



AN ANALYTICAL STUDY ON INVESTORS PREFERENCE TOWARDS DERIVATIVES AS AN INVESTMENT AVENUE IN INDIA

Dr. Renu Nainawat

Assistant Professor

Department of Economic Administration and Financial Management

Government Commerce Girls College Kota (Rajasthan)

drrenumanoj@gmail.com

Abstract:

The investigator has tried to assess the preference of investors towards derivative trading in India. Numerous studies are based on the effects of the futures and the various options which are listing on the underlying cash market volatility which have been done in the developed markets. The empirical evidence which is done and is based on the mixed and even the most suggest that even the introduction made out of the derivatives which do not destabilize the underlying market. Overall it is concluded that, even though derivatives trading is very risky in nature and amounts to speculation but it has gained lot of popularity due to various advantages associated with it. The ratio of positive feedback to negative feedback is more towards positive side and it can be said that respondents had a positive experience while trading in derivatives

Keywords: Derivatives, Investors, Attitude, Preference, etc.

1.1 Introduction:

The most significant and reliable event in finance is termed which is caused during the past decade and has been the cause of actual development and its expansion of the financial derivatives. These set of instruments also enhance the ability driven actually to differentiate the risk and also to allocate it to those set of investors who are most able and are willing to take it even. Derivative is also termed as a product whose actual set of value is derived from the value



of more than one or more basic variables, which are called as bases (underlying the asset, index, or even the reference rate), in a contractual manner. This is termed as an underlying asset which can also be called as equity, forex, commodity or even any other asset. The actual price of these set of derivatives which is also driven by the actual spot price of the underlying.

As per Indian context of the Securities Contracts (Regulation) Act, 1956 (SC(R)A), it also defines "derivatives", which also included, Even a contract is been derived with its actual set of value from the varied set of prices, or even the index of prices, of underlying the securities.

Derivatives are also termed as securities under the SC(R)A and hence they are termed as the trading done of derivatives which is also governed by the regulatory framework and is also carried under the SC(R)A. Derivative products also initially are being emerged as and is also being hedging with various devices which is against the fluctuations in the commodity prices, and even the commodity-linked derivatives have also remained the sole form of such set of products and are almost for 300 years.

Financial derivatives actually came into spotlight in the post-1970 period which was caused due to growing instability in the financial markets. However, since their actual emergence of these products have also become very popular and is governed by 1990s, they also accounted for about two thirds of the total transactions in the derivative products. In recent years, even the market for the financial derivatives has also grown tremendously in actual terms of variety of instruments which are also available, their complexity and is also turn-over. Even the small investors find these useful due to the high correlation of the popular indexes with the various portfolios and ease of use.

With the integration made of the financial markets and even the 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.

1.2 STATEMENT OF THE PROBLEM:

The introduction made out of the equity and the equity index derivative contracts in which even the Indian market has not been termed as very old but today the total trading values in which derivatives contracts are being ahead of the cash market.

This had led to a perception that the activities in the derivatives segment dictate the cash market prices of stocks. Given such perception, the investigator has studied the behaviour of volatility in cash market before and after the introduction made of the derivatives and probed whether the introduction derived out of the derivatives had any significant impact on the attitude of investors.

The investigator has made an attempt to assess the impact derivative trading on the behavioral aspect of investors in India. Numerous studies are based on the effects of the futures and the various options which are listing on the underlying cash market volatility which have been done in the developed markets. The empirical evidence which is done and is based on the mixed and even the most suggest that even the introduction made out of the derivatives which do not destabilize the underlying market.

1.3 OBJECTIVES OF THE STUDY:

Researcher has made the following specific objectives of the study.

1. To analyze out the investor's attitude and preferences towards various investment products in Western Mumbai.
2. To assess the awareness about various even investment avenues including derivatives.



HYPOTHESIS OF THE STUDY:

Researcher has framed the following hypotheses by considering the objectives of the study.

H01: “There is no significant association between demographic factors and investor’s approach towards in different investments including derivatives”

2.1 DATA COLLECTION METHODS:

The data is the raw material with which the actual foundation made of the subsequent analysis and even the statistical interpretation is firmly laid.

