INDIAN STOCK MARKET VOLATILITY – A BRIEF STUDY

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ABSTRACT - Stock Market is one of the most versatile sectors in the financial system, and Stock Market plays an important role in economic development. Stock Market is a hub where facilities are provided to the investors to purchase and sell their Shares, Bonds and Debenture etc. It is the place where the companies can sell their securieties and derivatives without any kind of barrier. Companies in India are now listing their long term securities in the stock market to get fund by listing their securities here. Bombay Stock Exchange (BSE), the National Stock Exchange (NSE) and the Calcutta Stock Exchange (CSE) are the main stock exchange in India. These three are largest stock market in India. Volatility of a stock market can be measured by calculating the dispersion in return which can be calculated by some statistical tools. Volatility of a stock market is termed as its risk and higher the volatility higher will be the risk. It is essential for the various types of investor to calculate the risk factor associated with their investment. Indian stock market is continuously providing important information to its investors like the stock market in the developed countries. We in the present study will try to understand the past, present and the future aspect of Indian stock market.

Keywords – Stock Market, BSE, NSE, CSE.

I. INTRODUCTION

As a part of the process of economic liberalization, the stock market has been assigned an important place in financing the Indian corporate sector. Besides enabling mobilizing resources for investment directly from the investors, providing liquidity for the investors and monitoring and disciplining company managements are the principal functions of the stock markets. The main attraction of the stock markets is that they provide entrepreneurs and governments a means of mobilizing resources directly from the investors, and to the investors they offer liquidity. It has also been suggested that liquid markets improve the allocation of resources and enhance prospects of long term economic growth.

Stock markets are also expected to play a major role in disciplining company's managements. In India, Equity market development received emphasis since the very first phase of liberalization in the early 'eighties. Additional emphasis followed after the liberalization process got deepened and widened in 1991 as development of capital markets was made an integral part of the restructuring strategy.

At the onset of late fifties the country is moving towards the socialist structure of societies as it was aiming to enhance public sector at a greater speed. The state was trying to get control over the allocation of resources and the nationalization of various sectors like Banks, Insurance sectors and non- banking financial institutions. From this period, financial oppression came into action and the stock market started becoming stand still.

II. STOCK MARKET - AT INDIAN PERSPECTIVE

Bombay stock exchange is the oldest stock exchange in India which was established in the year 1875 as "The native shares and stock brokers associatioin" it was a voluntary non –profit making association. The price of the stock of any company listed in any stock market for any particular day is determined by bid and offer of the buyer and seller. Buyers compete with each other for the best bid and got their highest price quoted to purchase a particular Stock Market Shares. Similarly, sellers compete with each other for the lowest price quoted to sell the stock. When the bid and offer price match with each other transaction took place. The fixing of bid and offer price among thousands of investors within a fraction of seconds is executed with the help of a super computer. There are 23 stock markets in India presently. The Bombay Stock Exchange (BSE), the National Stock Exchange (NSE) and the Calcutta Stock Exchange (CSE) are the three large stock exchanges. There are many small regional exchanges located in state capitals and other major cities.

HISTORICAL EVOLUTION OF INDIAN STOCK MARKET

As already stated, the Indian Stock markets have played a significant role in the early attempts at industrialization in

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India in the late nineteenth and early twentieth century's. The early textile mills and the first steel plants were funded in the stock market. Some of these capital raising exercises were large in relation to the size of the financial sector in those days.

Beginning in the late fifties, the country embarked on an inward looking socialistic model of development that sought to put the commanding heights of the economy in the hands of the public sector. The state took control of the allocation of resources in the economy as the banks and insurance companies were nationalized and development financial institutions grew in importance. A regime of financial repression came into being and the stock market stagnated.

The period from 1984 to 1992 was in some ways the high water mark of the Indian capital markets. As the markets responded enthusiastically to the first whiff of reforms in the mid 1980s and to the major reform initiative of 1991, the stock market soared through the roof. From October 1984 to September 1992, the stock market index went up more than ten times representing an annual compound return of 34per cent.

III. REVIEW OF LITERATURE

Debjit Chakraborty(1997) in the year 1997 with an objective to find out trend in the stock market the BSE national Index of Equity Price that comprises 100 companies was taken as index. The main aim of his paper was to establish relationship between the major economic indicator and stock market behavior. He also wanted to analyze stock market reactions to change in the economic climate. His study shows that stock market movements are largely influenced by, broad money supply, inflation, C/D ratio and fiscal deficit apart from political stability.

Redel (1997) conducted a study to know the actual reason of capital market integration during the period 1970 to 1994 in developing Asia by taking variables like net capital flow, FDI, portfolio equity flows and bond flows. He found that capital market integration in Asian developing countries in the 1990 s was a effect of broad-based economic reforms, especially in the trade and financial sectors. He concluded that for minimizing the risk and maximizing the benefits from increased capital market integration, the Asian developing countries should strengthen their economic liberalization process.

