Behavioural Finance: Guaging the Investment Logic Among Equity Investors

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ABSTRACT

Behavioral finance is a new dimension of finance which aims at supporting the conventional theories of finance by incorporating behavioral content to the decision-making process. The basic philosophy of behavioral finance is that the investors are not rational and that they get influenced with several factors which actually question the traditional finance. An underlying assumption of behavioral finance is that, the information system and structure and characteristics of market participants have a wide influence on the individual’s investment decisions as well as market outcomes. Theories of behavioral finance provide reasonable explanation to investors’ decision making and trading behavior. The study considers two behavioral aspects of investors, viz, disposition effect and herd behavior to associate the nature of attitude of investors with their investment logic. This process influences financial decision makers such that they act seemingly in irrational manner, and make suboptimal decision, violate traditional finance claim of rationality. The impact of this suboptimal financial decision has ramification for the efficiency of capital markets, personal wealth, and the performance of corporations.

Keywords: Behavioral Finance , Trading behavior, Disposition effect, Herd behavior.

INTRODUCTION:

Financial market is becoming increasingly popular for a large set of aspiring investors. The investor community plays a very important role in the stock market because of their enormous role in creating a buoyancy to the securities market. The Regulators of the stock market can never ignore the behaviour of individual investors. Over the past decade, behavioural finance has become a buzz word in the finance industry. Nowadays, many financial institutions offer financial services based on findings supported by behavioural finance. Also, many asset managers and hedge funds act based on strategies originating in behavioural finance. Behavioural finance attempts to explain and increase understanding of the logic of investment pattern, including the emotional processes involved and the degree to which they influence the decision-making process. Behavioural finance assumes an area which involves improving the understanding of financial markets and its participants by incorporating essence from behavioural sciences. This is in sharp contrast to the traditional finance paradigm, which seeks to understand financial decisions by assuming that markets and many of its investors and institutions make their decisions based on the rationality. This ensures that the investors make unbiased decisions and fulfill their self interests.

Investors are affected by a series of psychological biases in their buy-and-sell decisions. Among all investor groups, retail investors are highly susceptible to behaviourally induced errors. Some investors make use of the expertise of brokerage firms which supply relevant information based on market research intelligence. The study analyses the bias associated with investment decisions made by investors and its impact on their returns. The study aims to analyse the factors that affect the individual investors’ trading behaviour and the extent to

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which these factors determine the behaviour of individual investors. The study also aims to understand the risk exposure that drive the investors’ trading behaviour and to understand various behavioural models that explain investors’ trading behaviour, viz, disposition effect and herd behaviour.

OBJECTIVES OF THE STUDY:

- To examine the impact of risk tolerance level and demographic factors on attitude towards trading.
- To study the impact of disposition effect and herd behavior on trading behaviour.
- To study and analyse investor awareness and strategies towards the security market investment portfolios.

LITERATURE REVIEW:

Behavioural finance literature gets into the very heart of the debate about rationality and irrationality of market participants. Thaler (1991) makes an interesting remark: “If most individuals tend to err in the same direction, then a theory which assumes that they are rational also makes mistakes in predicting their behaviour.” Shefrin & Statman (1985) in their work, 'The Disposition to Sell Winners Too Early and Ride Losers Too Long: Theory & Evidence' focuses on four main points which, collectively, have been termed the ‘disposition effect’. These four points are prospect theory (PT), mental accounting, seeking pride and avoiding regret, and self-control. Prospect theory suggests that decision makers tend to sell profitable investments too soon, whilst retaining bad investments – even when standard theories of decision making (e.g. Expected Utility Theory) suggest otherwise. The disposition effect ties in the prospect theory as well as several different areas of decision making and behaviour.

Shefrin (2000) describes behavioural finance as the interaction of psychology with the financial actions and performance of “practitioners” (all types of investors). He recommends that these investors should be aware of their own “investment mistakes” as well the “errors of judgment” of their counterparts. Shefrin states, “One investor’s mistakes can become another investor’s profits. This theory essentially tries to provide a contrast to the fact that the ultimate motivation for investors is the maximization of the value of their portfolios. Rajarajan V (1997) has done extensive research on the characteristics of investors. He classified individual investor on their investment size and demographic characteristics. He also conducted analysis to segment individual investors based on their lifestyles. He brought out details about the association between lifestyles of individual investors and their demographic and investment related characteristics to understand them and their financial product needs better. Risk taking capacity has been a subject to many of his researches.

Hirshleifer (2001) categorized different types of cognitive errors that investor make i.e. self-deception, occur because people tend to think that they are better than they really are; heuristic simplification, which occurs because individuals have limited attention, memory and processing capabilities; disposition effect, individuals are prone to shell their winners too quickly and hold on to their losers too long.

Guido Baltussen (2009), in his work, 'Behavioural Finance: An Introduction', conducted surveys and reviews in the field of behavioral finance. It outlines the traditional finance approach, which builds upon rational acting investors, its assumptions, and its shortcomings. Moreover, it surveys the main findings from psychology and sociology that contrast with this traditional finance approach, and it provides examples of situations and studies that reveal the relevance of these findings for financial markets and its participants.

H. Kent Baker & Victor Ricciardi (2014) conducted studies on major principles of investor psychology, including heuristics, bounded rationality, regret theory, mental accounting, framing, prospect theory, and loss aversion. They also researched into the role of personality traits, financial therapy, retirement planning, financial coaching, and emotions in investment decisions.

HYPOTHESES:

The following hypotheses are set to be empirically tested to study the above mentioned objectives:

H0- There is no significant relationship between gender and emotions
H1- There is a significant relationship between gender and emotions

RESEARCH METHODOLOGY:

The study is both descriptive and analytical in nature. The study identifies the impact of various behavioural factors on individual investor’s investment behavioural pattern. The study was conducted using primary and secondary data. The study follows personal interview as the tool of survey using a questionnaire schedule and secondary data was collected from various websites, journals, magazines, newspapers etc.
Data Sources:
The primary data were collected through interview schedule focused with discussion. The data were collected from stock brokers and sub brokers, day traders, investors and various experts in the field of finance. The secondary data were collected books and journals related to financial markets, psychology, websites etc.

Sampling Design:
Among the population of stock market investors across Kannur district, a sample of 60 active stock market investors were selected through convenience sampling technique.

Statistical Tools Used for Analysis of Data:
- Likert scale
- Chi-square test

RESULTS AND DISCUSSION:
The study was conducted among a population of 60 active stock traders out of which 52 were male and 8 were female investors. The majority of the investors were in their post retirement segment (76.6%). This highlights the attitude of the investors to invest in the capital market, which is perceived as the promising opportunity to secure some return on their savings for the future. These investors were also possessing an investment experience of more than 5 years and had invested a lumpsum amount from their retirement corpus. The respondents were also found to be interested in short term investments. The study was done keeping in mind the demographics and emotional aspects of investors.

Risk Tolerance Profile:
During the course of the study the respondents were asked a set of questions to understand their risk tolerance level. Following are the questions and their responses towards the question.
- Just 60 days after you invest your money instock, its price falls 20%. Assuming none of the fundamentals have changed, what would you do?

Table 2.1.A

| Category       | NO. OF Respondents | Percentage |
|----------------|--------------------|------------|
| Sell           | 32                 | 53%        |
| Do nothing     | 25                 | 42%        |
| Buy more.      | 3                  | 5%         |

Sources: primary data

Interpretation:
53% of the respondents believed that 20% fall in share prices is a significant fall and cannot be ignored with a hope of recovery anytime soon. 42% of sample size believe that since the fundamental market conditions have not changed there is a possibility of recovery. Only 5% believe that it is an opportunity to buy more shares hoping for significant returns in future.
- A good investment opportunity just came along, but you have to borrow money to get in. Would you take out a loan?

Table 2.1.B

| Category        | NO. OF Respondents | Percentage |
|-----------------|--------------------|------------|
| Definitely No   | 35                 | 58.3%      |
| Perhaps         | 19                 | 31.6%      |
| Yes             | 6                  | 10.1%      |

Source: primary data

Interpretation:
Over 58% of the total sample population are not willing to take loan even though it’s a good investment. It would be fair to assume that since majority of the sample belong to retirement category they prefer to play safe they would prefer to skip the opportunity rather than take the risk of a loan. 31.6% say they might opt for a loan considering other factors. Only a 10% agreed to take a loan to avail the opportunity.

Disposition Effect:
Disposition effect refers to the tendency of investors selling the shares too quickly when there is an increase in
price and hold on for too long those shares that have dropped in value. The reason for this is that people do not want to recognize the losses but do want to recognize the gains they have made. By selling the shares whose value has dropped the investor would have to admit that he made a bad investment. As long as the losses are not recognized, they exist only in theory. People find it uncomfortable to “close the account” in negative. It causes feelings of regret to them.

Analysis of Disposition Effect:
A set of 4 questions were asked to the respondents keeping in view the concept of Disposition effect. The 4 questions were focussed on understanding the impact of Disposition effect in the financial concepts of shareholders. Following are the questions and responses of the 60 respondents with respect to Disposition effect.

- Sensitive to losses than to gains in trading

**Table No .2.2.1.A**

| Category     | NO. OF Respondents | Percentage |
|--------------|--------------------|------------|
| Sell         | 32                 | 53%        |
| Do nothing   | 25                 | 42%        |
| Buy more.    | 3                  | 5%         |

**Source:** Primary Data

**Interpretation:**
A majority of the respondents seem to agree on the point that they are more sensitive to losses than towards gains. This refers to the psychology of humans where however high the profits maybe, it is a marginal loss that captures the attention of the person. This is where disposition effect comes into play. In order to minimize their loss, people tend to sell off their shares as soon as they realize they are going to incur losses. This also shows their risk bearing capacities. Since majority of samples considered are in the retired category, it would be fair to assume that risk is not something they are willing to take and they are not willing to risk their life time savings.

- Expects Profits or at least break returns in all trade

**Table No .2.2.1.B**

| Category       | NO. OF Respondents | Percentage |
|----------------|--------------------|------------|
| Strongly Agree | 16                 | 26.6%      |
| Agree          | 24                 | 40%        |
| Neutral        | 20                 | 33.3%      |
| Disagree       | 0                  | 0%         |
| Strongly disagree | 0               | 0%         |

**Source:** Primary data

**Interpretation:**
Majority of the respondents agree that they prefer to make some kind of profit or some kind of breakeven in all the trades. It’s the most common of human tendency’s to aspire to earn more profit and to avoid losses. The results were as expected before the study. There is a neutral population which believes that even though it’s perfectly normal to hope for profit it’s not something that’s practical in all trades and losses are bound to happen. They believe uncertainty and risk is part of the business and is unavoidable so the best thing to do is try to minimize and be prepared for it to happen.

- Stocks that have declined in value after purchase are kept on hold with expectations for the stock to rebound

**Table No.2.2.1.C**

| Category         | NO. OF Respondents | Percentage |
|------------------|--------------------|------------|
| Strongly Agree   | 3                  | 5%         |
| Agree            | 9                  | 15.1%      |
| Neutral          | 18                 | 30%        |
| Disagree         | 17                 | 28.3%      |
| Strongly disagree| 13                 | 21.6%      |

**Source:** Primary Data

**Interpretation:**
The question here again sheds light on the risk bearing capabilities of the shareholders. In an earlier question,
respondents said that they prefer to sell of their shares than to suffer losses. This is a complementary question where respondents say that they would not hold a share that is in loss in anticipation that it will rebounce. Most people prefer not to take that risk and would instead sell off the share and realize whatever monetary amount that can be made out of it.

- Stocks are to be sold when there is increase in price rather than decrease in price

### Table No. 2.2.1.D

| Category        | NO. OF Respondents | Percentage |
|-----------------|--------------------|------------|
| Strongly Agree  | 5                  | 8.3%       |
| Agree           | 10                 | 16.6%      |
| Neutral         | 27                 | 45%        |
| Disagree        | 12                 | 20%        |
| Strongly disagree | 6                 | 10%        |

**Sources:** primary data

**Interpretation:**
The study shows inconclusive opinion about when is the best time to sell a share whether when there is an increase or when there is a decrease in price. Further study into the neutral character showed that selling of shares during its upward or downward movement depended on various other factors. Factors such as investor confidence played a major role in the decision making process.

The general idea that seems to be appearing from previous questions is that investors sell their shares when the share prices are falling with a view to arrest the loss that they may suffer from the downward trend.

**Herd Behavior:**
A fundamental observation about the human society is that people who communicate regularly with one another think similarly. The social influence has an immense power on Individual judgment. In everyday living, it is learned that when a large group of people are unanimous on their judgments, they are certainly right. Even completely rational people can participate in herd behavior when they take into account the judgments of others, and even if they know that everyone else is behaving in a herd like manner. While gathering information, people generally trust friends, relatives, and working colleagues more than media.

**Analysis on Herd Behaviour:**
A set of 5 questions were asked to the respondents keeping in view the concept of Herd behavior. Questions were focussed on understanding the impact of Herd behavior in the financial concepts of shareholders. Following are the questions and responses of the 60 respondents with respect to Herd behavior.

- Seek signals from other traders in matters of financial knowledge and trading behaviour

### Table No. 2.3.1 A

| Category        | NO. OF Respondents | Percentage |
|-----------------|--------------------|------------|
| Strongly Agree  | 14                 | 23.3%      |
| Agree           | 18                 | 30%        |
| Neutral         | 26                 | 43.3%      |
| Disagree        | 2                  | 3.3%       |
| Strongly disagree | 0                 | 0%         |

**Source:** Primary Data

**Interpretation:**
Majority of the respondents agreed to the statement that they seek trading knowledge from other traders. In the own words of one of the respondents “humility is the mark of a good human being, we are always learners and everyone around us teaches us something”. Traders are ready to accept their mistakes and learn from other traders.

- Following other traders irrespective of the logic behind their decisions
Table No. 2.3.1.A

| Category          | NO. OF Respondents | Percentage |
|-------------------|--------------------|------------|
| Strongly Agree    | 0                  | 0%         |
| Agree             | 2                  | 3.3%       |
| Neutral           | 21                 | 35%        |
| Disagree          | 23                 | 38.3%      |
| Strongly disagree | 14                 | 23.3%      |

**Interpretation:**  
The results of the study are quite clear, investors are not ready to blindly follow illogical decisions. They are ready to accept knowledge from other traders but not willing to take decisions blindly following their path. They believe in first absorbing the information and then carefully analysing it before making a decision.  
- No first-hand knowledge to form independent decision

Table No. 4.10.18.3

| Category          | NO. OF Respondents | Percentage |
|-------------------|--------------------|------------|
| Strongly Agree    | 9                  | 15%        |
| Agree             | 13                 | 21.6%      |
| Neutral           | 24                 | 40%        |
| Disagree          | 8                  | 13.3%      |
| Strongly disagree | 6                  | 10%        |

**Source:** Primary Data  
**Interpretation:**  
The results here are again inconclusive. This may be due to the fact that some traders spend most of their time involved in capital market activities whereas some don’t put in so much effort. It is important to understand the fundamentals of stock market and careful analysis of the market to fully understand it. Yet no knowledge is complete, investors may require help from experts in the field of investment.  
- Buying aggressively on identifying positive stock price movements without even knowing the cause

Table No.2.3.1.B

| Category          | NO. OF Respondents | Percentage |
|-------------------|--------------------|------------|
| Strongly Agree    | 0                  | 0%         |
| Agree             | 6                  | 10%        |
| Neutral           | 12                 | 20%        |
| Disagree          | 32                 | 53.3%      |
| Strongly disagree | 10                 | 16.6%      |

**Source:** Primary Data  
**Interpretation:**  
The trend shows that even though there is a positive movement investors would first like to know the reason for such movement before investing. Markets are unpredictable, if a movement is not carefully analysed then it could result in huge losses so investors chose to first understand the trend, the reasons and only then act upon it rather than hastily jump into conclusions.  
- Preferring to understand first, rather than to react hastily on identifying positive stock price movement;

Table No. 2.3.1.C

| Category          | NO. OF Respondents | Percentage |
|-------------------|--------------------|------------|
| Strongly Agree    | 10                 | 16.6%      |
| Agree             | 32                 | 53.3%      |
| Neutral           | 12                 | 20%        |
| Disagree          | 6                  | 10%        |
| Strongly disagree | 0                  | 0%         |

**Source:** Primary Data
Interpretation:
This survey question is complementary to the earlier question and the results back the earlier interpretation of understanding the market first before making decisions. 42 respondents agree to this, thus forming a clear positive trend.

Likert Scale Analysis Disposition Effect:

| PARTICULARS                                                                 | Total Likert Score | Mean Likert Score | Likert Score |
|-----------------------------------------------------------------------------|--------------------|------------------|-------------|
| I am more sensitive to losses than to gains in trading                       | 231                | 3.85             |             |
| I prefer to make profits or at least break even in all trades                | 236                | 3.93             |             |
| I sell stocks when there is increase in prices rather than decrease in price | 176                | 2.93             | 3.31        |
| I hold stocks that have declined in value after my purchase with expectations for that stock to rebounce | 152                | 2.53             |             |

| PARTICULARS                                                                 | Total Likert Score | Mean Likert Score | Likert Score |
|-----------------------------------------------------------------------------|--------------------|------------------|-------------|
| I don’t react on identifying positive stock price movement; rather I prefer first to understand | 226                | 3.77             | 3.02        |
| I seek signals from other traders in matters of financial knowledge and trading behaviour | 224                | 3.73             |             |
| I don’t have first-hand knowledge to form independent decision              | 191                | 3.18             |             |
| I buy aggressively on identifying positive stock price movements without even knowing the cause | 134                | 2.23             |             |
| I would like to follow other traders irrespective of the logic behind their decisions | 131                | 2.18             |             |

Chi Square Analysis:
Hypothesis Testing:
Test 1:
1. H0- There is no significant relationship between gender and emotions
H1- There is a significant relationship between gender and emotions

| Results                                                                 |
|-------------------------------------------------------------------------|
| strongly agree   agree neutral disagree strongly disagree Row Totals |
| male           | 0 (1.73) | 4 (6.93) | 19 (18.20) | 17 (14.73) | 12 (10.40) | 52 |
| female         | 2 (0.27) | 4 (1.07) | 2 (2.80)   | 0 (2.27)   | 0 (1.60)   | 8  |
| Column Totals  | 2        | 8        | 21         | 17         | 12         | 60 |

The chi square statistic is 27.033. The p-value is 2E-05. The result is significant at p < 0.05
P<0.05 indicating a very low value. Hence rejecting the null hypothesis. Accepting the alternate hypothesis that there is a significant relationship between gender and emotions.

FINDINGS:
- The investor awareness on capital market is found to be the least among all the other investment options.
- There is also very less engagement of young investors in this segment.
• Retired professionals find capital market as a great avenue to invest their savings and generate a regular form of income and women were least preferring this segment for investing.
• Most of the respondents were from retired category and it seems that bias like disposition effect and herd behaviour do affect their investment decision to a great extent.
• Since most people fell in the retired category, there is a tendency for risk aversion.
• The analysis of the chi square shows a much greater relationship between gender and emotions.

Disposition Effect:
- Sensitivity to losses has the highest Likert value in disposition effect which shows the impact it has on investor’s decision making ability. Retired people investing their life time savings find themselves highly sensitive to losses.
- Investors are hopeful of making profit or breakeven fully aware that losses are bound to happen.
- Investors do not hold on to stocks which have declined in value with the hope of a possible rebounce.
- Investors prefer to sell more when there is a decrease in price rather than when there is an increase, in anticipation of avoiding losses.

Herd Behaviour:
- In the analysis of herd behaviour it was found that even when share prices are high, investors believe in understanding the reason for the trend first before investing.
- Investors are willing to learn from other traders who have more experience in trading but when it comes to decision making they depend only on their instincts.
- Investors make decisions based on logical thinking and proper analysis of the market and not simply by following other traders.

CONCLUSION:
The role of behavioral finance which combines the discipline of finance and psychology to understand human behavior paves way for an analysis of different factors that result in such behavior. When the investors are investing in the share market, it is said that they are emotional rather than rational in most of the occasions. The dynamics of the investment process, culture, and their relationship with the share broker can significantly improve the decision-making process, resulting investment performance and satisfaction.
This study has been about understanding the concept of behavioral finance with respect to the equity investors of Kannur district. The study conducted among 60 respondents gave a fair idea about the psychology of investors. The investors were found to be rather risk averse as most of the respondents were from the retired category, who were always looking into the safest means of equity investment. The behavioral models such as disposition effect and herd behavior also impacted their investment decisions, but the respondents were found to be conducting logical analysis instead of impulsive decision making.

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