



A Study to Test The Accuracy Of The Proposed Anomalies Of The Behavioral Finance Theory – With Special Reference To Investors In Bangalore

Sushmita Raghavendra Rao ¹, Prof Shobha TS ²

¹ Mount Carmel College, ²

Abstract

The Behavioral Finance theory, as opposed to the classical finance theory suggested that people make decisions based on the potential value of gains and losses rather than the utility of the decision. This theory has its own propositions even on the behavior of investors in shares and tries to explain the influence of psychological biases in their decision making process related to individual stocks. Researches have been conducted to explain the influence of these biases on the behavior of investors all over the world with the presumption that cultural and sociological factors also influence stock buying decisions apart from psychological factors. Therefore, this paper establishes the key psychological and cognitive biases that have a major impact on the Indian aspect of the decision making process of investors in shares(Bangalore in particular) and all the biases that do not, considering all the factors mentioned above which have been tested in a larger retrospect (in major continents)

Key Words: Psychological and Cognitive Biases, Individual Stocks

1. INTRODUCTION

Finance can basically be divided into three categories.

- 1) Public Finance : Which involves the borrowing of grants and aids by banks and governments.
- 2) Corporate Finance : Which involves financing of businesses through equity investments and credit arrangements.
- 3) Personal Finance : Which involves financial management decisions that an individual takes for the future.

These categories of finance, however fail to explain inefficiencies in the market that caused irregular behavior of the market and how these inefficiencies affected investor characteristics and perceptions. Thus an additional branch of finance was born to explain this shift

Behavioral Finance began largely as the result of the prospect theory as developed by Daniel Kahneman and Amos Tversky. It is also referred to as the "Additional Branch of Finance" and is simply the study of psychology on the behavior of the practitioners of finance as well as its effect on various markets. Behavioral finance explains largely why and how markets may be inefficient.

This branch of finance mainly involves the combination of three interdisciplinary sciences: Finance, Sociology, which is the study of social behavior or society and Psychology, which is the study of behavior and mind, embracing all aspects of conscious and unconscious experiences as well as thought.

The theory claims that the conscious and the unconscious experience of a person as well as the social structure that he belongs to, has a major impact on the decisions that he takes in all fields, including finance.

The Behavioral Finance theory also has its implications and also covers all aspects of investor rationality when they take decisions to buy and sell shares. This theory argues that other classical finance theories like the Efficient Market Hypothesis theory, says that it is impossible to "beat the market" because stock market efficiency causes existing share prices to always incorporate and reflect all relevant information, whereas the Behavioral Finance theory states that certain mental biases govern the response of investors to certain stock market conditions which lead to irrational investment decisions.

Some of the biases discussed in this paper are:

- **Familiarity Bias:** Relates to the bias where people only invest in the shares of those companies they are familiar with. This bias reflects upon the level of comfort or "familiarity" a person experiences due to positive results, resulting in drop of investments in unfamiliar company shares due to the fear of any prospects of loss.
- **Sunk Cost Fallacy:** The bias assumes that if the price of the shares fall down, you should continue to invest in those shares with the expectation that prices should rise. This bias in a certain poses as an opposite trait to the Familiarity Bias where people harbor a mindset that prices of shares would shoot upwards after they have faces a significant drop.
- **Prospect Theory:** This theory states that losses and gains are valued differently, and thus individuals make decisions based

on perceived gains instead of perceived losses. Also known as the “Loss Aversion” theory

