



EFFECT OF CHANGE IN SEBI GUIDELINES ON INDIVIDUAL INVESTORS IN EQUITY DERIVATIVE SEGMENT-A STUDY WITH REFERENCE TO INDIAN CAPITAL MARKET

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ABSTRACT:

Financial derivatives are most effective tool for risk management in various asset classes. But these assets are not wisely used by Indian retail or individual investors. Various studies including market regulators SEBI shared their concerns about trading technique of retails or individual investor. The recently said individual investors many of them not financial fit to bear the loss caused by equity derivative market due to various factors associated with derivative segment. In order to curb the retails trading volume SEBI has done various changes in equity derivative segment. This research paper is an attempt towards studying the impact on such events on individual investor's volume. Event study methodology has been used along with T-test. The data for the study has been taken from SEBI and NSE official website from 2015 to 2018. The results showed that most events of the SEBI have not brought any significant change on individual investors' volume.

KEYWORDS: Equity derivative, Individual investors, SEBI Events, Hedging, Event Study.

1. INTRODUCTION

One of the most exciting, and at the same time, misunderstood jargon in the financial market is 'financial derivative'. As investment product financial derivatives has always been taken with a pinch of salt by the global market participants. One of the prime reasons for derivatives being welcomed with skepticism in the initial days has been the settlement issues. It was the subsequent realization by the largely non-participative hedging community; about the various hedging strategies that could be used to minimize and at times mitigate the risk of holding the assets that opened the doors for derivatives as a significant product for consideration. As the financial world started becoming volatile, complex uncertain and ambiguous (aka VUCA), the impetus for derivative product and the frequency and magnum of usage increased. As on today, derivatives is a product used on par with any other fixed income and equity security, in advanced as well as developing economies across, capital, commodity and forex markets.

Financial market regulators all over the world are worried constantly with regards to the increasing participation of individual and retail segment of investors in the financial derivative products. While it is an always welcome trend to have large number of retail investors participating in financial markets, the cause of concern is the growing interest of individual investors towards derivative market as motivated by their speculative mind set. However, there is no publicly available data which confirms the speculative moods of retail investors. Yet, the same cannot be ignored as the increasing turnover in the market advocate the fact that retail investors are more speculative intensive, Despite being the investment strategies and settlement payoff of the derivative exchanges is complex and at times may not be easily comprehended by the small or retail investors.



Looking back at historical experiences, we can say that financial derivatives have perceived to be complex products to understand, more specifically, understanding the market mechanism, trading strategies and valuation issues, are more complicating than other traditional financial products, like equity. This made the derivative participants, resort to what can be called a *noise-trading*, which essentially is an outer layer trading strategy, where one ignores the fundamentals of the underlying security and takes trading decisions, based on hearsay in the market place. Such practice affects the overall sentiments in the market, and pushes the rational investors out of market, at the same time increase the volatility (Ankit, Mrinal, & Prasanna, 2016).

A sound financial market increases market depth, brings down transaction cost and increases liquidity. Present trend in the Indian capital shows shocking facts especially in equity derivative segment. **Security exchange board of India, the market regulator of Indian capital market express their view of equity derivative market.**

Contrasting the equity market in India with derivatives market, Finance Minister Arun Jaitley pointed out during an annual meeting of SEBI, that out of the free float market capitalization of Indian equities almost 63% was owned by Institutional investors and about 18% by the retail segment, whereas in Indian derivatives market the institutional participation is just about 17%. Its also observed that just about 2% of trading members are accounted for more than 50% of derivative volume. (Praveen, V. Anantha, & Ajit, 2014). We can thus infer that in Indian stock market retail participation is considerably low, while the retail participation in what is supposed to be a highly technical product, equity derivative market is higher. Thus, the speculative motive is evident. Retail inventors are highly betting on the price movement of equity derivative contracts. A speculative capital market invites more speculators and discourages investors. It may be noted that Indian derivative trading volume is the world's second highest, next to Korean markets. Yet, such volume seems to be a result of a high number of speculators in the market.

LC Gupta Committee in March 1998 laid down stepping stone for introduction of derivative trading India. The 24 member committee has guided that 50% to 60% of derivatives volume could be used for hedging purpose, in other words, holding derivative position to avoid unexpected loss associated with underlying asset. And 40% to 50% towards a healthy speculation that will help price discovery in the market. However, at a global level there is no publicly available data which confirm the aforesaid hedging and speculation ratio. So, there is a need of a study to understand the equity derivative market in this context is there.

The aim of market regulator in any country is to protect the interest of investor particularly small and retail investors. The country like India where income growth of middle and lower income group growing significantly and domestic saving rate growing in connection with growth in income of the people. SEBI as market regulator should create a platform to facilitate retail and small investor participate in capital market with confidence. However confidence of retail and small investor in capital market looking shaggy. In order to restore the confidence of rational investor every market regulator kept on improving the policy governance and periodically updating and tightening the capital market policies. Before it is too late SEBI acted on it quickly made some necessary changes in equity derivative market to curb the retail investors over enthusiastic in equity derivative trading. (SEBI, Discussion Paper on Growth and Development of Equity Derivatives Markets in India, 2015)

This research paper is a systematic effort towards understanding the significant effect of policy changes introduced by SEBI towards controlling retail investors in equity derivative market.

2. LITERATURE REVIEW

Charles C Cox (1976) explains that derivatives market could cause stabilizing persuade on the underlying asset because derivative market attracts addition source of traders to the market place, which provides them low cost transactions same will be transmitted in to spot market more quickly. It provides favorable situation for traders to enter into the market same will result in better distribution of risk.

Gary and Louis (1994) in their research publication they explained about the future of equity derivative market. They said form of the equity derivative will be shaped regulatory and other constrains predominantly, however their functions pure determined by demand and supply of said instrument. It was clear in their research that equity derivative market will be controlled and structured by regulators predominantly, but demand and supply equity derivative will decides the how the instrument will function whether as speculative instrument or any other opportunity prevailing in the market like arbitrage and hedging.

Chathra, Ramachandra et al (1995) they expressed their view in the research paper as derivative market is of market of speculators. This market required very little cash which encourages investors to take chance and bet on the price movement. The factor of low initial investment is the key for speculative contribution that allows higher degree of leverage risk concentration. These kinds for market participant cause the destabilizing of spot market or cash market.

Ruchika and Saroj (2012)they found out that there are critical challenges in Indian regulatory environment; they continued to express their view on some of the issue and challenges faced by investors in equity derivatives. They found out that accounting method for derivatives, policy relating to domestic institutional participation, valuation and pricing of equity derivative, margin for derivatives were the key challenges in derivative market. Further they feel the reason for this was due to trade volumes, varying users and purpose of the usage.

Shruthi B C and Dr N. Suresh (2013) expressed that equity derivative market required to be fortify with diversified number of trading contracts and volumes in all equity derivative instrument. Further clarified that to achieve the deeper volume in the equity derivative market strong regulations and policy framework to be place which in turn protects the interest of investors. They furthermore explained Indian equity derivative market is predominantly participated by retail investors and other institutions are gradually getting to action.

Rahman and Hassan (2011)they found out that due to recent fall in Bangladesh stock market, consistent declaim in foreign direct investment investor of Bangladesh in need of financial product like equity derivatives for hedging of risk and expansion of the financial market. In their research paper they observed and evidence that equity derivative can strengthen the capital market in the term mitigating the risk and also create platform for alternate invest avenue for investors.

Isha, Moura and Gupta (2015)expressed derivatives are supporting and working as resisting tool for economy during turbulence internal and external economic downturn. They further explained that derivative market allows investors to take trading choice at higher leverage and lower transaction cost which supports all categories of investors to take a look at derivative market, keeping risk factor neutral.

Vashishta and Kumar (2010) explained derivative are the tool for risk management which helps in efficient management risk by different stakeholders, financial derivative offer an option to transmit the risk from risk averter to risk seekers and cost effective solution for problem associated with risk.

In the financial 2016-17 cumulative cash market turnover stood at 60.5 lakh Crore and during the same fiscal year equity derivative turnover surged to 944 lakh crore. This NSE data showing 15 times higer turnover in equity derivative market than cash market. Which cause a serious concern to market regulator? In justification of previous mentioned literate reviews boosts the retail investor sentiment on equity derivative as speculative tool. The capital market regulator is presently in the verge of overhauling its policies and rules for trading in derivatives. SEBI expressed its concern over suitability and complexity of equity derivative to individual investors.

To detoxify derivative market SEBI has initiated a public discussion in July 2017, keeping in mind forming of new rules. SEBI said *“The ratio turnover of derivatives to turnover in cash market is around 15 times to what extent the driver of this ratio in India are comparable with other markets”*. According to market regulator SEBI *“While a large number of individuals are active in derivative segment it has been observed that these investors may or may not have adequate financial capability to withstand risks posed by complex derivative instruments.”*

This research will analyze the various policies and rules chased by SEBI from 2015 to 2018 and study their impact on individual traders' volume. The analysis targets towards analysis the volumes of various market participants in derivative segment.

3. OBJECTIVE OF STUDY

The broad objective of the study is to analyze the impact of various regulatory steps taken by SEBI in order to curb the individual investors' speculative exposure in derivative segment. In this context, below specific objectives have been developed:

- To enlist important changes on operational guidelines brought in by SEBI encourage retail investors participation in derivatives segment
- To study the impact of changed operational guideline on retail investors behavior
- To study the impact of above regulatory steps of SEBI on retail volume in derivatives segment
- To study the impact of above regulatory steps of SEBI on non-retail volume in derivatives segment

4. METHODOLOGY

An EVENT STUDY has been conducted to achieve the above objectives. Under this method of research impact of a particular event on asset price will be studied. This method helps to find out how quickly market has reacted for the event. The event may be corporate actions like dividend declaration, bonus issue, change in management of the company, change in government and regulatory policy towards industry, union budget etc are the example for important event. An event study helps in finding out whether these information reflect the assets price or share price during day of event. An event in this study is defined as the date of a policy change announced by SEBI. ter the event will be take to study the abnormal return on the asset price. After computation of abnormal return a T-Test will be computed to verify the statistical significance of the abnormal return. If T-test result satisfies the 95% significant level then event can be concluded that there a significant impact of event occurrence.(Ramachandran, 2013)

Event study is not new to the world of research way back in the year 1933 James Dolley used the method to verify the effect of event on stock market. In his research paper "Characteristic and procedure of common stock split-ups", but that was not so popular but in the year 1969 when FAMA spoke about efficient market hypothesis event study gained lot importance in the field financial market. (Koch, Fenili, & Cebula, 2011)

Present study historical data pertain to total volume of equity derivative segment from www.nseindia.com, period from May 2015 to June 2018. Total equity derivative trading volume on daily and participant basis has been considered.

To conduct event study following equation has been use.

1) Abnormal return: Abnormal return computed based on below equation. Time series data for equity derivative total volume taken participant wise. 30 days prior to the event and 30 days after the event window has been taken.

$$ARit = Rit - ERit$$

AR= abnormal return of security I in during period T

Rit = Return of security I in during period T

ERit = Expected Return of I security on period T

2) Rate of Return on security is calculated based on below equation:

$$Rit = (Pit - Pit-1)/Pit - 1$$

Rit = return of security I during period T

Pit = price of security I during period T

Pit-1 = Price of security I during the period T-1

3) Expected rate of return is calculated based on below equation

$$ER_{it} = a_i + B_i R_{mt} + e_{it}$$

ER_{it} = Expected rate of return of security I in period T

A_i = average rate of return of security I in period zero market return

B_i = Beta coefficient of security (Ramachandran, 2013)

Entire set of data has been analyzed using Microsoft excel.

The event dates of SEBI have been given below. Data for this period collected from www.nseindia.com. Data includes total volume equity derivative segment which is classified among market participants like individual, Domestic Institutional Investor (DII) Foreign Institutional Investors (FII) and Proprietary Trading (Pro).

Table No – 1.1 SEBI Important event details

| Date of effect | Event | Date of proposal |
|-----------------|---|-----------------------------|
| November-15 | Change in contract size from 2lacs to 5lacs | 13 th July 2015 |
| NA | SEBI derivative review committee to increase the lot size | 28 th June.2017 |
| NA | Physical settlement of stock derivative | 07 th Sep.2017 |
| NA | Physical settlement implemented in phased manner | 11 th April 2018 |
| NA | Physical settlement started NSE Circular 37/2018 | 23 rd April 2018 |
| 01st June. 2018 | Margin collection requirement and computation of liquid net worth | 02.May.2018 |

Source: SEBI official website

5. HYPOTHESIS

- There is no significant impact on total volume of individual traders in equity derivative segment on event day.
- There is no significant abnormal return on individual trade volumes on event day

6. ANALYSIS

Since 2015 to 2018 SEBI has made 8 major announcements with reference to equity derivative trading and settlement. Each of the event date wise given below to find out the significant impact on the volume of retail or individual participant in equity derivative market. SEBI has made these changes in equity derivative market to control the surge in speculative trades of individual investors. However this study provides evidence whether these changes has brought changes in trading volume of individual investors or not.

During these event day if volume of retail investor has gone down then, we can say there is an impact if there is increase or no change in volume we can say no impact from these policy changes. Further these changed volume has tested to know the statistical significance. If these impact full fill the T-Test then we can conclude SEBI objective of implementing some of the policy change impacted on reducing the volume of retail investors.

Table given below shows data analysis which gives the computed T-value and table value at 95% significant level.

Table No – 1.2: Analysis of SEBI events

| Impact on Individual trading Volume | | | | | |
|--|-------------------------|-----------------------|----------|--|---------------------|
| Event | Date of proposal | Computed Value | T | Table Value at 95% significance level | Significance |
| Change in contract size from 2lacs to 5lacs | 13.July.2015 | 0.28 | | 1.96 | Not-Significant |
| Change in contract size from 2lacs to 5lacs effective day | 29.October.2015 | -2.33 | | 1.96 | Significant |
| SEBI derivative review committee to increase the lot size | 28.June.2017 | -0.05 | | 1.96 | Not-Significant |
| Physical settlement of stock derivative | 07.Sep.2017 | -1.02 | | 1.96 | Not-Significant |
| Physical settlement implemented in phased manner | 11.April 2018 | 0.9 | | 1.96 | Not-Significant |
| Physical settlement started NSE Circular 37/2018 | 23. April 2018 | 0.57 | | 1.96 | Not-Significant |
| Margin collection requirement and computation of liquid net worth | 02.May.2018 | 1.7 | | 1.96 | Not-Significant |
| Margin collection requirement and computation of liquid net with penalty | 01.June.2018 | -0.3 | | 1.96 | Not-Significant |

7. CONCLUSION

Except SEBI event dated 29.10.2015 which is statically significant at 95% significant level, rest all the event are not created significant impact on the retail volume. SEBI need to think on reasons behind speculative mind sets of individual investors. Further research need to be conducted on behavior factors of retail investors to research various behavioral factors which influencing individual investors. This will help in further strengthening the investor education and other required structural changes in equity derivative market.

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