

Impact of Behavioral Biases Factors on Investment Decision towards IPOs – A study of Retail Investors in Hyderabad & Secunderabad City

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Abstract:

Behavioral finance is a new area of finance using psychology and sociology of individuals. It is a relative area of finance shows that individual's financial decisions using their cognitive psychology. It has developed in response to conventional economic theory and standard finance, that holds the individuals are logical, risk-averse, and motivated by maximization of profit. Numerous capital market ideas have their roots in this idea of the rational investor. But in practice, everyone makes decisions that are significantly less reasonable than would be predicted by economic theory. The complex process that regulates a person's investing decisions involves logic, abstract cognition, and planning skills. Individuals make sensitive, quick, and automatic investment decision as a result of the effect of this distinctiveness. This study aims to ascertain the influence of behavioural bias factors on investment decisions towards Initial Public Offerings. The respondents for this survey are retail investors from the state of Telangana state with reference to Hyderabad and Secunderabad city. The sample investors are selected on non-probability sampling method and using convenient sampling technique. These target investors are generally who are willing to invest (beginners) invest (experience) or invested (participants) in Initial Public Offerings. Four behavioural bias variables are found by using a thorough literature review to analyse how they affect investors' investment choices. They are Herding, Heuristic, Market Forces and Prospect Factors. The relationship between these behavioral bias factors is also examined in this study and found that market forces with heuristic and herding factors have strong positive correlation. Few statistical tools namely Correlation, Chi-square test and multiple regression models are applied to test the hypothesis under the study. The results of multiple regression models reveals that Herding factor is significant impact on Investment Decision towards Initial Public Offering compared to Heuristic, Market forces and Prospect factors.

Key words: *Behavioral Biases Factors, Investment size, Investment Decision and Investment Behavior, Initial Public Offerings.*

1. Introduction:

With a history spanning more than a century, the Indian capital market has fueled the nation's economic growth. Simply put, the capital market is a marketplace for long-term investments and provides institutional infrastructure for borrowing and lending of medium- and long-term investments. In this market, the main sources of funding (fund generation) are government, banks, insurance companies, corporate savings, and individual savings. The government and private sector industries are the main sources of the demand for long-term capital. As a result, this market acts as a bridge between corporate and the general public. The capital market of India consists of the primary market and secondary market. The primary market, also known as the initial public offering (IPO) market or fresh public offer (FPO), is where new securities are traded (IPO). Its main purpose is to raise money to support new investment opportunities in infrastructure development and the purchase of fixed assets. In order to provide long-term financing, shares, debentures, securities, and mortgage loans are used. One of the primary market's distinctive features is that it gives investors the chance to learn about corporate fundraising and choose the best investment strategy (**Andrew M. Chisholm., 2002**).

There are essentially two steps in the IPO process. The pre-marketing stage of the offering is the first, and the actual initial public offering is the second. A company that wants to go public will either solicit private bids from underwriters or make a public announcement to attract interest of general public. The company selects the underwriters, who oversee the IPO process. A company may select one or more underwriters to oversee various phases of the IPO process jointly. Every step of the IPO process, including due diligence, document preparation, filing, marketing, and issuance, is handled by the underwriters.

In recent time, retail investor's participation is predominantly increases in both primary market and secondary market in the form of IPOs participation and buying and selling of equity shares. Post Covid Scenario, new Demat accounts were opened by 20 million (2020-2022) at CDSL and stock exchanges are at their life time highest level i.e., both NSE NIFTY@20,000 points and BSE's SENSEX@60,000 points. In this scenario, retail investors may affect by behavioral biases on rational decision making of investments in IPOs and Mutual funds. **Lo et al. [23]** suggest that any investor, who has knowledge, education, instruction and training can achieve in the stock market. Institutional investors have superior market awareness and experience.

1.1. Retail Investors Participation in Indian Primary Market:

The multifold rise in the number of Demat A/C in the last two years shows that retail investors are reposing their faith in the growth of the Indian economy. According to two depositories, NSDL and CDSL, the total number of Demat accounts is 9.28 crore as on April 30, 2022. This number is almost three times the number recorded as of March 2020. According to CDSL, the total number of Demat accounts was 2.12 crore in March 2020 that has grown to 6.50 crore in April 30, 2022.

