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A Study on Investors' Behaviour During Bull Phase in Indian Market with Special Reference to Bangalore City

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Introduction

In the modern finance theory, behavioral finance is a new paradigm, which seeks to appreciate and expect systematic financial market inference of psychological decision-making (Olsen, 1998)1. By understanding the human behavior, attitude and psychological mechanisms involved in financial decision-making, standard financial approaches may be better replicated and explain the reality in today's developing markets.

Behavioural finance is the integration of classical economics and finance with Psychology and the decision-making sciences. This study is related to the fact that how investors give different weightage to investment under similar situation. Some people systematically make errors in judgment or mental mistakes. Much of the economic theory available today is based on the belief that individuals behave in a rational manner and that all existing information is embedded in the investment process or no attention being given to the influence of human behaviour on the investment process.

Behavioural Finance field is so new, that most professionals responsible for large portfolios were not exposed to the principles of behavioural finance in their college curricula and these principles have significant practical implications for investment management.

No matter how much investor is well informed, has done research, studied deeply about the stock before investing, then also he behaves irrationally with the fear of loss in the future. Buying a stock with a bad image is harder to rationalize if it goes down. Investors typically give too much weight to recent experience and extrapolate recent trends that are at odds with long-run averages and statistical odds. In general individuals tend to feel sorrow and grief after having made an error in judgment.

Forecasting stock returns is one of the most investigated topics in behavioural finance; a number of models have been developed to explain stock returns. Although some of these models do not account for psychological factors, some studies, pioneered by Kahneman and Tversky (1979), suggest that investor psychology has a role in return generation.

A limited number of studies focus on emerging markets. In examining the relation between investor sentiment and stock returns, Lee et al. (1991), Neal and Wheatley

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(1998), Brown et al. (2002), Brown and Cliff (2004), Baker and Wurgler (2006), and Kling and Gao (2008) confront the difficulty of observing investor sentiment directly.

Many of today's customer-data segmentation tools shed light on who the customer is (demographics) where they live (geographic) and how they interact with a company (behavioral and transactional data). The most sophisticated tools, which are to be used in this study, tell us why customers do what they do (psychographics). This is powerful stuff when considering the implications and applications of such knowledge. By understanding attitude, one will be able to better predict and shape behavior. "Brains can be scanned to predict peoples' financial decisions" and lend the psychographics' study for investor's decision more relevance, reality and practicality (The Hindustan Times, February 28, 2003).

Studies dealing with lifestyle characteristics of individual investors are very few. Langer (1975) finds that self-reported risk tolerance does the best job of explaining differences in both portfolio diversification and portfolio turnover across individual investors. From the vantage point of traditional finance theory, the positive correlation between risk tolerance and diversification is surprising, as both risk-tolerant and risk averse investors diversify idiosyncratic risk. Investors who report being risk-tolerant are also more prone to believing that risk can be controlled, which suggests that self-assessed risk tolerance also serves as a proxy for an 'illusion of control', that is, overconfidence about one's ability to affect chance outcomes.

The study endeavors to test the hypothesis that influence of investment behavior of individual investors on their lifestyle (psychographic) characteristics and that there is a massive shift in the investors' preferences towards mutual fund products, a moderate continuing shift towards shares and debentures and a shift away from traditionally important financial instruments (National Savings Certificate and Life Insurance Policies). There is no difference in the importance of various sources of information for investment decisions.

By understanding the human behavior, attitude and psychological mechanisms involved in financial decision-making, standard financial models may be modified to better replicate and explain the reality in today's developing markets. The traditional standard finance theory is the body of knowledge constructed on the pillars of the arbitrage philosophy of Miller and Modigliani, the portfolio theory of Markowitz and the Capital Asset Pricing Model (CAPM) of Sharpe, Litner and Black (Statman, 1999). These theories believe markets to be efficient and are highly analytical and normative. On the other hand, modern financial theory is based on the assumption that the market actor makes decisions according to the adages of expected utility theory and makes neutral forecasts about the future.

A field of finance that proposes psychology-based theories to explain stock market anomalies is known as behavioral finance. This is the study of how psychology affects financial decision making and financial markets. Within behavioral finance, it is assumed that the information structure and the characteristics of market participants systematically influence individuals' investment decisions as well as market outcomes.

A number of psychological biases, that affect investors' behaviour and subsequently their decisions, have been dealt with in several previous studies across the world. Such biases include: overconfidence, home bias, sensation seeking attitude, competence effect, herding, anchoring, heuristics, etc. This study attempts to address the issue of competence effect.

Many studies have been undertaken in the field of investors' behavior in other places. As some of them are directly or indirectly related to the present study, a review is made of such studies which have greater relevance to the subject matter of the present study.

Important Measurement Parameters

Against the above discussed backdrop, this study analyzes the investment behavior of investors. Besides, the purpose of the study is to identify the attituditional factors that influence the investors in terms of investing in shares, mutual funds, post office savings, bank deposits etc., and to investigate the investment objectives and factors influencing investment decision-making process from the point of view of the investors.