The data are of two types:-

- Primary Data
- Secondary Data

2.1.1 Primary Data collection:

The direct personal observation method is also suitable where - - The scope of investigation is very narrow, as it is there in this research study - Investigation is confidential and it also requires personal attention out of the investigator - Accuracy of the data is important.

Out of these available methods the researcher has collected the primary data by interview method using standardized questionnaire from 800 investors from India by applying stratified and convenient random sampling technique.

2.1.2 Secondary Data:

Secondary data is data that has been collected by someone other than the user. Common sources of the secondary data for social science may also include censuses, surveys, organizational records and even the data collected which is carried through qualitative methodologies or even qualitative research. Primary data, by contrast, are also collected by the investigator by conducting the research.



3. Literature Review:

Dr. Y. Nagaraju, 2014 studied investors' perception towards the derivative instruments and the markets. The study also shows that even though most of the people look at derivatives with the fear, they should also understand the fact that derivatives help in shifting the risk to the other party. There are many myths that actually surround the derivative market. All these can actually be done away with the proper system in place.

Today institutional investors do most of the derivative transactions. It is very pivotal that even individual investors participate in the derivative market actively and reap the benefits from it.

Only educated investors with the help of friends and brokers are investing in this market. The reasons for not investing in this market are lack of knowledge and very complex nature of instruments. Some people have a wrong perception about derivatives. The study suggests that measures should be taken to make sure that the investors get a right picture of the instruments and their risk factors.

As per Varadharajan. P and Vikkraman. P (2011) in their study has stated that an investor decides on an investment after getting opinion from family, friends and colleagues, broker's recommendation and also other professional advice. The investor also takes into actual; consideration the market situations like financial results of the companies, bonus issue, price earnings ratio and the reputation of the investors in the market

4. Data Analysis:

In the present research the data has been collected from 800 investors from India in order to study their preference and attitude towards derivative investment. For this purpose their demographic character has been studied as well as their preference towards different alternative investments is also studied and it multiway ANOVA test has been applied on it using SPSS ver. 20.

To test the hypothesis "There is no significant association between demographic factors and investor's approach towards in different investments including derivatives" multiway ANOVA test is applied taking demographic variables as gender, age, education, occupation and marital



status as fixed factors and level of awareness for different investment options as dependent variables, where following results were obtained:

Table No. 1: Tests of Between-Subjects Effects

| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. |
|--------|-----------------------|-------------------------|----|-------------|---------|-------|
| Gender | Bank | .590 | 1 | .590 | 23.971 | .000 |
| | Insurance Policies | .590 | 1 | .590 | 19.465 | .000 |
| | Mutual Funds | .590 | 1 | .590 | 21.072 | .000 |
| | Real Estate | .622 | 1 | .622 | 12.295 | .000 |
| | Gold / Silver | 1.667 | 1 | 1.667 | 69.314 | .000 |
| | Equity (share) Market | 1.039 | 1 | 1.039 | 22.124 | .000 |
| | Derivative Market | 1.493 | 1 | 1.493 | 68.153 | .000 |
| | Debentures / Bonds | 0.000 | 1 | 0.000 | 0.000 | 1.000 |
| | Provident Fund (PF) | .056 | 1 | .056 | 1.727 | .189 |
| | Post office | .083 | 1 | .083 | 2.310 | .129 |
| Age | Bank | 16.236 | 3 | 5.412 | 219.897 | .000 |
| | Insurance Policies | 1.989 | 3 | .663 | 21.876 | .000 |



| | | | | | | |
|------------------|------------------------------|--------|---|-------|---------|------|
| | Mutual Funds | 1.795 | 3 | .598 | 21.372 | .000 |
| | Real Estate | 16.615 | 3 | 5.538 | 109.538 | .000 |
| | Gold / Silver | 3.642 | 3 | 1.214 | 50.497 | .000 |
| | Equity (share) Market | 2.614 | 3 | .871 | 18.549 | .000 |
| | Derivative Market | 3.260 | 3 | 1.087 | 49.590 | .000 |
| | Debentures / Bonds | .147 | 3 | .049 | 2.952 | .032 |
| | Provident Fund (PF) | 10.473 | 3 | 3.491 | 107.940 | .000 |
| | Post office | 10.797 | 3 | 3.599 | 100.200 | .000 |
| Education | Bank | 1.539 | 3 | .513 | 20.849 | .000 |
| | Insurance Policies | 8.045 | 3 | 2.682 | 88.480 | .000 |
| | Mutual Funds | 5.165 | 3 | 1.722 | 61.492 | .000 |
| | Real Estate | 7.982 | 3 | 2.661 | 52.622 | .000 |
| | Gold / Silver | 15.778 | 3 | 5.259 | 218.741 | .000 |
| | Equity (share) Market | 12.952 | 3 | 4.317 | 91.899 | .000 |
| | Derivative Market | 4.850 | 3 | 1.617 | 73.782 | .000 |



| | | | | | | |
|-----------------------|------------------------------|--------|---|-------|---------|-------|
| | Debentures / Bonds | 8.638 | 3 | 2.879 | 172.881 | .000 |
| | Provident Fund (PF) | 2.737 | 3 | .912 | 28.206 | .000 |
| | Post office | 4.625 | 3 | 1.542 | 42.921 | .000 |
| Occupation | Bank | 1.161 | 3 | .387 | 15.728 | .000 |
| | Insurance Policies | .534 | 3 | .178 | 5.873 | .001 |
| | Mutual Funds | 4.561 | 3 | 1.520 | 54.300 | .000 |
| | Real Estate | 1.415 | 3 | .472 | 9.330 | .000 |
| | Gold / Silver | 7.659 | 3 | 2.553 | 106.180 | .000 |
| | Equity (share) Market | 1.370 | 3 | .457 | 9.719 | .000 |
| | Derivative Market | 1.997 | 3 | .666 | 30.389 | .000 |
| | Debentures / Bonds | 11.578 | 3 | 3.859 | 231.724 | .000 |
| | Provident Fund (PF) | 7.253 | 3 | 2.418 | 74.761 | .000 |
| | Post office | 3.005 | 3 | 1.002 | 27.887 | .000 |
| Marital status | Bank | 0.000 | 2 | 0.000 | 0.000 | 1.000 |
| | Insurance Policies | 0.000 | 2 | 0.000 | 0.000 | 1.000 |
| | Mutual Funds | 0.000 | 2 | 0.000 | 0.000 | 1.000 |



| | | | | | |
|--------------------------------------|--------|---|-------|---------|------|
| Real Estate | 1.799 | 2 | .899 | 17.790 | .000 |
| Gold / Silver | .288 | 2 | .144 | 5.986 | .003 |
| Equity (share) Market | 1.150 | 2 | .575 | 12.244 | .000 |
| Derivative Market | 2.348 | 2 | 1.174 | 53.577 | .000 |
| Debentures / Bonds | 3.381 | 2 | 1.690 | 101.497 | .000 |
| Provident Fund (PF) | 6.696 | 2 | 3.348 | 103.520 | .000 |
| Post office | 15.992 | 2 | 7.996 | 222.621 | .000 |

Interpretation:

Gender: The above table shows that the significance value obtained from all the investment avenues (except debenture/bonds) is less the alpha value of 0.05 ($p < 0.05$) which states **that there is significant association between gender and awareness for different investment avenues**. This shows that the choice of investment differs between male and female. However in case of Debenture/Bond the choice of investment is exactly similar among male and female.

Age: The above table shows that the significance value obtained from all the investment avenues is less the alpha value of 0.05 ($p < 0.05$) which states **that there is significant association between age and awareness for different investment avenues**. This shows that the choice of investment differs among investors of different age group.

Education: The above table shows that the significance value obtained from all the investment avenues is less the alpha value of 0.05 ($p < 0.05$) which states **that there is significant association between Educational Qualification and awareness for different investment**



avenues. This shows that the choice of investment differs among investors of different educational qualification.

Occupation: The above table shows that the significance value obtained from all the investment avenues is less the alpha value of 0.05 ($p < 0.05$) which states **that there is significant association between occupation and awareness for different investment avenues.** This shows that the choice of investment differs among investors of different occupation status.

Marital Status: The above table shows that the significance value obtained from all the investment avenues (except Bank, Insurance and Mutual Fund) is less the alpha value of 0.05 ($p < 0.05$) which states **that there is significant association between marital status and awareness for different investment avenues.** This shows that the choice of investment differs among investors of different marital status. However, the choice is similar in case of Bank Investments, Insurance and Mutual Funds.

Hence, the hypothesis i.e. *“There is no significant association between demographic factors and investor’s approach towards in different investments including derivatives”* is **rejected.**

5. Findings of the study:

The trading in Index futures contracts grew by more than 8 times within a year of it being introduced in India in the year 2001. It doubled within the next year. In the financial year 2003-04, the turnover in Index Futures increased by 1161 per cent, that is, an increase of more than Rs.5,10,494 crores than the previous financial year. There has been steady growth in index futures trading turnover every year except the financial year 2008-09 when the Indian economy had suffered due to the global recession.

The volume in index options is steadily increasing by more than 100 per cent every year. The turnover in index option contracts is on an increase ever since it was introduced in India in 2001-02. During the year 2008-09, the turnover in index options had increased by more than Rs.23,69,391 crores, or an average daily turnover of Rs.9402 crores per day compared to the



previous year, while the turnover in all other derivative segments saw a decline. The turnover in index futures fell by 7 per cent, stock futures by 54 percent, stock options fell by 36 per cent while the turnover in index options had increased by 174 per cent.

In 2014-15, more than 72 per cent of total derivatives turnover came from index options only. The share of other derivative segments is falling comparatively. Stock futures, which once commanded more than 50 per cent of derivatives market share, now has a market share of around 14 per cent only in 2014-15. The market share of index futures is also on a decline over the years. Based on the available information, it can be said that investors prefer index options more than other segments of derivatives contracts.

The study also revealed that there is a significant association between demographic factors and investor's approach towards in different investments including derivatives

6. Conclusions:

Overall it is concluded that, even though derivatives trading is very risky in nature and amounts to speculation but it has gained lot of popularity due to various advantages associated with it. The ratio of positive feedback to negative feedback is more towards positive side and it can be said that respondents had a positive experience while trading in derivatives

It is possible that the introduction of derivatives has different impact on spot market volatility depending on the trading mechanisms, contract designs and regulatory framework. This explains the mixed results expressed by researchers in different markets. Further research is needed to explore the relationship between these factors and the spot market volatility.

References:

1. Abdulla Yameen, "Capital Market Development: Maldives Monetary Authority", pp. 8-10
2. Abhijeet Chandra, "Decision making in the Stock Market: Incorporating Psychology with Finance", Department of Commerce & Business Studies, Jamia Millia Islamia University.



3. Abhyankar A. H, "Return and Volatility Dynamics in the FTSE 100 stock index and stock index futures market", *Journal of Futures Market*, Volume 15(4), 1995, pp. 457-488.
4. Aggarwal R, "Stock Index Futures and Cash Market Volatility", *Review of Futures Market*, Vol. 7, 1988, pp. 290-299.
5. Alexakis, P, "The Effect of Index Future Trading on Stock Market Volatility", *International Research Journal of Finance and Economics* , 11, 2007, pp. 7-20.
6. Anna A. Merikas, Andreas G. Merikas, George S. Vozikis and Dev Prasad, "Economic Factors and Individual Investor Behavior: The Case of the Greek Stock Exchange", *Journal of Applied Business Research*, Vol. 20, No. 4, 1999, pp. 93-98.
7. Butterworth D, "The Impact of Futures Trading on Underlying Stock Index Volatility: The Case of FTSE Mid-250 Contract", 2000, Department of Economics, University of Durham.
8. Byrne, Kathleen, "How do consumers evaluate risk in financial products?", *Journal of Financial Services Marketing* 10, No.1, 2005, pp 21-36.
9. Chan K, Chan K C and Karloyi G A, "Intraday Volatility in the Stock Index Futures Market", *Review of Financial Studies*, 1991, Vol. 4, pp. 657-683.
10. Chatrath, A., Song, F. and Adrangi, B, "Futures trading activity and stock price volatility: some extension", *Applied Financial Economics*, 2003, Volume 13, pp 655-664.
11. Chiang M. and Wang C, "The impact of futures trading on spot index volatility: evidence for Taiwan index futures", *Applied Economics Letters*, 2002, Volume 9, page 381-85.
12. Chitale, Rajendra P, "Use of Derivatives by India's Institutional Investors: Issues and Impediments", *Derivatives Markets in India*, 2003, Tata McGraw-Hill Publishing Company Limited, New Delhi, India.