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CLASSIFICATION OF RETAIL INVESTORS A BEHAVIOURAL STUDY

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Abstract: *Investors around the world often fail to succeed in the stock market due to shortcomings in their personalattributes and approach to investment. There are numerous studies on the personal attribute of the investor but only few studies have looked into the approaches to investment in market situations. This is an empirical study which aims to classify retail investors based on their Pre Investing and Post investing approaches. We have used Exploratory Factor Analysis to identify various investor types on the basis of their approach and categorize them as Market-driven, Planning-driven, Safety-driven, Advice-driven, Time-driven, Caution-driven investors. Further, we check how the contributing approaches lead to expected return for each investor type. We find Market, Planning, and Caution- driven investors are able to achieve their expected return, whereas Advice-driven investors are not able to do so. Our study indicates that planning at individual level, market driven strategy and ability to book loss are useful in fetching desired return by the investor. Both time-driven long term investors, investing on the advice of friends and safety driven investors, who display safe approach by choosing good broker/good advisors and tangible companies, are found not to achieve expected return. Investors depending fully on brokers' advice may end up making loss in the market. The study will help in providing investor specific education by identifying their behavioral weakness.*

Keywords: *Investor Categories, Approach to Investment, Investor Behaviour.*

1. INTRODUCTION

India is one among fastest growing economies in the world. The growth rate of Indian Economy was an average of 7.10%[1] per annum during the 2005-15 and projected in the range of 7-62%[2] per annum during 2016-20. Keeping pace with the growth of the economy, Indian stock market also experienced a

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1. (GDP Growth (annual %), World Bank Datahttp://data.worldbank.org /indicator /NY .GDP.MKTP.KD.ZG?page=1

2. India Real Gross Domestic Product (GDP) The Statistics Portal) http://www.statista.com/ statistics/263617/gross-domestic-product-gdp-growthrate-in-india/

rapid growth during this time. Market capitalisation of NSE, the biggest stock exchange of India experienced a growth of 252% during 2005-14 from Rs. 28132.10 billion to Rs 99301.22 billion[3]. Unfortunately this growth in the stock market has no significant impact on wealth creation of the retail investors in India as only 2% of Indian Public are investing in stock market[4].Indians save 32% of their total income and are one among the topmost savers of the world[5].This provides a paradoxical situation having low participation of the retail investors in the stock market in spite of having high disposable savings and good return in the stock market.

In order to reduce the economic inequality in the country the government is trying hard to increase public participation in the stock market through policy measures, financial literacy initiatives, and strong regulatory measures. An extensive study conducted by Sankar De[6] indicates that majority of the Indian retail investors tend to lose money in the stock market and their approach to valuation of their investment options is based on feelings rather than careful calculation. Several behavioral anomalies are responsible for this: retail investors trade frequently, which leads to more mistakes, their stock selection is improper, they sell the winners and hold the losers, their stock portfolios are poorly diversified, which exposes them to a higher level of risk, they have preconceived investment ideas influenced by the media and past experiences, they ignore advisor wisdom to their own peril (Barber &Terrance, 2011). Besides the imperfection in decision making, investors also suffer from anchoring, availability bias, representativeness bias, overconfidence, mental accounting, regret aversion while ignoring the importance of a full proof investment strategy and fundamentals of the investing company (Chandra & Ravindra, 2012). It was found out that identifying the behavioral infirmity of individual investor is quite important for understanding the investor, but for a corrective course of action to overcome these anomalies, it is pertinent to figure out investment behavior in microstructure. Bloomfield (2006), calls for an examination of the psychological forces acting on the behavior of retail investors in different

3. Business Growth in CM Segment, nseindia.https://www1.nseindia.com/products/content/equities/equities/historical_equity_businessgrowth.htm
4. Only 2% of Indians Invest in Equity, (valueresearchonline.com, 2014) Extracted from https://www.valueresearchonline.com /story/h2_storyView.asp?str=25262
5. Gross Savings (%of GDP), World Bank Data, http://data.worldbank.org /indicator/ NY. GNS. ICTR ZS
6. Indian retail investors tend to lose in stock markets http://articles.economictimes.indiatimes.com/2012-11-29/news/35433105_1_retail-investors-trade-data-study

financial settings or microstructure. In this study, we chose two financial settings for studying retail investor behavior: pre-and post-investment. Behavior exhibited under these two settings is analyzed together, and we find that some investors neglect the planning aspect of investments entirely. Market-driven, Planning – driven investors and caution –driven investors get return from the stock market where as the other three categories do not get return.

2. LITERATURE REVIEW

Researchers hypothesize that retail investors are irrational owing to the losses incurred by latter in the market. This has been extensively studied under various behavioural imperfections across the world.

Kumar and Charles (2006) found investor sentiment to be a stronger guiding factor for stock market returns than macroeconomic news and cost of arbitrage. Investors are whimsically guided by a collective thinking, and they ignore the available information and the cost of investing. Lai et al., (2013) in a similar kind of analysis, considered the parameters of price anchoring, overconfidence, self-control, herd behavior, and liquidity preference. They found that retail investors' behavior was the same on all those parameters except liquidity preference and self-control, indicating the uniformity of their behavior in investing. While all studies agree on the irrationality of the retail investors' behavior, there is no consensus on whether the irrationality is uniform.

Pandit and Yeoh (2014) undertook a study on the Bombay Stock Exchange, India, and concluded that the irrational behavior of retail investors is a regular and persistent phenomenon. There is no commonality in their irrationality but a specific behavior remains with the investor for long. Investor behaviour may be classified under two categories; Trading Behaviour- situational during the process of trading and Investor Sentiment-behavior inherent to the investor. Yang and Liyun (2015) examines the impact of trading behaviour and investor sentiment on excess return in the stock market and found out that trading behaviour has a greater impact than the investor sentiment.

Kumar and Charles (2006) conducted a study on a large discount house in the US and found that return on specific shares is guided by the investors' sentiments rather than microeconomic views. However, Henker and Debapriya (2011) argued against this finding and explained that the retail investors or noise makers were not more responsible than other kinds of investors for market fluctuations, as proposed in the January effect of the Australian Stock Market.

Herd Behavior: Rehman et al., (2015) in a study in Saudi Stock Market found out that in contrast to the prediction of rational asset pricing models, daily time series relationship between the dispersion of individual returns and market return is significantly non-linear, suggesting the presence of herd behavior in the market.

Merkel et al., (2015) in their study on UK market add a new dimension to herd behaviour. The authors found out that portfolio returns are more through personal trading success. A positive market return creates a competitive attitude for relative performance and the feeling to have missed the opportunities induces the retail investor to jump in the bandwagon to buy stock in mass euphoria exemplifying herdbehavior.

Herd behaviour may also be traced to category of shares, industry, size of company, time factor and others. A study by Yao et al.,(2004) in the Chinese market during 1999-2008 uncover herd behaviour in specific category of shares. While in the A category shares there were no herd behaviour, B category shares experienced the herd behaviour. On breaking out the time factor towards the last part of the decade investors were making more rational choices. Herd Behavior was present at industry level amongst the largest and smallest stocks more in growth stocks in comparison to value stocks. Hammami and Tounes (2015) found out that the herding behavior in the Tunisian stock market is present more during the boom and busts, which leads to stock market movement

A global study was made by Chang and Limb, 2015, involving 50 stock markets over 46 years on herding behaviour. The result of the study showthat among 50 stock markets, only 18 exhibit significant herding behavior, but lesser sophisticated markets, herding behavior was significantly more common. National cultural factors influence herding behavior to some degree, and that aspects such as power distance, individualism, and masculinity have more dominant influences than others. Behavioral pitfalls, including excessive optimism, overconfidence, and the disposition effect, significantly dominate investors' herding tendencies. (Chang &Shih-Jia, 2015)

Risk Behavior: Kannadhasan M.(2015), studied the role of demographic factors viz. gender, marital status, age, occupation, education, and income as differentiating factor among levels of financial risk tolerance(FRT) and financial risk behaviour (FRB) of Indian retail investor. It was found out that

Gender, Age, Occupation and Income are the differentiator of the financial risk behaviour. In case of FRB Gender, Age, Education and occupation are the differentiating factor.

Response to Advice: Monti et al., (2014) found out that advice taking can be considered an adaptive behavior. Investors recognize their own lack of competence for applying the standard tools of portfolio choice. In addition to this motive, however, investors also seek and rely on advice because they consider their financial advisor to be a reliable and supportive person. Besides recognizing the paucity of information with the retail investors the study confirms trust of the investor on the advisor. Bhattacharya et al., (2012) found that hardly 5% of the investors seek inputs from advisors andeven that advice is typically ignored

Short-Termism: In a study of Chinese market, Ni et al., (2015) found a significant investor sentiment in the short term is significantly positive for stocks with higher returns in the short term while notably negative for stocks with small returns in the long term. This reversal effect verifies the existence of a strong overreaction in the Chinese stock market.

A successful rational investor uses the available fundamental and technical information to predict the future earnings of the company. In a study on in the American stock market, Hvidkjaer (2008) found that retail sentiments are positively associated with present stock market returns and negatively associated with future stock market returns. This explains the short termism of the retail investors who misuse the available information. Besides, retail investors through their irrationality push the price away from the fundamentals and subsequently prices revert back to the fundamentals over time. It explains how the retail investors are responsible for the inefficiency in the stock market. In other instances the informed retail investors sell stocks that are mispriced, and the unaware investors buy the shares available at low price because of the selling pressure, thus promoting the mispricing of the stock. Edelen et al., (2010) also confirm retail investors' positive association with contemporaneous stock market returns and negative association with future stock market returns.

Aggressiveness: Aggressiveness of investors was found across the market by a study conducted by Choi et al., (2015) in Korean market. They found Domestic individuals were aggressive contrarian investors in large-cap stocks and mildly trend-chasing in small stocks. Foreign institutions are aggressive trend-chasers regardless of market trends and stock size.Contrary to popular beliefs and expectations from prior literature, however, individual investors continue to trade and do not de-risk their investment portfolios during the crisis. Individual investors also do not try to reduce risk by shifting from risky investments to cash. Instead, individual investors use the depressed asset prices as a chance to enter the stock market. (Hoffman et al., 2013).

Disposition Effect: Selling winners compared to losers is termed as disposition effect. Frino et al., (2015) in a study in the Chinese market found out that the preference for selling winners compared to losers prevails even in the last month of the financial year when people have the last chance to realize a loss for tax benefits. Women, older people, people who trade relatively infrequently, people who do not hold a great number of stocks, people who tend to invest in low-price stocks and people who trade round size were having disposition effect without exception. Biases such as overconfidence and disposition effect do not occur together, whereas some biases like trading round size teams up with disposition effect as behavior infirmities.

Gambling Tendency: Bali et al. (2011) uncover a new anomaly (the ''MAX effect'') related to investors' desire for stocks with lottery-like payoffs. They tested daily return for one month and uncovered Stocks with high maximum daily returns (high MAX) perform poorly relative to stocks with low maximum daily returns (low MAX). MAX effect is strongly dependent on investor sentiment and is mainly due to the poor performance of high MAX stocks rather than high returns of low MAX stocks. Investors' desire to gamble in high MAX stocks was present both with individuals and institutions. Controlling for past sentiment reduces the significance of the MAX effect. The findings are supported by the ''optimal beliefs'' theories (Brunnermeier et al., 2007) where investor optimism generates a preference for lottery-type securities (Fong &Benjamin, 2014)

Sahi and Vinay (2015) separately tested the behavior of investors using funds from unexpected source and earned money. Besides developing an understanding on impact of sudden wealth on the investor. The study also compared theperceived attitude towards sudden wealth (PASW) against a Money Ethics Scale (MES) through a survey conducted on 252 participants on the dimension of helplessness, prudence, fear and stress, empowerment, indulgence and gratitude towards God. The findings of the study revealed that PASW is different from MES. Investors react differently when they are put in a reality situation.

Aspirations: Aspirations for achieving investment goals may be dependent on latent characteristics of an investor. The latent characteristics are the outcome of the cognitive behaviour and socio economic factors guiding the performance of the portfolio. Magron(2014) examined two different profiles of investors having high aspirations and low aspirations. Investors who have high aspirations trade more and hold riskier portfolios than the average. By contrast, low-aspirations investors are more diversified. The most significant findings to emerge from this study are that, controlling for turnover, diversification and risk factors, high-aspirations investors underperform their peers, whereas low-aspiration investors outperform their peers.

Context Sensitivity: Context sensitivity stands apart from other studies being situational relating to financial settings. Behaviour of Indians were examined by Panda and Rajen (2012) on the basis of their early socialization in the work place. They found out three basic kind of organizational behaviour among the employees. There were many researches on the contextual behaviour of Indians. They were perceived to be highly contradictory and inconsistent in their manifested behavioural patterns. Indian behaviour is determined more by the situation or the context rather than the personality. Sinha and Kanungo (1997) mentioned that 'context sensitivity among Indians manifests itself in relation to three components of the environment, which are desh (place), kal (time) and patra (person)'.

Buying stocks when others are selling and selling stock when others are buying is popularly known as contrarian strategy. Do the investors adopt this strategy? Foucault et al., (2011) studied the French market and found that retail traders do follow contrarian strategy and during the bearish phase of the market this strategy may stabilize the market. However, this impact is much smaller than the destabilizing effect of the momentum induced by traders who defy the principle of buying at low.

Interestingly, the investors who need advice the most seek it the least.Stotz (2011) explored the impact of insider trading on retail investors. Using data from a large German financial institution, he found that, retail investors’ buy–sell imbalance increases for stocks that are bought by insiders and decreases for stocks that are sold by insiders.

Thus, according to literature the irrationality of the retail investors is evident in the form of over confidence, herd behavior, price anchoring, short-termism, control, risk propensity, and callousness to advice.

Wood and Judith (2004) studied EMBA students and categorized them as (a) risk intolerant (b) confident (c) loss averse young traders, and (d) conservative long-term investors. This classification was based on their investment horizon, risk attitude, personalization of loss, confidence, and control. This study classifies the investor on their personal attributes. While appreciating classification of the investors on the basis of their inherent qualities, we have undertaken our study in a more precise and focused manner considering behaviour of retail investors in two financial setting or microstructure. We do not hypothesize investor behavior as rational or irrational. Although certain inherent characteristics of the investors have been included in our analysis, they have not been studied explicitly The pre-investment planning behavior centers on advice, analysis, estimation of profit or loss, portfolio planning, and observation of market parameters while the post-investment behavior considers exit/continuance in the market, response to loss/profit, achievement of target, averaging, and divesting the investment.

3. RESEARCH METHODOLOGY

We surveyed 496 investors from Bhubaneswar, a city in the eastern part of India. Although survey questionnaires were administered to 537 investors, 41 were rejected for incomplete information. We surveyed only active retail investors from three broking houses during the trading hours (9.15 AM to 3.30 PM) for three days. According to age profile of the investors 45% were in the age group of 25-35, 37% in the age group of 36-45, 16% in 46-55 age group and 2% were in the age group of 56-65. Employment profile of the respondents were; Business and Profession–27%, Housewives-6%, Government and Private sector employees–67%.

The questionnaire contained 17 questions on the pre-investment approach and 9 on the post-investment approach. The pre-investment section covered advice from various sources, tangibility of investment, reputation of the service provider, planning for individual shares, portfolio planning, fixing target before investing, sector-specific investment, investment on personal liking, investment based on volume trading, investment on reputation, and market capitalization. The post-investment section covered booking loss when price falls, booking profit on achieving the target, averaging when price goes down, hold and watch in the long term, divest partly, divest fully, and distrust in the service provider in a loss situation. Investors were asked to record their responses on a five-point Likert scale.

Cronbach's alpha test was used to assess the reliability, and factor analysis was performed to classify the investors on the basis of specific attributes.

4. RESULT AND ANALYSIS

Reliability Statistics: To determine the reliability of the dataset, Cronbach's alpha was determined. A reliability test determines whether the same set of items will give the same result if the questionnaire is re-administered to the same respondents. A coefficient value of more than 0.70 is considered to indicate good reliability of the survey instrument. Our alpha coefficient was 0.763, which indicated that the data was suited for further analysis.

Table 1.
Reliability Statistics

Cronbach's Alpha	*No. of Items*	*F*	*Sig*
.763	26	100.212	0.000

The data were analyzed through factor analysis, and results are shown in the tables below.

KMO and Bartlett's Test: KMO is the test of sample adequacy in factor analysis. A KMO coefficient of more than 0.60 indicates good sample adequacy; our coefficient was 0.830. A Bartlett's test of sphericitycoefficient of less than 0.05 is considered acceptable for further analyzing the data. Our coefficient of Bartlett's test of sphericity was 0.00, which indicated validity and suitability of the responses collected to the problem being addressed in the study.

Table 2.
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.83
Bartlett's Test of Sphericity	Approx. Chi-Square	5375.45
	Df	171
	Sig.	0

Total Variance Explained: Table 4 lists the factors extractable from the analysis,total variance explainedby total number of extracted factors has been presented. Notice that these extracted factors are obtainedafter avoiding the cross loadings. Rotation sum of squared loadings explains the degree percentage of variance redistributed to the derived factors. Six factors extracted in our studyexplained73% of the total variance of the dataset.

Table 3.
Total Variance Explained

Components	*% of Variance*	*Cumulative %*
Factor 1	19.986	19.986
Factor 2	17.991	37.976
Factor 3	9.691	47.667
Factor 4	8.197	55.864
Factor 5	7.436	63.301
Factor 6	6.942	70.243

Rotated Component Matrix: This is the key output of the factor analysis. It explains the correlation between the variables and components. The highlighted variables in the specific component are selected through the highest value of the individual rows. Typically, we find strong correlation between the variables and the components with higher fractional value. On the basis of the results in Table 5, we interpreted the results of the six components in Table 6. We have named the components according to the collective interpretation of the variables associated with them.

Additionally we have performed multiple regression analysis using the factor scores to find the contribution of each factor to the achieve the target return for the investor

Table 4.
Rotated Component Matrix[a]

	Component					
	1	2	3	4	5	6
Market-Driven						
How much importance you give to blue chip companies for your investment?	0.888					
How much importance you give to specific sector for your investment?	0.839					
How much importance you give to capitalization of the company for your investment?	0.828					
How much importance you give to volume trading of the company for your investment?	0.762					

Table 4 contd…

Planning–Driven					
How much time do you take to arrive at an investment decision?	0.761				
Do you undertake your own analysis before investing?	0.718				
Do you estimate probable loss before investment?	0.713				
How often you plan your investment by allocating funds?	0.703				
How often you target your return before investment?	0.562				
Safety–Driven					
How important is the reputation of the broker for opening a trading account?		0.772			
Do you consider fixed asset base for choosing the stock?		0.646			
Do you watch television for stock advice?		0.628			
Advice–Driven					
Do you take advice from the broking house?			0.806		
Do you take advice from personal advisors?			0.596		
Time–Driven					
Do you believe in partial divestment?				– 0.777	
How often you hold the shares even in a loss position?				0.593	
Caution-Driven					
In a loss position do you want to divest in full and close your investment account?					0.787
Do you book loss when price of the stock goes down?					– 0.552

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

The result of F–statistics shows that the model is fit andThe R square and Adjusted R2 is more than 0.6. The factors such as Market- driven, Planning driven and Caution driven are positively significant at 1 %. However, the factor Action-driven is negatively significant at 5%. Moreover, the factor Time-driven is having a positive insignificant coefficient and the factor Safety-driven negative insignificant coefficient.

Market-Driven: These investors invest in blue chip companies with huge market capitalization. They track the performance of the sector and trading volume of the specificstock before taking an investmentdecision.They get return as per their expectation.

Planning-Driven: Investors in this category devote considerable time to make an investment decision; theyconduct their own analysis; estimate the loss before investing;allocate funds for investment and target their return before investment. They usually achieve their investmenttargets.

Safety-Driven: Tangibilityof a company represented by its fixed asset is a primary deciding factor for safety-driven investors.They choose reputed brokers for dealing in the stock market. Their mindset of safety is also indicated through stock advice given by reputed advisors in the Television. In spite of their inclination for safety they have negative return in the market

Advice-Driven: These investors are dependent on the advice of personal stock advisors and advice given by broking houses. They also loose in the market with a insignificant negative coefficient found out through regression analysis.

Time –Driven: The long term investor in this category holds the stock even in a loss position and never thinks of partial divestment of his portfolio with a negative extraction of partial investment. Time-driven investors do not get return from the market.

Caution-Driven: Caution-Driven investors are loss averse and book loss when the stock price goes down. They get return from the market applying stop loss effectively.

Table 5.
Result of regression analysis

Factor	*Coefficient*	*Std. Error*	*Sig*
Constant	3.523	0.033	0.000
Market- Driven	0.714	0.033	0.000
Planning -Driven	0.825	0.033	0.000
Safety–Driven	– 0.008	0.033	0.816
Advice –Driven	– 0.065	0.033	0.049
Time –Driven	0.049	0.033	0.135
Caution Driven	0.134	0.033	0.000
	Model fitness		
F – statistics	187.5864011		0.000
R square	0.698		
Adjusted R2	0.694		

Depended variable: How often you achieve the target of your return?

5. CONCLUSION AND SCOPE FOR FURTHER STUDY

The study indicates that not all retail investors operate whimsically in the market. Market-Driven investors watch the market while planning – driven investors rely on plans made at their personal level. Iconic investors around the world suggest normative behavior of the investors to get return in the stock market. For example, Peter Lynch in his book "Up in the Wall Street stresses on company specific analysis, ignoring short term fluctuations, ignoring short term deduction of the market and own knowledge and analysis for getting return in the market. Usually this suggested normative behavior indicates planning driven investors. But a new kind of market – driven investor emerge from our study who also gets return from his investment focusing on the market. It may be interesting to explore whether their prudent behavior stems from the process of learning and/or disillusionment of the past? Tangibility is a personal preference for the safety-driven investors. These investors are not alone in their approach. The legendary investor Warren Buffet does not include technology stocks in his portfolio having lesser fixed asset base (Schroeder, 2008). But inability to make profit in the stock market by the safety driven investors uncover that prudent stock investing has several facets of analysis beyond tangibility. Their safety mindset also extends further to choosing an established broking house and listening to stock market experts from the Television. But unfortunately safety mentality does not translate into return. We had a reality check of the advice- driven investors. Marketing and trading executives of the broking houses invite retail investors to open an account with them and eventually assume the full responsibility of their investment. The investor keeps on doing short duration trading as per the advice of the broker. With all anxieties and aspirations, the investor does not gain anything rather his money becomes a medium of brokerage for the broking house. Our study becomes a waking call for the advice –driven investors to desist from falling prey to the unscrupulous broking houses. The time-driven are the patient investors who enter the market in long term view. Holding the investment without bothering to time the market is considered to be a prudent way of investing by some analysts (why Market, 2014). At no point of time they divest from the market even if the stock remains in a loss position. Our study finds out that these investors also do not make profit in the market indicating the necessity of a full proof investment strategy. Finally, a caution–driven investor is able to derive return from the market with his ability to book loss in a loss- making situation. From the findings of our study it is evident that watching the behavior of the market, planning at personal level and ability to book loss are the major guiding principles to get return from the market. The policy makers should develop desired financial literacy programme to discourage tentative approach of the investors. A self-aware retail investor can learn best practices adopted by other kind of investors to overcome his contextual behavior

References

A. Schroeder (2009), The snowball, Warren Buffet and the Business of Life. Bloomsbury Publishing, New York, P. 12-13.

Bali, Turan G., NusretCakici and Robert F. Whitelaw. (2011), Maxing Out: Stocks as Lotteries and the Cross-Section of Expected Returns, *Journal of Financial Economics*, Vol. 99(2): pp: 427-446

Barber, Brad M and Terrance Odean.(2011), The Behavior of Individual Investors. *Working paper*. (http://ssrn.com/abstract=1872211).

Bhattacharya, Utpal, Andreas Hackethal, Simon Kaesler, Benjamin Loos and Steffen Meyer. (2012),Is Unbiased Financial Advice to Retail Investors Sufficient? Answers from a Large Field Study, *The Review of Financial Studies*.Vol.25 (4): pp: 975–1032.

Bloomfield, Robert J. (2006).Behavioral Finance. *Working paper*. (http://ssrn.com/abstract=941491).

Brunnermeier, Markus K., Christian Gollier and Jonathan A. Parker. (2007), Optimal Beliefs, Asset Prices, and the Preference for Skewed Returns. *Working paper*. (http://ssrn.com/abstract=941491).

Chandra, Abhijeet and Ravindra Kumar. (2012), Factors Influencing Indian Individual Investor Behaviour: Survey Evidence.*Decision*. Vol. 39(3): pp: 141-167.

Chang, Chih-Hsiang and Shih-JiaLin. (2015), TheEffects of National Culture and Behavioral Pitfalls on Investors' Decision-Making: Herding Behavior in International Stock Markets. *International Review of Economics & Finance*, Vol. 37(C): pp: 380-392.

Choi,Jongmoo Jay., Haim Kedar-Levy and Sean SehyunYoo. (2015), Are Individual or Institutional Investors The Agents of Bubbles?.*Journal of International Money and Finance.* Vol. 59: pp: 1-22.

Edelen, Roger M., Alan J. Marcus and HassanTehranian. (2012), Relative Sentiment and Stock Returns. *Financial Analysts Journal.* Vol. 66(4): pp: 1–13.

Fong, Wai Mun and Benjamin Toh. (2014), Investor Sentiment and The MAX Effect. *Journal of Banking & Finance.* Vol.46(C): pp:190–201.

Foucault, Thierry., DavidSraer and David J.Thesmar. (2011), Individual Investors and Volatility. *TheJournal of Finance*. Vol. 66(4): pp: 1369–1406.

Foreign banks' share close to 10-year low. (2012, June). The Times of India. Retrieved from http://timesofindia.indiatimes.com/city/mumbai/Foreign-banks-share-close-to-10-year-low/articleshow/14448959.cms

Frino, Alex, Grace Lepone and Danika Wright. (2015), Investor Characteristics and The Disposition Effect, *Pacific-Basin Finance Journal*. Vol. 31: pp:1-12.

Hammami, Haifa and TounesBoujelbene. (2015),.Investors Herding Behavior and its Effect on Stock Market Boom-Bust Cycles.*The IUP Journal of Applied Finance*, Vol.21 (1): pp: 38–53.

Henker, Julia and Debapriya j. Paul. (2012),Retail Investors Exonerated: The Case of the January Effect. *Accounting and Finance*.Vol. 52(4): pp:1083–1099.

Hoffmann, Arvid O.I., Thomas Post and Joost M.E. Pennings. (2013)Individual Investor Perceptions and Behavior During the Financial Crisis.*Journal of Banking & Finance*, Vol.37 (1): pp: 60-74.

Hvidkjaer, Soeren. (2008), Small Trades and the Cross-Section of Stock Returns.*The Review of Financial Studies*, Vol. 21(3): pp: 1121–1153.

Kadapakkam, Palani-Rajan and Hongxian Zhang. (2014), Investor Ignorance in Markets for Worthless Stocks,*Journal of Financial Markets*. Vol.19: pp: 197–218.

Kannadhasan, M. (2015), Retail Investors' Financial Risk Tolerance and Their Risk-Taking Behaviour: The Role of Demographics as Differentiating and Classifying Factors, *IIMB Management Review*. Vol 27(3): pp: 175-184.

K. Redhead (2008),Personal Finance and Investments – A Behavioral Finance Perspective, Routledge Taylor & Francis Group, London and New York, p. 34.

Kumar,Alok and Charles M.C.Lee (2006), Retail Investor Sentiment and Return Comovements.*The Journal of Finance*, Vol. 61(5): pp: 2451–2486.

P. Lynch and J. Rothchild (2000), One up on Wall Street,Simon and Schuster, New York, P. 90-91.

Lai, Ming-Ming., Siow-Hooi Tan and Lee-Lee Chong. (2013),TheBehavior Of Institutional and Retail Investors in Bursa Malaysia During The Bulls And Bears. *The Journal of Behavioral Finance*. Vol.14 (2): pp: 104–115.

Magron, Camille. (2014), Investors' Aspirations and Portfolio Performance.*Finance Research Letters*Vol.11 (2): pp: 153–160.

Merkle, Christoph.,Daniel P. Egan and Greg B. Davies. (2015), Investor Happiness, *Journal of Economic Psychology*. Vol. 49(C): pp: 167-186.

Monti, Marco., Vittorio Pelligra, Laura Martignon and Nathan Berg. (2014), Retail Investors and Financial Advisors: New Evidence on Trust and Advice Taking Heuristics. *Journal of Business Research*.Vol.67(8): pp: 1749-1757.

Ni,Zhong-Xin., Da-Zhong Wang and Wen-Jun Xue. (2015), Investor Sentiment and Its Nonlinear Effect on Stock Returns—New Evidence From The Chinese Stock Market Based on Panel Quantile Regression Model. *Economic Modelling*. Vol. 50: pp:266-274.

Panda,Abinash and Rajen K Gupta. (2012), Deconstructing Context-Sensitive Nature of Indians' Behaviour: A Preliminary Attempt to Develop a Taxonomy for Three Work Contexts. *Int. J. of Indian Culture and Business Management*. Vol 5(6): pp: 696 – 733.

Pandit A. and Yeoh K. (2014), AStudy of Individual Investors in India.*The Journal of Developing Areas*.Vol. 48(3): pp: 129–148.

Rahman,M.Arifur, Shah Saeed Hassan Chowdhury and M. ShibleySadique. (2015), Herding Where Retail Investors Dominate Trading: The Case of Saudi Arabia.*The Quarterly Review of Economics and Finance*. Vol. 57(c): pp: 46–60.

Sahi, SahiliniKalra and Vinay Kumar Dutta. (2015), Perceived Attitudes Towards Sudden Wealth: An Exploratory Study. *International Journal of Indian Culture and Business Management*.Vol. 11(2): pp: 245-274.

Sinha, Jai B.P and R.N. Kanungo. (1997), Context Sensitivity and Balancing in Indian Organizational Behaviour. *International Journal of Psychology*. Vol. 32(2): pp: 93-106.

Stotz, Olaf. (2011), Do Retail Investors Follow Insider Trades?.*German Economic Review*. Vol. 13(3): pp: 257–274.

2014. "Why Market timing does not work."*Consumer Reports, Money Advisor*11, no 7: 8-9.*Business Source Complete*, EBSCO*host* (accessed May 13, 2016).

Wood, Ryan and Judith Lynne Zaichkowsky. (2004), Attitude And Trading Behaviour of Stock Market Investors: A Segmentation Approach. *Journal of Behavioral Finance*. Vol. 5(3): pp: 170–179.

Yang Chunpeng and Liyun Zhou. (2015), Investor Trading Behaviour, Investor Sentiments and Asset Price. *North American Journal of Economics and Finance.* Vol.34: pp: 42-62.

Yao, Juan., ChuanchanMa and William Peng He (2014), Investor Herding Behaviour of Chinese Stock Market,*International Review of Economics and Finance*, Vol.29(C):pp:12-29.