

Perception of Investors towards Derivative Market with Special Reference to Indore District

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Integration in the world's commodity and financial market because of globalization and liberalization of the countries across the world, various types of risks for market players have increased viz. Market Risks, Interest Rate Risk, Foreign Exchange Risk, Inflation Risk etc. successful management of such type of risks have become major issue for market players and business houses. This has increased the scope of Financial Engineering-the application of financial derivatives to manage risk.

INTRODUCTION

Integration in the world's commodity and financial market because of globalization and liberalization of the countries across the world. Various types of risks for market players have increased viz. Market Risks, Interest Rate Risk, Foreign Exchange Risk, Inflation Risk etc. Due to successful management of such type of risks have become major issue for market players and business houses. This has increased the scope of Financial Engineering-the application of financial derivatives to manage risk.

Today, in India the most of the index and equity derivative business is concentrated in the NSE, which accounts for almost 100% of the equity derivative business. The growth of the equity derivative business in India has been an unprecedented one.

With a start of average daily volume of Rs.10 crores has developed into a business opportunity of around Rs.30,000 crores per day. This volume of trade is more than 100 times gross domestic product of India.

If we look onto the figures of market turnover in the Stock market, almost 80% of turnover in Nifty is dedicated to derivative trading and remaining 20% is for cash market. This alarming increase in the derivative trading have alarmed the researchers to find out the reasons for such increase and to the way the market players are using derivatives in their trade.

LITERATURE REVIEW

The researchers all over the world have done research on derivative trading and were able to find out various facts about derivative and its trading. In this literature review efforts have been done to bring into the picture the research done about various issues throughout the world by the researchers. The literature review on the various issues is as follows:

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Derivative as Risk Management Tool

- **Bose, Suchismita** conducted research on “**The Indian Derivatives Market Revisited**” in the year 2006. They 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.

Liquidity

- **Routledge, Bryan and Zin, Stanley E** of Carnegie Mellon University conducted research on “**Model Uncertainty and Liquidity**” in year 2001. Extreme market outcomes are often followed by a lack of liquidity and a lack of trade. This market collapse seems particularly acute for markets where traders rely heavily on a specific empirical model such as in derivative markets. In this paper we capture model-uncertainty explicitly using an Epstein-Wang (1994) uncertainty-averse utility function with an ambiguous underlying asset-returns distribution. To explore the connection of uncertainty with liquidity, we specify a simple market where a monopolist financial intermediary makes a market for a proprietary derivative security. The market-maker chooses bid and ask prices for the derivative, then, conditional on trade in this market, chooses an optimal portfolio and consumption. We explore how uncertainty can increase the bid-ask spread and, hence, reduces liquidity. In addition, "hedge portfolios" for the market-maker, an important component to understanding spreads, can look very different from those implied by a model without uncertainty. Our infinite-horizon example produces short, dramatic decreases in liquidity even though the underlying environment is stationary.

Spot Future Relationship

- **Dheeraj Mishra, R Kannan and Sangeeta D Mishra** (2006), tried to find out the spot - future parity relationship in case of index futures in the Indian stock market. NSE Nifty has been chosen as underlying asset. It also aims at exploring different factors responsible for the violation of spot-future parity relationship. It was found that there exists a theoretical relationship between spot, futures and other relevant variables as dividend yield, maturity etc. the paper also aimed at finding out whether there exists an arbitrage profit due to violation of spot future. It was found that arbitrage profits are higher for far month future contracts than for near month future contracts. Arbitrage profits are more for undervalued future markets than overvalued future markets.

Volatility in the Market due to Derivative Trading

- **Sen Shankar Som and Ghosh Santanu Kumar** (2006) studied the relationship between stock market liquidity and volatility and risk. The paper also deals with time series data by applying “Cochrane Orthutt two step procedures”. An effort has been made to establish a relation between liquidity and volatility in this paper. It has been found that here is a statistically significant negative relationship between risk and stock market liquidity. Finally it is concluded that there is no significant relationship between liquidity and trading activity in terms of turnover.

Trading Volume of Stocks and Open Interest

- **Shenbagraman (2004)** reviewed the role of some non-price variables such as open interests, trading volume and other factors, in the stock option market for determining the price of underlying shares in cash market. The study covered stock option contracts for four months from Nov. 2002 to Feb. 2003 consisting 77 trading days. The study concluded that net open interest of stock option is one of the significant variables in determining future spot price of underlying share. The results clearly indicated that open interest based predictors are statistically more significant than volume based predictors in Indian context. The following exhibit gives the snapshot view of the results of studies on volatility effect of Stock Index Futures.

