

Derivative Trading In Indian Stock Market: Investor's Perception

** Anjali Choksi*

PART – I

INTRODUCTION

The most significant event in finance during the past decade has been the astonishing development and expansion of financial derivatives. These instruments enhance the ability to differentiate risk and allocate it to those investors who are most able and willing to take it—a process that has undoubtedly improved national productivity, growth and standards of living.

Figure 1: Growth of The Indian Stock Market.



Derivatives products provide certain important economic benefits such as risk management or redistribution of risk away from risk-averse investors towards those who are more willing and are 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. Derivatives are among the forefront of the innovations in the financial market and aim to increase returns and reduce risk. They provide an outlet for investors to protect themselves from the vagaries of the financial markets. These instruments have been very popular with investors all over the world.

Derivatives markets generally are an integral part of capital markets in developed as well as in emerging market economies. These instruments assist business growth by disseminating effective price signals concerning exchange rates, indices and reference rates or other assets and thereby, render both cash and derivatives.

As a logical step to the above progress, The Securities Contract (Regulation) Act of 1956 was amended in December 1999 to include derivatives in the definition of securities. SEBI permitted derivatives segments in two stock exchanges, NSE and BSE, and their clearing house/corporation to begin derivatives trading in approved derivative contracts. In the beginning, SEBI permitted trading in Index futures contracts based on S&P CNX Nifty and the BSE-30 (Sensex) indices.

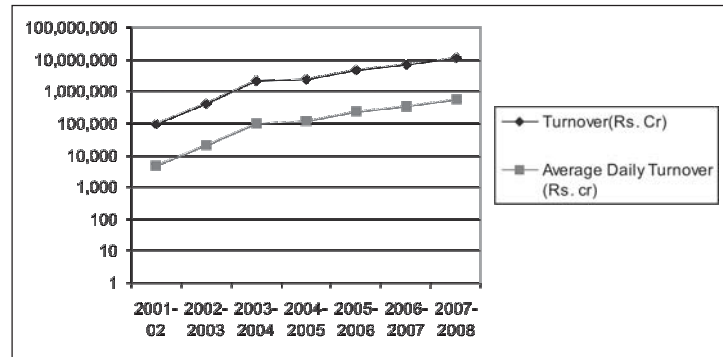
Subsequently, SEBI approved options trading based on these two indices, as well as options based on individual securities. The futures contracts are based on the popular benchmark S&P CNX Nifty. Stock index futures were the first equity derivatives launched in the two stock exchanges in India as early as June 2000. Data collected by SEBI indicates that stock index futures turnover grew tremendously from 2000-01 to 2006-07 with an average annual growth rate of 193.8%. The 2006-07 annual turnover rose to the level of 89.4% of the corresponding equity turnover and to 83.5% of the corresponding GDP of the same year.

Stock index options were launched at BSE and NSE one year after the SIF in June 2001. Stock options or options written on individual stocks were launched at BSE and NSE one month after the stock index options were launched in July 2001. The stock options turnover rate grew significantly from 2001-02 to 2006-07 with an average annual growth rate of 50.3%; the annual turnover rose to the level of 10.7% of the corresponding equity

** Lecturer, N.R. Institute of Business Management, GLS-MBA, Ahmedabad, Gujarat. Email : choksianjali81@gmail.com*

turnover in the first full year of trading in 2002-02, yet the ratio declined monotonically to 6.7% in 2006-07; and the annual turnover increased to 9.1% of the corresponding GDP in 2003-04, yet it also declined to 6.2% in 2006-07. The reason for the seemingly less-attractive growth of stock options is very likely due to the tremendous growth of stock futures which we will discuss shortly. Starting with index futures, we have made rapid strides and have four types of derivative products- Index future, index option, stock future and stock options. Today, currency derivatives, mini derivatives on Index, volatility index are also added to this basket of products. Figure II shows the growth of Future and option market.

Figure 2: Growth of Future and Option Market In India



The study understands and analyzes various strategies used by investors in capital market and also analyzes the various aspects of derivatives. It also gives you an idea about the Investors' awareness for the Derivative market. It also characterizes the rationale why investors are not investing more in F&O market. The study does not cover the perceptions of brokers and was limited to 180 investors from Ahmedabad city only. In derivative market, only two derivative products-Futures and options are used for the study.

