Chapter I

Introduction

Behavioral finance is the psychological study of the investors for making investment decisions. It helps to perceive the investor’s investment decision which depends on the investor’s emotions and sentiments. The two psychologists Tversky and Kahnemann (1973) traced the root of new paradigm behavioral finance in the cognitive psychology of the investors. This cognitive psychology means investors’ mental action through the experience, thoughts and perceptions of the human being. It described the investors’ mental shortcuts while investing which make them irrational in decision making. Aduda et al. (2012) described the behavioral finance as the study of the theories of investors psychology which affects the investors decision making and the financial markets. The behavioral finance is helpful for understanding the patterns of the investor’s sentiment and explains the emotional processes to which the investors are influenced for making rational decisions. The investor’s emotional biases also affect the market prices, returns and diversification of the investments. The behavioral finance is concerned with the investor’s rationality and considers how the investors’ make investment decisions based on their sentiments and emotions.

Barberis and Thaler (2003) assumed that the investors are rational and unbiased in their investment decision making. The rationality is the investor’s behavior in which the investors receive new information and update their beliefs correctly regarding that information. It further pointed that the investors discuss their own beliefs with the advisors and then the advisors approve the decision as acceptable or not for the investment purpose. This is defined as the rationality of the investors. The rationality depends on the investors own facts and beliefs in making investment decision. It is the stage of being reasonable on their decisions. Once the investors are able to understand the psychological behavior and emotions while making investment decisions then they perform better in the market and make rational decisions.

Chang et al. (2012) studied the investors cognitive behavior for make investing decision. For the explanation of the investors rationality and the decision making process, the concept of cognitive psychology arises in which it draws evidences related to how the people think and the biases arises when the people have beliefs, preferences in which they make their decisions, given their own beliefs and preferences. When the investors take decisions, this leads them to make
cognitive errors. This cognitive errors and biases affect the investment beliefs. The investors’ psychological behavior is influenced from the various biases in decision making as explained below:

a) **Cognitive dissonance**

The investor’s behavior also emphasizes the cognitive dissonance theory which is related to the investor’s psychology. People are uncomfortable when they hold two contradictory investment options in their mind simultaneously. So for resolving the contradictory situation, the investor has to accept the one and reject the other one. It is the mental state of the people when the investor has mental conflict with the decisions taken before. If the investors feel regretted on their taken decisions then the investor claims someone else is responsible for the unwanted outcomes.

b) **Regret**

Ricciardi and Simon (2000) suggested that the regret is also the theory of investor psychology. It refers to the investor’s emotion in which investor compares the present outcomes with the forgone outcomes. The regret is the feeling of the investors’ experience and the outcomes of their own decisions, which they have made in the IPO market. When the IPO shares has depreciated in value then the investors wants to reject the decision of sell stock and also wants to avoid the regret from from the bad investment decision.

c) **Herding**

The social interaction of the investors also plays important role in investing as herding behavior of the investors. Banerjee (1992) attempted to develop the investor behavior as herd behavior i.e. the investor always wants to do what the other investors are doing rather than using their own information and decision making capability. The herding behavior means that the people instinctively follow the others mental thinking to invest and respond to the signals captured from others. The investors’ follows the behavior and opinion of the majority investors to feel safer and to avoid the conflicts in their mind. It is the behavior in which the investors blindly follow the decisions of the majority rather than believing in their own rational decisions. If the majority of people starts to move in one direction then the others also follows the same direction. This psychological bias also affects the investor’s investment decision making process.
Once the investors are capable to identify the psychological biases and the mental errors in making initial public offering decisions, the investment decisions become more rational and prudent. From this information upgrade, the investors make rational decisions for IPO investment and thus avoid the herding biases in decision making.

d) **Heuristics**

Heuristics affects the investors’ decision making ability. Chira et al. (2008) considered the heuristics bias as the theory of psychological behavior and suggested that the heuristics is the rule of thumb. It defines as the investors’ ability to capture the information as it likely happen and use the past collected information to solve the complex problems. This experience is considered as the basis for taking investment decisions. It helps to explain how people make the decisions, arrive at the judgment and solve the difficult problems. It is helpful when the investors doesnot capable to analyze all the information, it allows speeding up of the decision making process through the mental shortcuts.

The psychological and systematic biases in their beliefs induce the investors to invest on the less favorable information that is usually the sentimental decision of the investors. The informed investors always invest rationally but the uninformed investors make investments on the basis of irrational sentiments. The rational investor are generally free of the emotions, thus correctly evaluates the IPO prices. In the case of uninformed investors, optimistic and pessimistic sentiments influence them and make the investment in the IPOs which give lesser returns.

Cremers and Pareek (2011) explained that the IPO market **overreacts and underreacts**, depending on the two main psychological biases, which areas follows:

- Investors’ overconfidence, and
- Self attribution bias.