FII Trading

- All the existing studies found that the **Equity return has a significant and positive impact on the FII (Agarwal, 1997; Chakrabarti, 2001; and Trivedi & Nair, 2003)**. But given the huge volume of investments, foreign investors could play a role of market makers and book their profits i.e., they can buy financial assets when the prices are declining thereby jacking-up the asset prices and sell when the asset prices are increasing (Gordon & Gupta, 2003). Hence, there is a possibility of bi-directional relationship between FII and the equity returns.

International Market and its Impact on Indian Derivative Market

- Masih AM, Masih R, Quarterly Review of Economics and Finance, 2007, Volume: 37, Page: 859-885, "**Global Stock Futures: A Diagnostic Analysis of a Selected Emerging and Developed Markets with Special Reference to India**", Tools used: correlation coefficients , granger's causality test, augmented Dicky Fuller test (ADF), Elliott, Rothenberg and Stock point optimal test. The Authors, through this paper, have tried to find out what kind of relationship exists between emerging and developed futures markets of selected countries.

Arbitrage Opportunities in Derivative Market

- Kumar Dr. R. & Chandra Abhijeet, "Individual Investor's Sentiments and Asset Pricing" *June 2000*. 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. The present paper documents the role of emotional biases towards investment (or disinvestment) decisions of individuals, which in turn force stock prices to move.

Broker's awareness/ investors awareness

- Srivastava Sandeep, Yadav Surendra S, Jain P K, "Derivative Trading in Indian Stock Market: Brokers Perception", September, 2008, Volume 20, Number 3 Review
The authors conducted a survey of brokers in the recently introduced derivatives markets in India to examine the brokers' assessment of market activity and their perception of the benefits and costs of derivative trading. The need for such a study was felt as previous studies relating to the impact of derivative securities on the Indian stock market do not cover the perception of market participants who form an integral part of the functioning of derivative markets. The issues covered in the survey included: a) perception of brokers about the attractiveness of different derivative securities for clients; b) profile of clients dealing in derivative securities; c) popularity of a particular derivative security out of the total set; d) different purposes for which the clients are using these securities in order of preference; e) issues concerning derivative trading; f) reasons for non usage of derivatives by some investors and g) pricing, liquidity and informational efficiency of the derivative market. Derivative securities have penetrated the Indian stock market and it emerged that investors are using these securities for different purposes, namely, risk management, profit enhancement, speculation and arbitrage. High net worth individuals and proprietary traders account for a large proportion of broker turnover. Interestingly, some retail participation was also witnessed despite the fact that these securities are considered largely beyond the reach of retail investors (because of complexity and relatively high initial investment). Further, there is a need to popularize option instruments because they may prove to be a useful medium for enhancing retail participation in the derivative market.

Transactions

- Naresh Gopal, University of Madras, "Views of the Market Participants on Trading, Regulations in the Derivatives Market", Indian Institute of Capital Markets 9th Capital Markets Conference Paper, January 25, 2006, The dynamic growth of the Derivatives market, particularly Futures & Options and the perceived risks to the financial sector, continue to stimulate debate on the proper regulation of these instruments. Even though this market was initially fuelled by various expert teams survey, regulatory framework, recommendations by laws and rules there is still a debate on the existing regulations such as why is regulation needed? When and where regulation needed? What are reasonable and attainable goals of these regulations? Therefore this article critically examines the views of market participants on the existing regulatory issues in trading Derivative securities in Indian capital market conditions.

Future pricing

Refet S. Gurkaynak , Bilkent University, Justin Wolfers University of Pennsylvania, Macroeconomic Derivatives: "An Initial Analysis of Market-Based Macro Forecasts, Uncertainty and Risk", January 2006, Federal Reserve Bank of San Francisco Working Paper No. 2005-26, In September 2002, a new market in Economic Derivatives was launched allowing traders to take positions on future values of several macroeconomic data releases. We provide an initial analysis of the prices of these options. We find that market-based measures of expectations are similar to survey-based forecasts although the market-based measures somewhat more accurately predict financial market responses to surprises in data.

These markets also provide implied probabilities of the full range of specific outcomes, allowing us to measure uncertainty, assess its driving forces, and compare this measure of uncertainty

with the dispersion of point-estimates among individual forecasters (a measure of disagreement). Few of the behavioral anomalies present in surveys of professional forecasts survive in equilibrium, and that these markets are remarkably well calibrated. Finally we assess the role of risk, finding little evidence that risk-aversion drives a wedge between market prices and probabilities in this market.

