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Investor Behavior towards Derivative Markets in Indian Context

Dr. Rishi Manrai
LMT School of Management, Thapar University Patiala- 147004

Abstract: *The behavior of retail investor's is changing towards derivative market in India for the last few years and with the introduction of behavioral finance the researcher would like to capture that. The concept of behavioral finance is booming in the capital market, there is hardly any place where its concepts aren't being applied. There is a need to grab more attention of the investor's towards derivative market and draw inferences from investor's behavior so that the derivative market can benefit and understand investor's preference better and unravel the factors that influence the risk tolerance level of the investors. So the crux of the study will give the researcher a quantitative model reflecting the factors affecting the investor behavior in derivative market with load factors. Through this study the researchers would like to study the various factors responsible for the investment behavior in derivative market. This will not only help the asset management companies to frame there investment policy but also help the macro policy makers to frame certain policy which will encourage investors to invest in derivative market.*

Key words: *Investor behavior, Derivative market, Investment*.

I. INTRODUCTION

1.1Behavioral finance – A background

Behavioral finance has emerged as a new discipline in the past decade, which tries to understand the interaction of psychology & finance. This helps us to have a better understanding of the investment decision making process of the investor and their impact on financial market. It is that part of finance which is related to the systematic financial market implications of psychological decision making. Thus the field of behavioral finance helps predicting irrational investors behavior and the decision making process. Many leading researchers Kahneman and Tversky (1979), Shefrin and Statman (1994), Shiller (1995), Shleifer (2000) have utilized many psychological theories for the efficient working of financial markets including prospect theory Behavioral finance has emerged to overcome the difficulties faced by the traditional paradigm.

It is a technique to understand stock market anomalies which explains how human behavior influence asset pricing and market movements. As stock market responds to human sentiments and cascading herd behavior because humans are emotional beings with different perceptions who under different circumstances respond differentially, given the same set of information.

Generally people have two goals security and return. Risk averse investors aims security while risk takers want to maximize their return. Each investor has his own needs and behavior based on the different shapes of utility functions which measures the investors risk aversion degree.

Behavioral finance is that part of finance which is related to the systematic financial market implications of psychological decision making. The field of "behavioral finance" helps predicting irrational investors behavior and the decision making process. This theory has been most successful in explaining investor behavior related to: overconfidence, fear of regret, anchoring & adjustment etc.

1.2 Conceptual framework of Derivatives

The term 'derivatives, refers to a broad class of financial instruments which mainly include options and futures. These instruments derive their value from the price and other related variables of the underlying asset. Their performance depends on how other instruments perform Derivative securities have been recently blamed as culprits for huge financial losses at firms like Gibson, P & G, Barring etc. they are sometimes viewed as bad because, they are complex instruments, highly leveraged and difficult to understand. The development of derivatives has occurred in response to a search for higher yields and lowers funding costs and demand for tools to manage risk

Derivatives are risk management tools that help an organization to effectively transfer risk. The Behavioral finance experts have proved it quite well that investment decision making is not a completely rational process. Individuals' investment decisions are guided by not only their intellectual aspects but also the emotions, desires, prejudices. Derivatives are new class of investment invention which offers sophisticated management of risk. Financial markets are characterized by a high degree of volatility. Derivative product are used to contain the risk arising out of the fluctuations in asset price, which partially or fully transfer price risk by locking in asset prices, derivative invention initially emerged as hedging devices against fluctuations in commodity prices. There are three broad categories of participants, hedger, speculator and arbitrageur. When it comes to money and investing , we are not always as sensibly as we think we are – that is why there is a whole field of study that explains our sometimes- strange behavior. Derivative Markets serves as risk reducing tool. It promotes economic efficiency by directing funds from those who do not have an immediate use for these funds to those who are in need of funds.It also channels money provided by savers and depository institutions to borrowers and investees through a variety of derivative instruments like future options, forward and swap.

Derivatives are new segment of secondary market operation in India so investors need to understand the complexity of this trade. Technological enablement and rapid growth of derivative market since the new economic policy of 1991 has given more importance to investors. Investor behavior also tend to move into savings to investment, More number of brokers also entered into the capital market due to the liberalized regulation in capital market. Brokers are providing number of services under single umbrella to the investors based on their need. So, this study aims to discover that how these services are perceived by the investors and how these services are utilized by the investors. The researcher will identify and evaluate the dynamics influencing investors' perception towards investment decision on derivatives market. The study would like to inspect the Investors objective and preferred type of instrument for investment. Not only this would the study also like to identify Investors opinion on derivatives market. Another objective of the study is to study the Factors influence trade in derivative instrument.

II. Review Of Literature

Various researchers in the past have tried to study the investor behaviors and their preference towards derivative markets in India. Bose and Suchismita, in their study examined derivative as a risk management tool. The researchers found that Derivatives products provide certain important economic benefits such as risk management or redistribution of risk away from risk-averse investors towards those more willing and able to bear risk. Derivatives also help price discovery, i.e. the process of determining the price level for any asset based on supply and demand. These functions of derivatives help in efficient capital allocation in the economy; at the same time their misuse also poses a threat to the stability of the financial sector and the overall economy
Kumar R. & Chandra A., critically examined arbitrage opportunities in derivative market. They concluded that individuals often invest in securities based on approximate rule of thumb, not strictly in tune with market conditions. Their emotions drive their trading behavior, which in turn drives asset (stock) prices. Investors fall prey to their own mistakes and sometimes other's mistakes, referred to as herd behavior. Markets are efficient, increasingly proving a theoretical concept as in practice they hardly move efficiently. The purely rational approach is being subsumed by a broader approach based upon the trading sentiments of investors. Mark fenton, Emma Soane, Nigel Nicolson and Paul Williame(2011) document a quantitative investigation to find difference between high and low performing traders and studied the role of intuition in the decision making process. The emotional regulation strategies adopted by experts reveals that high performing traders are qualitatively different from low performing traders as former are inclined to cope up with negative feelings and formulate effective strategies to regulate their emotions.

Natividad Blasco, Pilar Corredor, Sandra Ferreruela (2012) conducted a study to explore herding behavior to identify relationship between rational and emotional components and test whether past return indirectly drive hearding behavior. Bikhchandani model was used to measure hearding intensity in both buyer initiated and seller initiated market and the resulted that the hearding intensity depends upon past returns and sentiments and confirm the presence of both rational and emotional factors. William T.Lin, Shin chuan Tsai, Pei Yau Long(2013)examined the relationship between the hoarding of four investor groups namely individuals, foreign institutions, proprietary dealers , investment trust and the subsequent trading noise in the Taiwan Stock Exchange and suggested that institutional herding is rational and information based but individual herding is not. Trading noise is highest at the market opening and increasingly lowers in the middle of the day and increases at market closing and becomes reverse J shaped during crises period.Herding of foreign institutions reduces trading noise during both crises and non crises period while individual herding results in high trading noise and domestic institution trading noise increases during non crisis period.

Malcolm Baker, Jeffery Wargler, Y.Yuan (2011) presented the first paper to study the international time series of the cross section of stock returns. They examined the effect of local and global component of investor sentiment for six major stock markets into one global and six local market indices for Canada, France, Germany, Japan, the United Kingdom and the United States. A validation test is conducted of Siamese Twins and results reveal that relative sentiments are correlated with the relative prices. When sentiments are high, future return is low because it's difficult to arbitrage and value stocks.

Supriya (2014) reviewed derivative as a tool for managing risk which comes out of uncertainty and makes it difficult for businesses to estimate their future production cost and revenues. The NSE figures reveal that in equity derivative almost 90% of activity is due to stock futures and index futures, whereas trading in options is still limited to few stocks, partly because they are settled in cash and not the underlying stock. Further she found NSE has programmes to inform and educate brokers, dealers, traders and market personnel.

III. OBJECTIVES OF THE STUDY

3.1 Scope and Objectives of the Study

In Indian financial market there are number of financial instrument available for the investors. Some are risky and others are risk free assets. Some of them are liquid and marketable while others are illiquid. The investor broadly has three objectives i.e. maximization of return, minimization of risk or hedge against inflation. The investor has to choose the right avenue among these, depending upon their risk taking appetite. The study aims at understanding investor's behavior when it comes to make investment in derivative market. The focus of the study is on the investor behavior towards different investment options considering Indian derivative market and is restricted to retail investors. Attempt will be made to classify investors of north India on the basis of their age, gender, income, occupation, educational status, geographic area etc. In order to understand the investor behavior attitude and perception we shall be using primary data (questionnaire) and detailed information pertaining to the development of the derivative market can be collected from secondary data(research articles, books, journals, published material available at nseindia.com, bseindia.com etc).

On the basis of the various studies discussed in the literature review it can be observed that most of the studies conducted on the similar topic are survey based, catering to the investor behavior of the investors of a particular state or area. And specifically the researcher found that most of the studies in the area of investor behavior in case of derivative markets are qualitative in nature and are exploratory studies. These studies thus leave a lot of scope for researcher to investigate various factors considered by the investors while investing into derivative market. Additionally these factors can be empirically checked as how sensitive they are towards the dependent variable i.e. investment using regression analysis. The objectives of the study as per the gap analysis developed through literature review are:

- To study various investment options preferred by retail investors in North India.
- To examine the investor attitude and perception towards derivative market in North India.
- To gauge the significance of derivative market as an option by the retail investor in India.

Based on the literature review and the objectives of the study the researcher proposes the following hypothesis for the research:

3.2 Hypothesis of the study

H_0 1: Investor behavior is significantly affected by market/economic conditions.
$H_0$2: Investor's decision making is significantly affected by herding behavior.
$H_0$3: Economic factors (Disposable Income) is a significant factor affecting investor behavior
$H_0$4: Financial education is an important factor in making financial decisions.
$H_0$5: Investors age significantly affect investor behavior.

IV. PROPOSED METHODOLOGY

This section of the proposal describes the research design for the study i.e. the various sources of data, sample size, methodology as well as research software.

The data will be collected from a structured questionnaire as an instrument. This questionnaire would be filled by one to one investor survey as well as the questionnaires may be put on doc.google.com for online survey if required. The study will also be done through collection of data from other authentic resources like journals, magazines, newspapers and websites.

The respondents for this study will be investment professionals, brokers and retail investors. This sample would individuals who have the purchasing power and also the resources to access and use the Internet. This type of sampling is called "choice based sampling".

The data will be collected from 1000 respondents from north India with the help of active stock brokers. Two hundred respondents will be filling the questionnaire each from five states of north India i.e. Punjab, Haryana, Delhi NCR, Himachal and Utter Pradesh. The researcher would be ensuring that the respondents fill the questionnaire completely without any error. In case there is any error also the sample size is enough to represent the investor behavior of the country significantly.

The data will be analyzed using SPSS version 17 statistical software package. This is the most suitable software to perform factor analysis. Other than that the multiple linear regression can be implemented.

Factor analysis will be used to find out the important factors influencing the behavior of investors. Factor analysis helps to study the importance of attributes for investment opportunities selection. Obtaining a factor solution through factor analysis (principal components analysis) is an iterative process that usually requires repeating the SPSS factor analysis procedure a number of times to reach a satisfactory solution.

The process will begin by identifying a group of variables whose variance we believe can be represented more parsimoniously by a smaller set of factors, or components. The end result of the factor analysis will tell us which variables can be represented by which components, and which variables should be retained as individual variables because the factor solution does not adequately represent their information. Based on information from the dataset, we assume that there is no problematic pattern of missing data, that outliers do not impact the solution and that the analysis will be supported by a split-sample validation and a test of reliability using a level of significance of 0.05. Our investment decision-making factor model will be as follows:

$Y= b0+\Sigma bixi$ (i=1~n) - - - (A)

Where; x1~xn= Factors influencing the investor behavior, given in the questionnaire.

And b0~bn: are constants.

V. CONCLUSION

The behavior of retail investor's is changing towards derivative market in India for the last few years and with the introduction of behavioral finance the researcher would like to capture that. The concept of behavioral finance is booming in the capital market, there is hardly any place where its concepts aren't being applied. Risk averse investors always tries to play safe by investing in mutual funds, insurance, government bonds and securities whereas risk takers want to earn more returns and in lieu of that they prefer to invest in derivative market. As derivative market offers more return, with the hedging of interest rate risk and exchange rate risk with maximum profits and minimum loss. It has been noticed that there has been awareness about derivatives trading amongst the retail investors in India since last few years.

This is due to the increase in number of trading agents or companies in the market which lets retail investor's trade on derivatives on various exchanges like MCX and NCDEX. These commission agents make their income from trading done by the investors. As their business is dependent on such retail investors such commission agents try to attract as many as number of investors possible. Additionally, people already doing their trading businesses on physical commodities started trading on derivatives to hedge their positions against their physical stock. But studies reveal though developing countries have realized the importance of derivative market, still in depth studies in this field are few, which leads to lack of knowledge on part of retail investors because of its complexities and relatively high initial investment. There is a need to grab more attention of the investor's towards derivative market and draw inferences from investor's behavior so that the derivative market can benefit and understand investor's preference better and unravel the factors that influence the risk tolerance level of the investors. So the crux of the study will give the researcher a quantitative model reflecting the factors affecting the investor behavior in derivative market with load factors.

The researchers are conducting the research to study the various factors responsible for the investment behavior in derivative market. The literature review reveals that though developing countries have realized the importance of derivative market, still in depth studies in this field are few, which leads to lack of knowledge on part of retail investors because of its complexities and relatively high initial investment. The study gives adequate attention to the investor towards derivative market and draw inferences from investor's behavior so that the derivative market can benefit and understand investor's preference better and unravel the factors that influence the risk tolerance level of the investors. So the study will give the researcher a quantitative model reflecting the factors affecting the investor behavior in derivative market with load factors.

REFERENCES

[1] Anna, A., Andreas, G., George, S., & Dev P., “Economic Factors and Individual Investor Behavior: The Case of the Greek Stock Exchange,” Journal of Applied Business Research, 20(4), 93 97.
[2] Fenton, M., O’creevy, Soane, E., Nicholson, N., & Willman, P., “Thinking, feeling and deciding: The influence of emotions on the decision making and performance of traders,” Journal of Organizational Behavior, 32, 2011, 1044–1061.
[3] William T. Lin, Shih-Chua, & Pei-Yau Lung,” Investors’ Herd Behavior: Rational or Irrational,” Asia-Pacific Journal of Financial Studies 42, 2013, 755–776.
[4] Brian, M., Dowling, M., “The Role of Feelings in Investor Decision Making,” Journal of economic surveys, 19(2), 2005, 212- 234.
[5] Blasco, N., Corredor, P., Ferreruela, S., “Market sentiment: a key factor of investors’ imitative behavior,” Accounting and Finance, 52, 663–689 (2012).
[6] Marıa Jose, Roa Garcıa, “Financial Education And Behavioral finance: New Insights Into The Role Of Information In Financial Decisions, “Journal of Economic Surveys , 27(2), 2013, 297–315.
[7] Fehle, F., Tsyplakov, S., & Zdorovtsov, V., “Can companies Influence Investor Behaviour through Advertising? Super Bowl Commercials and Stock Returns, (2003).
[8] Baker, M., Wurgler, J., & YUyan, Y., “Global, local, and Contagious investor sentiment”, Journal of financial Economics, (2011).
[9] Baker, M., Wurgler, J., “Investor Sentiment and the Cross Section of Stock Return, “The Journal of Finance, LXI, No.4, 2006, 1645-1680.
[10] Mittal, M., & Vyas, R.K., “Personality Type and Investment Choice: An Empirical Study, “IUP Journal of Behavioral Finance, 5(3), 2008, 7- 22.
[11] Leoni, P., “Psychological Aspects of Market Crashes,” ICFAI Journal of Behavioral Finance, 6(1), 44- 55.
[12] Nagpal, S., & Bodla, B.S., “Impact of Investor’s Lifestyle on Their Investment Pattern: An Empirical Study”, IUP Journal of Behavioral Finance, 6(2), 29- 51.
[13] Siwar, E., “Survey of the Phenomenon of Overreaction and Under reaction on French Stock Market”, IUP Journal, 8(2),2011, 24- 45.
[14] Cavalheiro, E.A., Vieira, K.M., & Ceretta, P.S., “Misattribution Bias: The Role of Emotion in Risk Tolerance,” IUP Journal, 8(3), 2011, 26-44.
[15] Schinckus, c., “Archeology of Behavioral Finance, “IUP Journal of Behavioral Finance, 8(3), 2011, 8- 22.
[16] Mittal, M., & Vyas, R.K., “Demographics and Investment Choice among Indian Investors, “The ICFAI Journal of Behavioral Finance, 4(4), 2007, 51-62.
[17] Kumarai, S., “An Insight into Derivative Market: Indian Perspective,” International Journal of Research in Finance & Marketing, 1(6), 2011, 25- 37.
[18] Kukreja, G., “Investors Perception for Stock Market: Evidences from National Capital Region of India”, Interdisciplinary Journal of Contemporary Research in Business, 4(8), 2012, 712- 726.
[19] Ahuja, N., “Commodity Derivatives Market in India: Development, Regulation and Future Prospects, “International Research Journal of Finance and Economics, 2, 2006, 76-84.