Bondt and Thaler (1984) empirically found that the investors overestimate the private information and their own abilities. Then they overreact on their own information and make the investments. On the private information, the IPO prices overreact and on the public information of stock, the IPO market prices underreact.

e) **Overconfidence Behavior**
If the investor overestimates the information due to the overconfident behavior then the investors have greater personal involvement in the IPO market. The overconfident investor is the one who overestimates the precision of the private information rather than the collection of the public information news. Inaishi et al. (2010) and Trinugroho (2011) noticed the influence of the overconfidence on the IPOs. The investors become more optimistic, more confident and start invests excessively whenever, their predictions prove true. This excessive trading leads the investors, to face decreasing returns from the investments. It affects the investors by depending too much on their private information and putting too much faith on their own recent experiences. This behavior may lead them into losses and thus, become the irrational decision.

f) **Self Attribution Bias**

On the contrary, the biased self attribution means the investors evaluate the outcomes of their own actions. Under this, the investors become positive on the successful outcomes while on the other hand attribute the unfavorable outcomes to the bad luck. Cremers and Pareek (2011) noticed that the investors action gets a boost on the getting positive public information and their confidence level increases but get discouraged at low level outcomes and their confidence level diminishes. The investors behave positively when the results are profitable but when the results shift towards losses, then they assign fault to the destiny.

g) **Representative Behavior/ Bias**

Relying too much on the recent experience and overreacting on the current information can be defined as the representative behavior of the investor. Chandra and Kumar (2011) talking about the investors’ representative behavior say that the investors want to invest in the hot stock on the basis of the past performance of that stock. The investors are behaved optimistically on the IPO share prices when the investors receive positive investment information.

h) **Conservative Behavior/ Bias**

The investor tends to be very slow to pick up on the changes and often underreacts, this behavior of the investor refersto as the conservative behavior. The investor survives on the belief that they have most useful information of initial public offering but, in fact, they have less information. These investors have unrealistic convictions about expected profits and may involve into the costly investments because they overestimate the extent of the expected profits.
i) Reinforcement Learning

Reinforcement learning means that the personal experience of investors gets more importance than how investor behaves at the investment outcomes for the future actions. It means that investors depend more on their personal experience rather than just reading about the same information without the personal involvement. If the experience of investors is good then it bolsters investor’s confidence. This reinforcement learning is the leading theory for updating the heuristics. It is just as the machine learning. It posits that the decision makers try to repeat the actions for future which had produced favorable results in the past. Investing under reinforcement learning, the managers follow the three strategies of investing which are as follows:

- “win- stay”,
- “lose- switch” and
- “momentum and contrarian” trading strategy.

The “win- stay” and the “lose switch” both strategies come under the disposition effect of the investors.

- Disposition Behavior

The buy and hold rule also defines as the disposition effect. It means the tendency of investors in which the losers stock is held too long and the winners stock is sold too soon. Tehrani and Gharehkookhian (2012) suggested that the investors realize the gainful investment more quickly and retain the losing investment too long till the companies’ performance gets better. The investor’s intentions believe that the current losers can be the future outperformers. And the today’s losing investor will be appreciated soon as the today’s winners. If past losers gets more IPO return in future then the investor believes that they have justified and rational information otherwise irrational to the IPO investments. The investor always wants to buy securities on the favorable information, sells when the prices go up and continue to hold if the prices go down. This disposition effect explains the prospect theory as given below:

- Prospect Theory

The prospect theory is the theory of decision making under the conditions of the risk. Kahneman and Tversky (1979) defined the prospect theory as the process of identifying the
person’s intention to invest. The intention is divided into two parts, first is editing the stock which means how the stock will perform and second is the judgment principle which evaluating the losses and the gains. It is helpful in directly assessing how the choices are framed and evaluated in the decision making. The author extends the prospect theory to the investments and says that when investors face two and three investment outcomes, the investor behave as the “S” shaped maximizing value function. As shown in figure 1.3, the S- shaped prospect theory draws concave to the domain of gains and convex to the domain of losses.

Figure 1.1

Kahneman and Tversky (1979) S-shaped Prospect Value Function Theory

![Graph of S-shaped Prospect Value Function Theory](image)

The domain of gains means that the investors who are risk averse and the domain of losses refers to the investors’ who are risk seeking. In the risk aversion domain, graph is more steeper at the losses than gains. The investors behave risk averse for moderate gains, when the gains changes to high probability and losses changes to the low probability. On the contrary for the risk seeking person, the gains changes to the low probability and the moderate losses changes to the high probability. This S shaped value function refers to as the reference point from which the appreciation and depreciation in shares are calculated. When the IPO appreciates then the
investor sells the gainful investment and continues to use this purchase price as the reference point, the investors are at more risk averse when the stock will be at the more concave point.