OBJECTIVES OF THE STUDY

To analyze the Perception of investors towards derivative market with special reference to Indore district.

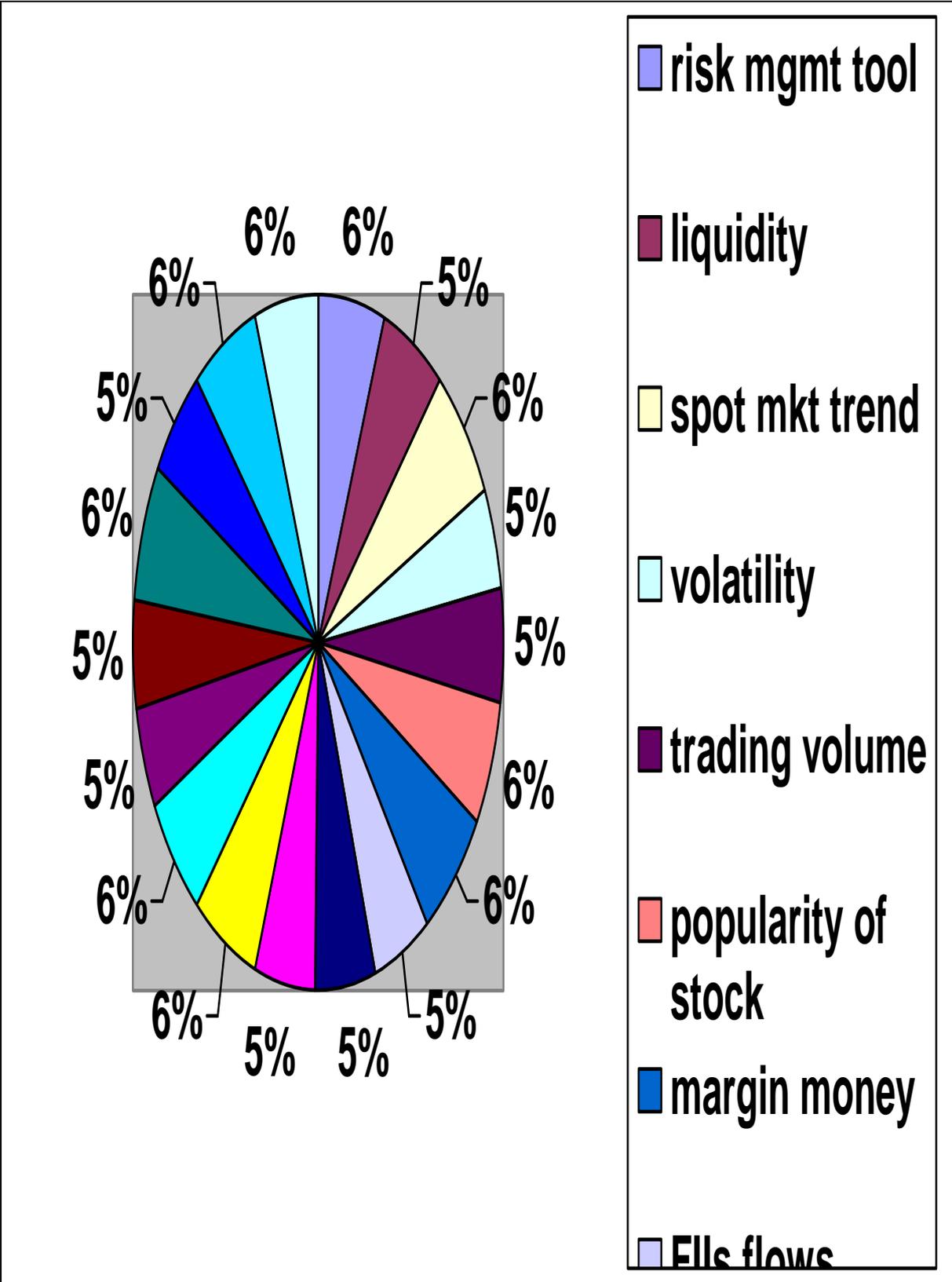
RESEARCH METHODOLOGY

Questionnaire method of sampling is used to collect the data from 50 respondents who are the clients of various broking houses of Indore. Percentage analysis & Z test Tools used for analysis.

ANALYSIS AND INTERPRETATION OF DATA

Part A

Most of the respondents (44%) are of the age group 31-40. Majority of the respondents (65%) are male. Most of the respondents (38%) are graduates followed by Post graduates. Most of the respondents (29%) are entrepreneurs and Working Executives. Most of the respondents (38%) are having an Income level of 1- 5lacs followed by respondents having income level 5-10 lacs. Most of the respondents (40%) are influenced by friends and relatives followed by brokers. Most of the respondents (49%) said that News Papers and Financial Experts help them to minimize their risk. Most of the respondents (29%) invest in stock index future followed by stock index option.



These are the common factors perceived by the investors in derivatives market

Z Value of Factors and their Results

NULL HYPOTHESIS	STATEMENT OF FACTOR FOR THE Z-TEST	Z-VALUE	RESULT
H 01	There is no significant difference in perception of investors related to use of risk hedging as risk management tool for avoiding risk.	2.066	H: O1 ACCEPTED
H 02	There is no significant difference in perception of investors related to increase in transparency and liquidity after introduction of derivative.	2.058	H: O2 ACCEPTED
H 03	There is no significant difference in perception of investors related to situation of spot market.	2.907	H: A3 ACCEPTED
H 04	There is no significant difference in perception of investors related to decrement of volatility of spot market after introduction of derivatives.	1.657	H: O4 ACCEPTED
H 05	There is no significant difference in perception of investors related to trading volume of stock or index.	1.925	H: O5 ACCEPTED
H 06	There is no significant difference in perception of investors related to popularity of stock.	2.689	H: O6 ACCEPTED
H 07	There is no significant difference in perception of investors related to less capital requirement for trading.	2.396	H: O7 ACCEPTED
H 08	There is no significant difference in perception of investors related to investment by FIIs.	1.603	H: O8 ACCEPTED

H 09	There is no significant difference in perception of investors related to effect of international market on national spot market.	2.402	H: O9 ACCEPTED
H 010	There is no significant difference in perception of investors related to change in monetary policy RBI.	2.216	H: O10 ACCEPTED
H 011	There is no significant difference in perception of investors related to higher degree of investor awareness programs conducted by various agencies.	1.815	H: O11 ACCEPTED
H 012	There is no significant difference in perception of investors related to Current market information or Any Private Information by Reliable Source.	2.519	H: O12 ACCEPTED
H 013	There is no significant difference in perception of investors related to easiness of pricing of Asset and Forecasting of movement of stocks or Index.	1.603	H: O13 ACCEPTED
H 014	There is no significant difference in perception of investors related to friendly financial infrastructure including receipts and payment of Funds.	2.682	H: O14 ACCEPTED
H 015	There is no significant difference in perception of investors related to excess returns in derivatives.	3.122	H: A15 ACCEPTED
H 016	There is no significant difference in perception of investors related to lack of comfort of brokers in providing suggestions regarding derivative as compared to spot market.	2.732	H: A16 ACCEPTED
H 017	There is no significant difference in perception of investors related to use of derivatives for arbitrage opportunities.	1.811	H: O17 ACCEPTED

H 018	There is no significant difference in perception of investors related to increase in speculative activities after introduction of derivatives.	2.144	H: O18 ACCEPTED
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CONCLUSION

After going through the Study of investor perception for investment in derivatives market, some worthwhile results were found out in the light of awareness. In this study derivative market is dominated by male investor with an age group of 31-40.

Investor rejected that they are not affected by spot market movement and even excess return does not affect their decision of investment in derivatives. In study the factor "broker feel problem in providing suggestions about derivative trading" but it was found that they are interested in providing suggestions about derivative trading.

In the study, it was found that derivatives are used as risk Hedging tool and the trend of the spot market affects the trading of Derivatives. But an interesting fact to note down here is that around 80 % of out of the overall amount invested is in derivative market and rest in the cash market. It clearly signifies that the most of the amount is for speculation and not for hedging.

In study, investor perception about derivative is influenced by the popularity of stock and also affected by the trading of FII and movement in International market. Most of them (43%) invested about 5-10% of their income on investments and only 9% invested more than 20% of their income on investments. Respondents perceived that Market Risk and Credit risk are the two major risk observed in capital markets.

LIMITATIONS OF THE STUDY

- The nature of the market is dynamic so as a result the perception of the investors may keep on varying.
- Sample size of the research has been restricted to 50 and in Indore district only.
- This research is focused on the investors perception towards Equity and Index Derivative Market only.
- Lack of awareness- the awareness about Investment in Derivative Market is not up to the mark among investor and thus it is very difficult to communicate.

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