INVESTING IN INDIAN STOCK MARKETS: AN EMPIRICAL ANALYSIS ON THE BEHAVIOURAL BIASES AND DECISION MAKING OF INDIAN STOCK MARKET INVESTORS.

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Abstract : Behavioral biases are predominant in the decisions made by market participants. This paper analyses the various biases with respect to Indian investors. The primary data has been collected to test that whether these biases are present in the context of Indian stock market investors. We have analyzed these biases with a well structured questionnaire where groups of questions pertain to a specific bias. This study recommends that these biases are present in most investors and will serve as a guideline for analyzing their present and future investments.

Keywords: behavioral bias, behavioral finance, psychology, stock market investors

INTRODUCTION

Financial markets have been highly volatile and uncertain. The macroeconomic ups and downs have a great impact on financial markets. The financial bubbles happen naturally as a part of the economic cycle. During the financial bubbles investors have to be very rational in making financial decisions. However the idea of fully rational investors who always maximize their utility and demonstrate perfect self-control is becoming inadequate. The highly volatile nature of the financial market witnessed during 1990s can be the result of so called speculative bubble.

This paper focuses more on the psychological aspects of the investor in decision making process in the framework of Behavioral finance which seeks to understand and predict systematic financial market implications of psychological decision processes. In addition, it focuses on the application of psychological and economic principles for the improvement of financial decision-making (Olsen, 1998).

REVIEW OF LITERATURE

Jelena in his paper examines market behaviour, defines the concept of behavioural finance and exhaustively analyzes the varying behaviour of market participants and occurring examples.

Andrew Reeson and Simon Dunstall studied how behavioural anomalies and heuristics result in unexpected, and frequently suboptimal, behaviour using examples from real world financial decisions. People are inclined to put off making decisions (particularly complex decisions), stick with default options and are readily swayed by how information is presented.

Mercer Consulting (2006) identified the following behavioral finance 'biases' affecting the actions of market participants on a daily basis.

a. Overconfidence – People continually overrate their own skills in a range of activities. This trait has been shown to exist in business and finance, with decision makers overconfident of their abilities.

b. Loss aversion – People appear to realize gains too quickly in the fear that their unrealized profit will disappear. In addition, they have trouble cutting their losses and tend to hold onto loss-making stocks too long in the hope of recovering their shortfalls.

c. Confirmation bias – As an extension of overconfidence, people tend to see positive outcomes as confirmation that an earlier decision was soundly biased. When a favorable outcome occurs, they are less likely to reassess the underlying reasons for that outcome and the probability that gains will be repeated.

d. Framing – Many people vary their responses to questions depending on how such question is presented or framed.

e. Anchoring – People naturally tend to focus on specific values as bases for which to compare or estimate future possible outcomes.

f. Status quo bias – People would prefer to maintain their current positions rather than move to new positions.

OBJECTIVES

- The study aims at qualitatively proving the above mentioned biases and their repercussions in the decisions made by stock market investors.

- An in-depth analysis of each bias pertaining to the decision making tendencies of Indian investors

HYPOTHESIS

- The behavioral finance 'biases' affects the actions of the Indian market participants.

METHODOLOGY

The study is based on primary data randomly collected from 36 samples. There were 24 questions in the questionnaire on the seven behavioral biases tendencies as identified by Mercer Consulting in 2006. The questionnaire was prepared to identify the nature of the trading activities of the investor, as well as the pattern of decision making by the investors. The methodology used for the analysis is qualitative in nature. The questions have been analyzed on a five point rating scale, ranging from completely agree to completely disagree. This paper is based on the study conducted by Abiola Ayopo Babajide and Kehinde Adekunle Adetiloye on Investors' Behavioral Biases and the Security Market: An Empirical Study of the Nigerian Security Market.

ANALYSIS AND RESULT

Overconfidence

Analysis

The questions pertaining to the overconfidence biases are aimed at gauging the respondents' level of confidence over his knowledge and skills in the mentioned field.