Kerlinger defines a research design as "the plan

structure and strategy of investigation purporting to answer research questions and control variance". Research design indicates a plan of action to be carried out in connection with a proposed research work. The process of research design includes the selection of the research problem, the presentation of the problem, the formulation of hypotheses, conceptual clarity, methodology, and data collection, testing of the hypotheses, interpretation, presentation and the like. The design of research evolved by the researcher is to answer the research questions with utmost validity, objectivity, accuracy and economy. In the research process the researcher visualizes and implements a specific plan in order to generate relevant empirical evidence. A research design suggests the appropriate directions for making observation and conducting analysis of data.

The expected utility theory says that an investor is risk averse and the utility function of a person is concave, which means the marginal utility of wealth decreases. Here, the asset prices are set by rational investors and, therefore, rationality-based market symmetry is achieved, where securities are priced according to the efficient market hypothesis.

In finance, "rationally" means two things. First, agents' beliefs are correct: the subjective distribution they use to forecast future realizations of unknown variables is indeed the distribution that those realizations are drawn from. Second, given their beliefs, agents make choices that are normatively acceptable, in the sense that they are consistent with Savage's notion of Subjective Expected Utility (SEU).

According to Investopedia, there have been many studies that have documented long-term historical phenomena in securities markets contradicting the efficient market hypothesis and cannot be captured possibly in models based on perfect investor rationality. A new area has evolved in financial research that recognizes a psychological element in financial decision making, thus challenging traditional models which assume markets. The success of contrarian and momentum strategies owes largely to psychological factors. The premise of behavioral finance is that psychological factors can enhance the effectiveness of investment strategies.

Research Gap

Going by the literature review carried out by the researcher, it has been identified by the researcher that not much work has been done relating to the investing characteristics and decision making processes that affect the investors during the bull phase in Bangalore. Here, in order to achieve the objectives of this thesis as mentioned above, an attempt has been made to study the changed behavior of the investors' during bull phase in Indian market.

Objectives of The Study

The study has the following objectives:

1. To assess the fluctuating behavior of investors during the Bull Phase in Indian Money Market.
2. To analyze the risk taken and stress experienced by the investors.
3. To assess the effect of investors' emotions on their decisions to invest.
4. To examine the relationship between investors decision based on market information and decision making process.
5. To make an appraisal of the influence of agents on investors decision.

Scope of The Study

The present study would make an attempt to analyze the impact of behavioral finance on investors in taking critical decisions with respect to various financial portfolios. The main objective of the study is to trace the psychological behavior of the investors particularly under the Bull Phase and the factors influencing on their decisions.

The objective of the study is first of its kind in dealing with analyzing psychological behavior of investors. The study is confined to the sample respondents who are regular to the Bangalore Stock Exchange. The area of operation is limited to Bangalore metropolitan. As such relevant data was collected and the same was validated with the secondary source of information. The findings of the study would help the policy makers, consultants, finance managers, financial institutions, academics in reforming and restructuring their thought process. Thus, the importance of the study is limited

to the study of Behavioral finance and its impact on the investment decisions during the bull phase. The Bull Phase is considered a very strategic phase because lots of variations are observed and this provides more generalized strategies.

Research Methodology

This study attempts to study the psychological factors affecting the investors at the time of investing, and various other factors primarily contributing to their behavior. To study about the reasons for the market ups and downs information was culled from diverse sources like Business Standard, Economic Times for the study. A few interviews of leading brokers and market players in Bangalore were also done. Since, the primary objective of this study is to study the behavior of the investors; this work is a descriptive and diagnostic in nature, which seeks to analyze the behavior of the investors in stock markets.

Framework of The Study

The investment opportunities available for an investor spreads across broad areas ranging from company shares, mutual funds, insurance products, post office savings, etc., Depending upon the level of risks as perceived by the retail investors the quantum of investment also varies. The size of investment varies as much as the nature of the market itself. In various sectors, both service and manufacturing industries, the behavior of the investors differs.

Understanding the behavior of the investors both in quantity and quality of each investment and their attitude during bull phase, are important as they form the basis for enhancement of the volume of investment in the market, thereby in the companies and other avenues.

The attempt in this study is to analyze the attitude and behavior of the investors during bull phase. Understanding the investors' behavior and attitude during bull phase has a major implication on the performance of the various options available like share market, mutual fund companies, insurance companies etc., because it helps the concerned authorities to take a re-look at the options made available to the investors based on its strength and to identify the gaps.

Hypothesis Formulation

Based on the gaps identified and the topic taken for this dissertation, the scholar, in consultation with some experts, have identified and set forth the following Hypothesis, to be tested during the course of analysis:

H1: There exists significant association between the socio-economic characteristics of the respondents and their investment behavior strategy in the capital market.

H2: There exists significant functional relation between the dependent variable i.e. amount invested and a set of independent variables of personal characters.

H3: There exists significant difference among respondents in the mean investment in the different opportunities in the capital market and

H4: There exists significant difference in the overall investment mean rank among different groups of respondents namely occupation and income groups.