In the convex point, the investor expects from the declining stock that the stock return will be reversed back to the issue price, on this point the investor is not able to make the selling decision, so, either he/she bears the huge loss or hold the stock. This convex point shows the investors’ risk seeking behavior. In this theory, if the investors hold the two stocks, one is up and other is down. And if the investor faces the situation of liquidity demand and has no new information about the IPOs then more likely to sell the investment which is up, hold the IPO which is down.

- **Momentum and Contrarian strategies**

  The momentum traders appear as the less risk averse but the contrarian traders show the signs of overconfidence and the risk aversion. The momentum and contrarian trading strategies are the two opposite investment strategies; both try to investigate the historical price and the past return data, in order to forecast the future stock return performance. The momentum strategy has come in market since 1980-1990s. It defines that the investments which have performed good will be going good also in the future, so the investor buys the stocks which have good historical performance and sells the less performed ones. The share price is more likely to keep moving in the same direction rather than change directions. The momentum investor believes that the large increase in the prices of the shares will be followed by the additional gains and the declining values will be followed by the losses. It describes that buy the past winners stock and sell the past losers stock. This strategy has come about capturing the purchase of hot ones and selling the cold ones. To participate in this strategy, the investors have to invest for long period, which shows the upward price trend and for short sell which shows the downward price trend. Once this strategy establishes, then the investors continue to move with the trend direction rather than to move against the trend.

  Hamalainen (2007) described the two strategies in which the contrarian strategy has become success since 1970s. The contrarian strategy behaves just opposite to the momentum strategy. This strategy believes the stock whose historical performance is going bad and expected to do better in future and past favorable performers are going downward, so this strategy suggest to the investors, that buy the losers stock and sell the winners stocks based on the historical data.
The investors buy the stock when the other behaves pessimistically and sell when other investors behave optimistically. The contrarian investors believe that the other people, who say that the IPO is moving up, they say so only when they had fully done with the investment and else they have no purchasing power for investing into it. The contrarian wants to buy and sell the specific investments when the majority of investors appear to be doing the opposite. In this way, the investors do not behave rationally on their own decisions.

According to the biases, the investors tend to overreact to the news, buy the winner’s stock due to the overoptimistic behavior and sell the loser’s stock due to the over pessimistic tendency of the investors. At this point, the IPO investments show misprice. The stock market plays an important role in the way of investment. It is crucial to know the stock market behavior before going for IPO. It is necessary for the investors to collect all the available information about the stock market and invest in the IPOs. The investors have various investment options to enter into the stock market.

i) One is done through the primary market, it is also called as the Initial Public Offering market and

ii) Second is the secondary market or trade through the existing companies which are listed on the stock exchanges.

The stock exchange refers to as the body of individuals, whether incorporated or not, established for the purpose of controlling, assisting and regulating the trading activities of buying, selling and dealing into the securities. The stock exchange is a platform or marketplace where buyers and sellers can transact the shares in a convenient and competitive manner at the best possible prices.

**Indian Scenario of the IPO**

The primary market is the market where the securities are issued to the public for the first time. It is the channel which uses to sell the new securities in the market. Madan (2003) described the initial scenario of the IPO market. Before 1992, the primary market was controlled by the Controller of the Capital Issues appointed under the Capital Issues Control Act 1947. During that time, all the share price issues were controlled by the CCI. After CCI was abolished, the Securities and Exchange Board of India was formed for the administrative tasks in 1988. The
SEBI was formed to protect the interests of investors in the stock market as well as promoting and regulating the share market under the SEBI Act, 1992. Since January 1992, all the rules, regulations and guidelines are issued by the SEBI. All the companies have listed under the two national stock exchanges which are Bombay Stock Exchange and National Stock Exchange in India regulated by SEBI.

Murthy and Singh (2008) explained the term Initial Public Offering. The initial public offering refers to the offering when a company wants to sell the shares to the public for the first time. The company announces the shares publicly first time in the market and it may raise capital through the new issue of shares. When the new company wants to come in the market, then the company issues the shares to the general public in the market as an Initial Public Offering. The IPO are often issued by smaller and young growing companies to expand their capital. But the IPO can also be done by large private owned companies which are looking to become publicly traded. The IPO can be issued by the issuers when the company which is presently not listed at any stock exchange makes either a fresh issue of shares or for the sell of its existing shares or both for the first time with the anticipation, from which a liquid market will develop. Most of the companies start out with no liquid market and raising the funds from a small number of investors if the investors wish to sell the stock.

The new companies have fewer resources, little background information and the low credibility to conduct an IPO. It can go public by cashing their investments, selling the own company to another large company to make an acquisition and sell the shares in IPO, then this company is ready to go publicly with the IPOs. When the companies wants to go public, then the IPO company issuers hire the investment banks as mediators. The issuer company offers the shares and sells the shares to the investors with the help of the lead underwriters. The IPO can be a risky investment. It is very tough to predict the behavior of the stock on its initial day of trading and in the near future because the companies often have a historical data to analyze the company. The investors always go with the historical data to judge the companies’ IPOs but the market is uncertain for the future prices. Few people have the key to manage money in the IPO market but others may leave their financial decisions upon the professionals and on to the mediators.