The survey is important because in this volatile market, it is prudent to be familiar with the strategies followed by them and the lessons they have learnt by burning their hands in this stock fire. In addition, Media reports have also raised concerns about the speculative nature of the derivative market. As Financial Times columnist James Morgan puts it, 'A derivative is like a razor. You can use it to shave yourself...or you can use it to commit suicide.' The study also concludes the reasons as to why many investors do not invest in this segment.

This paper is separated as follows:

Part I-Introduction

Part II-Groundwork of survey

Part III-Background of Investors

Part IV-Market activity and Perception of investors in three segments

Part V-Conclusion of the study.

PART – II

SURVEY OF DERIVATIVE TRADING IN INDIAN STOCK MARKET (2006-08): INVESTOR'S PERCEPTION

GROUNDWORK OF THE SURVEY

The survey was conducted mainly with the purpose of understanding the derivative market along with checking its awareness from the side of investor's viewpoint. The issues covered in the survey includes: 1) perception of investors about the cash and future and option market-Time horizon, purpose of investment and preference for a particular derivative security out of the total products.2) Factors they take into consideration while investing.3) Issues concerning derivative trading 4) Strategies followed by them under different market scenarios 5) Reasons for non-usage of derivatives by some investors.

The survey contains primary information collected from investors with the aid of a questionnaire filled from 180 investors in capital market of Ahmedabad city. The Investors were selected randomly from 5 leading broking firms in Ahmedabad:-LKP Shares Ltd., Motilal Oswal Securities, Rajvi Brokers, India Bulls and Shah Investments. The Questionnaire was divided into four segments:

1) General Information (Q.No 1 to 3)

2) Cash Market (Q.No 60-65)

3) Cash & Future Market (Q.No 4-33)

4) Future& option. (Q.No 34-59)

There were in all 65 questions that were divided into the above three sections. There were 92 investors in Cash & Future market, 80 investors from Cash market and 8 investors from the F&O market.

The questionnaire consists of both close ended as well as open ended questions. Questions were interconnected and correlated. So, the questionnaire was designed in such a way that investors fall in one of the above segments and answer only related questions falling in that segment.

PART – III

BACKGROUND OF INVESTORS (180)

The age and investment criteria of investors reveals that there are more investors in the age group of 30-40 years investing Rs.1,00,000 to Rs.3,00,000 in the capital market. There are fewer tendencies to invest for investors in the age group of 40 and above. Also, looking at the occupation background, more number of investors are from the service class who tend to invest between Rs.100000-Rs.300000 ;while it has been observed that the businessman invests more than Rs. 500000 in the Capital market. From income point of view, investors with income of Rs 100000 to Rs 300000 have been investing more i.e. upto Rs 300000 in the capital market while the investors with less than Rs.1 lakh as income also invest but volume of investment is less. Majority of the investors use economic times and view CNBC for market related news. 51% of the investors invest in both cash and future market while 44% invest only in the cash market. 68% of the traders trade in Exchange Traded market, while 27% of the investors trade both in Exchange traded and Over the Counter market.

This information was derived from the general questions asked in the beginning of questionnaire.

PART- IV

MARKET ACTIVITY OF INVESTORS AND THEIR PERCEPTIONS

180 Investors are divided into three categories as per the questionnaire:

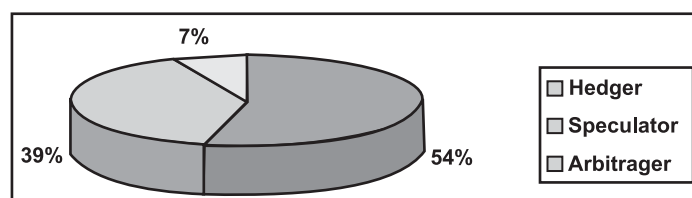
1. Investors in Cash Market Segment (80).
2. Investors in Cash and future Market both (92).
3. Investors Trading in only Future & option Market (8).

There are some common and general questions in the three segments but the questionnaire also incorporates diverse questions according to the requirement of the segment. The survey results on the market activity of the participants in three different segments are reported in this section.