Area of The Study

The study was conducted in Bangalore only. For the purpose of data collection, the important agents' offices were visited and the particulars of the retail investors were collected from the agents. Moreover, the actual investors who frequently visit the exchange/ agents' office were also taken into account while conducting the survey. Along with these, select offices and banks in Bangalore have also been considered for collecting secondary data for this study.

Nature & Collection of Data

Data for the study is primarily collected through a survey method in the form of a questionnaire. The survey was conducted during September, 2009 and March, 2010. In the questionnaire, the respondents were asked to compare today's trend with that of before and after the market crash in 2008, where 'today' refer to the time of survey. The other literatures concerning the behavioral finance and speculative bubble in India and outside are collected from the existing source. The questionnaire consists of twenty (20) questions concerning the fundamental factors affecting the financial decision-making and questions referring to the behavior of investors during and after the speculative bubble. In the process of primary data collection, investors of different financial products were included in the sample size and

the required data collected. The filled up questionnaires were first processed with the help of Microsoft Excel to get an impression of the primary results and then the same was fed into SPSS format. The analysis was done using SPSS (15.0 version) software.

Sample Size

The study is based on sample survey. The total number of population in Bangalore who are into trading was considered and using two way self-weighted proportionate stratified sampling, a sample size of 640 were considered and interviewed for the present study. This method was originally used by John Gunaseelan in his study entitled 'Public Sector Road Corporation: A comparative study with private sector (1998)'. In the two-way self-weighted proportionate stratified sampling, the number of units to be drawn in proportion from each stratum is in the proportion of 75:25 as they stand in the universe.

In this study, gender and age group have been considered as stratification variables. Among the population engaged in retail investment in Bangalore, the gender, both male and female is in the order of the proportion 75:25 and the other variable considered for the sampling purpose, namely Age is in the order of 20 years and above. Hence, this sampling scheme has considered gender as one stratification variable and age as another stratification variable. Hence, this scheme could be named as two-way self-weighted proportionate stratified sampling.

Plan of Analysis

After the data collection was over, the collected data were analyzed using suitable statistical techniques such as Mean, Chi-square test, Factor analysis and Discriminant Analysis. Statistical Packages for Social Sciences (SPSS 15.0) has been used for the analysis.

Limitations

I. The study was conducted among the retail investors in Bangalore Metropolitan, as the Stock Exchange is situated in Bangalore.

II. All the respondents were asked to answer all the questions and as some information had to be recalled from memory, there could be some memory bias.

III. The variables taken for the study are limited to the significant variables in the pilot study and

IV. The study was conducted during a limited period, which is from September 2009 to March 2010, and as such the findings may not be applicable to other periods, and other States in India.

Chapter Scheme

The dissertation is presented in seven chapters, as detailed below:

Chapter I the introductory chapter, provides the meaning of Behavioural Finance, the link between psychology and behavioural finance and the key concepts in the field of behavioural finance.

Chapter II Presents the Literature Review

Chapter III presents the research design being adopted for this thesis, the rationale and the context of studying behavioural finance, various theories associated with the behavioural finance, a broad and extensive review of research work under taken so far regarding behaviour of the retail investors during bull phase in India. The Research problem, outlining the objectives, need for the study, the desired sample size, collection of data and the statistical tools employed in the study are also discussed in detail.

Chapter IV presents an overview of the security market in India, brief discussion about the behavioural pattern of the stock markets with special reference to Bangalore Stock Exchange and National Stock Exchange for a period of Ten years starting from 1999-2000 to 2009-2010.

Chapter V explores the profile of the respondents and their behavioural pattern with respect to the financial products in Bangalore, as has been highlighted earlier in order to achieve the objectives set forth for this study.

Chapter VI consolidates the important observations made in this study and definite conclusions are presented and

In Chapter VII valuable suggestions are presented, which would enable the stock exchanges to enhance the services and products being offered to the public.

Analysis & Findings

Using the data collected by administering the questionnaire, analysis has been done and the results are presented here. The attitude and fluctuating behaviour of the investors have been studied. A detailed analysis of the respondents with respect to their demographic characteristics has been done and accordingly the same has been reported and interpreted. The variables considered for this study are Gender, occupation, age, educational qualification, marital Status, monthly income, percentage of monthly income for investment and period of investment.

Capital Market: Respondents' Profile

Objective 1: To study the fluctuating behaviour of investors and its impact on market in general and during Bull Phase in particular.