First the IPO firms select the mediators for selling its securities in the primary market. The company then consults the underwriters to determine how best the security offering is and
how the securities can be distributed in the primary market. The IPO firms take the help of underwriters to make decisions of offering shares at best prices to the investors. Most of the times, the new IPOs are issued at too large level and difficult to manage for the single underwriter, then the investment bank generates to manage the offerings. The group of investment bank is called the syndicate. In an IPO, the syndicates help to determine the type of security to issue, at the best offering price and at the best time to bring into the new market. This mediator helps the issuers of the companies to go public.

Once the stock goes publicly, it allows the company to raise capital and enhances the liquidity on the more favorable terms. Chauhan (2014) described in study that the IPO issued in primary market by different ways as public issue, right issue, bonus issue and private placement. The companies raises the capital and prices of securities differently in the primary market by the way of **public issue, right issue, bonus issue and the private placement**. The **public issue** refers to the selling of the securities to the public in the primary market. The issuing company makes an offer for selling the shares to the public at a particular price. This offer is presented by a legal document and this legal document refersto as the prospectus. Thus, the public issue is an invitation by the company to the public for subscribing the shares offered in the prospectus. This prospectus is the document which contains all the company details, shares prices and the number of shares issues. This prospectus has to be approved by the board of the directors of the company and this has to be filed to the Securities and Exchange Board of India and the Registrar of the companies.

The **right issue** refers to the selling of the securities to the existing shareholders. The company offers the shares to the existing shareholders on the pro-rata basis. The **bonus issue** refers to the issue of the shares to the existing shareholders by the issuer of the issuing companies without make consideration from the shareholders. It referred to as the bonus issue. And the **private placement** refers to the selling of securities privately by the company to the solicited investors and the investors are not exceeding from 49. The formal prospectus is not needed in the case of private placement. Once the company is listed, it is capable to issue more shares through the right issue. The private placement investors are usually invests in the mutual funds, pension funds, banks and insurance companies.
In a general way, the valuation of the firm to go publicly depends on the price meeting in which the company wants the clearance to go public from the SEBI. The underwriters can choose the IPO as the best method for selling the new shares. The underwriters may consider many factors when decide the IPOs prices. The company plans an IPO by appointing the lead underwriters for their help in deciding the appropriate price for issuing the shares. So, this price decision for the issued IPOs is also a crucial point in the process of the IPOs.

a) **Fixed price and Book building method**

Kumar and Anees (2012) examined the two mechanisms for the IPO pricing. There are two methods in which the price of the IPO determined in India for public issue. One is the Fixed price method and the second is the Book building method. In the **fixed price method**, the issuer of the company allows to freely price the issue. The securities offer the subscription to the public at the fixed price. The offer and allocation price can be fixed by the issuer with the consultation of the underwriters of the companies. The securities issue price detail has to be disclosed in the company prospectus in advance. The actual price of the IPO depends upon the analysis of the market conditions and also judges the intrinsic value of the company.

The issuer company also mentions the price band in the draft offer document in detail filed with the SEBI. But the actual price can be fixed at the later date before filling of the final offer document by the SEBI. If the IPO oversubscribes, then the offerings has to be allocated on the pro-rata basis. The price at which the IPO is offered and allotted known by the investor in advance is referred to as the fixed price offerings. On the contrary, the IPO issues the price at which the securities are offered and allotted, the investors do not know the IPO price in advance, only the indicative price range is known to the investors. This refers to as the **book building** method. The SEBI has provided the three options to the issuer companies in this method.

Figure 1.2
i) 25% issued through fixed price and 75% from book building method: In this, the 75% of the IPO issue can be offered to the reserved institutional investors who have participated in the bidding process. And remaining 25% of the issue can be offered through prospectus to the reserved general investors who have not participated in the bidding process.

ii) 90% through book building method and 10% through fixed price method: In this 90% IPOs offers through book building process and remaining 10% through the fixed price method. This option was adopted by the issuers during the years 1999, 2000 and 2001. But after these years, the SEBI has discontinued this option.

iii) 100% issued through the book building method: In this, the whole 100% IPO issue is offered through this process. The issues has opened and closed for all the investors on the same dates as decided by the issuer companies.