I.CASH MARKET

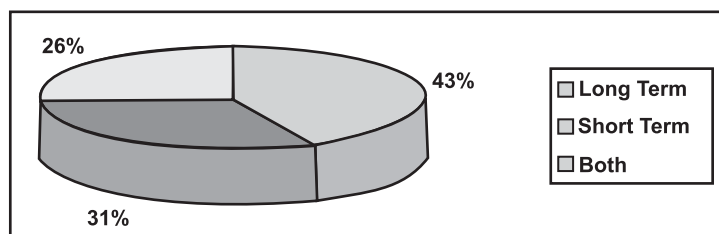
In all, 6 questions were there in this segment. Following are the results from this segment.

Figure 3: Types of Traders



Majority of the investors (61%) are using cash market for hedging and speculation purposes and they invest for long term by taking position in the cash market unlike day trading and Intra-day trading.

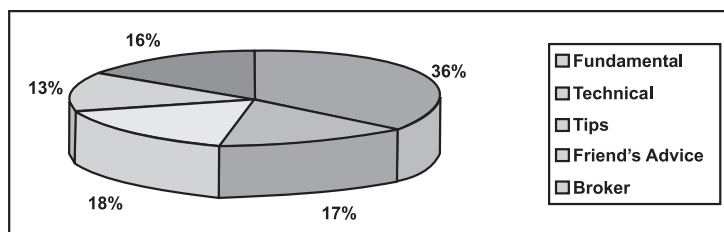
Figure 4: Time Horizon of Investment



43% of the investors are long term investors and the second highest (31%) are investing for short term purpose.

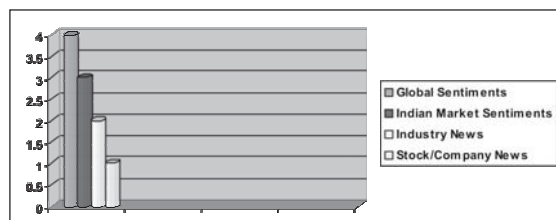
They believe in capital appreciation rather than short term capital gain. Their reason of investment in this sector is safety, low risk, high return and no long term capital gain.

Figure 5: Factors Considered While Making An Investment



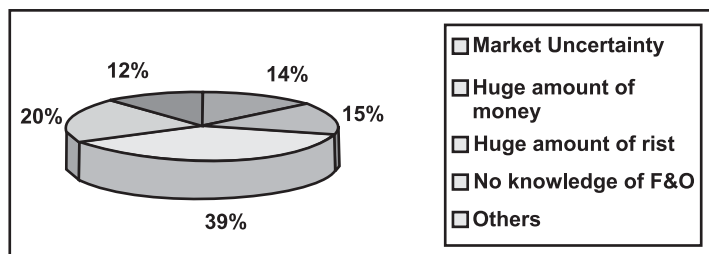
Several investors (36%) believe in the fundamental analysis, while some of them rely on technical analysis, tips from brokers & other sources.

Figure 6: Indicators Investors Study After Having Position In The Cash market (On basis of ranking)



Highest ranking is given to the Global scenario followed by Indian Market sentiments encouraged by Industry news. Now- a –days, performance of the Indian market is mostly stirred by global indices. Commodity market is already there in the proof, largely driven by London metal exchange & now even Nifty & Sensex move on the same track.

Figure 7 :Reasons For Not Investing In Future & Option Market.

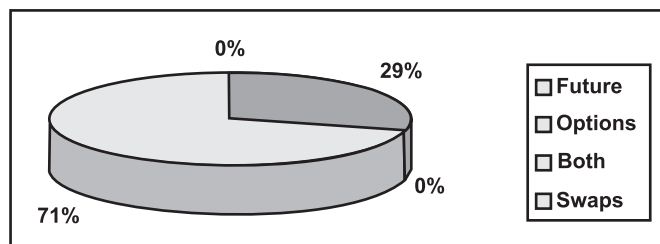


Investors in the cash market do not like to invest in Future & Option mainly because of market uncertainty and high risk. There is enormous amount of margin money required to trade in F&O and also risk potential is sky-scraping.

II.CASH AND FUTURE MARKET

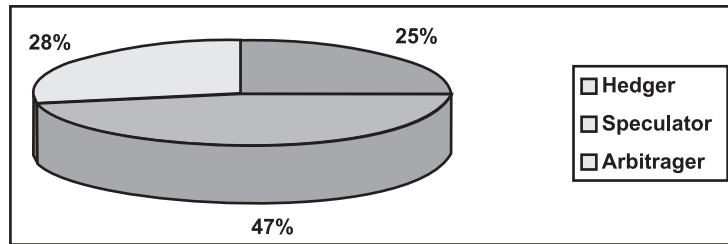
In all, 30 questions were asked in this segment.