The following are the findings and the conclusions arrived at based on the analysis of the data:

- All the respondents have earned an average profit of less than ten per cent of their investment as returns during the period of transaction.
- All the respondents have the motto of profit earning only when they invest in the capital market.
- Majority of the investors are worried about the implications of entry and exit from the market.
- Loss in capital appreciation, followed by the change in the market trend are main concern for worry for the investors at the time bull phase in the market.
- Most of the investors get advice from portfolio management services.
- Majority of the investors have plan to invest/ deposit in banks/ post office and the remaining 10 per cent have expressed that they are not sure about their decisions.
- Majority of the investors feel that a part of profit earned from trading in the market should be invested in a safer side, where as 35.6 per cent invest to avoid tax.
- 45 per cent of the respondents feel that it is always better to invest in recurring deposits in Banks.
- 70 per cent of the respondents feel better to invest in NSC in the post office than any other investments in Banks.
- All the respondents reported safe to invest in mediclaim, which indicates that investment in mediclaim is a safer one for the investors.
- 20 per cent preferred to invest in mediclaim, in the insurance company LIC, followed by 17.5 per cent preferred in GIC, 27.5 per cent preferred in ICICI, 25 per cent in Birla Sun Life and the rest of 10 per cent preferred in SBI Health.

Objective 2: To analyze the risk and stress taken by the investors

In order to study whether there is any association between two attributes namely socio-economic characteristics such as gender, age, marital status, education, family income, family size with area of residence/nature of activity among the respondents, Chi square analysis is performed and the results are presented as :

- The frequency of trading dependents on the respondent's age group.
- The frequency of trading depends on the respondent's educational status.
- The frequency of trading depends on the respondent's marital status.
- The frequency of trading depends on the occupation of the respondents.
- The frequency of trading depends on the gender of the respondents.
- The frequency of trading depends on the monthly income of the respondents.
- The mode of trading depends on the period of investment by the respondents.
- The frequency of trading depends on the percentage of monthly income being invested in capital market.
- The study that the investment strategy depends on the respondent's age group of the respondents.
- The Investment Strategy depends on the educational status of the respondents.

- The Investment Strategy depends on the marital status of the respondents.
- The Investment Strategy depends on the occupation of the respondents.
- The Investment Strategy depends on the gender of the respondents.
- The Investment Strategy depends on the monthly income of the respondents.
- The Investment Strategy depends on the period of investment by the respondents.
- The Investment Strategy depends on the percentage of monthly income by the respondents.
- The source of information about the opportunities for the investment in the capital market depends on the age of the respondents.
- The source of information about the investment opportunities in the capital market depends on the educational status of the respondents.
- The source of information about the investment opportunities in the capital market depends on the marital status of the respondents.
- The source of information about the investment opportunities in the capital market depends on the occupation of the respondents.
- There is association between the gender and the source of information about the investment opportunities in the capital market.
- The source of information about the investment opportunities in the capital market depends on the monthly income of the respondents.
- The source of information about the investment opportunities in the capital market depends on the period of investment by the respondents.
- The source of information regarding investment opportunities depends on the percentage of monthly income being spent in capital market by the respondents.

Objective 3: To assess the effect of investors' emotions on their decisions to invest

and

Objective 4: To examine the tendency of investors to focus on pieces of information both relevant and irrelevant in their investment decision making process.

Discriminant Function Analysis

Using Discriminant analysis it has been found that there are three groups namely respondents with lower Mean score, respondents with medium mean score and respondents with higher mean score and the group II is excluded from the analysis. Eight Predictor variables considered for the analysis are X_1-Age, X_2-Gender, X_3-Marital status, X_4-Educational status, X_5-Occupational status, X_6-monthly income, X_7-period of investment in the capital market and X_8 percentage of monthly income from the investment.

Regression Analysis

From the Step wise multiple regression analysis, it has been found that Age, Gender, Marital Status, Educational Status, Occupational Status, Monthly Income, Period of Investment, and Percentage of Monthly Income have significantly contributed to the satisfaction of the respondents with respect to their investment decisions made.

From the analysis it has been inferred that among the investment opportunities in the capital market available to the respondents, investment in Shares is seen as the top most priority followed by Insurance, Post office savings and Savings at banks in the same order.

Friedman's Test

By Friedman's test, it is concluded that Government employees are interested in investing in capital market and self-employed group of respondents are less interested. Likewise, respondents with higher monthly income in the range of Rs.50-75 thousand are more interested in investing in capital market than all other group of respondents and the respondents in the least income in the range of Rs.10-25 thousand are less interested in investing in capital market.

Findings

1. The study indicated that all the respondents invest in the market with the motto of earnings only and that the majority of the investors are worried

about the implications of entry and exit from the market. Moreover, a loss in capital appreciation followed by the change in the market trend is main concern for worry for the investors at the time bull phase in the market and most of the investors get advice from portfolio management services. All the respondents felt that investment in mediclaim is a safer avenue for them.

2. It has been established by the finding that the socio-economic characteristics have association with the frequency of trading and investment strategy adopted by the investors.

3. The same socio-economic characteristics have association with the source of information on investment opportunities, intermediaries who provide necessary information regarding the various investment avenues are to be strengthened further, so that the same intermediaries can further improve the investors' confidence.

4. The investment horizon of the respondents specifies that a majority of investors have an investment horizon covering a period of more than a year. Besides, the respondents did not increase their frequency of monitoring, which indicates that investors' investment objective is long-term and they think the market crash is a short-term phenomenon and will revive again. The composition of investments has changed to some extent after the market crash. The investors have reduced their allocation of investments in companies with high risk and high returns and moved towards companies with stable but lesser returns.