It is important to ascertain this as it is one of the most important parameters in judging the person's responses from a behavioral aspect.

One of the questions to test the overconfidence aims to establish the level of investment in the stock markets by the respondents. It is not surprising that all of the investors think that they don't invest excessively in the market. More than half the people in the survey have claimed to be investing in rationally acceptable amounts (question 1). This in no way is an indicator of their skills as good/bad investors, but it gives us a benchmark to correlate their subsequent answers in the questionnaire.

Consequently, a large quantity of people that is 53% of the respondents claim that they are not surprised of the outcomes of the stock markets in a given day or in the long run. This gives reason to believe that they think they can forecast to a great extent the announcements in the markets and their subsequent consequences.

This may be correlated to the opinions of people with reference to their over-confidence as investors in the stock market, as a contradiction to the results obtained above, wherein the number of people who think they are good in stock investments are 34%. This is in direct contradiction with the data obtained in question '1'. This evidence to the irrationality and fickle minded approach to judging one's own capabilities and hence reflect poorly on their investment aptitude.

LOSS AVERSION

Analysis

Loss aversion refers to the risk-taking ability of an investor. The change in behaviour of an investor when faced with potential losses and gains are analyzed under certain circumstances and their responses recorded.

A majority of the investors say that they are immune to the effects of emotions in investment. The implications will result in better stock market investment decisions, however we have seen innumerable times the effect of emotions on our daily decisions. This refers to the ability to become risk averse when faced with gains and risk taking when faced with losses. It has a correlation with the sense of attachment and "status quo bias" that everyone is prone to. This is affirmed by the statistics of question '2',wherein a majority of investors prefer maintain their positions in loss making stocks and sell their profit making stocks. This behaviour probably arises out of the investor sentiments pertaining their desire to earn profits out of loss making stock as well, and their increased ability to sustain losses as the stock starts to perform poorly. The questions '3' and '4' reveal interesting conclusions about investor behaviour. As 47% of investors may pay the lost amount if they have not physically transferred the money to the broker. However they are hesitant in paying again if the same amount is lost as a 'receipt'. Although the situation in the two questions are identical, the respondent's sense of monetary loss in each of the cases is different perceived. The respondent has a higher probability in paying the lost amount again if the transaction (or physical transfer of money) hasn't been made.

ANCHORING

Analysis

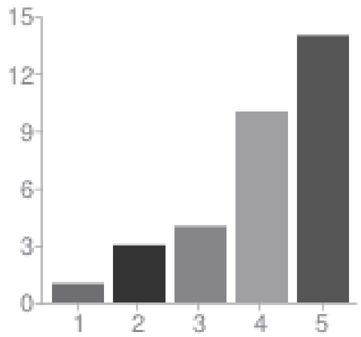
The responses that we obtained from the questions can be categorized under various biases. However all these biases can be encompassed within the purview of anchoring. We have tried to estimate the tendency of humans to give importance to short term data and immediate events rather than on the relevance of the event. Question '5' highlights the optimistic nature of the respondents as well as their ability to draw comparisons between the previous market downturn and the subsequent recovery. Due to the heuristic nature of their judgments, they may not perceive the actual factors influencing the downfall and its consequent rise. This leads to misinformed decisions being implemented and the loss that follows it. The forecasting of events is done on an intuitive basis, which may lead to an overall loss. The actual cause of an event must be correctly attributed to, so that wrong decisions may be avoided. A person who has shown returns of 50% in the first quarter may or may not be able to get the same returns again. The conclusions drawn from these observations is seen as a major cause in over-valuing stocks, especially at the time of initial public offers(IPO's). Apart from these, conservatism, belief perseverance, representativeness, wishful thinking and availability biases are closely related to the anchoring effect and are in intricate ways related to each other. They essentially reveal the psychology of the investors and are hence cases to be considered separately and in much greater depth.