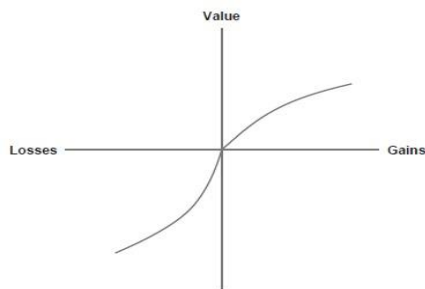


Fig 1: The Prospect Theory

- **Over Reaction Bias:** This bias states that people immediately take up the decision to buy or sell the shares when their prices rise or drop by a small margin irrespective of their actual performance in the market.
- **Over Confidence Bias:** In this bias, people often misjudge their skills in the stock market and take decisions on the basis of that. Overconfidence is a particular attribute expressed by investors where they end up over estimating their capacity to understand the functionality of the stock market.
- **Herd Behavior Bias:** This bias is defined as a mentality characterized by a lack of individual decision making or thoughtfulness. This bias states that people, in the stock market take decisions on the basis of the decisions taken by others.
- **Gamblers Fallacy:** This is commonly known as the Monte Carlo Fallacy wherein, it is a mistaken belief that if something happens more frequently than normal during some period, it will

happen less frequently in the future. This theory proposes that people observe a pattern that exists in the stock market and consciously take decisions in the contrast with the expectation that the latter would happen.

- **Hind sight Bias:** Here, this bias can lead an individual to believe that an event was more predictable than it actually was, and can result in an oversimplification in cause and effect. At a deeper level, the ability to be affected by the Hindsight Bias hugely depends on three factors:
 - 1) By the role of surprise
 - 2) By Personality Characteristics
 - 3) By Virtue of Age

the general concept is that if two choices are put before an individual, both equal, with one presented in terms of potential gains and the other in terms of possible losses, the former option will be chosen.

The underlying explanation for an individual’s behavior, under prospect theory, is that because the choices are independent and singular, the probability of a gain or a loss is reasonably assumed as being 50/50 instead of the probability that is actually presented.

- **Mental Accounting Bias:** According to this bias, people classify their money into separate accounts and identify the intent or the purpose for holding each account.
- **Anchoring Bias:** This bias states that during decision making, anchoring occurs when individuals use an initial piece of information to make subsequent judgments.

4. RESEARCH DESIGN

2. PROBLEM DEFINITION

The Efficient Hypothesis theory suggests that investors usually resort to a more predictable or rational behavior in the stock market because it states that it is impossible to “Beat the Market” because the stock market efficiency causes existing share prices to always incorporate and reflect all relevant information.

But the Behavioral Finance theory proposes the existence of certain Biases or anomalies that helps to examine the mental processes and emotional issues that individuals, financial experts and traders reveal during the financial planning and investment management process.

The decision making process of investors incorporates both a quantitative and qualitative aspect that is based on the features of the investment product of financial service and thus these biases are certain short- cuts that can save the investors time and can lead them away from rational thinking and thus understanding investor behavior can inform investors about these biases and can help them improve their decision – making process in selecting investment services, products and strategies.

3. METHODOLOGY

This research is descriptive in nature as it attempts to have a systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions.

4.1 Title of the Study

“A Research to test the Accuracy of the Proposed Anomalies of the Behavioral Finance theory amongst Investors of Shares in Bangalore.”

4.2 Objectives

- To test the stated anomalies of the Behavioral Finance theory amongst investors in Bangalore.
- To test the anomalies on the Bangalore district of Karnataka as a more specific succession to the research conducted in Asia.
- To analyze the responses of the respondents through questions pertaining different situations that can either result in the affirmation of the Efficient Market Hypothesis theory or the Behavioral Finance Theory.

4.3 Sample

The samples were the investors in shares in the Bangalore district of Karnataka.

- A total of 80 respondents, out of which 30 respondents were distributed questionnaires and 50 responses were also sent Google forms.
- The method of random sampling was used for the research.
- 30 responses were collected by distributing questionnaires to various stock firms throughout Bangalore and a few Google forms were distributed in a few corporates.

5. SOLUTION PROCEDURE

The data that has been collected from the questionnaires were tabulated as per as the options that

had been selected. Pie charts have also been prepared to show the exact distribution of the population.

6. RESULTS AND DISCUSSIONS

The questionnaires that were distributed amongst the respondents had the following results.