5. The abnormally high returns of stocks in the market experienced before the crash may have induced the investors to take higher risk but the decline in the market after January 21, 2008 has reversed this tendency. This change in investment strategies of investors was also confirmed in the statistical analysis, which indicates a significant difference between the investment strategies and the investments the respondents made since the bear market began after January 2008 market crash.

6. It is also found that a majority of the investors who responded to the questionnaire considered the market was overvalued during the period before the crash may help to clarify why the market sometimes acts in an irrational manner.

7. People thought they were following winner stocks blinded by easy profits and they abstained from contrary financial exposure even though faced with conflicting information. This phenomenon was further supported by herd behavior, which respondents admit as an important contributing factor to the overvaluation of the market. Investors who thought the market was overvalued during the crash think that the market is currently undervalued which is an instinctive result. This is also conformed through the statistical analysis. The statistical analysis also showed that there was a distinction in the behavior of investors towards investment in companies before and after the crash of 2008.

8. This study assumes that even though a majority of the investors realized the gravity of speculative bubble, they, however, continued their investment activities knowing that the risk for a collapse is imminent. This exemplifies as an irrational investor behavior. It is evident from the present study that if investors recognize the psychological factors which affect their decision-making process, they can avoid the occurrence of such speculative bubbles and enhance the efficiency of today's global financial market. From a long-term historical viewpoint, investing in the equity market has been profitable and the realization of behavioral factors affecting this market can help to better understand its periodic unpredictability.

9. Investors in the present study have invested in various investment vehicles in the BSE and NSE. Age, education, and income were found to be the most influencing factors of the individual investors' competence in the stock market activities and trading behavior.

10. The results of the study reveal that a person invests as per his/her own judgments once he/she perceives himself/herself more knowledgeable

about investing. Since this is a study of behavioral finance, the study tried to measure investors' competence by using the survey method rather than relying on assumptions about psychological biases. It is found that investors having high, high to moderate income and professional qualification are supposed to be more confident about their competence when it comes to trading in stock markets. It was observed that highly competent investors show more frequent trading behavior.

11. The study finds that level of education and income of individual investors are likely to have a significant impact on their behaviour, followed by factors, such as, age, investment and gender. Through this study, it was shown that investors who feel themselves more competent tend to trade more frequently than those with less perceived competence. This trading behavior is attributed to the competence effect. Thus, it can be said that competence effect rules the trading behavior of individual investors.

12. The psychological factors put forth in this study are two-fold. First, any factor leading an individual to believe in the occurrence of a drop is relevant because such beliefs will act as self-fulfilling prophecies. Those beliefs can stem, for instance, from herding, market rumors, fear of contagion or panic (or a combination of all these). We do not sort which one seems most likely, but rather point out that they are all relevant because they lead to the same phenomenon-a crash anticipation. Second, it must be true that all the agents in the economy agree on the anticipation (rumors have reached the whole market for instance).It implies that anticipations can have a significant effect on prices formation. This view is consistent where crashes are driven by successive releases of public information on the actual state of the economy.

13. In spite of the phenomenal growth in the security market and quality Initial Public Offerings (IPOs) in the market, the individual investors prefer less risky investments, viz., life insurance policies, fixed deposits with banks and post office, PPF and NSC. Occasions of blind investments are scarce, as a majority of investors are found to be using some source and reference groups for taking decisions. Though they are in the trap of some kind of cognitive illusions such as overconfidence and narrow framing, they consider multiple factors and seek diversified information before executing some kind of investment transaction.

14. Investors have made media as a part of their investment life. According to them, financial dailies, TV channels and peer groups can play a pivotal role in making investment decisions. Psychographics play an important role in determining investment behavior and preferences of individual investors. Brokers who are in direct touch with investors play a vital role in keeping the capital market lively by providing various services to investors. Furnishing update and relevant information, probably would be the major contribution of these middlemen. Consultants and analysts in the capital market could play a similar role.

15. Mental mistakes such as loss aversion and framing induce investors to make decisions that make intuitive sense, but produce inferior results. They are, in effect, mental shortcuts allow to make decisions ineffectively, without formal analysis.

16. With mounting complexity in investment decision making, behavioral finance has emerged as an important branch to provide answers to intricate financial puzzles. In harmony with behavioral finance concepts, our research validates that personality factors do affect individual investors' decisions and that he acts 'normal' and 'usual' and not always 'objective' and 'rational'. In the present research, scale has been created based on the examples from heuristics (rule of thumb) and frame dependency (the way problem is presented to investor that can affect his choice).

17. The results exhibited that the cognitive biases—heuristics and frame dependency are not independent. The tendency to conform to behavior finance scale that developed for measuring the phenomenon exhibited two dimensions. One dimension was strongly related to experience and the other dimension was strongly related

to the personality dimensions of openness and extraversion. The results show that extraversion scores have a positive relationship, and openness scores have negative relationship with tendency to comply with behavioral finance concepts.