Figure 8:Type of Products In Which Investors Invest More.



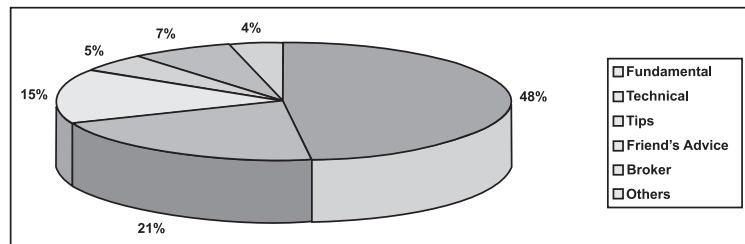
Out of 180 investors, 51 % investors invest in this market and out of them, 71% trade in both future and option and majority of the trade is routed through exchange markets.

Figure 9: Type of Traders in Cash and Future Markets



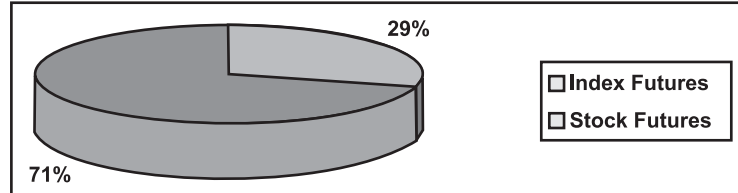
In this segment, mainstream (47%) investors are using the market for speculation purposes. They are mainly position traders (68%), holding the position for short periods (37%) & indulging in delivery transactions unlike daily and Intra-day traders. They speculate by buying and selling futures.

Figure 10: Shows the factors they consider while investing in this segment.



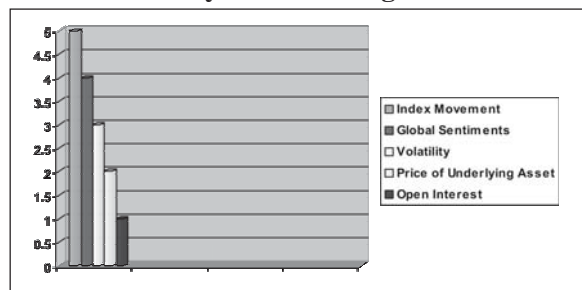
48% of the investors give priority to fundamental analysis for investing while the second preference is for technical analysis. They believe in investing in fundamentally strong companies rather than just following charts and patterns. They also give importance to index movements i.e. Indian market sentiments and global sentiments.

Figure 11: Product Inclination For Trading In Future Market



Majority of the investors are inclined to stock futures as compared to Index futures. Their favourite scripts include RNRL, RIL, REL, Reliance Capital, Tata Steel, Infosys etc. They mostly used it for speculation rather than hedging. The results, however, are not agreeable and satisfying as Index futures are more appealing since they are less risky than single stock.

Figure 12: Indicators Investors Study While Taking Position In Cash and Future Market



An overwhelming majority of investors described the index movement and market sentiments as the two most important indicators as shown in the Figure 12. Further volatility and underlying assets are also noteworthy, while other factors like open interest, interest rate are of least importance.

Majority of the investors are Bullish traders and in case of adverse market movements, they either book loss or hold their position as shown in Figure 13.

Figure 13: Investors In Long Futures Perform In Bearish Market

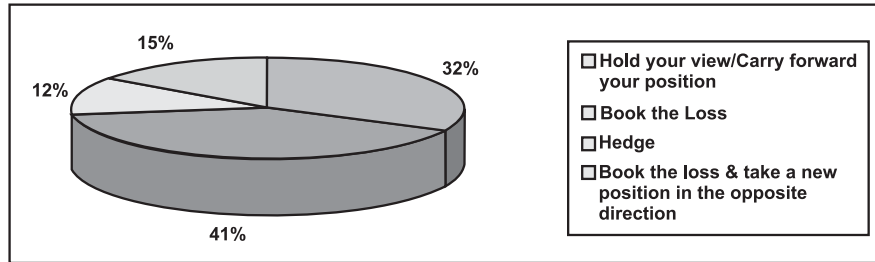
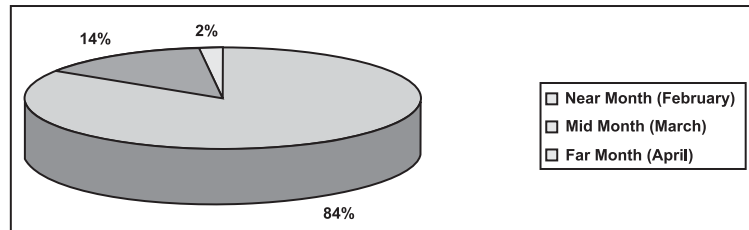


Figure 14: Selection of Future & Option month Contract



F&O contracts are available for trading for three months. Investors have to select in which month they want to trade. A great majority of investors selected near month contract and very few opted for far month contract. The reason for it is that it is very hard to forecast the future. Also, volatility & volume turnover is more in near month contracts unlike far months.

OPTION MARKET

While trading in option market, most of the investors are speculators and their outlook is bullish on the market. If the market turns the other way round, they either book losses or continue to hold their position. Their results are very much similar to future markets in terms of type of trader, outlook on market, preference for contract month and that is why their figures are not shown here.

There are 2 types of options-Call & Put. Investors according to their perceptions can enter into long or short call & long or short put. The study also explains investors' preference for a particular call or put option according to their views about the market. Figure 15 shows that they prefer long call unlike short put if they wish to be in the long position in the underlying asset. As we know, the buyer of option and buyer of the underlying asset are two different things. In long call & long put, you are the buyer of option, you pay premium for purchasing this right but you are a buyer in underlying asset in long call but in long put, you are the seller of the underlying asset. Opposite is for short call & short put, whereby, you receive premium for selling the option but you are seller of an underlying asset in short call & buyer in short put. The payoffs of all the four positions are different and hence, the need for selecting one suitable position is crucial for investors as per their risk appetite.

Figure 15: Preference of Investors for Long Call desiring Long Position in underlying asset

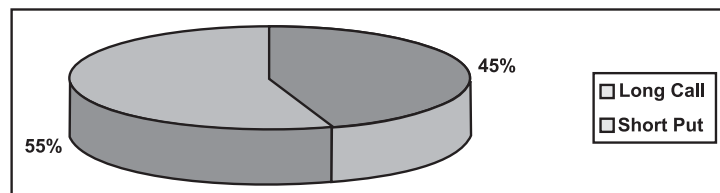


Figure 16: Preference of Investors For Long Put Desiring Short Position In Underlying Asset

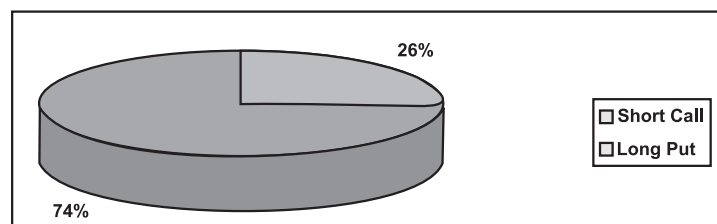
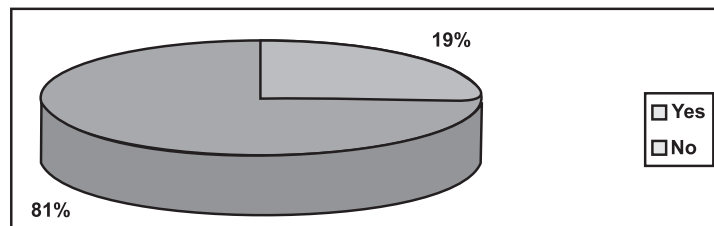


Figure 15 and 16 depict that bulk of investors are buyers of option (Long call & Put) rather than seller of the option. This is because the loss is limited upto the premium amount paid and profit is unlimited as writer loss is limited and profit is unlimited. Writer of the option gains that profit when the market is stable or less volatile. Overpowering Investors (97%), while selecting the option month contract, prefer near month contract and further, while selecting a particular strike price, the factors that they take into consideration are spot price that is nearer to strike price, volatility and volume in that strike price, time remaining to expire and amount of premium to be paid. After selecting the strike price, investors frame their own strategies. They are not aware of the strategies published in books like butterfly strategy, strangle, straddle etc. Figure 17 shows that an overwhelming majority of investors are not aware of strategies readily obtainable in books. They use their own strategies like using call and put simultaneously on the same underlying asset where one long position and other short position are taken. Strategies like having two calls and 1 put or 2 puts and 1 call are used to take advantage of difference of premium amount. Some investors know about such strategy but they have no knowledge of how to use such strategy. The above information is derived from open-ended questions asked in the questionnaire.

Figure17: Awareness of Strategies Like butterfly, Strangles, Straddle, Strip & Straps.



Many questions were asked to investors relating to their position in future or option market, strategy they follow in unfavorable market, example-When you have long futures, what will you do while the market is bearish? The choice that was given was use future, use short call, use long put, use index futures, use cash market, use index options, and hold the position or other alternatives.

Figure 18: Counter Taken By Investors In Long Futures In Bearish Market

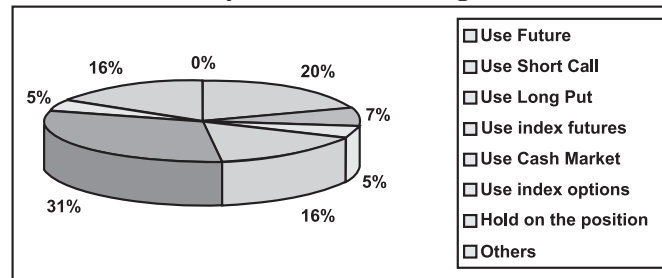
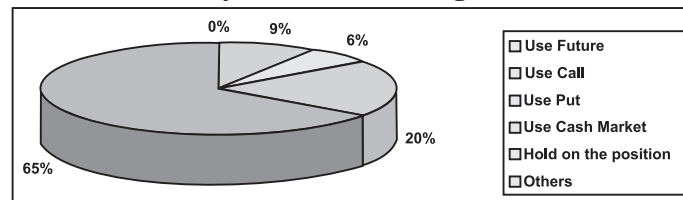


Figure 19: Counter Taken By Investors In Long Futures In Undecided Market



The above figures shows that more than 50 % of investors use cash markets or futures to hedge their position in bearish market and if it is undecided, they (65%) intent to hold their positions.

Same exercise was done to the following positions:-

Short futures in bullish market, long call in bearish market, short call in bullish market, long put in bullish market, and short put in bearish market.

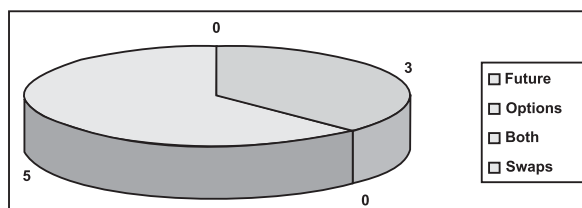
The results are more or less the same and hence, all the charts are not shown. Whether investors have long or short future, long or short call, long or short put in opposite market, bulk of investors use cash markets or futures to hedge their position in market and if market is undecided, then they hold their position in the market.

FUTURE & OPTIONS MARKET

There were only 8 investors who deal exclusively in this segment. They were asked 26 questions in all.

Out of 8 Investors in Future market, 5 invest both in Future & options and 3 invest only in Futures as shown in the below Chart I.

Chart I: Proportion of Investors In F&O Market



These 5 investors are hedgers, while the other three are speculators as shown in below chart II. According to their objective, hedgers are position traders while 3 of the speculative traders do intraday trading as depicted in Chart

Chart II: Type of Trader (I)

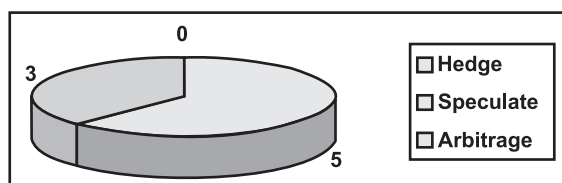
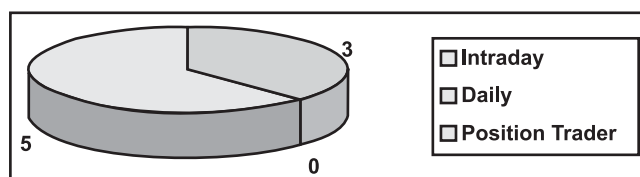
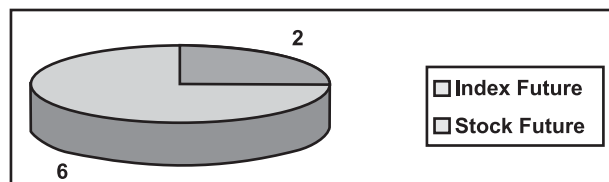


Chart II: Type of trader (II)



The quantity of investors i.e. 6 out of 8 prefer stock future while the other 2 trade in Index future as shown in chart III.

Chart III: Preference for Stock Futures over Index Futures



The other information derived through the open ended questions is as follows:

1. Mainstream investors prefer being a bullish trader in future market and whether they are bullish or bearish, investors in the market (when the market turns the other way round) prefer to hold their position or hedge their position.
2. While taking position in future and option market, investors give more preference to volume and open interest and majority of them prefer near month contract while selecting contract because of high volatility and volume.
3. Majority of the investors are not aware of the strategies like butterfly, straddle and strangle strips & straps. They use their own strategies.
4. While having a long position, they prefer long call and for short position, their preference is for short call.
5. All the investors use options along with future and majority of the investors use a mixture of call and put together.
6. If investors have long future or short future in the market and if the market turns the other way round, then majority of the investors use cash markets or index option and if the market is undecided, then also majority of them prefer using cash market.
7. Whether investors have long call or short call in the market and if the market turns the other way round, then majority of investors use cash markets, hold on to their position or use future and if the market is undecided, then majority of them use cash market.
8. While having a position in Long Put, investors prefer using short put in Bullish Market and hold on their position in Undecided Market and while having a position in Short Put, investors prefer using Index futures as well as cash market in Bearish Market and use Future or hold on the position if the market is undecided.

PART V

CONCLUDING OBSERVATIONS

This paper documents the findings of a survey performed to analyze the derivative market experience and investor strategies of the Indian stock market. The survey was conducted on a sample of investors who are active participants in the cash and derivative segment of the NSE. Major observations are summarized here.

Majority of the Investors invest in Cash and future market segment. Investors in all three segments are position traders investing for long term in cash market and long and short term in cash and future and Future and option Market.

Investors investing only in cash market and Future & Option market alone are hedgers while investors investing

in cash & future market together are speculators. This is the reason as to why undecided market investors use cash market along with future and option market for hedging, while investors in cash and future market together hold their position rather than hedging. Investors should also use such market for hedging as it can be advantageous to them rather than booking their losses in this volatile market.

Stock Futures are preferred more for trading by investors. Infact, they should prefer index futures in this volatile market as they are very effective as a hedging tool especially for hedging portfolio. They are relatively low risk products compared to stock futures and also volatility and trading cost is less unlike stock futures.

Investors, while investing in cash and future market, give more priority to Index movements and Global sentiments whereas in the other two sectors, they give interest to volume and open interest. They should also take into consideration put call ratio, volatility index and RBI news.

Majority of the investors having long or short positions are buyers of option in future and option market. Buying an option is more favorable than selling an option. Selling an option is more beneficial when the price of the underlying asset is stable. Also, profit is limited and loss is unlimited in selling an option. Also, majority of the investors prefer near month F&O option contracts rather than far months contract due to volatility and volume in near month contract.

The survey reveals the awareness of derivatives among mass investors and those Investors having no knowledge of it depend mostly on broker or take advice of friends in order to make an investment. The survey also points out the reasons for less popularity of derivatives among few investors. Major focus is on risk element and uncertainty, whereas, attraction for cash market is due to safety, low risk, high return and no long term capital gain.

The survey further concludes the absence of awareness of derivatives strategies like butterfly, strangle, straddle, stripes & straps etc. among overwhelming investors. Such Investors follow their own strategies like using call & put simultaneously on same underlying asset, 2 calls and 1 put or 2 puts and 1 call to take advantage of premium income. There are also some of them who know about such strategy but have no knowledge about its usage. Therefore, knowledge should be imparted through discussions and seminars on such issues so that derivatives can play a stronger role in moving towards more efficient markets.

BIBLIOGRAPHY

1. John C Hull- Options, Futures and Other derivatives, fifth edition, LPE.
2. Sandeep Srivastava, Surendra S Yadav and P.k.Jain (2008), "Derivative Trading In Indian Stock market: Brokers Perceptions", IIMB Management review, September 2008.

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