Table No – 1 Total Fund Mobilizations in Indian Capital Market
(Amount in Rs. Crore)

| Particulars | 2016-17 | | 2017-18 | | 2018-19 | | 2019-20 | | 2020-21 | |
|----------------------------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|-----------------|--------------|-----------------|
| | No of Issues | Amount | No of Issues | Amount | No of Issues | Amount | No of Issues | Amount | No of Issues | Amount |
| A. Equity (i+ii+iii+iv+v) | 528 | 76,770 | 683 | 231826 | 546 | 237052 | 377 | 3,06,327 | 344 | 2,29,786 |
| i. IPO | 106 | 29,104 | 201 | 83,684 | 123 | 16,087 | 60 | 21,345 | 55 | 31,030 |
| ii. FPO | 1 | 10 | 1 | 13 | 0 | 0 | 02 | 37 | 02 | 15, 030 |
| iii. Right Issue | 12 | 3,416 | 21 | 21,400 | 10 | 2,149 | 17 | 55,670 | 21 | 64,059 |
| iv. QIPs | 20 | 8,464 | 53 | 67,257 | 14 | 8,678 | 14 | 54,389 | 31 | 78,738 |
| v. Preferential Allotments | 410 | 44,250 | 407 | 59,472 | 399 | 210138 | 284 | 1,74,886 | 235 | 40,930 |

Source: Annual Reports from SEBI

The above table illustrates the total funds mobilization in Indian capital market through primary market. Equity Instruments include Initial Public Offering; Follow on Public Offering, Rights Issue and Qualified Institutional Placements and Preference Allotments. The total funds raised in 2016-17 are ₹76, 770 crores to ₹2, 29,786 crores in 2020 -21. Considering the no of issues, a total of 528 was issued in 2016-17 and 344 in 2020-21. As the data shows that no of issues in 2016-17 is high and total funds mobilized is low compared to 2020-21 (vice-versa).

2. Review of Literature on Behavioral Finance:

The theories of conventional finance are not entirely rejected in behavioural finance. Instead, it explains that investors are not always logical in their approach to the market and thus the market is ineffective. The study of finance known as behavioural finance incorporates psychological theories into the field of finance in order to better understand investor behaviour. It also explores the causes and mechanisms of market inefficiency. In his work, "Psychology of the Stock Market," **Selden, G. C. (1912)**, examines how investors' psychological biases impact market behaviour and alter price fluctuations. The "hypothesis of cognitive dissonance" is a novel idea in social psychology that **Festinger, L., Riecken, H., & Schachter, S. (2017)** introduced. This theory contends that an individual's cognitive process alters their belief. Ritter (2003, p. 429) asserts that behavioural finance is founded on psychology and that there are a number of cognitive illusions that can affect human decision-making. These illusions are separated into two categories: heuristic decision-making illusions and prospect theory illusions derived from the usage of mental frames (Waweru et al., 2008, p.27). The following list also includes these two groups, as well as the herding and market elements.

- **Heuristics Theory:** Heuristics are rules of thumb that facilitate decision-making, particularly in complicated and uncertain contexts (Ritter, 2003, p. 431). They do this by simplifying complex assessments of probability and value predictions (Kahneman & Tversky, 1974, p.1124). These heuristics are generally highly helpful, especially when time is limited

(Waweru et al., 2008, p. 27), but they can occasionally result in biases (Kahneman & Tversky, 1974, p.1124; Ritter, 2003, p.431). When presenting three factors—representativeness, availability bias, and anchoring—Kahneman and Tversky appear to be among the first authors studying the factors that make up heuristics (Kahneman & Tversky, 1974, p.1124-1131). Waweru et al. include the gambler's fallacy and overconfidence as additional heuristic theory components (Waweru et al., 2008, p.27). Representativeness refers to the degree of similarity that an event has with its parent population (DeBondt & Thaler, 1995, p.390) or the degree to which an event resembles its population (Kahneman & Tversky, 1974, p.1124). Representativeness may result in some biases such as people put too much weight on recent experience and ignore the average long-term rate (Ritter, 2003, p.432). The "rule of small numbers" (Rabin, 2002, p. 775; Statman, 1999, p. 20) is the idea that a tiny sample can resemble the parent population from which it is collected, which can result in a gamblers' fallacy (Barberis & Thaler, 2003, p.1065). More specifically, the gamblers' fallacy occurs in the stock market when people predict incorrectly the reversals that are thought to signal the end of good (or poor) market returns (Waweru et al., 2008, p.27). When people generate estimates using some beginning values that are skewed toward the initial ones because different starting points provide different estimations, the phenomenon of anchoring is applied (Kahneman & Tversky, 1974, p.1128). Anchoring occurs in the financial market when recent observations fix a value scale. When selling or assessing, investors always resort to the original acquisition price. Anchoring forces investors to set a price or income range for a company based on historical tendencies, which causes under-reaction to unforeseen events. Anchoring and representativeness are somewhat related because it shows that people tend to base decisions on recent experiences and are more upbeat when the market is rising and more gloomy when it is falling (Waweru et al., 2008, p.28). Overconfidence is said to increase risk tolerance, mental agility, and tenacity and resolve. Or, to put it another way, arrogance can enhance performance in the workplace. Additionally, it has been seen that exaggerating one's ability can assist others see one's abilities more favorably, which could lead to a quicker promotion and a longer investment period (Oberlechner & Osler, 2004, p.3). When people overuse information that is readily available, availability bias occurs. Investing in local companies that investors are familiar with or can quickly access information about is one way that this bias manifests itself in the stock market, despite the core principles of so-called diversification of portfolio management for optimization (Waweru et al., 2003, p.28).