18. This study has brought out interesting facets of the Indian retail investors. It identifies the existence of strong association between demographic characteristics and the risk bearing capacity of Indian investors.

19. This study confirms the relationship between age and income and the risk bearing capacity of investors. The financial product designers armed with this sort of fascinating information on the risk bearing capacity of investors can develop products to suit the risk characteristics of the investors. Also the financial product marketers can specifically target the prospective investors for the products instead of approaching every individual with an array of products which may not suit them at all.

20. The study revealed that most of the investors were highly educated and therefore, they considered own study and observation as an important factor for their investment decisions.

21. It was also found that most of the investors took own decisions regarding their investments. They get the information from sources like agents, newspapers and magazines.

22. The study revealed that only 16 per cent of the investors faced difficulties in buying or selling their investments and their difficulties covered the problems like inadequate prices, delay in transfer.

23. An interesting and important inference which emerged was that 36 per cent of the investors did not know about the safety of new issues of company shares, debentures and shares bought on stock exchanges. Though the middle class investors were highly educated, they lacked in skill and knowledge in deciding about their avenues in investing.

24. The study revealed that the female retail investors in Bangalore have higher monthly income than the male investors. The study also revealed that male investors were highly educated as compared to female investors. Most of the female investors also prefer to invest in risky securities for the future investments as compared to male investors.

25. The broader hypothesis in the study was that there is a massive shift towards Mutual Fund products. However, the study revealed that there is a moderate shift towards Mutual Fund products from present circumstances to the future investments. The hypothesis also stated that there is a moderate and continuing shift towards shares and debentures. However, the study revealed that the preference of the investors has shifted away for shares 24% and for debentures 66% from present circumstances to the future investments.

26. The preference for traditionally important financial instruments viz small saving, bank and company fixed deposits have also shifted away during the same period. However, there is a massive shift towards traditionally important financial instruments viz., life insurance policies, and Government securities.

27. The sub-hypothesis of the study was that the preferences of Middle class investors in Bangalore towards financial instruments differ according to the sex, age, education, occupation and income level of the investors.

28. The study revealed that the investors prefer various financial instruments uniformly for their next year's investments irrespective of their age, level of education and occupation. However, their preferences for various financial instruments for the next year's investments differ on the basis of their sex and level of income.

Conclusion & Suggestions

The purpose of this study was to conduct an empirical research on factors that affect the investment behavior of retail investors. More explicitly, the objective was to study the retail investors' behaviour on various avenues in Indian market with special reference to Bangalore. Behavioral finance, which is a latest paradigm of finance seeking to enhance the standard of financial theories by introducing behavioral aspects to the investment decision-making process, providing the theoretical basis for the research.

In addition to behavioral factors, other structural and cultural factors essential for the speculative bubble have also been considered for further development of the theory to study the investor psychology. Stock market participants have, for a long time relied, on the perception of efficient markets and rational investor behavior when making investment decisions. However, the idea of rational investors and market efficiency is proved wrong in many researches. In practice the market inefficiency in the form of anomalies, and irrational investor behavior have been observed more repeatedly during the past decades. The results in this thesis, acquired from the questionnaire carried out, advocate that the investors' behavior was in fact to some extent irrational when considered from a standard finance point of view and that the composition of investments has altered as a consequence of the retail investors' speculative behaviour.

The study indicated that all the respondents invest in the market with the motto of earnings only and that the majority of the investors are worried about the implications of entry and exit from the market. Moreover, a loss in capital appreciation followed by the change in the market trend is main concern for worry for the investors at the time bull phase in the market and most of the investors get advice from portfolio management services. All the respondents felt that investment in mediclaim is a safer avenue for them.

It has been proved and established by this research that the socio-economic characteristics have association with the frequency of trading and investment strategy adopted by the investors.

Also, the same socio-economic characteristics have association with the source of information on Investment opportunities, intermediaries who provide necessary information regarding the various investment avenues are to be strengthened further, so that the same intermediaries can further improve the investors' confidence.

The investment horizon of the respondents specifies that a majority of investors have an investment horizon covering a period of more than a year. Besides, the respondents did not increase their frequency of monitoring, which indicates that investors' investment objective is long-term and they think the market crash is a short-term phenomenon and will revive again. The composition of investments has changed to some extent after the market crash. The investors have reduced their allocation of investments in companies with high risk and high returns and moved towards companies with stable but lesser returns.

The abnormally high returns of stocks in the market experienced before the crash may have induced the investors to take higher risk but the decline in the market after January 21, 2008 has reversed this tendency. This change in investment strategies of investors was also conformed in the statistical analysis, which indicates a significant difference between the investment strategies and the investments the respondents made since the bear market began after January 2008 market crash.

From the analysis, it is also found that a majority of the investors who responded to the questionnaire considered the market was overvalued during the period before the crash. Heuristics, a process by which people find things out for themselves typically by trial and error, may help to clarify why the market sometimes acts in an irrational manner. How investors read information is a significant question to investigate. The uninterrupted increases in stock prices during the period from 2005 may have contributed a very optimistic enthusiasm among investors, which led security prices to overstate.

