

Financial Derivatives And Risk Management: Retail Investors' View

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INTRODUCTION

With the opening up of the economy to multinationals, the adaptation of liberalised economic policies, the economy is driven more towards the free market economy. It exposes the investors to various risks such as exchange risk, market risk, interest rate risk, economic risk and political risk and so on. With the integration of the financial markets and free mobility of the capital, risks also multiplied. In the present state of the economy, there is an urgent need for the investors to protect their interests by shifting some of the uncontrollable financial risks to those who are also to bear and manage them. Thus, risk management becomes a must for survival since there is a high volatility in the present financial markets. In this context, derivatives occupy an important place as a risk reducing mechanism. Derivatives are useful for reducing many of the risks mentioned above. History of financial markets has evidence to suggest that when risk management avenues are provided by means of derivatives, markets attract higher volumes of investments from savers, strengthening the markets in the process.

Derivatives play a variety of roles, but, perhaps, the most important role is hedging. Hedging involves transfer of market risk- the possibility of sustaining losses due to unforeseen unfavourable price changes. A derivatives trading allows an investor to alter his market risk profile by transferring to counter-party some type of risk for a price. Hedging is the prime reason for the advent of derivatives and continues to be a significant factor driving investors to deal in derivatives. Derivative products serve the vitally important economic functions of price discovery and risk management. The transparency, which emerges from their trading mechanism, ensures the price discovery in the underlying market. Further, they serve as risk management tools by facilitating the trading of risks among the market participants. These products enable market participants to take the desired risks and get rid of the undesirable undertones. To facilitate the development of the derivatives market, it is necessary to educate the market participants / investors on the hints of these new age products and their strategic uses. In this regard, the role of SEBI, stock exchanges and its member participants is very much needed. To keep speed with inevitable and persistent uncertainty, today's investors must understand the basics of derivatives. Derivatives serve as tools for managing risk when used judiciously and cautiously.

NEED OF THE STUDY

Risk management is the very hot issue in the finance world. It is a major challenge for all the participants in financial market. Day by day the complexity in risk management is increasing. Even though there are many tools and techniques are available to manage risk, still there is requirement for sophisticated instruments to manage risk. Derivative instruments are developed as more sophisticated and innovative tools to handle risk. But still, today, market participants are not so familiar with derivatives. Lack of understanding of the market and lack of close link to those doing the day-to-day trading have also hindered the growth of these markets. Lack of understanding as to how the derivatives in stock markets are to be operated is the major roadblock, in the success of the futures and options market in our country. In fact, even the L.C. Gupta Committee has noted in its report in March 1998 that, "Derivatives are not always clearly understood". A few well-publicised debacles involving derivatives trading in other countries has also created widespread apprehensions in the Indian public's mind. As derivatives trading is a high risk trading system and is a new area in the Indian capital market scenario, it is necessary to understand clearly, the precise nature of the derivatives, their objective and scope, the types of risks associated therewith, and the ways and means of minimising these risks. Due to absence of such awareness and due to inadequate appreciation of their character, derivatives may

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result in a number of players burning their fingers. Even after nine years, from introduction of derivatives, market participants, especially small-retail individual investors are not familiar with the concept of derivatives. Yet, they are under misconception about derivatives.

Creating awareness by providing proper information/guidance is an essential need of the day. Market participants, especially small investors, need clear guidance about risk management techniques. There is a big need of research in the area of risk management and its tools with the view of providing sophisticated knowledge to the investors and all the market participants and to the professionals. The main concern is to provide a level playing field for retail investors. Retail investors do not have easy access and are, therefore, unable to manage their portfolio risks, as efficiently as big investors. This is unfair to retail investors, as they cannot utilize risk containment mechanisms available to them. In addition, establishment of local trading in derivatives brings these markets under the regulatory supervision of local markets, increasing investors' confidence in markets as well as enhancing investor participation. Investors will find that there are lots of opportunities to make money once they understand the concept of derivatives and its application. Investors need proper education and training for using derivatives without any hesitation. It is sure that after "digesting" the concepts of the derivatives, the investor would be able to use derivatives products with more ease in his day-to-day trading.

LITERATURE REVIEW

The review of existing literature gives hints on some issues. First, the issue of derivatives impacting spot market has garnered a somewhat mixed reaction. Some studies have proved that there is impact of futures market on spot market and vice versa. Some other studies proved that futures market has no impact on spot market and vice versa. Two bodies of theory exist in literature relating to the impact of equity derivatives on the trading volume of underlying spot market. Some studies support the view that due to derivatives trading, there is a significant increase in the trading volume in spot market. Some other studies concluded that derivatives trading resulted in reduction of trading volume in the spot market. These studies are based on econometrics and mathematical applications of financial derivatives. These focused on mathematical comparison of spot market and futures market volatility and their implications on each other. Similarly, some studies concluded that the volatility in the spot market is reduced due to derivatives trading. And some other studies concluded that spot market volatility has increased because of derivatives trading. But, some other studies have opined that derivatives trading has no impact on spot market volatility. However, these findings have not helped the retail individual investors at large. All the studies ignored the basic question - whether retail investors are aware of derivatives? Have they understood derivatives? Has the retail investor accepted derivatives? Has he been using/misusing derivatives? Is he satisfied with derivatives? And so on.

Only few studies (Essie Tsoi 2002) have discussed retail investors' participation in derivatives market in Hong Kong Stock Exchange. As far the researchers' knowledge is concerned, no relevant study has been conducted for understanding the retail investors' awareness, attitude, risk perception and their problems of derivatives and their usage in Karnataka. It is clear from the survey of existing literature that research studies in this particular view are very few. So far, not much has been studied about the problems of retail investors regarding financial derivatives. So far as Karnataka is concerned, hardly any studies exist of the retail investors' view about financial derivatives and risk management. And there is not much research work on retail investors' awareness and attitude about financial derivatives and risk management in India.

OBJECTIVES OF THE STUDY

The main objective of this study is to investigate investors' attitude towards financial derivatives and risk management, starting with the initial presumption that investors on the capital market are risk-averse. The overall aim of this research is to gain an overall understanding of awareness, knowledge and application of derivatives such as a risk management tool among retail investors to assist in the development of education, marketing and communication strategies. The focus is to provide research to evaluate general attitude of investors toward derivatives and risk, using specific designed questionnaire. The sub objectives of the study are as follows: **1)** To study retail investors' level of awareness, perception and attitude as regards to 'Financial Derivatives, Risk and Risk management' and to identify the knowledge gap in usage of 'Financial Derivatives' among retail investors. **2)** To ascertain how investors' are using financial derivative products. And to understand what constraints investors view as critical while using derivatives.