- **Prospect Theory:** Expected Utility Theory (EUT) and prospect theory are two methods of thinking about decision-making from various angles. While EUT focuses on investors' rational expectations, prospect theory emphasises subjective decision-making affected by the investors' value system (Filbeck, Hatfield & Horvath, 2005, p.170-171). The analysis of decision-making under risk is dominated by the EUT, a normative model of rational choice and descriptive model of economic behaviour. Regret aversion, loss aversion, and mental accounting are some of the mental states that have an impact on a person's decision-making processes, according to the prospect theory (Waweru et al., 2003, p.28). Regret is a feeling that people experience after making mistakes. By being willing to sell growing shares while refusing to sell declining ones, investors are able to avoid regret. Additionally, investors regret holding losing equities for a longer period of time than they regret selling winning stocks too quickly (Forgel & Berry, 2006, p.107; Lehenkari & Perttunen, 2004, p.116). When

referring to a similar-sized loss or gain, people's different levels of mental punishment are referred to as loss aversion (Barberis & Huang, 2001, p.1248). Evidence suggests that people are less happy with equal gains than they are with the threat of losses (Barberis & Thaler, 2003, p.1077). The process through which people consider and assess their financial transactions is known as "mental accounting" (Barberis & Huang, 2001, p.1248). Investors can segregate their assets into separate accounts by using mental accounting (Barberis & Thaler, 2003, p.1108; Ritter, 2003, p.431). According to Rockenbach's own empirical investigation, which is useful for arbitrage-free pricing, connections between various investment opportunities are frequently missed. Loss aversion, regret aversion, and mental accounting are employed in this study to gauge the prospect dimension's effects on investors' decisions about initial public offerings.

- **Herding effect** - In the financial market, the tendency of investor behaviour to imitate that of other investors is known as the herding effect. Since investors tend to depend more on communal knowledge than on private information, the occurrence of herding is typically carefully considered by professionals. As a result, many promising investment opportunities at the moment may be negatively impacted. Academic scholars are also concerned with herding because it affects stock price movements, which affect the characteristics of risk and return models, which affect the perspectives of asset pricing theories (Tan, Chiang, Mason & Nelling, 2008, p.61). Herding can influence stock trading and build momentum, according to Waweru et al. (2008, p. 31). The impact of herding, however, can diminish at a certain point since it becomes more expensive to follow the herd in order to receive rising irregular returns. Areiqat, A. Y., et al (2019, p. 37) list the stock investment choices that an investor can be influenced by the others: purchasing, selling, selecting the stock, holding the stock for how long, and trading a large volume of stock. According to Waweru et al., an investor's buying and selling decisions are greatly influenced by the actions of others, and herding tendency encourages investors to avoid regretting their choices.
- **Market Forces** - The following market factors are listed by Waweru et al. (2008, p. 36) as having an impact on investors' decision-making: price fluctuations, market information, prior stock-trend tendencies, customer preference, overreaction to price movements, and fundamentals of underlying companies. Typically, over- or under-reaction to price changes can result from changes in market information, the fundamentals of the underlying stock, and stock price. Empirically, it has been demonstrated that these modifications have a significant impact on how investors make decisions. Researchers are persuaded that overreacting or underreacting to news may lead to different trading methods by investors and subsequently affect their investing decisions (DeBondt & Thaler, 1985, p. 804; Lai, 2001, p. 215). According to Waweru et al. (2008, p. 36), market information has a significant influence on investors' decisions, and as a result, investors tend to concentrate on well-known equities and other newsworthy occurrences that are based on stock market information. Additionally, Barber and Odean (2000, p. 800) stress that investors are affected by stock market events that catch their attention, even if they are unsure of whether these occurrences will lead to positive future investment performance.