People thought they were following winner stocks blinded by easy profits and they abstained from contrary financial exposure even though faced with conflicting information. This phenomenon was further supported by herd behavior, which respondents admit as an important contributing factor to the overvaluation of the market. Investors who thought the market was overvalued during the crash think that the market is currently undervalued which is an instinctive result. This is also conformed through the statistical analysis. The statistical analysis also showed that there was a distinction in the behavior of students towards investment in companies before and after the crash of 2008.

This study assumes that even though a majority of the investors realised the gravity of speculative bubble, they, however, continued their investment activities knowing that the risk for a collapse is imminent. This exemplifies as an irrational investor behavior. It is evident from the present study that if investors recognize the psychological factors which affect their decision-making process, they can avoid the occurrence of such speculative bubbles and enhance the efficiency of today's global financial market. From a long-term historical viewpoint, investing in the equity market has been profitable and the realization of behavioral factors affecting this market can help to better understand its periodic unpredictability

The study examines the factors that determine the competence level of individual investors. Investors in the present study have invested in various investment vehicles in the BSE and NSE. The study also explores whether the competence level of individual investors affects their trading behavior. The study develops a questionnaire which included 19 items related to: age, education, gender, income, investment, and self perceived competence of the individual investors. Age, education, and income were found to be the most influencing factors of the individual investors' competence in the stock market activities and trading behavior.

The results of the study reveal that a person invests as per his/her own judgments once he/she perceives himself/herself more knowledgeable about investing. Since this is a study of behavioral finance, the study tried to measure investors' competence by using the survey method rather than relying on assumptions about psychological biases. It finds that investors having high, high to moderate income and professional qualification are supposed to be more confident about their competence when it comes to trading in stock markets. It was observed that highly competent investors show more frequent trading behavior.

This study, however, has certain limitations. The survey conducted was limited to a particular geographic location. This is because of resource and time constraints. Though the conclusions drawn from this study can be extended to general investor behavior, more extensive similar studies can be carried out with a larger sample of individual investors. This may lead to more authentic results of individual investors trading behavior. This study measures the investor behaviour and its impact on investor trading behavior by using survey evidence.

The study finds that level of education and income of individual investors are likely to have a significant impact on their behaviour, followed by factors, such as, age, investment and gender. Through this study, it was shown that investors who feel themselves more competent tend to trade more frequently than those with less perceived competence. This trading behavior is attributed to the competence effect. Thus, it can be said that competence effect rules the trading behavior of individual investors.

The psychological factors put forth in this study are two-fold. First, any factor leading an individual to believe in the occurrence of a drop is relevant because such beliefs will act as self-fulfilling prophecies. Those beliefs can stem, for instance, from herding, market rumors, fear of contagion or panic (or a combination of all these). We do not sort which one seems most likely, but rather point out that they are all relevant because they lead to the same phenomenon-a crash anticipation. Second, it must be true that all the agents in the economy agree on the anticipation (rumors have reached the whole market for instance). This second point must occur so that anticipations can have a significant effect on prices formation. This view is consistent where crashes are driven by successive releases of public information on the actual state of the economy.

The preference for traditionally important financial instruments viz small saving, bank and company fixed deposits have also shifted away during the same period. However, there is a massive shift towards traditionally important financial instruments viz., life insurance policies, and Government securities.

Managerial Implications

It has been seen that tendency to conform to behavioral finance was predicted by experience and personality. However, the position of behavior finance is not considered as an anomaly or as an error. It should be noted that the concepts that drive this phenomena has been evolutionary and based on natural selection.

However, one should be aware of these tendencies and the factors that are associated with them and adequate care should be taken during investment decisions. One has to be aware of ones' own (and of others!) heuristics and frame dependencies, which are generated by experience and personality.

A number of scientific researches focusing on the stock market have not only developed new theories on capital markets but refined existing ones which are considered sophisticated and efficient in the interpretation of relevant information.