3) To assess retail investors' satisfaction level with and perceptions of the derivatives market and the related services

and to identify areas for developing the financial derivatives market. 4) To understand the need of training and education for retail investors to participate in capital market and derivatives segment in particular. 5) And to give suggestions about the concerned problems. And also to give suggestions for popularizing financial derivatives among retail investors.

RESEARCH METHODOLOGY

❖ **Questionnaire Based Survey** had been conducted to collect **Primary data** from ordinary retail investors to know about the level of awareness and knowledge of investors about financial derivatives and risk management. Questionnaire was designed and it contained 45 questions for the collection of primary data. **Schedule method** along with questionnaire was also used to identify the knowledge gap in usage of financial derivatives among retail investors.

❖ **Secondary Data:** Secondary data was gathered from different sources such as, Internet, websites, professional magazines, reference books, newspapers, refereed journals and seminars and/or conference books. In addition, books on financial derivatives and risk management written by various authors, periodicals and articles in the newspapers, magazines and Reports on financial derivatives and risk management by some committees like L.C. Gupta Committee were also referred to.

❖ **The Universe (Population)** for the study were investors in Karnataka state. The researcher considered only those investors who had D-Mat A/c, therefore, the total population for the study were the D-Mat A/c holders belonging to Karnataka state during 2008. The sampling unit for the study was each individual retail investor. The sample size for the study was only 500 respondents. Due to time and cost constraints, the researchers had taken the sample size as only 500, which is considered optimum for the study.

❖ **Sampling Technique** was based on probability sampling or random sampling, in which every respondent had equal chance of participating in the survey. A random sampling process was adopted to select individuals. The eligibility criterion for selecting the respondent was that the respondent should have a D-mat account with any Depositories Participant. It was assumed that the D-mat account holders will have little knowledge about the stock market.

❖ **Sampling Frame:** From the survey area, (Karnataka) only 19 important districts/cities were selected. Selected cities were clustered into three groups; more important cities, important cities and less important cities on the basis of city's development, population and convenience of obtaining response from respondents. Only one city, Bangalore, was considered more important city, and seven cities namely, Mysore, Mangalore, Dharwad, Davanagere, Shimoga, Gulbarga and Bellary were considered important cities and all other cities were considered as less important cities. Since Bangalore city is the capital city of Karnataka state, and more number of investors are available in the city, therefore, out of the 500 sample size, 125 respondents (25%) were selected from Bangalore city itself. And from each of the important cities, 30 respondents (6%) were selected and 15 respondents (3%) were selected from other less important cities.

❖ **Time Dimension:** The survey fieldwork was conducted during the period of May 2007-October 2008. To calculate correlation between spot price and futures price, Nifty data from the 1st January 2008 to 31st December 2008 was extracted from NSE website.

SCOPE OF THE STUDY

Foreign Institutional Investors (FIIs) have a growing significance. But as compared to institutional investors, retail investors are much more sensitive to changes in market sentiment. Derivatives investment is complementary to stock investment, attracting a small group of retail investors who are more educated and of higher work status. Reasons for the mass participation of retail investors include the following - Privatization, Technology, Government Policy, Regulatory Policy, and Employee Remuneration. The study focused only on retail investors' view about financial derivatives and risk management. Derivatives are generally perceived instruments which cause big losses. Suggestions for proper risk management for the end users have been proposed in light of the analyses. In this study, the researchers considered only financial derivatives in general and equity derivatives in particular. And more emphasis was laid on market risk rather than on other risks. This study is covering only the aspects such as investors' awareness about financial derivatives, their attitude towards usage of derivatives, and their risk perception and so on.

RESPONDENT'S PROFILE

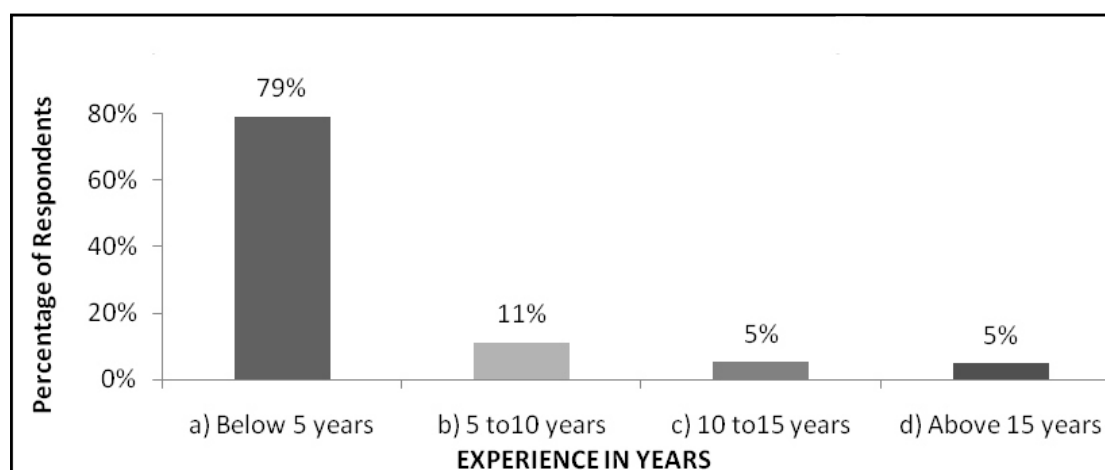
Respondents for this study were only individual retail investors. According to SEBI, a retail investor or small investor is one who finances a listed company in the form of equity (shareholder) or debt (debenture holder) up to ₹ 1 lakh through an Initial Public Offering. Their holding in stock market is less than 10% of the floating stock in stock market. The respondents belonged to different age groups. For convenience, the respondents were classified into six groups. According to the survey, 1% of the respondents belonged to below 20 years of age group, 38% of the respondents belonged to age group of 21-30 years, 28% of the respondents were those who came under the age group of 31-40 years, 20% of respondents fell under the age group of 41-50 years, 10% of the respondents were those who belonged to 51-60 years' age group and 3% of the respondents belonged to the above 60 years group. Education is one factor which strongly influences investors' behavior about investment decisions. Investors were also classified according to their educational qualifications. They were classified into four groups - below degree, degree, above degree and others. According to the survey 17% of the respondents belonged to the below degree category, 47% of the respondents had completed their Degree, 34% of the respondents had qualified above degree, and only 2% were qualified for other courses like diploma and certificate courses etc. It is clear that education plays an important role in investors' decision making. 81% of the investors were educated up to the degree (graduate) level.