The SEBI announces the guidelines first time for the book building process in October 1995. Before 1995 only fixed price process of IPO was followed by the companies. Murthy and Singh (2008) noticed the allocation amount of the investors in the book building method. When the 100% book building process through the SEBI has entered into the market then it divides the allocation amount to the investors like 35% to the retail individual investors (RIIs), 15% to the non institutional investors (NIIs) and 50% to the qualified institutional buyers (QIBs). At the time of the book building allocation, the SEBI has allowed the new mechanism called hybrid mechanism, which is the composite of 25% of fixed price concept and 75% of the book building concept. Under book building process, the share price is not fixed in advance.
Although, the IPO price is determined by the potential investors in which the investors are willing to pay for that share. In order to discover the prices of the shares, bidding is the process of recording the investors demand during the IPO. The price of the issue is determined when the majority of the investors are willing to pay and buy the IPO at that particular price. The issuer appoints the investment bank who acts as a book runner and the book runner builds the book which is confidential for the issuer, book runner and the underwriters. This book records the data as from where the shares have acquired, price band of the shares and the transfer of the shares on the investors’ demand. In the book building process, the bids are submitted online but the book records the transactions at the off market by the help of book runner. The draft prospectus is submitted to the SEBI without the price band. Then, this prospectus is circulated to the solicited investors mentioned with the price band, and the price band has arrived by the advice of the book runners with the issuer company.

It entertains the soliciting investors to submit the number of shares they would like to buy and bid at that price which has disclosed in the price band. For example, the company fixes the price range rather than the particular price of the issue like Rs. 80-100. When the bidding process starts, the investors have to bid for the share within the price range like bid for Rs 80, Rs 90 or Rs 100. The lowest price of the price range refers to as the floor price and the highest price refers to as the cap price. The price at which the shares are allotted to the investor is referred as to the cut off price. It is the price at which the new shares are issued, determined after the book closed in consultation with the issuer company. After the closure of the book building process, the book runner and the issuing company evaluates the collected bids and determines the final issue price for the investors, at which the IPOs shall be sold in the market. The actual price of the shares is discovered on the basis of demand received from the prospective investors. It is the process where the issuers of the IPOs, ask the investors, to bid their shares at the different prices.

The issuer decides the price band for the bidding process and the investors make the bids for the different number of shares at the different prices. By considering this bidding process, the issuer decides the best price at which the IPOs are allotted. The bid price refers to the price at which the investor is willing to buy the share, and the offer price is the price at which the investor is willing to sell the issues. The mediators in the stock market declares the bid price and ask price of the new equities, at that price, the investors prepares to buy and sell the IPOs at that particular price. The reverse bookbuilding method captures the online sell and purchase orders.
from the shareholders with the help of book running lead managers. It presents the issuing company’s shares to the solicited investors for buying back the company’s shares from the market and the NSE provides the bidding facility to the whole nation.

There are three types of the aftermarket bidding activities which are short covering bids, pure stabilization bids and the penalty bids. The shortcovering refers to the underwriters who short the stock before the IPO. After the IPO market begins, if the share price rises, the underwriters uses the overallotment option to cover the short, and if the share prices declines then buys the stock from the IPO market. Aggarwal (2000) also described in study the aftermarket short covering that initially the underwriters sell the excess of IPO shares than the originally planned then cover the short position through green shoe option in the aftermarket. The next pure stabilization bids refer to as stabilizing the secondary market prices after the working of IPO phase by the underwriters, and bid on the behalf of the underwriters to repurchase the shares at the offer price. When the underwriter posts the bids in the open market without exceeding the offer price then they are called the pure stabilization bids.

Boreiko and Lombardo (2009) also described the pure stabilization that the underwriters are always ready to purchase the IPO shares from the aftermarket and support the issuing company’s shares prices. And the next penalty bid means the stabilizing bids which may be used to support the stock which has the high selling pressure and which comes from the investors looking to flip the purchased shares for the quick profit. If the shares had flipped in the IPO market then do the revoke selling concession, which refersto as the penalty bids. Aggarwal (2000) also described that the underwriters charge penalty on those members whose investors try to quickly flip the IPO shares in the aftermarket with the expectation of earn good returns.

The penalty bid is the bid to purchase the IPO that has been provided by the underwriters. It allows the underwriters to reclaim the selling concession from the investors, who are in connection with the IPOs when the securities sold by the investors, which purchase to cover the transactions. It is the penalty imposed by the underwriter on the new issue securities against the brokers, whose clients sell the issue shares immediately after the purchase, because the investors want to make the quick profits on the IPO. The penalty bid stabilizes the new issue prices in the aftermarket. All the biddings are recorded by the underwriters in the market. But the issue price
depends on the investors’ demand and supply of the company’s shares. If the demand of the shares is high then the book showing becomes oversubscribed.

b) **Green shoe option**

The green shoe option comes to stabilize the market. Alle and Parab (2012) described the new mechanism named as green shoe option. It is known by different names such as overallotment option or the price stabilization mechanism. This was introduced by the Securities and Exchange Board of India in 2003. In the green shoe option, first the merchant banker is appointed as a stabilizing agent (SA) by the issuing company. This stabilizing agent makes an agreement and enters with the pre issue shareholders to borrow the number of shares. These pre issue shareholders are the ones who already holding the shares of the company at the time of the IPOs. All the details are disclosed in the draft offer document. The issuing companies allow the underwriters to buy up 15% additional shares at the issue price. The amount for borrowing additional shares is fixed at 15% from the issue size. Whenever the need arises in the IPO market, this overallotment option gives the right to the registered securities for selling the additional securities at the offering price, which is suggested by the underwriters. The issuers give the option to the underwriters that in the public issue, the issuers offer excess allotment of the shares.