Avenues for Future Research

1. Future research could use variables assumed in this study and test more specific misevaluation from investors' biases. This study provides the empirical evidence that the information uncertainty amplifies the effect of psychological biases, but does not focus on any specific type of psychological biases. For example, the research on retail investors could use information uncertainty as an indicator to distinguish the investors' biases and rational behavior. If the trading of retail investors is motivated by overconfidence or narrow framing, then one should observe more such trading behavior on the firms with higher information uncertainty.
2. It would be difficult to explicitly distinguish information uncertainty from information asymmetry. A theoretical study in the context of cognitive process as well as rational reaction is required to clarify the different impacts of information uncertainty and asymmetry. The potential in this orientation is considerable in both expanding the area of understanding and practicing in real market. More disclosure of information would certainty lower the information asymmetry, while on the other hand, it may fill the market up with noise that increases the estimation costs and risks.
3. The present research shows individual investors as well as corporate managers tend to issue more equity when previous information uncertainty is high and market valuation is high. The behavioral finance suggests that the market timing phenomenon could be due to either irrational market traders, or irrational managers' decisions. By comparing the usage of stock exchange proceeds between issuers with high and low information uncertainty, one may opine whether the market timing behavior can be explained by irrational investors or not. If an investor observes the overpricing and knowingly sell overpriced stocks, he should not use the proceeds to do investment because the true cost of equity is high. On the other hand, if investors believe that high market valuation indicate the low cost of equity or good market outlook; they may over invest the proceeds to non-profitable opportunities.
4. This study requires further research on information uncertainty. The study adopts several proxies for information uncertainty because there is no one universally agreed proxy in the literature. Each proxy may capture other firm's characteristics. For example, the idiosyncratic volatility is the main proxy in all the empirical observations. This proxy has been widely used to measure price synchronicity among the individual investors. Although each proxy alone may be questioned for its appropriation, they jointly would provide enough explanation power to indicate the influence of information uncertainty. The reason is that the data of stock market is limited to form other proxies, such as individual investor ages, and return expectations etc., are not comparable across the markets. Surely, with more understanding on the characteristics of information uncertainty, it may be possible to find one proper and unique proxy to test this issue in future.

Conclusion

From the above discussion it can be observed that, the securities markets in India have made enormous progress in developing sophisticated instruments and modern market mechanisms. The key strengths of the Indian capital market include a fully automated trading system on all stock exchanges, a wide range of products, an integrated platform for trading in both cash and derivatives, and a nationwide network of trading through over 46,184 corporate brokers.

A significant feature of the Indian securities market is the quality of regulation. The market regulator, Securities and Exchange Board of India (SEBI) is an

independent and effective regulator. It has put in place sound regulations in respect of intermediaries, trading mechanism, settlement cycles, risk management, derivative trading and takeover of companies. There is a well-designed disclosure based regulatory system. Information technology is extensively used in the securities market. The stock exchanges in India have the most advanced and scientific risk management systems.

The growing number of market participants, the growth in volume of securities transactions, the reduction in transaction costs, the significant improvements in efficiency, transparency and safety, and the level of compliance with international standards have earned for the Indian securities market a new respect in the world.

First, it shows that the stock prices would suffer more mis-evaluation when the recent news to the market is hard to interpret. Therefore, investors should avoid investing in the underlying firms until the uncertainty is resolved by new information which has more precise indications off firm's fundamental value.

Also, this study suggests the increased arbitrage risk for institutional investors who may have better knowledge of firm's value. The mis-evaluation or arbitrage opportunity of stocks with information uncertainty is related to the investor's psychological biases. As Hirshleifer (2001) argues, the noise traders who believe in their personal evaluation could 'arbitrage away the arbitrageur' even without the knowledge of firm's true value. As long as the force of investors' biases is strong enough to impact the stock price, arbitrageurs should be cautioned to choose the right time of trading against the mis-evaluation. A proper indicator for arbitrageur to assess the mis-evaluation persistence could be idiosyncratic volatility or dispersions among analyst forecasts.

Moreover, the fund managers should be aware that information uncertainty imposes the cost of equity issuance in addition to adverse selection cost. The announcement effect is more negative for firms with larger information uncertainty which may off set the benefits from selling overpriced stocks. Previous research shows that adverse selection cost could be lowered by disclosing more information to the market. However, information uncertainty could not be efficiently mitigated from the corporate side as it partially stems from the nature of business.

This study however, has some limitations and requires further research on information uncertainty. The study adopts several proxies for information uncertainty because there is no one universally agreed proxy in the literature. Each proxy may capture other firm's characteristics. For example, the idiosyncratic volatility is the main proxy in all the empirical observations. This proxy has been widely used to measure price synchronicity among the individual investors. Although each proxy alone may be questioned for its appropriation, they jointly would provide enough explanation power to indicate the influence of information uncertainty. The reason is that the data of stock market is limited to form other proxies, such as individual investor ages, and return expectations etc., are not comparable across the markets. Surely, with more understanding on the characteristics of information uncertainty, it may be possible to find one proper and unique proxy to test this issue in future.

Another potential limitation in this study is that empirical tests in only one stock markets have been carried out to test the influence of information uncertainty in stock price continuation, while behaviour of investors in other comparable stock markets within the state has not been covered. But an in-depth analysis of these two markets and the difference between them would be trivial for the future study. The reason for the study of Bangalore stock market is simply because the equity market has more issuance volume that has given greater access to statistics. Thus, nevertheless the impact of information uncertainty would be similar in other stock markets as well of course, with some degree of relative differences.

Human behaviour is the powerful, uncertain & irrational wild card in the equation for analyzing, understanding and predicting during bull phase. Insights from human history suggest the inverse that the human is the only real constant, and it teaches us patterns repeated across periods, cultures, wars and industries because

while the circumstances change, people do not. The investors who can engage in investment of various avenues at Bangalore can apply presence of mind while investing and thrive in long term.