In this study, five heuristic components—Overconfidence, Gambler's fallacy, Availability bias, Anchoring, and Representativeness and three prospect theory components - Loss aversion, Regret aversion, and mental accounting, Herding factors and Market forces are used

to measure their impact levels on the investment decision making towards Initial Public Offerings.

GAPS IN RESEARCH STUDY:

Many behavioural biases can affect an investor's decision to invest. Prior research on behavioural finance has found four main biases that affect how investors make decisions: Heuristic, Prospect, Herding and Market forces.. This study will close this gap in the literature by examining the effects of gambling and other factors on investors' investment decision towards IPOs. Second, the majority of behavioural finance studies place an emphasis on investor decision-making processes and behavioural bias factors. Here, a variety of investors are surveyed to learn more about their biases and choices in IPOs. To date, there hasn't been a specific study that focuses on retail investors and their behavioural biases on IPOs. By choosing retail investors and examining their behavioural biases when accessing the primary market, this research will close this gap. Third, there are no studies conducted in Hyderabad and Secunderabad cities towards Investment Decisions and Behavioral Biases factors affect on Initial Public Offerings. This study closes the knowledge gap by investigating the relationship between the chosen behavioural bias components and how it affects investors' decision-making towards Initial Public Offerings.

SIGNIFICANCE OF THE STUDY: This study offers insightful knowledge regarding the stock market access habits of retail investors in India. This study's primary objective is to examine the impact of behavioural bias factors on Investment Decisions towards IPOs in Twin cities of Telangana state i.e., Hyderabad & Secunderabad cities. Tversky, A., & Kahneman, D., (1992-1994) found that heuristics and framings are major biases which affect the individual's judgement. Later in 1986, they found a theory called “prospect theory” that is a famous revolutionary theory in behavioural finance, accepted by most of the financial practitioners in the world. They argued that a rational theory of decisions does not provide any foundation to the decision making theory. Several studies conducted over the last four decades based on their findings. The investors' lack of awareness is the key cause of this lag. More investors are entering the market as behavioural finance has gained popularity. It aids investors in identifying the biases that affect their investment decisions towards Initial Public Offerings. This study helps retail investors, portfolio managers, and financial advisors understand the significance of behavioural bias variables and how they affect investment decisions.

OBJECTIVES OF THE STUDY:

The major central point of this study is to find out the impact of behavioural bias factors on investment decision towards IPOs.

1. To measure and analyse the investment size in IPOs by Hyderabad and Secunderabad investors wise.
2. To measure the behavioural factors influencing investors' decision in IPO and Mutual Funds.

CRONBACH'S ALPHA (α) – RELIABILITY TEST: A reliable measurement passes the reliability test. It is used to determine whether a measurement instrument yields an exact and reliable result. The statements that make up the behavioural bias components in this study are

rated on a five-point Likert scale, from strongly disagree to strongly agree. One such reliability tool used in SPSS to determine measurement reliability is Cronbach's alpha. The Cronbach's alpha (α) value must be higher than 0.6 in order for the instrument to be considered reliable.

The alpha values of the respective behavioural bias factors are shown in the following table 2.

Table No – 2 Reliability Statistics

| Cronbach's Alpha α - Value | N of Items |
|---|-------------------|
| 0.902 | 24 |

Source: Primary Data

The overall reliability value is 0.902 for 24 statements representing Behavior Biases Factors constructed under the study. The Cronbach's alpha value is more than 0.6 shows the excellent reliability under the study.

Table No – 3: Cronbach's Alpha Value

| S.No | Behavioral Biases | Cronbach's α - value |
|-------------|--|---|
| 1 | Representativeness | 0.731 |
| 2 | Overconfidence | 0.799 |
| | Anchoring | |
| | Gambler Fallacy | |
| 3 | Ability Bias | 0.501 |
| 4 | Loss Aversion | 0.702 |
| 5 | Regret Aversion | 0.768 |
| 6 | Mental accounting | 0.817 |
| 7 | Price changes | 0.792 |
| 8 | Market information | |
| | Past trends of stocks | |
| | Fundamentals of underlying stocks | |
| | Overreaction | |
| 9 | Herding | 0.746 |

Source: Primary Data

3. Research Methodology: A sample design is a technique or procedure used by the researcher to choose elements for the sample. The sample design must be chosen by the

researcher after considering the nature of the inquiry and other relevant criteria (Kothari C.R., 2004).

- **Sample Size:** Sampling is defined as, the selection of a subgroup of the population from within a statistical population to estimate characteristics of the whole population. In the present study, the researcher has used non-probability sampling. Because respondents in the study need prior knowledge of the stock market and who only invest and ready to invest in the market are request to fill the questionnaire. Therefore, a convenient sampling method or judgment sampling adopted due to large population in the defined geographical area i.e., Hyderabad & Secunderabad (twin) cities of Telangana state under the study.

Table No – 4 Spread of Sampling Distribution

| Brokerage Firm | Hyderabad | | Secunderabad | |
|--------------------|------------------------------------|-------------------|------------------------------------|-------------------|
| | Questionnaire Distributed / Mailed | Response Recieved | Questionnaire Distributed / Mailed | Response Recieved |
| ICICI DIRECT | 50 | 41 | 50 | 29 |
| HDFC SECURITIES | 50 | 43 | 50 | 21 |
| SBI CAPITAL | 50 | 44 | 50 | 26 |
| KOTAK SECURITIES | 50 | 47 | 50 | 27 |
| ANGEL ONE BROKING | 50 | 46 | 50 | 24 |
| SHAREKHAN | 50 | 46 | 50 | 32 |
| MOTILAL OSWAL | 50 | 48 | 50 | 31 |
| 5PAISA | 50 | 47 | 50 | 32 |
| IIFL | 50 | 47 | 50 | 21 |
| UPSTOX | 50 | 48 | 50 | 24 |
| Total | 500 | 457 | 500 | 267 |
| Grand Total | 1000 | 724 | Response Rate | 72.4% |

Source: Researcher Compilation

- **Sample Unit:** Retail investors from Telangana who actively participate in the primary market i.e., IPOs are considered as Sample Unit.
- **Sample Frame:** Information about broking companies is gathered from the websites of SEBI and BSE/NSE. A comprehensive list of brokerage businesses is created using the data gathered from these sources, and this list is considered to be the sample frame for this study.

Data collection: The data collected from the target investors who hold Demat Account & ready to invest, and experience in the stock market through questionnaire. The questionnaire consists of demographic questions, investor profile and behavior biases factors. The questionnaire was distributed in Online and Offline format within the twin cities radius. From Hyderabad and Secunderabad city, 500 sample investors are selected through branch managers, relationship managers and through personal contacts. For this purpose, a suitable sample size of investors is carefully selected. In this process, alpha level a priori at 0.04 has been set which plans to use a proportional variable. The sample size is determined using the Yamane (1967) formula.

$$n = \frac{N}{1 + N(e)^2}$$

Where n is the sample size, N is the population =68, 09,970 and e is the level of precision. A 94% confidence level and P = 0.04 are assumed. When this formula is applied,

$$n = \frac{68,09,970}{1 + 68,09,970(0.04)^2}$$

$$n = 624.94$$

$$n = 625$$

4. Data Analysis and Results Discussion: Investment Size and Behavioral factors impact on Investment Decisions towards IPOs.

H₀₁: There is no significant association between Investment Size and Area of the respondents.

Table No – 5 Investment Pattern in IPOs – Area Wise

| Investments in IPOs | Area | | Total | Remarks |
|--------------------------|-----------|-----------|-------|----------------------------------|
| | Hyderabad | Sec-bad | | |
| Less than Rs1,50,000 | 159 | 110 | 269 | Accept the H₀₁ |
| Rs.1,50,001 - Rs.3 Lakh | 260 | 131 | 391 | |
| Rs.3,00,001-Rs.5 Lakhs | 29 | 18 | 47 | |
| Above Rs.5,00,000 | 9 | 8 | 17 | |
| Total | 457 | 267 | 724 | |
| χ^2 – Value = 4.572 | d.f = 3 | p = 0.230 | | |

Source: Primary Data

29 respondents are investment in IPOs lies between Rs.3, 00,001 – Rs.5 Lakhs. Only 9 respondents are invested above Rs. 5 Lakhs in IPOs. On the other hand, 110 of sample respondents from Secunderabad invested less than Rs. 1, 50,000 in IPOs. Under the study, 131 are invested between Rs. 1, 50,000 – Rs. 3 Lakhs and 18 respondent's investment size between Rs. 3, 00,000- Rs. 5, 00,000. Only 8 respondents investment is more than 5, 00,000 in IPOs.

Investment size in IPOs and Area: The computed χ^2 – Value = 4.572 with d.f =3 and p >0.230 resulting into reject the null hypothesis H₀₁. In simple words, there is no significant association between investment size in IPOs and area of the respondents Investment size in Mutual Funds and area of the respondents: The computed value of χ^2 is 96.917 and p<0.000 resulting into reject the null hypothesis. In other words, there is a significant association between investment size and area of the respondents.

H_{02a}: There is a significant impact of behavioral biases on investment decision-making towards Initial Public Offerings.

- **Multiple Regression Model**

Dependent Variable: Investment Decisions towards Initial Public Offering **Independent Variables:** Prospect factors, Market forces, Heuristic factors, Herding effect.

Table No – 6 Correlations

| Variables | Statistical Tools | Heuristic | Prospect | Market Factors | Herding | Investment Decision |
|---------------------|---------------------|-----------|----------|----------------|----------|---------------------|
| Heuristic | Pearson Correlation | 1 | | | | |
| | Sig. (2-tailed) | | | | | |
| Prospect | Pearson Correlation | 0.354** | 1 | | | |
| | Sig. (2-tailed) | 0.000 | | | | |
| Market Factors | Pearson Correlation | 0.431** | 0.721** | 1 | | |
| | Sig. (2-tailed) | 0.000 | 0.000 | | | |
| Herding | Pearson Correlation | 0.178** | 0.304** | 0.537** | 1 | |
| | Sig. (2-tailed) | 0.000 | 0.000 | 0.000 | | |
| Investment Decision | Pearson Correlation | 0.112** | -.0046 | 0.151** | 0.426** | 1 |
| | Sig. (2-tailed) | 0.003 | 0.216 | 0.000 | 0.000 | |

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

Source: Primary Data

Correlation Analysis shown in table 6. The variables identified under the study are Heuristic, Prospect, Market Factors, Herding Factors and Investment Performance has significant relationship except Investment Performance and Prospect theory. From the table, Market forces and Prospect theory has strong positive correlation as 0.721, followed by Herding Biases and Market forces with 0.537 significant relationships. Considering Market Forces and Heuristic factors correlation resulting in 0.431 and Investment Performance and Herding Factors with 0.426 significant relationships.

Table No – 7 Model Summary of Dependent Variable: Investment Performance or Investment Decision

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change |
|-------|--------------------|----------|-------------------|----------------------------|-----------------|
| 1 | 0.476 ^a | 0.227 | 0.222 | 0.950 | 0.227 |

a. Predictors: (Constant), Herding, Heuristic, Prospect, Market Factors

b. Dependent Variable: Investment Decision

Source: Primary Data

Table No - 8 ANOVA

| ANOVA ^a | | | | | | |
|--------------------|------------|----------------|-----|-------------|--------|--------------------|
| | Model | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 190.253 | 4 | 47.563 | 52.657 | 0.000 ^b |
| | Residual | 649.453 | 719 | 0.903 | | |
| | Total | 839.707 | 723 | | | |

a. Dependent Variable: Investment Decision

b. Predictors: (Constant), Herding, Heuristic, Prospect, Market Factors

Source: Primary Data

Table No – 9 Coefficients

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--|----------------|-----------------------------|------------|---------------------------|--------|-------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 1.270 | 0.183 | | 6.927 | 0.000 |
| | Heuristic | 0.127 | 0.046 | 0.101 | 2.773 | 0.006 |
| | Prospect | -0.280 | 0.053 | -0.252 | -5.267 | 0.000 |
| | Market Factors | 0.051 | 0.069 | 0.041 | 0.734 | 0.463 |
| | Herding | 0.500 | 0.042 | 0.463 | 11.772 | 0.000 |
| a. Dependent Variable: Investment Decision | | | | | | |

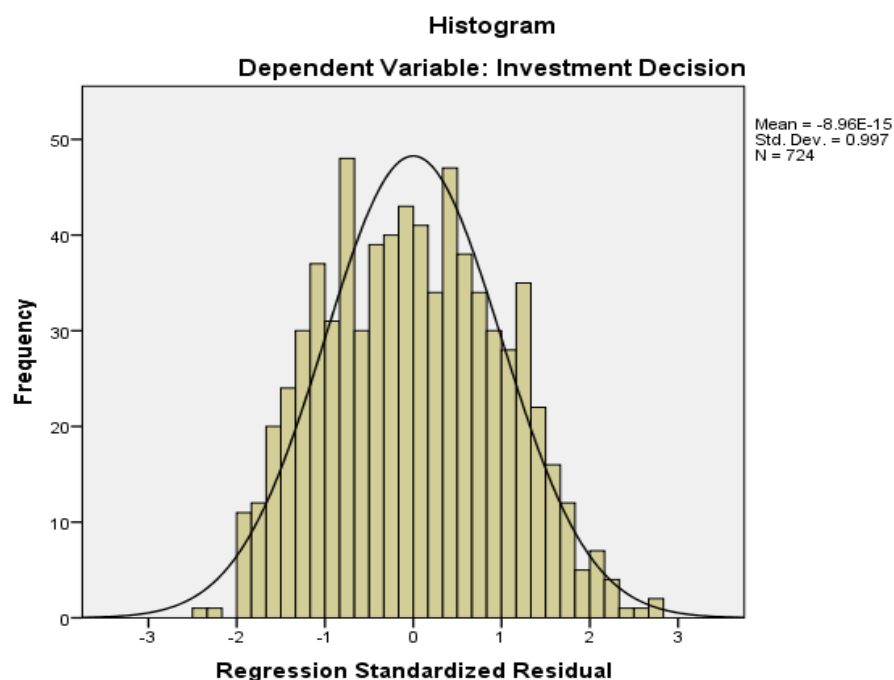
Source: Primary Data

Table no. 7 indicates that the Adjusted R^2 is for Model 1 is 0.222, showing that the independent variables – Herding, Heuristic, Prospect, and Market Factors together cause an explained variance 22.2 percent in the dependent variable Investment Performance or Investment Decision. The F-statistic value of 52.657 for Model 1 in table no. 8 was found to be significant at five percent. Table no. 9 shows that regression coefficients in Model 1, i.e. Herding, Heuristic, Prospect, and Market Factors are significant for the model with standardized co-efficient values 0.500, 0.127, -0.280 and 0.51 respectively.

Based on the above results the equation for the dependent variable Investment Decision is given as follows:

$$\hat{Y} = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mu_i$$

$$ID = 0.500 (\text{Herding}) + 0.127 (\text{Heuristic}) - 0.280 (\text{Prospect}) + 0.051 (\text{Market Forces}) + \mu_i$$

Chart No – 1 Histogram for Dependent Variable: Investment Decision

5. Conclusion of the study: The impact of behavioural bias factors on individual investment decisions is a subject that is increasingly being studied by financial professionals worldwide. This study paves the way for more research on behavioural bias variables and their impact on how investors behave while making investments. The investor's behaviors simultaneously determine their heuristic and prospects theory. Discriminant analysis is used to determine how behavioural bias factors affect investment choices related to initial public offerings (IPOs). Results of this descriptive study investigate how investors' biases affect their overall investing choices with regard to initial public offerings. In addition, investor behaviour, heuristics, herding, and gambling bias factors each have a big impact on how investors decide which stocks to buy. The main conclusions of this study will help retail investors to comprehend behavioural bias elements and how they affect their investment choices. With the aid of a multiple regression model, this study aims to determine the causal relationship between the behavioural bias factors.

This study has various applications for initial public offerings (IPOs), which are equity investment decisions. The conceptual model gives management of brokerage firms, experts, and financial advisors a systematic framework for making better investing choices based on behavioural biases and advancing the goals of retail investors. Making better investing choices behavioural biases and advancing the goals of retail investors. This research opens the way for businesses, brokerage firms, fund managers, and financial advisors to inform individual investors about the psychological variables that thwart sound investment judgment. In order to prevent making bad investment choices, they might encourage ordinary investors to directly engage the capital market through IPO bids (Short term gains, quick profits) and Listing gains, long-term holding, and portfolio management. This study paradigm examines the main behavioral biases factors and their influence on investment decisions towards initial public offerings (IPOs). This study can be used by brokerage firm managers and investment analysts to comprehend how investors behave in the market when making investments in initial public offerings (IPOs). They frequently instruct their clients on how to become successful investors. The main finding of the study is that the data used in it highly support both the hypotheses and the theoretical model. The academic professionals are encouraged by this study to engage in rational debates on theory and proposition, measuring methodology, research work technique, and management implications.

Future Directions to Research: This study is limited in its attention to a few specific behavioural bias factors namely Heuristic, Herding & Prospect theory and how they affect on investment decisions towards IPOs only. Many behavioural bias factors prevent investors from making profitable investment choices. The impact of this study in defining investors' investment behaviour is a viable area for future research on this subject. Future researchers can build on this study to investigate other behavioural bias variables and their impact on Mutual funds schemes, Portfolio Construction and Equity selection by Individual Investors.

BEHAVIORAL BIAS FACTORS INFLUENCING ON INVESTMENT DECISIONS TOWARDS IPOs- Please evaluate the degree of your agreement with the impacts of behavioral factors on your investment decision making: Likert's 5 point scale stated as **1- Strongly Disagree / 2 – Disagree / 3 - Somewhat Agree / 4 – Agree / 5 – Strongly Agree**

| | S.No | Statements | 1 | 2 | 3 | 4 | 5 |
|---------------------------|-----------|---|---|---|---|---|---|
| Representativeness | 18 | You bid the equities which have strong fundamentals, huge scope for growth and avoid the underperforming companies coming for IPOs. | | | | | |
| | 19 | You use trend analysis of some representative stocks to make investment decisions for select IPOs. | | | | | |
| Overconfidence | 20 | You believe that your skills and knowledge of stock market can help you to outperform the market. | | | | | |
| Anchoring | 21 | You rely on your previous experiences in the market for your next investment in IPOs | | | | | |
| Gambler Fallacy | 22 | You forecast the changes in stock listings in the future based on the recent market conditions. | | | | | |
| Ability Bias | 23 | You are normally able to anticipate the end of good or poor market returns at the NSE / BSE | | | | | |
| | 24 | You consider the information from your close friends and relatives as the reliable reference for your investment decisions. | | | | | |
| Loss Aversion | 25 | After a prior gain, you are more risk seeking than usual to Invest in Upcoming IPOs or Equity Issues. | | | | | |
| | 26 | After a prior loss, you become more risk averse. | | | | | |
| Regret Aversion | 27 | You avoid selling shares that have decreased in value and readily sell shares that have increased in value | | | | | |
| | 28 | You feel more sorrow about holding losing IPO stocks too long than about selling winning stocks too soon after listing. | | | | | |
| Mental accounting | 29 | You tend to treat each element of your investment portfolio separately. | | | | | |

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|--|-----------|--|--|--|--|--|--|
| | 30 | You ignore the connection between different investment possibilities | | | | | |
| Price changes | 31 | You consider carefully the price changes of IPOs stocks that you intend to invest in. | | | | | |
| | 32 | You have the over -reaction to price changes of IPO stocks after listing. | | | | | |
| Market information | 33 | Market information is important for your IPO stock investment | | | | | |
| Past trends of stocks | 34 | You put the past trends of Industry and similar stocks under your consideration for your investment. | | | | | |
| Fundamentals of underlying stocks | 35 | You analyze the companies' customer preference before you invest in their stocks (IPOs) | | | | | |
| | 36 | You study about the market fundamentals of underlying stocks (IPOs) before making investment decisions | | | | | |
| Overreaction | 37 | Other investors' decisions of choosing IPOs stock much impact on your investment decisions | | | | | |
| Herding | 38 | Other investors' decisions of the stock volume (no of bids) have impact on your investment decisions | | | | | |
| | 39 | Other investors' decisions of buying and selling IPO stocks have impact on your investment decisions | | | | | |
| | 40 | You usually react quickly to the changes of other investors' decisions and follow their reactions to the stock market. | | | | | |
| | | | | | | | |
| Investment Performance | 41 | The return rate of your recent IPOs stock investment meets your expectation. | | | | | |
| | 42 | Your rate of return is equal to or higher than the average return rate of the market | | | | | |
| | 43 | You feel satisfied with your investment decisions in the last year (including buying, choosing stocks, and selling. | | | | | |

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