed and if the investors hold too long with the
expectation that the IPO will recover in coming days and they get positive return but the IPOs do
not revert back as expected then this decision leads them in pain of regret from their worthless
decision.

The investors **anchoring behavior** was considered more important and take advantage of
investing in overperformed IPO stocks by the collection of recent information. The investors
seek suggestions from experts that where to invest for profitable opportunities to assure their
own current collected information. The IPO low return performance found in the beaten down
markets and in the longer period investments. The investors were less inclined to invest in the
long run investments if they invest, they hold for the long run with the expectation of
appreciation in IPO returns recorded in future. The investors invested only after the collection of
recent information and ignored the past positive information of companies, this is also the
irrational decision of investors.
Another confirmatory factor was investor disposition. The investors had framed their minds when investing in IPO that they felt regretted on the wrong decisions of investment and hesitant in invest again in the market after facing the downfall loss. The investors were having disposition to sold the stocks if the stock price is decreased to avoid the loss and invest for the privileged information. They had disposition of selling the IPO shares before overpricing stage came if expected the overpricing market. The investors have to diversify the savings into more than one with the anticipation of more return and less risk; this was also the investor’s disposition.

The investors were not firm on the investing decisions, this was referred to as cognitive dissonance behavior of investors’. In fact with this confusion, the investors were invested into market on the leveraged investing to accumulate more return. In this regard, the leveraged investing and rational behavior of investors had found negative relationship in this. The investors were not willing to invest in IPO through take out loans but invested due to the behavior of cognitive dissonance. The investors preferred to hold the investments which provided low returns or investors expectation that the market will bounce back then they sell the investment and make profits. The investors were felt confused in taking advice from advisors on the IPO investments failed to deliver upon listing from the low loadings in the factor.

The investors’ behaved pessimistically when the IPOs were below the issue price. In this regard, the investors demanded the experts’ advisory when the results were unfavorable. The investors sold the shares in case of panicky behavior or behaved pessimistically on investments when the IPO shares showed the declined movement. Due to the pessimistic behavior, the investors always wanted to explore more other alternatives before investing and analyze the risk and return in all the options available. The next factor was herding behavior of the investors. The investors followed the others behavior whether others moving in the right direction or not. The other variables in this factor were recorded at negative loadings.

Overall, it concluded that often, the investors blamed their own decisions for less time and effort given to research the stock. Due to this less attention for the analysis of company fundamentals affected the investors by behavioral biases. Often, the investors blamed the experts
advice, friends recommendations, undue influence of advisors, media information or low performance of the market pushed the investors to behave over-optimistically or over-pessimistically which discussed above. It found that the investors were panicky from the loss faced in investments and hesitant to pick up the new stock again in the market. It is recorded that the majority of investors realize the negative returns in IPOs in short as well as in long run due to their self proclaimed on privileged information, herding behavior, anchoring behavior and so on. All these above factors results are proved that the investors are irrational in making IPO investment decisions.
References:

Books:

Articles:


