International Journal of Academic Research and Development
ISSN: 2455-4197
Impact Factor: RJIF 5.22
www.academicsjournal.com
Volume 3; Issue 1; January 2018; Page No. 140-143

The influence of behavioural dimensions of investors in equity derivative market

[1] N Sivasankar, [2] Dr. AA Ananth
[1] PhD Research Scholar, Manonmaniam Sundaranar University, Thirunelveli, Tamil Nadu, India
[2] Associate Professor, Department of Business Administration, Annamalai University, Tamil Nadu, India

Abstract
The study aims to measure the behavioural dimensions of investors towards Indian derivatives market with reference to investors in Coimbatore district. The investors who access the equity derivative market in Coimbatore district is consider as respondents for this survey. 1004 equity derivative investors in the Coimbatore district is participated in this study. Descriptive research design is used in the study. The primary data is collected by using well – structured questionnaire. The convenient sampling techniques are used to select the respondents. The data were collected from the retail equity Derivatives investors from the six taluk head quarters of Coimbatore district. Cronbach's alpha is used to find out the reliability of the questionnaire. The results of Cronbach's Alpha Coefficient for five Scale Items are from 'good' to 'excellent'. The researcher found that the various methods of investment in equity derivative market, majority of the equity derivative investors prefer trading only when there is a good price in the market.

Keywords: derivatives market, investment behaviour, investment decisions, ethical behaviour among the derivative investors

1. Introduction
A derivative security is a financial contract whose value is derived from the value of something else, such as a stock price, a commodity price, an exchange rate, an interest rate, or even an index of prices. The researcher describe some simple types of derivatives: forwards, futures, options and swaps. Derivatives may be traded for a variety of reasons. A derivative enables a trader to hedge some pre-existing risk by taking positions in derivatives markets that offset potential losses in the underlying or spot market. In India, most derivatives users describe themselves as hedgers and Indian laws generally require that derivatives be used for hedging purposes only. Another motive for derivatives trading is speculation (i.e. taking positions to profit from anticipated price movements). In practice, it may be difficult to distinguish whether a particular trade was for hedging or speculation, and active markets require the participation of both hedgers and speculators. A third type of trader, called arbitrageurs, profit from discrepancies in the relationship of spot and derivatives prices, and thereby help to keep markets efficient. Jogani and Fernandez describe India's long history in arbitrage trading, with line operators and traders arbitraging prices between exchanges located in different cities, and between two exchanges in the same city. Their study of Indian equity derivatives markets in 2002 indicates that markets were inefficient at that time. They argue that lack of knowledge; market frictions and regulatory impediments have led to low levels of capital employed in arbitrage trading in India. However, more recent evidence suggests that the efficiency of Indian equity derivatives markets may have improved.

Review of Literature
Eresi & Vasantavalli (2003) [4] have considered the issue of impression of individual investor in connection to the danger divulgences made in offer reports by IT organizations. An investigation of danger divulgence hones, example and impression of investors have been made, covering offer reports of 33 bangalore based IT organizations which opened up to the world somewhere around 1993 and 2000. It is presumed that highlights of nature of crevice between the fancied and real hazard divulgences made. Organizations must guarantee this crevice is limited around expanding the quality and level of danger revelations in the offer archive.
Meir statman (2003) [11] is of the supposition that the investors in the mid twentieth century and today are enticed by the draw of huge cash from the most recent innovation stocks yesterday's speculators could scarcely envision today's web, however they trusted as eagerly to make their fortunes from mines, automobile sector, and the remote broadcast. Yet, investment notices then were like notices today, and lessons that ought to have been adapted then should be rehashed today.
Havinder kaur (2004) [8] communicated that the suggestions for investors displayed were likewise essential for the stock exchange managers and policy makers. The reconnaissance administration around the monetary allowance ought to be stricter to keep over the top instability under check. There is no motivation to be worried over the overflow for the US markets as the proof recommends powerless and fairly conflicting relationship between the two markets.
Raj Dhankar, madhumita Chakraborty (2005) [13] Testing of stock value behaviour in indian market, concentrates on two diverse sub tests with a specific end goal to know the stock price behaviour in Indian Market. One sample of day by day closing price of BSE constructed by the Stock exchange in Mumbai for the time of January 1991 to December 2001. What's more, another example contains day by day balanced closing prices of 30 hidden organizations incorporated into

BSE Sensex. They reasoned that indian market can't be chosen as flawlessly arbitrary or completely non – irregular.

Patric Anderrson (2005) [12] affirms that money related specialists experience issues in precisely foreseeing the future course of the share trading system. Their forecasts of procuring per share frequently fall above or underneath the real result experienced examiners have a tendency to be marginally close to the right figure than unpractised ones. Stock suggestions issued by financial experts from time to time lead to significant yields and subsidize directors appear to be notable tenaciously achieve gives back that beat suitable benchmarks.

Golaka, Nath, Manoj dalvi (2005) [5] measured daily volatility of utilizing intra – day high recurrence returns. They figured different sorts of volatility measures and considered their relative system utilizing straightforward factual strategies. They found that the acknowledged instability measures utilizing high recurrence information perform superior to the standard GARCH Models.

Kaustia (2008) [9] in their investigations on tying down impacts in the long haul future stock returns evaluations of investment experts and found that ability in fact fundamentally lessened behaviour predispositions. A test of great tying down impact connected to share market return gauges uncovered that the impact got with understudies was a few times higher than with experts. Their outcomes proposed that money related business sector expert may not hold enduring return desires. They additionally found that the experts were not cognizant of the effect of verifiable profits for their desires.

Mark Broadie and Ashish Jain (2008) [10], This article grows full pricing and risk administration models for these instruments in the connection of a Heston square root stochastic volatility model, including expressions for the greater part of the standard Greek letters and two or three new ones for the parameters of the volatility process. Moreover, the creators give a strategy to setting up ideal fences of difference and instability contracts utilizing a limited arrangement of choices as an operational estimation to the full arrangement requiring a continuum of alternative.

Significance of the study

This study will contribute to the general body of knowledge in the field of finance and act as a reference material for future scholars and researchers who would like to advance their knowledge in behavioral finance and use the study to formulate their research problems. It will help them to formulate appropriate strategies that will help to minimize the negative impact of such influences. The findings of the study are expected to assist investors and investment managers in understanding the contribution of psychological and emotional factors towards their investment decisions as well as forming a basis for self-evaluation by individuals in light of their previous decisions to gauge the extent of their biasness and make necessary adjustment.

Statement of the problem

The overall market of interest on government securities, bank deposits and other fixed deposit has been decreasing year after steadily due to various factors which affect the interest of the investors and the rate of interest of the investors. But on the other hand the investor's interest is gradually shifted towards mutual funds, shares and other company securities. When compare to bank deposits the return from mutual funds is high. Likewise, when compare to mutual funds the return from derivative (equity) market is very high. But of course risk is also high in these securities. Hence, it is very important to know to what extent the people were aware of derivative market and their perception towards its products. Investor's perception is a two-way street of how they view the derivative segment and translate the information they receive. By keeping these issues in mind the present study "The Influence of Behavioural Dimensions of Investors in Equity Derivative Market" is undertaken.

Objectives

- To study the behavioural influences on investment pattern among the derivative investors.
- To evaluate the ability of investors in estimating the future growth potential of the derivatives.

Research Methodology

Research Design

Research design stands for advance planning of the methods to be adopted for collecting the relevant data and the techniques to be used in analysis, keeping in view the objectives of the research and availability of time. Descriptive research includes surveys and fact-finding enquiries of different kinds. The major purpose of this research is description of state of affairs as it exists at present.

In this survey the design used is descriptive in nature. The information is collected from the individuals and analyzed with the help of different statistical tools, for describing the relationship between various types of variables, pertaining to different investment options. Moreover Chi-Square Analysis, Henry Garrett Ranking Analysis, ANOVA, Confirmatory Factor Analysis and Structural Equation Modeling (SEM) has been done for processing the data and information is derived to meet the objectives of the study.

Sample Size

The researcher adopt convenience sampling technique to select the respondents for the survey among the target population. Out of 1100 respondents selected, only 1047 respondents responded to the researchers request to fill in the questionnaire. Though there were 1047 respondents initially, the final sample stood as 1004 as 43 questions dropped due to lack of sufficient information.

Data Collection

Primary Data

Primary data was collected by questionnaire method. Survey is conducted at various stock broking houses and at the residence of investors at their convenience. The data collected and recorded by the researcher in the way of questionnaire method. The schedules thus filled up are thoroughly checked to ensure accuracy, consistency and completeness, the data which was collected from the 1004 equity derivative investors are residing at Coimbatore district. The sample size is fixed based on the total population of selected taluks given list of

equity investors at stock broking houses.

Secondary Data

The secondary data was gathered from the records published by RBI, SEBI, NSE, and BSE. The latest information was gathered from well equipped libraries in Coimbatore city and further secondary data were collected from various leading journals, magazines and websites.

Data Analysis

Participating Factors

The sample respondents are classified on the basis of their participating factors. They are stock index futures, stock index options, futures on individual stock, options on individual stock as presented in table No. 1

Table 1: Participating Factors

S. No.	Participating factors	No. of Respondents	Percentage
1	Stock Index Futures	240	23.9
2	Stock Index Options	427	42.7
3	Futures on Individual Stock	173	17.3
4	Options on Individual Stock	164	16.4
	Total	1004	100

Source: Primary Data

Table No. 1 reveals that 42.7 percent of the respondents are participating in stock index options, 23.9 percent of the derivative investors are involved in stock index futures, 17.3 percent of the derivative investors are involved in futures on individual stock and 16.4 percent of the derivative investors are involve in options on individual stock.

Therefore, the maximum of 42.7 percent of the derivative investors are involved in stock index options.

Risk Factors in Derivatives Market

The Henry Garrett ranking method is taken for the study to examine the risk factors in derivatives market and the particulars of Garrett points and mean are given under.

Table 2: Risk Factors in Derivatives Market–Henry Garrett Score and Rank

S. No	Factors	Total Score	Average	Rank
1	Liquidity Risk	53201	52.99	I
2	Asset Volatility	45849	45.67	V
3	Hard to determine the best opportunities	51140	50.94	II
4	Risk of making a poor investment	48256	48.06	IV
5	Risk of poor professional advice	50546	50.34	III

Source: Compiled from Primary Data

Table No. 2 reveals that the 1st ranker of 'Liquidity risk' has secured the score of 52.99 Garrett points. The 2nd ranker of 'Hard to determine the best opportunities' has secured the score of 50.94 Garrett points. The 3rd ranker of 'Risk of poor professional advice' has secured the score of 50.34 Garrett points. The 4th ranker of 'Risk of making a poor investment' has secured the score of 48.06 Garrett points. The 5th ranker of 'Asset volatility' has secured the score of 45.67 Garrett points. Hence, it is determined that 'Liquidity risk' was ranked as a first risk factor in derivative market whose average is 52.99 Garrett points.

Chi-Sqaure Analysis

This section has been devoted to analyze the level of ability in estimating the future growth potential of the derivatives for which chi-square test has been employed.

Table 3: Chi-Square Analysis

Statement No	Factors	Calculated Value	Table Value	S/NS
1	I usually suggest my friends and pear group to invest in derivatives.	2.084	9.49	NS
2	Equity derivatives market in India has registered an "explosive growth" in the past decade.	8.691	9.49	NS
3	Trading in derivatives gained popularity soon after its introduction.	14.604	9.49	S
4	Derivatives provide an opportunity to transfer risk.	7.260	9.49	NS
5	The derivatives turnover on the NSE has surpassed the equity market turnover.	8.226	9.49	NS
6	Derivatives market is playing a major role in shaping price discovery.	7.568	9.49	NS
7	Increased volatility in financial asset prices.	25.774	9.49	S
8	Wider choices of risk management strategies to economic agents and innovations in financial re-engineering.	10.487	9.49	S
9	Derivatives market has been extremely encouraging and successful.	12.070	9.49	S
10	Choices at risk management strategies have been driving the growth of financial derivatives worldwide.	9.503	9.49	S
11	Experimenting with new ideas in investment.	20.204	9.49	S
12	There is high emphasis on individual accountability for performance and contribution.	4.038	9.49	NS
13	Individual responsibility for the risk they are expected to accomplish.	5.492	9.49	NS
14	Freedom to take investment related decision.	14.687	9.49	S
15	Really interesting and enjoyable in Derivatives investment.	6.056	9.49	NS
16	Consulted sufficiently (experts) before taking a decision.	1.029	9.49	NS
17	Interpersonal relationship here is mainly governed by the stock exchange and SEBI had frequently exchange of information for keeping track of things.	3.467	7.82	NS
18	I am not afraid to express my views to solve investment risk related problems.	14.536	9.49	S

Source: Compiled from Primary data

The above table indicates that the calculated value of chi-square is higher than the table value of Statement No. 3, 7, 8, 9, 10, 11, 14 and 18. Hence the null hypothesis is rejected. And the calculated value of chi-square is lower than the table

value of Statement No. 1, 2, 4, 5, 6, 12, 13, 15, 16 and 17. Therefore, the null hypothesis is accepted.