Therefore, the underwriters have the right to additional selling of the shares to the investors rather than originally planned by the IPO issuers of the companies. Ray (2012) noticed that the overallotment option situation might happen when the demand of the shares is higher than the expected, and as a result, the IPO price is showed above the issue price. The investors buy the IPOs of new companies with the hope of getting higher price in the secondary market than the original selling price. On the increase of secondary market price, it increases the investor’s confidence and also raises the image of the issuer company in the mind of the investors. This increased confidence of the investor will be results in more bids in the IPO market at the more favorable prices.

On the contrary, if the diminishing level in the aftermarket prices below to the issue price is found, then the underwriters buy the IPO shares back from the open market. The overallotment option is the option to avail or not to avail, for the issuer company and for the merchant banker. This decision is taken after considering the issuer company’s reputation in the market, measuring
the expectations of the investors, the price band which is determined by the merchant banker and so on. Many small investors are unable to make up their minds whether to bid into the IPO market or not, at that particular price band because they remain in fear of losing money in the IPO.

In this case, the issuer company and the mediators enhance the confidence among the investors regarding the IPO issue by availing the green shoe option mechanism. This mechanism can be exercised within the 30 days of the IPO offering but it is not exercised on the same day of the issue. The issue price is not decided according to any prescribed rule, rather it is set by the issuer company and the mediators collect all the bids received from the investors. The share price level is set on the investor’s movements like when the demand of the investors lowers than the supply of the shares, and the IPO shares have been allocated to the bidders at this price. This set price says as the IPO is overpricing. If the market price immediately at the listing day lowers than the issue price then it is considered as the overestimate of the IPO issue price and this phenomenon is called the overpricing. The second phenomenon of the IPO pricing is underpricing. If the market price immediately at the listing day is higher than the issue price, then it is known as the IPO has underestimated and this phenomenon refers to as the underpricing.

Before the allotment of the shares in the IPO market, the investors behave very consciously whether to get the shares or not. If the investors have the shares then they worry about the performance of the share at the day of listing and aftermarket price. The IPO market will open at above the issue price or below the issue price. When the investment begins in the IPO market, the investors expect the market to stay liquid and transparent. In this regard, the green shoe option helps to improve the liquidity position of the market. Due to the overallotment of the shares, more shares would go to investor’s hands. The larger the number of shares in the hands of the investors, greater the possibilities of dealing of these shares in the IPO market. The investors try to find out whether the IPO market is overpriced or underpriced after the IPO issue. After issuing of the shares, the investor wants to evaluate the performance of the shares before investing. A lot of the companies want to go public for the first time to raise the funds but the issue price affects the companies who want to go publicly for the first time. The companies always decide the right price which should be underpriced, because the underpriced IPO companies can get the good results in investing and provide the investors large positive returns.
c) **Overpricing and Underpricing**

There are two different anomalies of pricing the IPO. First is the **IPO overpricing** and second is the **IPO underpricing**. The overpricing refers to as the price when listing price is less than the issue price of the IPO. If the IPO have been sold at the higher market price, it means the companies lose its compatibility. When the IPO market records are overpriced, the underwriters may come in the trouble of fulfilling their commitments of selling the shares because the shares offered to the public at high prices. Even if underwriters sell all of the issued shares when the stock value falls on the first trading day, it may lose the marketability and more of its value.

![Anomalies of the IPO Pricing](image)

Mishra (2012) described the underpricing phenomenon of the IPO issues. The underpriced IPO means, when the prices of the IPO below its market value. When the listing price shows more than the issue price, then this stock perceives to be underpriced. The IPO issuer tends to know more about the value of the shares than the investor, because to compensate the investor’s risk which has been taken by the investors while investing and company must underprice the shares to encourage the investors to participate in the IPO. The underpricing is the difference between the IPO issue price and the listing day price of the IPO in the secondary market. The underpricing refers to as the dilution of the pre issue shareholders. If the IPO market price is underpriced, the stock will perform better in future and the underwriters believe that the IPO market is hot.
The aim of the IPO underpricing is to generate the people’s interest in the stock market when it is first publicly traded and money left on the table, which causes to get high return to the investors. Through the flipping, the IPO can lead to generate gains for the investors who have been allocated shares of the IPO at the offering price. The flipping means the buying of the IPO at the offering price and reselling immediately these shares once the trading began, for earns the substantial profit. This flipping is commonly done by the institutional investors rather than the retail investors, because these institutional investors keep more IPO at the offering price. This flipping is most profitable in the hot IPOs market.

d) **Money left on the table**

However, the IPO underpricing results in the money left on the table, which means loss of the capital that could have been raised for the company, because of the reason that the stock will be listed at the higher price. If the company makes lots of money means company is doing well, its value rises because people are willing to pay more for the company’s stock. The higher the underpricing, greater the amount of money made by the investors who got allocations in the IPOs, this phenomenon is called as money left on the table by the firms. Loughran and Ritter (2002) defined the money left on the table in the tabulated way. It is measured as the first day price gain which multiplies by the number of shares sold.