- It was observed that when the gender distribution of the respondents was carried out, more than 60% of the respondents were male and the other 40% were females.
- It was also observed that the years of experience when it comes to distribution was up to 68.75% for the 0 – 5 range, 22.50% to the 5 -10 years range and the rest belonging to the 10 years and above range.
- The analysis of the data shows that most of the respondents, around 66.25% rate their skills of investing as Medium and 6.25% as poor.

This research was carried out for 11 anomalies of the Behavioral Finance theory. The results for each of these anomalies were observed as follows.

- It was observed that around 51 respondents (63.75%) would prefer investing in shares of companies that they are familiar with.
- Around 45 respondents (56.25%) would continue to entertain the shares of those companies whose prices have dropped down and around 52 respondents (65%) would wait for the prices of these shares to regain its value rather than trying to offload them.

- Under the prospect theory, majority of the respondents chose those situations where they have a guaranteed possibility of achieving gains as compared to the losses, even though the former seemed to be more practical.

- It was observed that around 47 respondents (58.75%) would immediately purchase those share which even shows a 1% increase rather than waiting for the situation to stabilize.

- Around 35 respondents (43.75%) rated their investment skills as Good, 43 respondents (53.75%) rated their stock picking skills as Medium and around 46 respondents (57.50%) rated the performance of their stocks as Good.

- It was observed that on being asked whether investors would take up decisions regarding shares on the basis of the response of the other investors in the market, 47 respondents (41.25%) said yes, but on the other hand, 50 respondents (62.50%) said that they would base their decisions on Personal Judgment.

- In a hypothetical situation, where the prices of the shares have gone up in five consecutive trading sessions, 33 respondents (41.25%) said that the prices of the shares would decrease in the next trading session.

- In a situation where investors have an intuition that the shares of the company would not do well and in due course of time, what they had initially predicted happened, around 52 respondents (65%) said that they wouldn't.

- It was observed that when investors conduct a research on the company shares that they want to buy, around 36 respondents (45%) said that they would conduct a general research, and when it comes to selling a set of shares, around 45 respondents

(56.25%) would focus on the negative turn of events in share developments.

- In a case study, where respondents buy a Rs 100 ticket and lose it, around 45 respondents (56.25%) said that they wouldn't buy the ticket again, whereas, if they have lost the Rs 100 note before buying the ticket, 51 respondents (63.75%) say that they would purchase a ticket again.
- Around 46 respondents (57.50%) say that they would continue to keep the shares whose price drops from Rs 1000 to Rs 500, whereas in another situation, where the share price which previously had increased from Rs 2400 to Rs 3500 and has dropped again to a low of Rs 2100, because of the withdrawal of 40% of the capital by an important customer of the firm, around 47 respondents (58.75%) said that they still would buy those shares.

7. CONCLUSION

The research has been conducted to test the accuracy of the 11 Behavioral finance biases as a result of which it has been found out that 7 of these biases the Familiarity Bias, Sunk Cost Fallacy, The Prospect Theory which included case studies by the founding fathers of this theory (Tversky and Kahneman), The Gamblers Fallacy, The Hindsight Bias, The Mental Accounting Bias and the Anchoring Bias.

However, It was observed that the Overreaction Bias, where the respondents would not prefer to take an external parties opinion, The Overconfidence Bias, where the investors would prefer to pick out a medium stance to rate their stock performance, The Herd Behavior Bias, where the respondents claim that Personal Judgment forms the basis of their decisions as compared to People's

reaction to the share prices and the Confirmation Bias, where people would prefer to make decisions which are neutral as compared to over or under emphasizing their point of reference or opinion are biases that slightly deviate from the ideal situation.

Ideally, this research that has been conducted to test the Accuracy of the anomalies of the Behavioral Finance Theory has resulted in the affirmation of the existence of many of the biases talked about in the existing market situation for the target population.