



A STUDY ON FACTORS AFFECTING INVESTORS' BEHAVIOUR IN DERIVATE TRADING

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Abstract

Financial market is a mechanism, which allows people to trade money for securities or commodities such as gold or other precious metals. Financial markets are affected by forces of supply and demand and allocate resources over time through a price mechanism such as the interest rate. The rapid globalization of the business environment during the last decade has exposed many firms to exchange rate fluctuation. The increased exposure is forcing many corporations to manage effectively financial risks like foreign exchange risk, interest rate risk and other financial risks. The growing significance of corporate hedging has had its demand for innovative risk management mechanisms and revolutionary developments in the field of financial engineering. The support offered by financial derivatives in this respect is highly acknowledged by the firms. The primary objective of the study is to evaluate the perceptions and experiences of the stock market investors on derivatives.

Keywords: *Financial Derivatives, Financial Market.*

INTRODUCTION

The gradual liberalization of Indian economy has resulted in substantial inflow of foreign capital into India. Simultaneously dismantling of trade barriers has also facilitated the integration of domestic economy with world economy. With the globalization of trade and relatively free movement of financial assets, risk management through derivatives product has become a necessity in India also, like in other developed and developing countries. Tremendous growth in derivative market can be attributed to a number of factors. They reallocate risk among financial market participants, help to make financial markets more complete, and provide valuable information to investors about economic fundamentals. Derivatives also provide an important function of efficient price discovery and make unbundling of risk easier.

The process of liberalization and deregulation of the financial market led to the integration of the world financial markets. The arrival of information technology facilitated the process of integration on an unprecedented scale. With the integration of financial markets and free mobility of capital, risks also multiplied and risk diversification came to occupy the center stage. This led to the evolution of risk hedging mechanisms, which are generally known as derivatives. Derivative is a product whose value is derived from the value of one or more basic variables called bases in a contractual manner.

SCOPE AND SIGNIFICANCE OF THE STUDY

Every business involves risks. For certain risks we have insurance, collateral etc. but there are certain risks arising out of exchange in the value of an asset or liability or the cash flow due to change in market conditions. To provide against such risk there are no insurance organization or collaterals. There are certain financial devices available in the market which help take care of such business risks or which help in reducing the impact of such risks. These devices are nothing but the financial derivatives, which precisely do the job of protecting one from the adverse effects if the movement in the various market variables. A derivative is mainly a mechanism for covering against risks.

The process of liberalization and deregulation of financial markets led to what is known as the integration of world financial markets. With the integration of financial markets and free mobility of capital resulted in increased risk. It will lead to the evolution of risk hedging mechanisms, which are generally known as derivatives. Derivatives can be used as very good tool for risk management and hedging if used properly. The advent of modern day derivative contracts can be attributed to the need for farmers to protect their produce from any decline in the price of their crops.

Derivatives provide investors with a tool to hedge their naked positions in the cash market. They also enable the unexpected movement in the market. Derivatives help you in managing your cash flows in a better fashion. Derivative trading by individuals is generally considered as speculative business. But derivatives, apart from speculation, provide investors with a multitude of uses namely hedging and speculation.

OBJECTIVES

1. To evaluate the profile of retail investors engaged in derivative trading
2. To understand the motivational factors behind derivatives trading.
3. To ascertain the association between preference towards derivatives and
 - (i) Level of income/savings
 - (ii) Education

4. To identify the factors that influence the popularity of financial derivatives

METHODOLOGY

Present study deals with primary data. Methodology adopted for the study has 3 phases.

Phase I: Understanding concepts of financial derivative

Phase II: Sample design

Capital market investors dealing with Geogit securities and JRG security Ltd are selected for conducting this study. 50 sample investors from Kottayam District who are regularly dealing with Geogit or JRG are selected for data collections through structured questionnaire. Sample investors are selected from both JRG and Geogit branches in KTM and Changanacherry on 1:1 proportion. This selection is based on convenience.

Phase III: Analysis the data

Primary data collected is analyzed by using statistical tools like chi-square analysis, percentages; Likerts scaling techniques, composite index etc.

Hypotheses

- There is no association between the preference towards derivatives and education.
- There is no association between the preference towards derivatives and level of income.

Meaning and Definition

A derivative is specific type of investment whose pay offs over time are derived from the performance of assets such as commodities, shares or bonds, interest rates, exchange rate or indices such as stock market index, consumer price index or an index of weather conditions. Derivatives are known as “deferred delivery or deferred payment instruments”. In a sense, they are similar to securities, which are backed by the original issuer of the underlying asset, or security. Derivatives are instruments whose value is based on or derived from, the price of securities, commodities, money or other external variables. Derivatives are product whose value are derived from one or more basic variables called bases. These bases can be underlying assets such as foreign currency, stock or commodity, bases or reference rate such as LIBOR or US Treasury rate etc. Derivative, thus have no value of their own but derive it from the asset that being death with under the derivative contract. Derivative means a forward, future, option or any other hybrid contract of predetermined fixed duration linked for the purpose of contract fulfillment to the value of a specified real or to an index of securities.