Thus, there is a remarkable relevance between the Statement No. 3, 7, 8, 9, 10, 11, 14 and 18 and the future growth potential of the derivative market with reference to investors in Coimbatore District.

Findings

- The majority of 42.7 percentage of the respondents are participating in stock index options.
- The 'Liquidity risk' was ranked as a first risk factor in derivative market whose average is 52.99 Garrett points.
- It is disclosed that there is a intimate remarkable relationship among the 'Trading in derivatives gained popularity soon after its introduction' get the calculated value of 14.604, 'Increased volatility in financial asset prices' get the calculated value of 25.774, 'Wider choices of risk management strategies to economic agents and innovations in financial re- engineering' get the calculated value of 10.487, 'Derivatives market has been extremely encouraging and successful' get the calculated value of 12.070, 'Choices at risk management strategies have been driving the growth of financial derivatives worldwide' get the calculated value of 9.503, 'Experimenting with new ideas in investment' get the calculated value of 20.204, 'Freedom to take investment related decision' get the calculated value of 14.687, 'I am not afraid to express my views to solve investment risk related problems' get the calculated value of 14.536 is higher than the table value of 7.49, Hence the future growth potential of the derivative market is higher in Coimbatore District.

Suggestion

- Strategies like hedging, index futures must emerge in derivative market to reduce the market risk, provisions must be made to return at least the principal amount of investors.
- This research leads to suggest the equity derivative investors to avoid friends and pear group opinions for their own investments because it is differ from time to time.

Conclusion

Majority of equity derivative investors in this study, have an experience of one to two years in equity derivative market investment. They have a relatively short period of active investment in derivatives. Among the various methods of investment in equity derivative market, majority of the equity derivative investors prefer trading only when there is a good price in the market. Equity derivative investors in general are exposed to unsystematic risk arising from inadequate diversification in derivative market. The majority of equity derivative investors are preferring medium-term position of trade.

It is found from the study that more number of equity investors fall in the age group of 31 to 40 years. Majority of the equity derivative investors invest small portion (10% to 20 %) of their income in equity derivatives, and most of them are investing in equity derivatives with the objective of very good returns in their investments.

References

1. Andrew ferraris hans buehler ana bermudez marcus overhaus, equity hybrid derivatives, john wiley & sons inc, 58-264.
2. Andrew m. Chisholm, derivatives demystified a step-by-step guide to forwards, futures, swaps and options, 2nd revised edition edition,john wiley & sons,1-286.
3. Crawford sen, derivatives for decision makers, john wiley & sons, 218-235.
4. Eresi, Vasantavalli. Perceptions of Individual Investors Vis-a-vis Risk Disclosure in IT Companies IPOs - A Study, Indian Journal of Accounting. 2003, 33:10-16.
5. Golaka, Nath, Manoj dalvi. Day of the Week Effect and Market Efficiency Evidence from Indian Equity Market using High Frequency Data of NSE. The ICFAI Journal of Applied Finance. 2005; 11(2):5-25.
6. Gordon & Natarajan, Financial Markets and Services Tata McGraw. Hill Publishing Co Ltd, New Delhi.
7. Gupta SP. statistical Methods Sultan Chand & Sons, Newdelhi.
8. Havinder kaur Time Varying Volatility in the Indian Stock Market, vikalpa. 2004; 29(4):25-42.
9. Kaustia Should good stocks have high prices or high returns? Evidence of financial advisors' labile expectations, 2008.
10. Mark Broadie, Ashish Jain Pricing and Hedging Volatility Derivatives. The Journal of Derivatives Spring. 2008; 15(3):7-24.
11. Meir Statman. A Century of Investors. Financial Analyst Journal. 2003; 59(3):52-68.
12. Patric Anderrson the Common Stock Investment Performance of Individual Investors, The Journal of Finance. 2006; 55(2):773-806.
13. Raj Dhankar, madhumita Chakraborty. Testing of Stock Price Behavior in Indian Markets: An Application of Variance Ratio Test and ARIMA Modeling, The icfai journal of applied finance, February, 2005.