Occupation is an indicator of economic conditions of the persons and one of the vital factors which influence investors. Investors have been classified on the basis of their occupation into 5 groups namely- Academicians, Executives, Businessmen, Employees, Professionals and others. According to the survey, 13% of the respondents belong to category of academicians, 13% of the respondents belong to Executives' category, 25% of the respondents belong to businessmen category, 30% of the respondents belong to Employees' category, 10% of the respondents belong to Professionals' category, and 9% of the respondents belong to others. Executives include company managers, brokers etc. Professionals include engineers, chartered accountants, financial consultants, advocates, doctors etc. Employees include government employees, private employees, bank employees, retired employees etc but below executive level. Businessmen include contractors, shop keepers, land lords etc. Others include students, self employed, housewives, farmers, and those who have not mentioned their occupation. A big chunk of investors are employees that comprise of about 30% followed by businessmen (25%). Academicians and executives are equal participants. Professionals' category consists of 10% of total number of respondents. Others include categories such as students, house wives, farmers, and self employed.

FINDINGS AND ANALYSIS

The primary data collected from respondents has been analysed with help of graphs and tables by using percentage method.

Chart 1: Classification On The Basis of Investment Experience

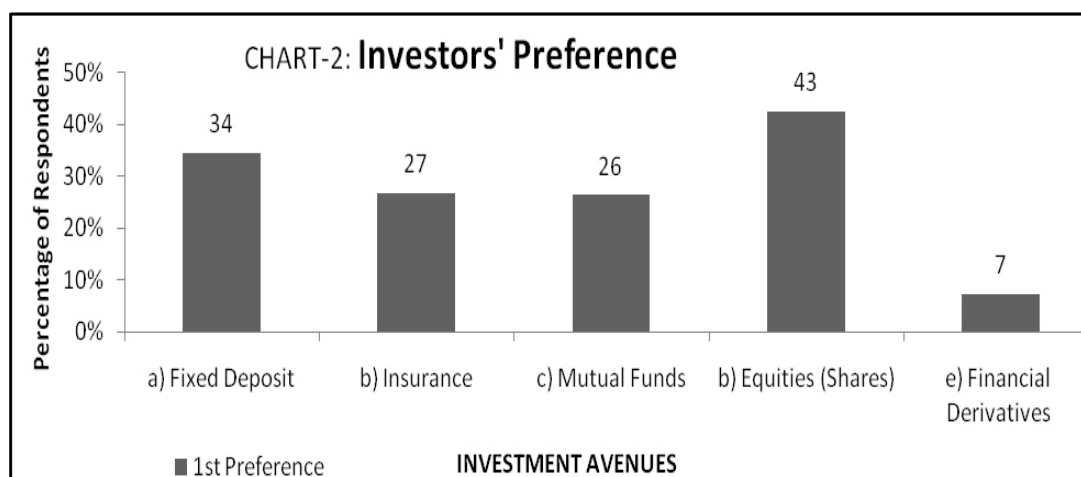


Source: Compiled From Field Survey

The study found that 79% of the investors entered into the capital market recently. Since 66% of the investors are

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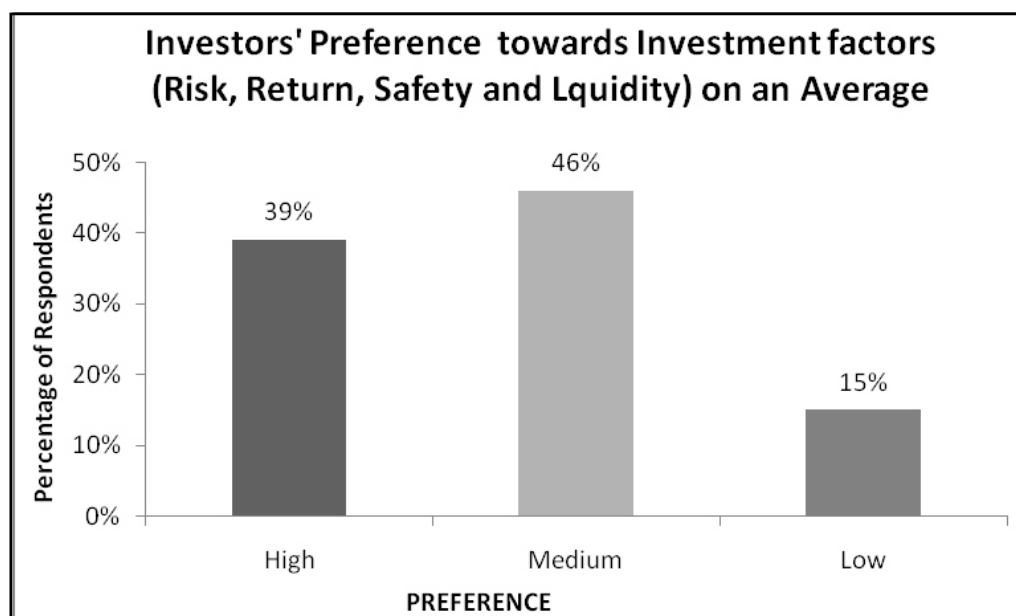
youths, they had an experience of not more than 5 years.



Source: Compiled from field survey. Multiple answers allowed.

It was found from Chart 2 that 43% of the respondents gave first priority for equity shares; 34% of the respondents gave first priority for Fixed Deposits. Around 27% preferred Insurance and Mutual funds because of most of the insurance products unit linked schemes. Only 7% of the investors prefer derivative products as their first choice.

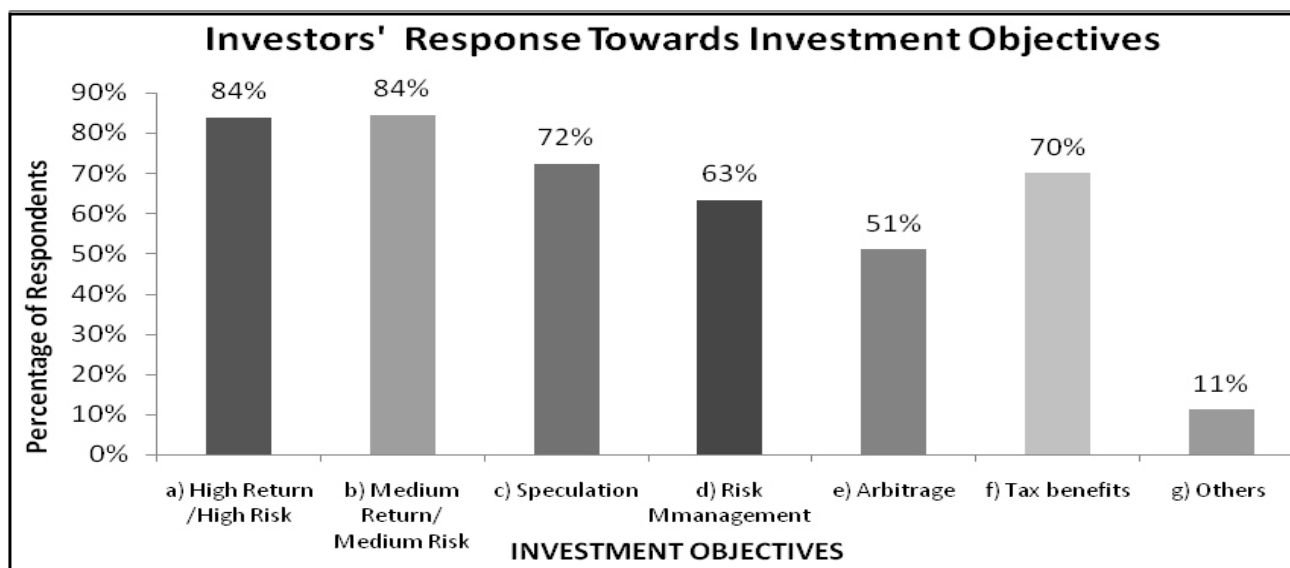
Chart : 3



Source: Compiled from field survey.

The study found that majority of the investors were aware of the quantum of risk involved in each investment avenues. On an average, 39% of the investors preferred high risk, high return, high safety, and high liquidity, 46% of investors preferred medium risk, medium return, medium safety and medium liquidity and only 15% of the investors preferred low risk, low return, low safety, and low liquidity. It was found that retail investors were neither risk evaders nor risk seekers -they were medium risk takers. Similarly, retail investors neither preferred high return nor low return, they preferred medium (reasonable) return. It was also found that investors prefer medium risk as well as medium return with medium liquidity. However, they preferred high safety for their investment. It means that investors are neither aggressive nor conservative- they are rational/moderate investors.

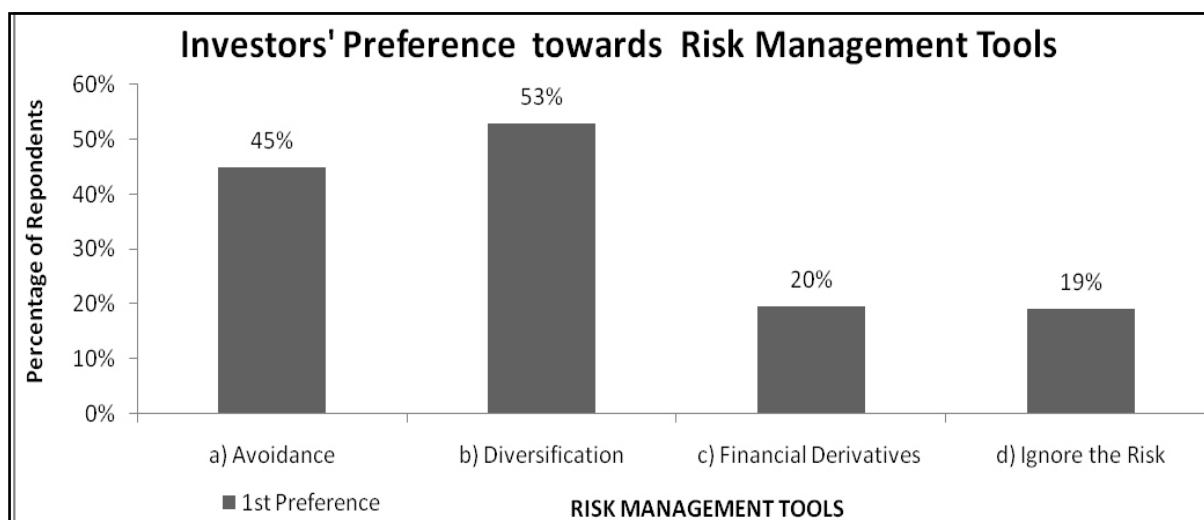
Chart : 4



Source: Compiled from field survey. Note: Multiple answers allowed.

From Chart 4, it can be inferred that 84% of the investors responded for high return and high risk and also medium return and medium risk as their investment motive. 72% of the respondents had speculation motive, 63% of the investors had risk management motive, 70% of the investors wanted tax benefit out of investment. However, in case of prioritization for investment motive, it was found that 52% of the investors preferred high return and high risk as their first investment objective. 46% of the investors preferred medium return and medium risk as their first objective. And 31% investors preferred tax benefit as their first investment objective. 13% of the investors preferred speculation as their first objective. Only 12% of the investors preferred risk management as their first objective. According to survey majority, 55% of the investors said that they can manage risk arising out of price volatility. It showed investors' level of confidence in managing the market volatility. And only 59% of the investors knew that derivatives are used for risk management.

Chart:5



Source: Compiled from field survey. Note: Multiple answers allowed.

From Chart number 5 , it can be inferred that for a majority of the investors' (53%),diversification was the first priority to be used as a risk management tool. 45% of the investors' avoided risks (as much as possible) by not investing in risky

securities. Only 20% of the investors gave first preference for financial derivatives to manage risk. 19% of the investors simply ignored the risk. The study revealed that very less number of investors were familiar with derivative concepts. And investors' knowledge about derivatives concepts is very much poor. For instance, only 35% of the investors are familiar with call and put options, it meant that 65% of the investors were not familiar with call and put options concept, which is very commonly used. It was found that only 41% of the investors were investing in financial derivatives. But 64% of the investors were not willing to invest in derivatives.

Table 1: Investors' Familiarity With Derivatives Concepts (in %)

Derivatives Terms	Not Heard	Heard But Not Familiar	Familiar	Very Much Familiar
a) Call & Put Option	37	28	24	11
b) Strike Price	40	27	19	14
c) Margin Call	39	24	24	13
d) Straddle	72	20	5	3
e) Hedge Ratio	65	19	11	5
f) Option Premium	49	18	20	14
g) Butterfly Spread	81	14	2	3
h) Mark to market	50	12	22	16

Source: Compiled From Field Survey. Note: Multiple Answers Allowed.

From Table 1, it can be observed that very less number of investors are familiar with derivatives concepts. For instance, only 35% of the investors were familiar with call and put options, it meant that 65% of the investors were not familiar with call and put options concept, which is very commonly used. It was found that only 41% of the investors invested in financial derivatives. But 64% of the investors were not willing to invest in derivatives.

Table 2: Summary of Merits and Demerits of Derivatives Market

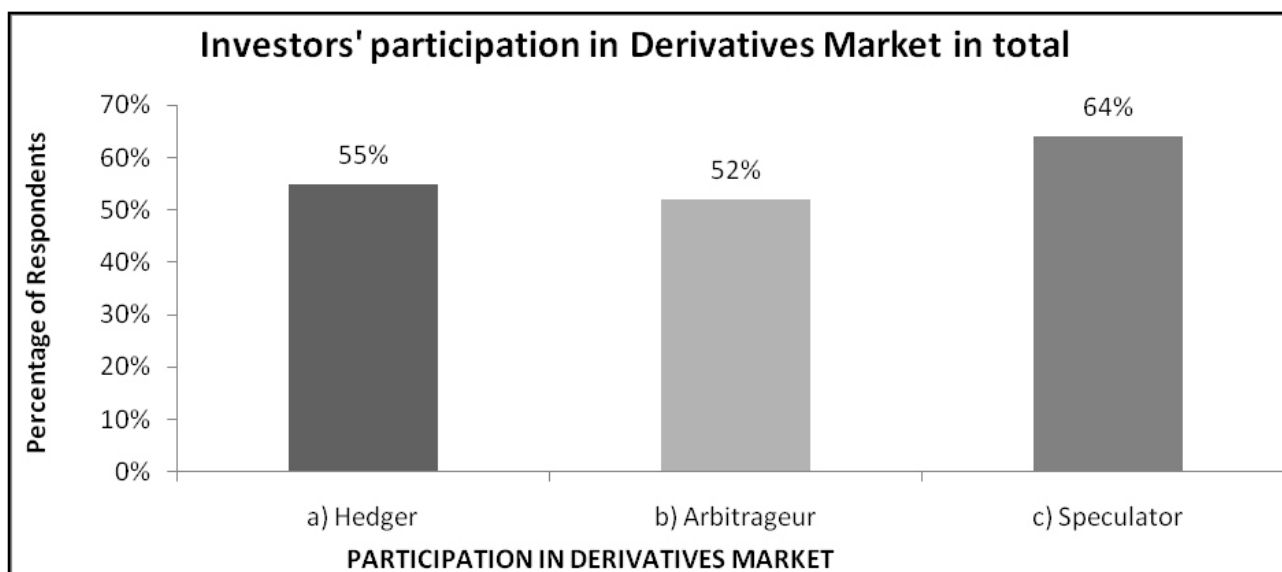
	Triggers	Impact		Barriers	Impact
1.	Awareness	35%	1.	Unawareness	37%
2.	High Returns	47%	2.	High risk	57%
3.	Avoid risk	26%	3.	Market volatility	43%
4.	Ensure Safety	19%	4.	High contract size	50%
5.	Transferability of risk	35%	5.	High tax on profit	21%
6.	Low investment	33%	6.	Complexity	29%
7.	High liquidity	23%	7.	Standardised Contracts	21%
8.	Interested	28%	8.	Non-availability of advisers	23%

Source: Compiled from survey.

Table 2 reveals that 47% of the investors believed that high return was the merit of derivatives. Contrarily, 33% of the investors responded that low investment was the merit of derivatives. Only 35% of the respondents responded that the transferability of risk was the merit of derivatives. 50% of the investors found contract size to be the reason for not investing in derivatives. 57% of the investors did not invest in derivatives as they felt that derivatives were highly risky. 37% of the investors said that they were unaware of derivatives segment, therefore, they were not investing in them. 21% of the investors found that high tax was levied on investment gain. 16% of the investors said that they did not invest due to lack of knowledge. 23% of the investors were ready to invest, but they needed advisors to guide them properly. Since volatility is the biggest problem for the small investors in stock market, 43% of the investors felt that volatility was the demerit of derivatives also. Around 30% of the investors responded that derivatives are complex and it creates disadvantage for derivatives trading. From Chart 6, we can observe that in total, 64% of the investors participated as speculator followed by 55% of the investors, who participated as hedgers and 52% of the investors, who participated as arbitrageurs. And highest number (26%) of investors wanted to participate as regular speculators in the derivatives segment. This shows that speculation is more preferred than hedging. Highest percentage (56%) of

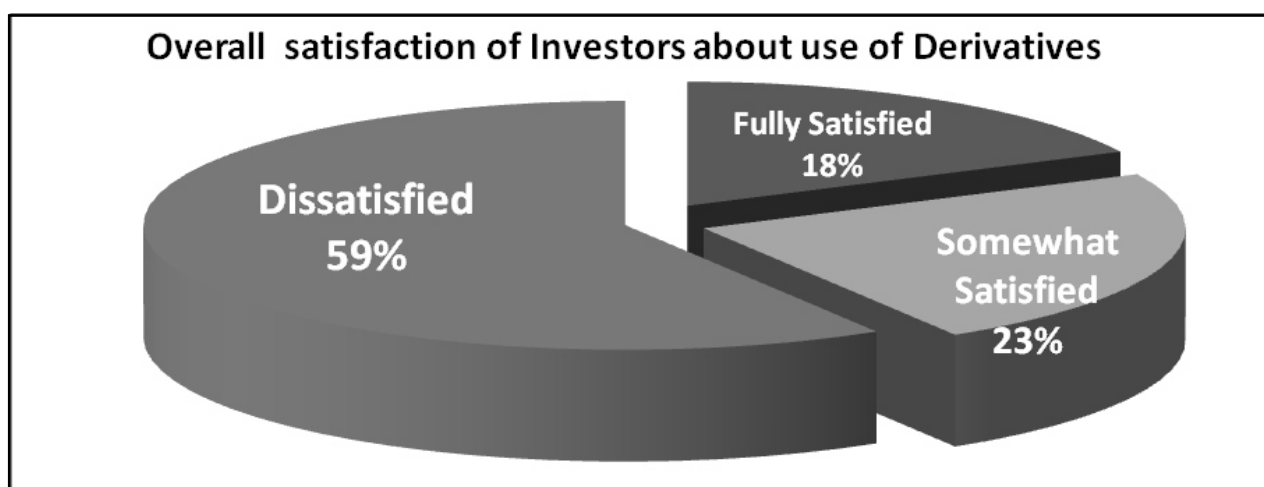
investors' first priority was speculation as their motive behind investment in derivatives. Only 25% of the investors preferred hedging first as the motive behind their investment. It can be observed that majority of the investors misuse derivatives. Compared with speculation, hedging is given less importance.

Chart : 6



Source: Compiled from field survey. Note: Multiple answers allowed.

Chart :7



Source: Compiled from field survey.

The Chart 7 reveals that around 60% of retail investors were dissatisfied with derivatives usage. 23% of retail investors were somewhat satisfied. Whereas, only 18% of the retail investors were fully satisfied with derivatives use. As per Chart 8, around 40% of the investors ranked the use of derivatives as moderate. Around 30% of the investors ranked the use of derivatives as above moderate. 7% of the investors ranked derivatives below moderate. Whereas, 23% of the investors were not clear about the use of derivatives -they said 'Cannot say'. 59% of the investors were not aware of training programmes. And 78% of the investors were really in need of some kind of training programmes to equip themselves to trade in stock markets.

FACTORS FOR INCREASING INVESTORS' PARTICIPATION

Drawing on the findings of the survey, the possible factors that could increase investor participation are analysed in the

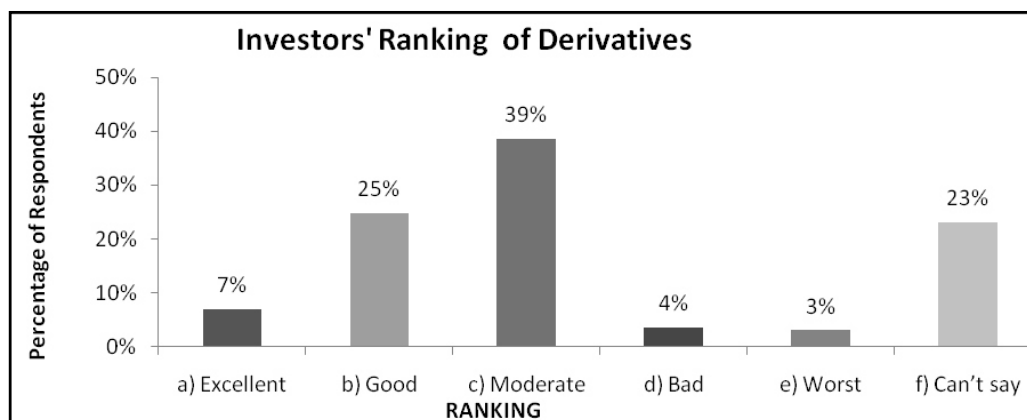
dimensions of retail participation in the derivatives markets.

✿ **Market Conditions:** Favourable market sentiment is fundamental to trading activities. This effect is rather strong in retail trading. Market liquidity and volatility are the results of trading activities and are also their drivers. In the derivatives market, for example, investors may see volatility as potential profit opportunity. Market liquidity could be enhanced by suitable changes to the market structure or systems. Enhancements such as appropriate short selling regulations and facilitating day trading can be considered.

✿ **Costs and Services:** Cost is a factor mainly for retail investors whose transaction amount is relatively low and who have little negotiating power. Lower transaction costs might be able to attract new investors and may be a strong stimulus for investors to trade more e.g. doing more day trading. Lower cost is also known to be a major attraction of online trading. The tangible components of the transaction costs - commission and tax would have room for reduction. A certain degree of positive impact is expected in the market if commission becomes negotiable. The promotion of online trading is expected to stimulate more trading activities. With the convenience and efficiency offered by online trading, there is shorter turnaround time for stock trading. Investors feel more empowered by the information and functions at their disposal, and so may be more willing to trade frequently, thereby boosting market turnover. However, online trading may be more appealing to the younger generation who are more receptive to, and familiar with computer technology. Online trading is essentially a broker service to retail investors. Other associated broker services will also help attract and retain investors, e.g. product promotion, investment advice, and entertaining investors' inquiries.

✿ **Investors' Education:** Given the fact that a large proportion of retail non-investors did not enter the market because of lack of knowledge, general market promotion and education appear to be important. Marketing is also important to tap potential retail investors with currently low participation. The Indian stock market, in particular, is a high potential source of both retail and institutional investors. Promotion of retail trading in derivative products other than Index-related products will also have great potential benefits. In particular, the growth potential of retail participation in the stock options market is expected to be high. Motivation of retail participation in derivatives is also expected to benefit the stock market as derivatives investors were found to be more active stock traders. Conversely, promotion of stock trading is expected to stimulate derivatives trading as stock investment experience was found to be the major motivation factor for derivatives trading.

Chart : 8



Source : Compiled From Field Survey

OBSERVATIONS IN CONVERSATION WITH RETAIL INVESTORS IN SURVEY

Retail investors were trading purely on the basis of market sentiments, and investment decisions were taken purely on the basis of tips from friends & Stock Brokers' advice etc. Especially, fresh investors were more influenced by advice of friends or relatives. Since retail investors are small in size in terms of investment, they cannot avail consultation from Professional Advisors. Retail investors over-react with market sentiment and they lack of patience. And they lack Holding Capacity; because of investment of money kept for some other purpose and ,therefore, due to impatience and

wrong decision making, they exit with loss. But investors should always invest only that money which they have kept aside for investment. Retail investors neither take seriously Fundamental Analysis nor Technical analysis before investing in Stocks and also Lack of Diversification of Risks by investing huge amounts in very few companies. They enter the market when they are supposed to wait/exit. And they exit the market when they are supposed to hold/enter into the market.

Retail investors who trade on derivatives take big positions by investing their total investable funds; otherwise, they can take less position in cash market with same amount. This leverage effect sometimes makes retail investors suffer huge loss and they loose whole investment and become insolvent. A trade in spot market would at least leave investors with scripts (though lower valued) but in derivatives, investor would be left with nothing to bounce back, as in case of a normal trade. Therefore, an investor should take same position in derivatives markets as he would take while investing in cash market with less money and the remaining part of investable fund can be invested in other securities like fixed deposits. By doing this, they can maximize overall return on investment with less risk. However, retail investors are not interested in Systematic Investment Plan (SIP).

HOW TO INCREASE INVESTORS' PARTICIPATION?

1. Knowledge Is A Major Barrier For Retail Investors: Apart from financial constraints, over the years, lack of knowledge remains the major reason for not investing in derivatives. This may suggest that education of the public in the past few years might not be sufficient or that non-investors are simply not receptive to investment information. Education in investment concepts and personal financial management must be more effective if it is done as a programmed syllabus starting at school/colleges. Moreover, more and better investment knowledge will not only help increase retail investor participation, but also the quality of their investment decisions and hence, help contribute to the improvement of the overall market quality.

2. Mass Media Would Be The Best Channel For Retail Investor Education: According to the survey, television is considered the best channel by retail investors for delivering investor education information (chosen by 92%), followed by newspapers. It is believed that a multitude approach would be beneficial - this could, on the one hand, attract attention of the public via mass media like television, newspapers, and poster advertisements, and on the other hand, could achieve more educational effect via interactive means like the Internet and seminars, conferences and training programmes.

3. Increasing Investor Protection And Market Quality Is Necessary: Investors' protection, the regulation of insider trading, the regulation of listed companies and brokers, and listed company quality are the areas that retail investors show most concern about. In addition, the major driving factor for more trading from retail investors was found to be more high-quality listed companies. Market quality is an essential factor for sustaining investor participation. The major areas with improvement opportunities that are highlighted here include: market regulation and protection of investors- regulation of insider trading, listed companies, market intermediaries; corporate governance and information disclosure of listed companies - their regulation, corporate governance and information disclosure.

4. Product Development: Apart from product quality and variety, the right product for the right people is also important. In the cash market, the listing of more companies with which local people are familiar and high quality companies may attract many new retail investors. In the derivatives market where the products may have greater customer segmentation by nature, careful product design will be needed.

CHANGING THE RULES FOR BETTER PARTICIPATION

Recent media reports indicate that SEBI is likely to change trading regulations in the derivatives segment. This would be quite welcome. The Indian derivatives market has been starved of a friendly market microstructure for long. Large contract sizes, high margins and low liquidity have pushed many participants away from the market.

1. Minimising Minimum Contract Size: Retail investors would trade in the derivatives markets when size is equal to market lot of shares. Because of high contract size, many investors who wish to hedge relatively small exposures or who wish to take relatively small speculative positions will be unable to use the derivatives. In this regard, the decision of the SEBI to reduce the minimum contract size in terms of value from ₹ 2 lakhs to ₹ 1 lakh would make it more attractive for retail investors thereby, facilitating further liquidity. It is suggested that minimum contract size of Nifty, Nifty midcap 50 and other stock futures and options can be further minimised as BSE introduced Sensex mini

futures/options market lot of only 5 units, so that more retail investors can participate in derivatives market. One of the respondents responded during survey that he is facing liquidity problem with Minifty. This is because of Minifty is facing competition from Nifty itself and Minifty becomes illiquid, that causes retail investors to face the problem that they cannot buy or sell Minifty quickly. Especially Nifty is concerned there is no need to having two separate contracts with market lot of 50 and 20 (Minifty). There should be only one instrument when the underlying asset is same. It is better to reduce the lot size of nifty future contract to 20 instead of having a separate entity (Minifty).

2. Uniform Contract Size Stock Futures/Options: At present, the contract size is dependent on the spot price of the underlying as it relates to a fixed value of ₹ 2 lakh. So, if Reliance Natural Resources (RNRL), on a specific day a few years ago, was trading at ₹ 25/-, the contract size was fixed at 7,190. If the price moved from ₹ 25/- to ₹ 240/-, traders had to simply pay a higher margin that would go up from ₹ 80,000/- to ₹ 3.85 lakh per contract. The NSE does reduce contract size when the margin rises to very high levels, but it is almost always rather late in the day. It is suggested that the markets should shift to a uniform contract size of 100 or 50. There are at least two advantages in doing so. First, it will attract more participation in the market, as derivatives will become more affordable. This will lead to better price efficiency. And second, traders can construct innovative income-enhancing strategies. A plain-vanilla strategy would be covered call-write. This is a strategy where traders sell a higher strike call against the underlying asset. Another strategy is to take advantage of spot-futures differential. Suppose futures price is ₹ 100/- while spot trades at ₹ 110/-. A trader can sell the stock that she holds and buy futures. Typically, futures will trade above spot after sometime. That is when the trader can reverse the transaction and take profits. If a trader wants to take advantage of the price differential between RNRL spot and futures now, she needs to hold 1788 shares of the stock and have enough money to pay margin on the futures. The strategy would be easier if the contract size were 100 or 50.

3. Margining Short Legs: The NSE will collect margin on the short-leg, even though a short option when combined with a long-leg is not as risky. Take Nifty 5000 long time spread. This involves buying March Nifty 5000 call and selling February 5000 call. Any loss on the short February 5000 call will be largely taken care of by the gains on the long March 5000 call. SEBI can, hence, considerably reduce the margin requirement. If the trader were to only close the long-leg, the stock exchange could indicate the higher margin requirement on the open short position. Reducing margin requirement on the short-legs in spread trades would lead to active trading in the options market. Traders can also then engage in switch trades - setting up covered call-write with futures.

SUGGESTIONS

In the light of above findings and observations, the following suggestions are made. There is a big need to bring awareness among the retail investors about derivatives trading. Here, some of the important suggestions are discussed as below.

1. Enhancing confidence and knowledge among retail investors to make them to participate in derivatives segment. Indeed, the first and most important factors that help retail investors are education and confidence enhancements. This is true at the level of the institutional investors as well as of retail investors - relying on derivatives for risk management purposes. In light of the complexity of some derivatives, mathematical concepts, derivatives pricing and management models, it is necessary that a sufficient educational training be given to retail investors; it is the responsibility of SEBI, Stock Exchanges, Intermediaries, Depositories, and Academicians. The regulators should continue their efforts to strengthen the derivative exchanges and instill confidence and awareness among the retail investors for increasing participation in derivatives markets.

2. Enhancing confidence and knowledge among derivatives brokers/staff to make them to help investors in derivatives segment. It is necessary that a sufficient educational training be given to derivatives brokers/staff also. To minimize educational risk, one could for instance, condition the hiring process upon the obtaining of a university degree, or a professional degree, and on the attendance to a specialised course on derivatives. Eventually, the financial community could introduce examinations that test the future candidate's minimum body of knowledge required to perform a specific task or be responsible for a specific risk exposure. Such an examination policy is already compulsory for brokers on most regulated exchanges, but it should also be extended to trade centre operators/staff who execute orders on behalf of investors.

3. Stock Exchanges (national/regional) and Universities/ Business schools should have Memorandum of

Understanding (MOU). So that they can plan investor education programmes like workshops, seminars, investors' meets, conferences etc on a regular basis. It will enhance the knowledge of students, potential traders/advisors, and faculty members and in turn, it benefits the common investors. It is suggested that derivatives concepts can be included in the curriculum of commerce and management education, even at the undergraduate level. Regional stock exchanges must play an educator role to educate retail investors associating with local universities/colleges. There are many funding agencies for seminars and training programmes to educate investors. For example, Government of India set investors' education fund. Both academicians and educational institutions can make use of it to educate investors as part their social responsibility.

4. Encourage the harmonization and standardization of direct price risk reduction mechanisms, such as daily marking-to-market. Eventually, the broker could define and explain values and risk of the positions of the investor and provide right advice to the small investors who do not possess the relevant financial skills internally. Facilitate the use and encourage the harmonization of risk reduction mechanisms such as netting and settlement of contract to the investor.

5. Tax Relief: To give real boost to derivative market, participation by retail brokers and small investors should be encouraged. Amending income tax laws to offer clarity as well as preferential tax treatment to profits/losses in derivatives trading is one of the changes that regulators need to focus on. Profit on derivatives trading is considered as business gain/losses (Speculative). And same is not allowed to be set-off against the normal business profit/losses. Whereas, cash market gain is treated as short-term gains/losses. Due to this, major players are not participating in the derivatives segment in a big way. It is suggested that income from derivatives trading of individual retail investors (not institutional investors) should be taxable under the head "Capital Gains", and should be entitled to the concessional tax treatment for short-term capital gains under section 111A of Income Tax Act 1961. Since the benefit of that section is available only to equity shares in a company or a unit of an equity oriented mutual fund, derivatives should be treated at par with equity shares as far as individual retail investors are concerned¹⁰. Exceptions to 'speculative transactions' as provided in Section 43(5) of IT Act also include hedging transactions undertaken in respect of stocks and shares. Proviso (b) to Section 43(5) states 'a contract in respect of stocks and shares entered into by a dealer or investor therein to guard against loss in his holdings of stocks and shares through price fluctuations'. It appears that if index futures are considered to be part of stocks and shares as per the wording of Section 43(5), then the proviso will also become applicable and hence hedging contracts through the mechanism of index futures will not be considered speculative¹¹.

6. Broaden derivatives market, ensure more liquidity and attract investors. In India, around 6000 listed companies are available for trade in Bombay Stock Exchange and on National Stock Exchange. NSE has about 1319 companies listed representing the length, breadth and diversity of the Indian economy. Today, however, the futures and options contracts are available in NSE only on 180 securities as on 1st September 2009. And there are about 5600 companies listed on BSE, but only 109 securities on BSE stipulated by the Securities & Exchange Board of India. SEBI can be allowed stock exchanges to include all listed scrips in the futures and options (F&O) segment- it will broaden derivatives market, ensure more liquidity and attract investors.

7. Stock Exchanges (BSE/NSE) should conduct the Derivatives Market Transaction Survey (DMTS) annually. Conducting or encouraging research on retail investors' view about derivatives, purpose of their transaction, product preference, their level of contribution/participation in Fs & Os segment etc. For instance, Hong Kong Stock Exchange (HKEx) has been conducting the Derivatives Market Transaction Survey (DMTS) annually since 1994. The main objective of the survey is to track trading composition by investor type and by trading purpose in derivatives (futures and options) market. Similarly, NSE and BSE have been approaching research on capital market but they should go for DMTS annually so that they come to know retail investors' view on derivative markets.

8. Regional Stock Exchanges Role: Generally, Stock exchanges should positively perceive in the derivatives area. There is the perception that Stock exchanges have been very active, with good results in the retail user end of the market. But retail investors felt that Stock exchanges could "get derivatives more talked about", and therefore, provide education opportunities. All the Regional Stock Exchanges should involve extensively as frontline organisations to conduct education programmes for retail investors at regional level. As there is no much trading in regional stock exchanges, they could focus on investors' education. For this, Investor Education Fund of Government of India can be utilized by regional stock exchanges.

9. Easy Accessibility: There is less understanding among the local retail investors about derivatives. There is a need for these to be distributed more widely and placed on the website in local/regional languages. Should motivate derivatives brokers to open more number of derivatives trading centers throughout the country. And from all the view “anything that educates retail investors is good”, being mindful that they are extremely busy, the need to go to them, arrange investors' meet locally, e.g. presentations at conferences they 'can' attend. Though the SEBI, BSE and NSE have been conducting various investors education programmes, they are charging more fee and hence, is not reachable to retail investors. The programme fee must be reasonable so that ordinary investors can afford it. At least, Service tax (10.30%) on fees charged for investors' education training programmes conducted by BSE and other training institutes should be removed.

10. Better Trained Contact Persons: Majority of dealers do not have trained frontline staff in their premises, which leads to loss of clients. Majority of dealers' staff lag behind in technical and conceptual skill. Stock trading assistants or sub brokers, retail investors need training in the impact of derivatives in reducing risk and need empowerment to ask their brokers if they are doing the right thing for risk management. There is need for improved transparency and to encourage all to talk about it more openly. There is need for education for compliance and systems at retail investors level, educate office staff to educate investors.

CONCLUSION

Derivatives usage among retail investors appears to be a fact of modern financial life. The evidence suggests that the percentage of retail investors using derivatives is currently less than half. Will derivatives' use expand over time? There is reason to believe that some of the retail investors currently not using derivatives will begin to use them as knowledge of these instruments increases and public perception of derivatives improves. It is proved that investors are neither risk evaders nor risk seekers. But investors are medium risk takers. And investors are aware of risks involved in investment. Investors prefer medium risk as well as medium return with medium liquidity, but they prefer high safety for their investment. And retail investors are able to manage their investment risk. It means investors are neither aggressive nor conservative -they are rational investors. Even though retail investors seem to be wise enough in taking risk, but most of the times, they are the sufferers in the capital market. Even though more than 50% of the investors are aware of Derivatives and they know that Derivatives are used for risk management, still they are not using financial derivatives as Risk management tools whereas they have been using derivatives as speculative tools. Majority of retail investors are neither investing nor are willing to invest in financial derivatives. Investors using derivatives also are not satisfied with the use of financial derivatives. It is proved that there is a big need of training and education programmes for retail investors to fill confidence and make investors take the advantage of the derivative products, professionals, brokers, regulators should give guidance and training for retail investors continuously, at reasonable cost at all places.

BIBLIOGRAPHY

1. Business Line daily news paper, Sunday Feb17-2008.
2. Dhruv Agarwala & Kartik Varma 'Eight mistakes to avoid while investing' Economic Times dated 26 Mar, 2008. www.economictimes.indiatimes.com/Finance/article.
3. Essie Tsoi “INCREASING INVESTOR PARTICIPATION: INSIGHTS FROM HKEx SURVEYS”, Research & Policy, Corporate Strategy, HKEx, Published in the SFC Quarterly Bulletin, 18th July 2002. www.hkex.com.hk/research/cmsurvey.htm
4. Essie Tsoi, “Understanding Investors in the Hong Kong Listed Securities and Derivatives Markets” Research & Planning Department, Hong Kong Exchanges and Clearing Limited, July 2004.
5. Essie Tsoi, “Understanding Investors in the Hong Kong Listed Securities and Derivatives Markets” Research & Planning Department, Hong Kong Exchanges and Clearing Limited, July 2004.
6. “HKEx Derivatives Market Equally Supported by Exchange Participants and Investors”, Research & Planning Department, Jaunary-2007, www.hkex.com.hk/research/dmtrsur/DMTS06.pdf
7. <http://www.derivativesindia.com/scripts/account/index.asp>
8. <http://www.r2iclubforums.com/forums/f36/indian-tax-derivatives-futures-10845/>
9. John C Hull, “Options, futures and Other Derivatives”, 5th edition., Delhi, Pearson Edition (Singapore) Pvt. Ltd., Branch, 482 FIE., 2004.
10. K. Balanaga Gurunathan, “An Investors' Requirements in Indian Securities Market” Delhi Business Review X Vol. 8, No.1, January - June 2007. Pp.35.
11. Philip G. Rutledge, Pennsylvania Securities Commission, February 1995, 2nd Edition, on www.wisegeek.com/what-are-financial-derivatives.htm.