Derivatives or derivative securities are contracts which are written between two parties and whose value is derived from the value of underlying widely-held and easily marketable assets such as agricultural and other tangible physical commodities or currencies or short-term and long-term financial instruments or intangible things like commodities price index, equity price index or bond price index.

With securities laws (Second Amendment) Act, 1999 derivatives has been defined in securities contracts (Regulations) Act as:

- a. security derived from a debt instrument share loan whether secured or unsecured risk instrument or contract for differences or any other form of security.
- b. A contract, which derives its value from the prices or index of prices, of underlying securities.

ANALYSIS OF DATA

Table 1, Educational Back Ground of Respondents

Sl. No.	Particulars	No.	%
1	SSLC	9	18
2	Pre Degree	6	12
3	Graduate	20	40
4	Post graduate	7	14
5	Professional degree	8	16
Total		50	100

Source: Primary data

The above table shows the education profile of the investors selected for the study. 40% of the investor selected for the study are graduates 14% are post graduates and another 16% have professional qualification. Hence 70% of the selected investors have bachelors' degree or post graduate degree.

Table- 2, Occupational Classification of Respondents

Sl. No.	Particulars	No.	%
1	Business	13	26
2	Employee	11	22
3	Professional	8	16
4	Agriculturist	5	10
5	Others	13	26
Total		50	100

Source: Primary data

The above table shows the occupational profile of the investors selected for the study. Out of the 50 respondents 26% are engaged in business and 22% are employees. Professionals constitute 16% and balance includes agriculturists and others. It can be seen that there is a dominance of businessmen and others in this field.

Table -3, Monthly Income Classification

Sl. No.	Particulars	No.	%
1	Below 10,000	32	64
2	10,000 – 20,000	10	20
3	20,000 – 30,000	6	12
4	Above 30,000	2	4
Total		50	100

Source: Primary data

The survey results show that 64% of the traders have a monthly income below 10,000. 20% traders belong to Rs.10, 000 to Rs.20, 000 category and 12% traders monthly income is between Rs.20, 000 – 30,000. Rest 4% people belong to high income group. The average monthly income of the respondent selected for the study is Rs.39,000 with standard deviation of Rs.4234.

Table 4, Investment avenues of Respondents

Sl. No.	Particulars	No.	%
1	Bank	29	58
2	Real estate	4	8
3	National saving scheme	7	14
4	Insurance	25	50
5	Stock market	50	100
6	Others	-	-
Total		50	100

Source: Primary data

The above table shows various investment avenues of the investors selected for study. Most of the respondents have more than 2 avenues. 50 respondents having investment in capital market are selected for the study. 58% of the respondents have deposits with banks, 50% have investments with insurance companies and 14% have investments with National Savings Schemes.

Table -5, Stock Market Investment of Respondents

Sl. No.	Particulars	No.	%
1	Equity shares	38	76
2	Debentures	2	4
3	Mutual fund	18	36
4	Derivatives	37	74
5	Others	1	2

Source: Primary data

The survey results show that 76% of the stock market traders are invested in equity shares and 74% of the traders are invested in derivatives. 36% of the traders have investment in mutual fund. Only 4% of the traders are invested in debentures and 2% of the traders are invested in other stock market investments. A close observation of the data shows that capital market investors are not at all interested in fixed interest securities like debentures. It is also very interesting to note that a large majority of the investors in capital market prefer derivatives as an investment avenue.

Table- 6, Stock Trading Experience of Respondent

Sl. No.	Particulars	No.	%
1	Less than 1 year	9	18
2	1 – 5 years	20	40
3	5 – 10 years	10	20
4	More than 10 years	11	22
Total		50	100

Source: Primary data

Table 3.6 shows the experience of respondents in capital market operations. It is found that 22% of the traders have the experience of the more than 10 years in stock trading while 20% of people have experience between 5 and 10 years. 40% of the respondents have experience from 1 to 5 years. Balance 18% respondents are new comers having experience less than 1 year. The average experience of the respondents is 5.54 years (5 years and 197 days) with a standard deviation of 1.37 years (1 year and 135 days).

Table -7, Motivational factors behind Derivative Trading

Sl. No.	Particulars	No.	%
1	Short term finance	9	24.32
2	Less Investment cost	6	16.23
3	Less risk	8	21.62
4	Chance to earn high return	17	45.95
5	Others	5	13.51
Total		50	100

Source: Primary data

The above table shows the motivational factors behind derivative trading of the investors. 45.95% of investors in derivative products are attracted by the chance to earn high return. 24.32% of investors prefer derivative products because it requires funds for a short period of time. Even though derivatives are risk-hedging instruments, only 21.62% of the selected respondents are motivated by this factor. It can be concluded that derivatives are considered by the investors as tool earn superior gain and not as a risk hedging mechanism.

Table- 8, Trading in Financial Derivatives

Sl. No.	Particulars	No.	%
1	Futures	30	81
2	Options	29	78.38

Source: Primary data

Out of the 37 investors in derivatives 81% are investing in futures and 78.38% deals in options. It is very clear that more investors than options prefer futures. Some investors are investing in both futures as well as options.