If the IPO shares had been sold at the closing market price rather than at the offer price, and the measured amount of the offering has becomes higher which equals the money left on the table. If the IPO shares had been sold at the offer price rather than the closing market price, the measured amount of the offering is not higher and the calculated amount does not equal the money left on the table then, the same amount is proceeded for the accumulation by selling of the fewer shares, resulting the investors’ profits come out from the pockets of the issuing companies. This left out money on the table means the cost to the underwriters. The underwriters desire the lower offer price but the issuing company wants the higher offer price. It is the cost of the company and at the same time a gain for the investors in the form of positive initial returns on the underpriced shares.

e) **Winner’s Curse**
The underpricing market creates the situation referred to as the winner’s curse. In this case, the informed investors will compete with the uninformed investors. It has two assumptions. First, the unpredictable prices of the IPOs have true values and second assumption is the heterogeneity of the information among the investors. The informed investors are capable of handling the underpriced IPO, which gives the good return to the investors and the rest of the situation of the IPOs is left to the uninformed investors. If the informed investors invest in the market, they would get a good, average or high initial return at the deal of IPOs in the underpriced issues. And on the other side, the overpriced issues has been left on to the uninformed investors and gets a negative average initial return which leads to suffer under the winner’s curse situation. The issuers try to keep the IPO underpriced to build the interest of the uninformed investors to get involved in the IPO market. In this way, both the informed and the uninformed investors get the benefit of earning the positive initial return.

Lin et al. (2010) described that the informed investors will withdraw from the IPO market at declining phase and the uninformed investors will receive the larger allocation in the overpriced situations. In the underpriced market, the uninformed investors will receive a smaller allocation because the informed investors come to join the market. The winner’s curse also affects the size of the issue. If the issuer size increases, then it would be more comfortable to manage the issues and get the true value of the firms. Most of the time, larger IPO issuers have fewer chances to be underpriced. Many of the researchers have indicated that the short term return of the IPOs is measured to be higher and the long term IPO performance is not too much favorable. At the time of offering, the investors behave overoptimistically to get the high return in the IPO market. When the IPO market is underpriced, more investors want to buy the IPOs, the demand for the IPOs increases due to the optimistic investor’s behavior and more the companies want to go public. Simultaneously, many investors earn the profits from the short term IPOs dealings under the underpricing situation of the IPO market.

The investors have asymmetric information of the IPO shares while investing. The asymmetric information refers to the information about the true value of the company’s shares to the investors through the help of the investment bank or the underwriters. The new issuers of the firms are having less familiar information about the true value of the company than the underwriters who know more about the company. The information asymmetry has found among the IPO informed and the uninformed investors which generates the winners’ curse theory. To
attract the interest of the investors, the IPO issuers must leave enough money on the table to compensate the investors for their uncertainty. The underpriced IPO issuers are more interested to attract the uninformed investors to bid in the IPO, whose bids will in turn attract the informed investors. The IPO market does not only care about the aftermarket expected liquidity but also cares about the uncertainty of share’s value. The IPOs make the firms more liquid which increases the firm’s value.

f) Seasoned equity issue

Seal and Matharu (2012) described the seasoned issue concept. It also refersto as the secondary equity offerings or follow on offerings. It is the new equity issue by an already publicly traded company. It may be involved in the shares which sell by the existing shareholders, the new shares or both. It is defined as the issue of additional shares from the established company whose securities already trade into the secondary market. The offer document of the seasoned offerings make by the issuer of the company and fulfills the certain regulatory criteria, in which certain issues are allowed to offer and sell the securities to the public without mentioning each offer detail in the separate prospectus. The seasoned equity issue handled by the underwriters in the same way as the IPO handles except the price of the new share because it depends on the market price of the shares. The cluster of the investment banks handles the issue of the stocks in the primary market. They may agree to share the losses in case of the unsold stock, also can stabilize the market to prevent the share prices from falling too low and in exchange the mediators, paid the fees to the issuer companies.