FRAMING

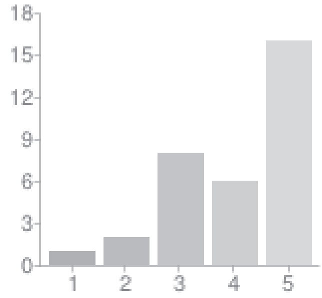
Analysis

The change in the opinions or decision making abilities due to the alternative approach to asking questions is referred to as framing. The manner in which we interpret data is subject to the way we perceive it. However the responses were quite startling as the respondents openly agreed to them being more in favour of public perception of the stock's value rather than its actual value. This highlights that technical analysis and fundamental analysis are not the driving factors that motivate a sale or purchase of stocks. Although in the long run the fundamental analysis may come through, it is essential that we keep in mind the short term sentiments of the investors. So a better understanding of the companies is required as its base is strong. However we reach a contradiction when we assess the outcome of the questions '8' and '9,' purely stating a fundamental analysis or technical analysis, wherein majority of respondents are in favour of these two options.

8) Fundamental analysis (dependence level)



9) Technical analysis (dependence level)



STATUS QUO

Analysis

Status quo bias is a cognitive bias; an irrational preference for the current state of affairs. The current baseline (or status quo) is taken as a reference point, and any change from that baseline is perceived as a loss. Status quo bias should be distinguished from a rational preference for the status quo ante, as when the current state of affairs is objectively superior to the available alternatives, or when imperfect information is a significant problem. A large body of evidence, however, shows that an irrational preference for the status quo—a status quo bias—frequently affects human decision-making. The tendency to procrastinate and avoid any changes in decisions made earlier is known as status- quo bias. It is commonly perceived in our daily activities. Although everyone knows the importance of quickly adapting to the changing circumstances, they prefer not to, due to the certainty and assurance of the present set of conditions. This is a major deterrent in stock market investments which prevents people from pulling out of their stocks at the right time. The response to the question above is slightly misleading. The survey claims that majority of respondents continuously alter their stock positions. These conclusions can be made via simple observations in daily activities.

CONFIRMATION BIAS

Analysis

It can be difficult to encounter something or someone without having a preconceived opinion. This first impression can be hard to shake because people also tend to selectively filter and pay more attention to information that supports their opinions, while ignoring or rationalizing the rest. This type of selective thinking is often referred to as the confirmation bias.

Results of the question have affirmed the bias to a great extent. The subconscious selection of their friend who has a similar opinion only goes to show their affinity to hearing what they already know or confirming their preconceived notion.

These results are closely related to the status quo bias and pertain to the affinity of people towards an investment plan that is safe and avoids uncertainty.

The confirmation bias may also relate to the false association between two events which have no relation whatsoever. In this case it is important that one makes careful justifications relating the causes of events.

HERD BEHAVIOUR

Analysis

The answer to this question can be found in what some people believe to be a hardwired human attribute: herd behaviour, which is the tendency for individuals to mimic the actions (rational or irrational) of a larger group. Individually, however, most people would not necessarily make the same choice.The question has been answered in individuality and hence has obtained a rational response. The Question needs to be framed in a slightly more offhanded manner and subconsciously obtain the true nature of the biasThe conclusion obtained is not acceptable due to the large amount of empirical data already present for this variable as is observed in stock market crashes and 'speculative bubbles'.

CONCLUSION

The results obtained have gone a long way in proving the hypothesis assumed. Although some of the hypotheses have not given us substantial data proving or disproving the bias, they still have scope for further verification and testing to analyze them in depth.

We have confirmed the overconfidence bias to a great extent, along with loss aversion, anchoring effects, framing effects and confirmation bias. Status quo and herd behavior don't seem to be as predominant in the respondents' choices as the other biases. These biases may be tested by methods suggested earlier such as the "Reversal Test" for the status quo bias and a more indirect approach to the herd behavior bias. Through the empirical analysis we could prove that "The behavioral finance 'biases' affects the actions of the Indian market participants".

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