Table- 9, Opinion about effectiveness of derivatives in reducing risk

Sl. No.	Particulars	No.	%
1	Highly effective	6	16.23
2	Effective	22	59.46
3	Not effective	3	8.11
4	Highly ineffective	2	5.40
5	No opinion	4	10.80
Total		37	100

Source: Primary data

Table 9a, Value as per Likerts Scaling Technique

Sl.No.	Particulars	No.	Weights	Product
1	Highly effective	6	5	30
2	Effective	22	4	88
3	Not effective	3	3	9
4	Highly ineffective	2	2	4
5	No opinion	4	1	4
		37		135

Table 3.9 shows the opinion of respondents about the effectiveness of derivatives in reducing risk. Likerts scaling technique is adopted for identifying the general opinion of respondents. The computed value as per the scaling technique is 136, which lies in between 148 (37×4) and 111 (37×3). Hence the rating of the respondents ranges in between effective and not effective. The average value as per the scale is computed to be 3.72 which is very closer to the value assigned to the rating effective. Hence we can conclude that the investors believe that the derivatives are effective in reducing risk.

Table- 10, Type of derivatives dealt in by the respondents

Sl. No.	Particulars	No.	%
1	Stock options	28	75.68
2	Stock futures	24	64.86
3	Index options	23	62.16
4	Index futures	24	64.86

Source: Primary data

Table 3.10 shows the types of derivative instruments dealt in by the respondents. As the table indicates 75.68% of investors in derivatives deal in stock options, 64.86% deal in stock futures. 62.16% deals in index options and 64.86% investors deals in index futures. Thus it can be concluded that stock option is the most popular derivative instrument. Most of the investors are dealing in both options and futures.

HYPOTHESIS – I

Education and derivative investment

Level of education	Invest in derivative	Not invest in derivative	Total
Upto Plus two	10	5	15
Graduates, PG& others	27	8	35
Total	37	13	50

Ho: There is association between the preference towards derivatives and education.

Level of significance : 5%
Degree of freedom : 1
Calculated value : 0.599
Critical value : 3.841

As the calculated value is less than critical value the null hypothesis is accepted. That means education background of respondents and investment in derivative are independent.

HYPOTHESIS – II

Level of income and derivative investment

Level of income	Invest in derivative	Not invest in derivative	Total
Below 10,000	27	5	32
Above 10,000	10	8	18
Total	37	13	50

Ho: There is no association between the preference towards derivatives and level of income.

Level of significance : 5%
Degree of freedom : 1
Calculated value : 4.98
Table value : 3.841

Since the computed values of χ^2 is greater than table value of χ^2 reject Ho. It means level of income and investment in derivative is related. Level of income of respondent and their investment decision about derivatives are related.

FINDINGS OF THE STUDY

Financial derivatives are the most popular mode of investment in capital market. Commodities market is also gaining popularity world over. The present study is undertaken among small investors actively engaged in capital market. Following are the major findings of the study

- Majority of the traders are highly educated 70% of the selected investors have bachelor's degree or post graduate degree.
- Business people have prominence in the field of derivative trading.
- Most of the respondents belong to the average income of Rs.10,000. 84% of the respondents have monthly income below Rs.20,000.



- It is found that most of the respondents have more than 2 investment avenues. Investors prefer to invest their funds in stock market, bank and insurance.
- It is found that 76% of the respondents have investment in equity shares and 74% of the respondents invested their funds in derivatives. Only 4% of the traders have invested in debentures.
- It was found that 82% of the respondents have more than 5 years' experience in the field of stock trading.
- Study is found that 45.95% of the respondents invest their funds in derivative for obtaining large profits. Risk hedging comes only as the second choice. The risk hedging capacity of derivatives was acknowledged only by 21.62% of respondents.
- This study found out that risk – hedging ability of derivative is effective.
- Stock option is the favourite for 75.68% of the investors in derivatives. Futures contracts are more preferred by the investors than options. 81% of the investors deal in futures and 78.38% of the investors deal in options.
- Education background of respondents and investment in derivative are independent.
- Level of income of respondent and investment in derivative is related level of income of respondent and their investment decision about derivatives are related.

CONCLUSION AND SUGGESTIONS

Derivatives are risk hedging mechanisms. Capital market investors are using financial derivatives to optimize return and minimize risk on investment. The present study is undertaken among small investors in capital market. The result of the study reveals that small investors are not considering derivatives as a tool for hedging risk. This shows the level of ignorance of the small investors about financial derivatives. The authorities of capital market, stock exchange and firms dealing in derivatives must try their level best to improve the level of knowledge of investors about derivatives.

LIMITATIONS OF THE STUDY

Following are limitation of the study

- The present study is undertaken among 50 investors dealing in JRG and Geogit branches in Kottayam and Changanacherry on 1:1 proportion. The study is undertaken among small investors actively participate in capital market. Therefore result of the study is applicable only to the small investors.
- Financial derivatives are complex in nature which involves many aspects. The present study is confined to limited aspects.

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