In the case of pricing the seasoned equity offerings, the stock commonly offers at the discount to the current market price. It is issued by the firm whose existing shares have already in the situation of the high trading volume and high price stability. The underpricing generates the good impression in the investor’s minds for selling the seasoned equity offerings at the attractive prices by the IPO companies. Due to the good reputation of the shares, the seasoned equity offerings have high liquidity in the secondary market. At the initial public offering level, the investors do not know how smoothly the aftermarket will be. The IPO underpricing is higher for the shares in the case of lower the expected liquidity and higher the liquidity risk. At the underpricing IPO level, the investors expect to liquidate their shares into the aftermarket. Because of the information asymmetry, it seems more difficult to value the firms under the
higher uncertainty of the IPO returns. During the hot issue market, there are high chances of risk in the new companies’ listed shares. The higher risk level in the market is positively related to the higher initial return. The initial public offering generates short term returns for the investors by the purchase of the stock at the offering price. The long term performance of the IPO is different from the short term performance.

g) **Fads and windows of opportunity**

Ritter (1991) analyzed the performance of the IPOs in long run and also discussed the other two themes as fads and windows of opportunity. The long term performance comes under the two main categories such as fads and windows of opportunity. The initial public offerings underperform in the 5 years after the IPO market, the investor buys the shares at the first day closing price and holds the shares with the expectation of earning profit in the upcoming three years period. This diminishes long period referred to as the long run underperformance of the IPOs. The fads occur in the hot issue market because in this period, the investors behave overoptimistically to make the IPO investment and about the growth potential of the IPOs going public. Furthermore, the issuers give time to their IPOs during the fad periods in order to take advantage of the windows of opportunity.

The issuers provide the time to the issuance of their IPOs during the fads when investor behaves optimistically about the companies for further growth and these issuers collect responses of high value period, which causes the large cycles of the IPO volume. The firms which are listed in the high volume periods have a greater probability to overvalue, than the firms which have listed under the lower volume periods. When the cost of equity becomes low then the firms have the advantage of windows of opportunity. The firms avoid the issuing of shares in those periods where few others available with their good quality firms issue. The underwriters offer the shares in the IPO market when the market seems hot. At the hot initial public offering market, it has high IPO average initial returns and higher the IPO volume offerings. The investors look more optimistic in the hot market prospects and these firms seem much more able to go public at the more favorable prices. The hot market initial public offerings are of high quality and are needed to dilute the ownership structure than the cold IPO markets. The IPO hot and cold market varies from time to time across the countries. This variability in the share prices is the reflection of the performance of the companies.
Keep in mind aforesaid bias and conceptualization of the Indian IPOs, which have been discussed for this study. Before started the journey of this study, it is noted that the Indian IPOs has started its market from eighteen century and tackled many disturbances. But now, it is well globalized, well organized and fully modernized with technology. However, now the IPO market is best in terms of trading with the help of technology. All the buying and selling transactions are done electronically by the stock exchanges. After reviewing the existing studies, it is noted that the researches have not concentrated on the new emerging topic in the context of Indian IPOs which are listed under NSE. This study has focused on the aspects as the IPOs price performance, risk and return relationship and investors behavior on the IPOs movements which have not been discussed earlier.

As observed that, all the investors are known about the uncertainty of the IPO market. And still, the investors think that the IPO market is the lucrative method to accumulate money. In India, the large amount of money is transacted in the share market on the daily basis. The question arises that, is this large amount has been invested by the aware people, educated ones, professionals and knowledgeable investors or by the less aware ones. On the other case, are the investors investing on the basis of their guess and intuitions that the IPO market is become up at next movement. It will be interested to know the reasons behind the IPO market movements and investing behavior of the investors.

The volatility may be happened from the arrival of unpredictable news events which causes the IPO movements and investors judgments. Why the IPOs are showing positive and negative values after the listing day. How it works or moves on the aftermarket trading days. Due to these fluctuations of market, many investors have loss heavy money in IPOs. Hence, this study has taken to analyze the factors and biases which affect the investors behavior on investing either they invest or not again in case of fear behavior. Many of the studies assumed that the investors are rational in investing. Now the question arises, if they are rational then found the reasons behind the losses which are faced by them. This study would be helpful to examine the price performance of IPOs, investors rationality and the guidelines to reduce the losses and maximizing the gains while investing.
This study is helpful to get guidelines that which segment is more profitable in investing and which IPO have more grades. After reviewing this, the particular influence has been given to examine the qualitative aspects of the investors’ rationality and quantitative aspects of the IPOs pricing performance which has listed at NSE. This study has attempted to analyze the investors behavior in IPO investing through the primary study which has not discussed by the researchers earlier.

**Rationale of this study**

- The investors in decision making tend to be predisposed for their understanding of market movement. Sometimes it exuberate into overreaction while other times their reaction is very subdued and muted one resulting into the underreaction to price sensitive information.

- In recent times, higher incidence of market volatility finds in India and is more attributed to investor switching behavior in recent times. This necessitates the deeper understanding of this kind in relation to IPO investment.

- Very few studies has been done on IPO in India and hardly any study has been done on IPO pricing as regards to the investors rationality.

- In view of above, the study of understanding the investors’ rationality in case of IPO pricing is urgently called for justifying the study of consistency.
References:

Books:


Articles:


