Assessing the Influence of Herding Behavior among Investors

Dr. Shikha Bhargava* Prof. Mahima Birla**

ABSTRACT

Over the decade it has been assumed that the investors believe in maximizing the utility and take decision rationally based on the trade-off between risk and reward. However, the fact is that they make errors in the way they think and conduct errors. The review examines five such concepts of behavioural finance. The present paper examines one such concept of behavior finance of herding among the investors. Herding behavior means following the consensus opinion and ignoring the rationality. This is dominant in the market because investors are concerned with what the other people follow and what viewpoints they hold.

A descriptive research design is carry out to conduct the research. Primary data were collected through questionnaires. Secondary and primary data is collected. Investors who deals in the Exchange and are from the city define the population of the research. Statistics such as mean, std. devation, chi square were calculated to analyze the data.

The study concludes that investment decisions are influenced by behavioral biases of investors even though they are well informed about the scenario. The study identifies that emotions and herd instincts play on important role in decision making of investors. Herd behavior is measured on four parameters and aspects.

- Speed of herding.
- Buying and selling of stocks
- Choice of stocks to be trade
- Volume of stocks to be trade

Result of this study helps in understanding the behavior and the psychology behind the clients behavior. The study also highlighted the need to empower the advisor and the client to make better investment in the right direction which is essential for individuals as well as for economy as a whole. The study also identifies that herd behavior varies significantly different for different income group and different gender study thus suggest that they can be served as a segmentation basis for financial services.

Keywords: Herding Behavior, Behavioural Finance, Financial Service.

INTRODUCTION

The research identifies the extent to which behavioral factors affecting the investment decision and how exactly the manger takes into account the factors and plan their strategies. Inclination of individual to pursue the actions (rational or irrational) of a majority group is well known as herd behavior (Bikas, 2013). Herd behavior is the result of two major reasons. First, due to social force of conformity, people have a tendency to behave as per from

the group norms they belong. Second, generally people believed that generally a large group is not likely to be wrong. So they ignore the basic rationality of supply and demand and Purchase stocks based on price impetus while is known in the behavioral finance it leads to irrational behavior defective decision Peteros & Maleyef (2013).

The concept can be measure on 4 behavioral variables (buying and selling; choice of stocks; volume of stocks; speed of herding); following the decisions of the other

^{*}Assistant Professor, Pacific Business School, Udaipur

^{**}Dean, Faculty of Management, Pacific University, Udaipur

investors. People tend to herd together is a common phenomenon as it enhance the psychological biases and gives a sense of security.

The aim of the research is to validate few concepts which prevail in the minds of the investors. Investors before investing in the various asset classes like gold, equities, bonds, real estate etc. measures risk-returns payoff, and reliability of the offering companies, simultaneously they also consult the herd opinion (Garcia 2013). The aim is also to study the psychological impact on the behavior of the investor(s) while arriving at the decision to invest in different avenues of investment.

The research was guided by the following objective.

- To Assess the influence of Herding Behavior while investing and allocating the available resources to final investment decision.
- To establish the relationship pattern between the demographic characteristics and herd behaviour

REVIEW OF LITERATURE

Bernstein (1996) notes that there is proof to show repeated patterns of illogicality, inconsistency and incompetence in the way human beings arrive at decisions and choices when faced with uncertainty. Gwily (2009) argues that incompetence in the market that prompts practitioners to make use of forecasting techniques is caused by traders using simple, heuristical forecasting rules in preference to basing their expectations on an analysis of the fundamentals. Behavioral finance seeks to understand and forecast systematic financial market implications of mental decision processes (Olsen, 1998)

HERD BEHAVIOUR

In the present scenario information spread faster and faster, and makes the investment decision process more and more difficult (Fromlet, 2001). In view of Johnson et al (2002) the explanation of new information may need herd behaviour rules. The advise given is that herd mentality play an active role on both sides of the equation, Institutional decision making and investors behavior both are influenced by this phenomenon (Gounaris & Prout, 2009). The behavior is the propensity of individual to pursue the actions rational or irrational of a larger group. This herd mentality is the result of two major cause. Firstly, social force of conformity exist and people.

Secondly, people believe the rationally huge group is not

likely to be mistaken. Investing in stocks based on certain impetus while not behaving rationally according to basic economic principles of supply and demand is known in the behavioural finance. Late in 1990s, Venture capitalist and private investors were anxiously investing huge amount of money into internet related companies, even though most of them did not have financially sound busines.

Reseach was done at the Banja Luka Stock Exchange, which is one of the world's most renowned stocks markets. Stevens and Lipsev (1992) It was found that herding is insignificant during extreme return periods with its even after controlling for thin tradings.

Clement & Tse (2005) declares forecasting as herding or bold and he declare that boldness increases with the analyst's 1)prior accuracy, 2)brokerage size, 3) experience and declines with consistency with theory linking boldness with career concerns and ability; (2) bold forecasts have high accurate than herding ones; bold forecasts should thus be better as they incorporate analysts' private information more completely and provide more relevant information to investors as compare to the forecasting as a result of herding.

Herzenstein et al. (2011) the availability of online Peer-to-Peer (P2P) loan auctions enable individual consumers to borrow and lend money directly to one another. Herding behavior can be, defined as a likelihood of bidding in auctions bids higher than that of herding bids. The phenomenon strategic herding behavior exist as shown by the Empirical studies research also show evidence o lenders such that they have a greater likelihood of bidding on an auction with more bids for example a 1% increase in the number of bids increases the likelihood of an additional bid by 15%. but only to the point at which they have funds (Gleason, Mathur & Peterson 2004).

ANCHORING

Anchoring occur when present prices are about right, but investors pays lot of attention to recent experiences (Raines and Leathers, 2011). Gwily (2009) observed that agents switch between the rules depending on profitability.

OVER CONFIDENCE

Investors overvalue their foretelling skills and think that they can well time the condition. One side effect of investor overconfidence leads to excessive trading (Evans, 2006; Allen and Evans, 2005).

PROSPECT THEORY

The concept stressed under prospect theory provides a framework and explains how behavioural aspects influence risk tolerance in investment decision. Kahneman and Tversky (1979) found that people under weigh outcomes that are probable in comparison with those that are certain. People respond differently to equivalent situations depending on whether they are presented in the context of losses or gains. Lebaron (1999) said thet people become considerably more distressed at the prospect of losses than they are pleased by similar outcomes. Sometime situations are such that there is large probability of loss, people exhibit risk-seeking rather than risk-averse behaviour (Tversky, 1990).

Loss Aversion: Kahneman and Tversky (1979) found that people under weigh outcomes that are probable in comparison with those that are certain. They also found that people respond differently to equivalent situations depending on whether they are presented in the context of losses or gains.

MENTAL ACCOUNTING

Investors have a general tendency to treat each element of their investment portfolio separately, which can lead to inefficiency, and inconsistency in making investment decisions (Shiller, 2000). According to Richard Thaler (2006), All financial decisions should be based on rational calculation of its effects on overall wealth position.

Regret Aversion: Fogel and Berry (2006) found that investors reported regrets about holding a losing stock too long than about selling a winning stock too soon and this led to the disposition effect. The significance of information in financial decisions may be reduced or eliminated by psychological aspects of the individual. The example of such kind of behavior a mental state of overconfidence that is individual or shared with a group, or such as the individual's limited ability to process complex and bulk of information.

The objective of the paper is to complement this emerging body of literature. This was done through analyzing the way individuals perceive and process information before proceeding to financial decisions. The work was reviewed and suggests a number of broad guidelines that can provide a framework for future discussion (Peteros & Maleyeff, 2013).

The objective of the research work aims to recognize the emotional factors on market movements. It focus on investor rationality and explains the psychological effects of investing activities that influence the investment decision with special reference to herd behavior.

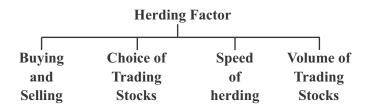
METHODOLOGY

A descriptive research design was framed and hypothesis was formulated to establish the relation between the demographic variables and herd behavioral investors of Udaipur city are considered as the population for this research work. Primary data were collected through survey based on structured questionnaires; secondary data was collected from published records and Journals. The Sample of 100 respondent was selected in a way that ensures that segregation of the demographic variable such as gender, profession and income group can be covered properly. Thus a proper stratified sample technique was employed to carry out the research.

CONSTRUCTION OF A QUESTIONNAIRE

The Questionnaire is divided into two parts 1) First part comprises of the personal and demographic details of the investors and 2) part deducted from ROL are the four parameters each with four items to measure herd behavior.

Herding factor is the investors basic nature to move in accordance to group consensus and paying less attention to the rational information. The herd behavior was measured on four parameters which are 1) speed of herding 2) choice of stocks; 3) volume of stocks; 4) buying and selling); following the decisions of the other investors (Welch, 2000).



Volume: 5 | Issue: 1 | January to June 2017 | ISSN 2319-1740

The behavior signifies how individuals in a group can act together without planned direction and rational behaviour. Origination of the term pertains to the behavior of animals in herds The reliability of the herd parameter is measured using cronbach alpha, Nunnally (1978) suggests that

Cronbach s alpha should be at least 0.7 to make sure that the measurements are reliable. However, many statisticians believe that it can be acceptable if the Cronbach s alpha exceed 0.6 (Shelby, 2011). The results of Cronbach's alpha test(6.18) shows indexes is greater than 0.6

RESEARCH SUMMARY

The Research Methodology used thus can be summarized as

Key issue	Methodology
Research design.	Descriptive research
Data	Primary data
Research	Survey method
Research instrument	Questionnaire
Sample size	100 Investors
Sampling Unit	Randomly selected Investors from Udaipur, Rajasthan became the sampling unit for the research.
Sampling Frame	The database of the survey were treated as sampling frame

DATA ANALYSIS

Table1: The demographic classification of respondents.

		Г			Г
		Frequency			Frequency
Gender	Male	59	Education	Secondary	1
	Female	41		H. Sec	11
	Total	100		Graduation	40
Age	Below 30	38		Post	48
	years			graduate/	
				Ph.D	
	30-40	29		Total	100
	years				
	40-50	22	Respondent'	Business	60
	years		Occupation	Men	
	50 years	11		Job Person	25
	and above				
	Total	100		Home	1
				Maker	
Marital	Married	79		Retired	14
Status				Pensioner	
	Unmarried	21			

Table 2: Respondents'Estimated Average

Monthly Income (Rs)	Frequency
Less than 20,000	8
20,000-50,000	48
50,000-1,00,000	32
More than 1,00,000	12

Herding factor: Measuring the Impact

To assess the influence of herd behavior on investment behavior. Two aspects were judged in this paper:

Firstly Impact of herd behavior was mapped and Secondly the relationship between the demographic factors and herd behavior was identified. Table 2 shows the result of the 100 respondents and Impact of herd behavior on them.

Factors to measure Herding Factors	Average	Std. Dev
Herd decision on choosing of stock types will have impact on final Investors' decisions.	4.8180	0.42572
Herd decision of the stock volume will have impact on final investment.	4.2060	0.65454
Herd decision of buying and selling of stocks have impact on final investment.	4.3680	0.79614
People respond immediately to the changes of other investors' decisions and follow their reactions to the final investment.	3.7580	0.87691

INTERPRETATION

The herding behavior is highest with respect to

- a) Herd decision on choosing of stock types will have impact on final Investors' decisions. Which means that people tends to get influence by the selection of stock types and stocks' purchase and selling by decision of their friends and relatives.
- b) The fact that people respond immediately to the changes of other investors' decisions and follow their reactions to the final investment, got low score immediately.

c) All the parameters use in the study to scale the herding factors have a mean score of more the 50% which shows that the investors has a great impact on the Investors behavior.

Further to understand the relationship between the demographic factors and the herd behavior, chi-square test was applied . Table 3 representing the result. A hypothesis was framed to understand the relation.

Ha 1: Demographic characteristics bear a significant influence over herd behavior

Table 3 : Demographic characteristics and the Herd Behavior

S. No	Factors	Value: chi square	Sig. Value
1	Gender	0.015	0.905
2	Age	0.362	0.949
3	Marital status	7.373	0.026*
4	Education qualification	4.874	0.31
5	Employment	3.408	0.635
6	Monthly income	9.036	0.03**

Only the two factors, marital status and income level are found to be significant. It can be clearly visualized through Table 3 that the value of chi square coefficient of the various demographic factor is insignificant except the Income Group and Marital Status members.

A further descriptive statics of income and marital status were calculated to understand the trend.

Table 4: A Cross tabulation of Monthly Income vs Herding Factors

Monthly Income	Herding	Total	
	Moderate	High	
Less than 20,000	5(62.5)	3(37.5)	8
20,000 - 50,000	41(85.41)	7(14.59)	48
50,000 - 1,00,000	25(78.13)	7(21.57)	32
More than 1,00,000	9(75)	3(25)	12
Total	80(80)	20(20)	100

Table 5 Marital Status * Herding Factors
Cross tabulation

Monthly Income	Herding Factors		Total
	Moderate	High	
Married	64(81)	15(19)	79
Unmarried	16(76.20)	5(23.80)	21
Total	80(80)	20(20)	100

INTERPRETATION

- a) Herding factors is identified highest among the married people with 79.20% and 75% respectively the reason can be attributed to fact that the formation of social groups in the society and the knowledge gained among them. Also the people tend to be a little cautious and risk averse at this stage.
- b) Herding factors is found to be highest among the people of income level (20000-50000) and (5000-20000) respectively. The probable reason for the same can be due to the fact that investors that falls in the above income group are from middle class family and are bound to get influenced by reference people or group.

CONCLUSIONS AND MANAGERIAL IMPLICATIONS

- Role of advisors: The herd behavior in investor signifies the role of financial advisors that they can play in influencing. The utmost important roles they can play that of making their clients understand the psychology of trading. The advisors can help individual investors as they can introduce them to the disasters lead by poor decisions. They can assist the client understand that impulses of the intuitive mind are quite natural but leads to misguided decisions, but they should teach the client that there exist a better path to follow which should be govern by more rational approach. Clients should be educated at every aspect to avoid the impulsive nature in investment decisions and follow rational behavior. The study highlighted the two component of advisor client relationship: the personal and the technical. Demonstrations or training of professional competence and personal empathy should be given to given to every advisor.
- Segmentation basis: Two broad basis of segmentation

of investors have been identified viz Monthly Income and Marital status. Policy makers can consider these segments while framing their business policies in accordance to that. Separate strategies can be framed for the different segments. As herd behavior tends to be different as per the Marital Status and Income level. The marketer should consider this fact while framing the marketing strategies.

REFERENCES

- Welch, Ivo, 2000, "Herding Among Security Analysts," Journal of Financial Economics, Vol. 58, No. 3 (December), pp. 369–96.
- Bikas, E., Jurevičienė, D., Dubinskas, P., & Novickytė, L. (2013). Behavioural finance: The emergence and development trends. Procedia-social and behavioral sciences, 82, 870-876.
- Peteros, R., & Maleyeff, J. (2013). Application of behavioural finance concepts to investment decision-making: suggestions for improving investment education courses. International Journal of Management, 30(1), 249.
- Garcia, M. J. R. (2013). Financial education and behavioral finance: new insights into the role of information in financial decisions. Journal of Economic Surveys, 27(2), 297-315.
- Preis, T., Moat, H. S., & Stanley, H. E. (2013).
 Quantifying trading behavior in financial markets using Google Trends.
- Bikas, E., Jurevičienė, D., Dubinskas, P., & Novickytė, L. (2013). Behavioural finance: The emergence and development trends. Procedia-social and behavioral sciences, 82, 870-876.
- McKinnon, J. (1988). Reliability and validity in field research: some strategies and tactics. Accounting, Auditing & Accountability Journal, 1(1), 34-54.
- Liu, Y., Wu, A. D., and Zumbo, B. D. (2010). The Impact of Outliers on Cronbach s Coefficient Alpha Estimate of Reliability: Ordinal/Rating Scale Item Responses. Educational and Psychological Measurement, 70 (1), 5–21.
- Fromlet, H. (2001). Behavioral Finance-Theory and Practical Application. Business Economics, Vol 36, Issue 3.
- Winchester, D.D., Huston, S.J., Finke, M.S. (2011).

- Investor Prudence and the Role of Financial Advice. Journal of Financial Service Professionals, July 2011.
- Waweru, N.M. and Ndungu, P. (Forthcoming) "Relationship between increase in dividend payments and future earnings of companies quoted in the Nairobi Stock Exchange ,
- Shelby, L. B. (2011). Beyond Cronbach s Alpha: Considering Confirmatory Factor Analysis and Segmentation. Human Dimensions of Wildlife, 16 (2), 142–148.
- Akehurst, L., Köhnken, G., Vrij, A., & Bull, R. (1996).
 Lay persons' and police officers' beliefs regarding deceptive behaviour. Applied Cognitive Psychology, 10(6), 461-471.
- Clement, M. B., & Tse, S. Y. (2005). Financial analyst characteristics and herding behavior in forecasting. The Journal of finance, 60(1), 307-341.
- Kuppuswamy, V., & Bayus, B. L. (2015). Crowdfunding creative ideas: The dynamics of project backers in Kickstarter.
- Trueman, B. (1994). Analyst forecasts and herding behavior. Review of financial studies, 7(1), 97-124.
- Liu, D., Brass, D., Lu, Y., & Chen, D. (2015). Friendships in online peer-to-peer lending: Pipes, prisms, and relational herding.
- Gleason, K. C., Mathur, I., & Peterson, M. A. (2004).
 Analysis of intraday herding behavior among the sector ETFs. Journal of Empirical Finance, 11(5), 681-694.
- Balcilar, M., & Demirer, R. (2015). Effect of global shocks and volatility on herd behavior in an emerging market: evidence from Borsa Istanbul. Emerging Markets Finance and Trade, 51(1), 140-159.
- Sun, H. (2013). A longitudinal study of herd behavior in the adoption and continued use of technology. Mis Quarterly, 37(4), 1013-1041.
- Raines, J.P., Leathers, C.G. (2011). Behavioral Finance and Post Keynesian-Institutional Theories of Financial Markets, Journal of Post Keynesian Economics.
- Fromlet, H. (2001). Behavioral Finance-Theory and

- Practical Application. Business Economics, Vol 36, Issue 3.
- Gounaris, K.M., Prout, M.F. (2009). Repairing Relationships and Trust: Behavioral Finance and the Economic Crisis. Journal of Financial Service Professionals.
- Keynes, J,M. (1936). The General Theory of Employment, Interest and Money, London: Macmillan.
- Hong, H., Kubik, J., Stein, J. C. (2005). Thy neighbor's portfolio: Word-of-mouth effects in the holdings and trades of money managers. Journal of Finance, Vol. 60, pp. 2801–24.
- Gounaris, K.M., Prout, M.F. (2009). Repairing Relationships and Trust: Behavioral Finance and the Economic Crisis. Journal of Financial Service Professionals.
- Thaler, R. (1993). Advances in Behavioral Finance. Journal of Political Economy, Vol. 98 No 4.
- Barber, B., Odean, T. (2001). Boys will be boys: gender, overconfidence and common stock investment, Quarterly Journal of Economics, Vol. 116.
- Ross, L. (1987). The Problem of Construal in Social Inference and Social Psychology, Hillsdale, NJ: Erlbaum
- March, J., Sharpira, Z. (1987). Managerial Perspective on Risk Taking. Management Science No. 33
- Ritter, R.J. (2003). Behavioral Finance: Pacific Basin Finance Journal, Vol. 2, No.14.
- De Bondt, W.F.M., Thaler, R.H. (1994). Financial Decision-Making in Markets and Firms: A Behavioral Perspective, National Bureau of Economic Research, Working Paper No. 4777.
- Odaen, R.A. (1998). Behavioral Finance and its Implications for Stock-Price Volatility, Financial Analyst Journal 54, No.2.Odean (1999) loc.ic.it
- Kahneman, D., Tversky, A. (1974). Judgment under Uncertainty: Heuristics and Biases. Science, vol. 185.
- Raines, J.P., Leathers, C.G. (2011). Behavioral Finance and Post Keynesian-Institutional Theories of Financial Markets, Journal of Post K

Volume: 5 | Issue: 1 | January to June 2017 | ISSN 2319-1740