Avijit Banerjee (1998) examined the worthiness and effectiveness of the Fundamental Analysis and Technical Analysis for helping examining a security for inclusion or exclusion in a particular portfolio. He found Technical Analysis helps an investor more to find out the exact timing to buy or sell an individual security than fundamental analysis. He also stated that the modern portfolio literature suggests **'beta' value P** as the most acceptable measure of risk of scrip. In order to minimize risk the investor shouldThe securities having low P should be selected for constructing a portfolio in order to minimize the risks.

According to "Suresh G Lalwani"(1999) emphasized the need for risk management in the securities market with particular emphasis on the price risk. He commented that the securities market is a **'vicious animal'** and there is more than a fair chance that far from improving, the situation could deteriorate.

According to " Nath and Verma" (2003) examine the interdependence of the three major stock markets in south Asia stock market indices namely India (NSE-Nifty) Taiwan (Taiex) and Singapore (STI) by employing bivariate and multivariate co integration analysis to model the linkages among the stock markets, No co -integration was found for the entire period (daily data from January 1994 to November 2002).They concluded that there is no long run equilibrium.

According to "Bhanu Pant and Dr. T.R.Bishnoy" (2001) analyzed the behaviour of the daily and weekly returns of five Indian stock market indices for random walk during April 1996 to June 2001.They found that Indian Stock Market Indices did not follow random walk.

According to "Juhi Ahuja" (2012) by examining the Indian capital market and its structure he observed that the structure of Indian capital market has undergone a vast change. The introduction of varities types of reforms and development in the capital market made the capital market strong enough to compete with the world market.

IV. CAUSES OFVOLATILITY IN INDIAN STOCK MARKET

The stock market volatility depends on various internal and external factor and there combined effects. Variables such as credit policy, economic growth, political stability international economic condition, exchange rate, interest rate, credit policy etc. have direct or indirect impact on the volatility of the stock market. Volatility is driven by trading volume followed by arrival of new information regarding new floats, or any kind of private information that incorporate into market stock prices.

Beside quantities measures that have direct or indirect impact on stock market volatility there are other qualitative factors also as strongly advocated by scholars of capital market like Robert Sheller. According to him investor's psychological or social belief also has a great influence on the stock market volatility.

For derivative valuation to asset management and risk management calculation of volatility is the pivot of all discussion. Volatility measures the size of the errors made in modeling returns and other financial variables.

Volatility of returns in the stock markets is major area of concern to attract foreign investment for the developing

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countries. In the economically developed countries' market stock market shows greater stability with high returns but in case for developing countries like India and China we can see higher return as well as higher degree of volatility in the stock market.

The act of simultaneous buying and selling of securities which is technically known as Arbitrage is also another important factor for stock market volatility. This process bounds the stock market to adjust the price discrepancies of a stock very quickly which leads to volatility of a stock market.

Another cause of volatility is the speculation of stock which can be best described as short term investment undertaken with an sole objective of generating high return. Speculative investment is inherently risky. Speculation causes fluctuation in the price of the script and it is also a mojor reason to deviate price from its intrinsic value.

Stock market volatility has major two components, the one is of due to information based on price change and other is based on noise and speculation trading.

There may be both real investor and speculative investor in the stock market. Real investor invests on the basis of fundamental information of a stock but speculative investor invests on the basis of short term price changes in the market. It very much difficult to identify the nature of investment but it is due to speculative investor the fluctuation in the stock market often goes to the peak.

Both hedgers and speculators are fascinated to the futures market, which trade on the basis of their prospect of the future price movements in the derivatives as well as the underlying market. There are contradictory views regarding the impact of futures contracts on volatility of spot market. Many studies have been made to find out the impact of futures on volatility. Studies have shown mixed results. Some studies have reported an increase in volatility and some report decrease or either no effect on volatility.

MEASURES HAVE BEEN ADOPTEDTO CONTROLVOLATILITY

The market volatility can be controlled by the following measures:

Circuit Breakers:

Circuit breaker is an auto check mechanism at the time of runaway move of any security or of any index in either direction. It is in the form of a pre defined values in percentage form. It is implemented either by way of halting of trade in a security or an index for a certain period or by halting of trade in a security or an index for a particular day. In the first case the trading is halted for a few minutes to few hours to let cool down the activity of the market participants and allow the investors to absorb new information regarding the security and invest accordingly. If the volatility steel exist after the resumption of normal activity then second option is introduced and transaction is stopped for the whole day. The percentage at which the circuit breaker is fixed for a particular security or for an index is revised at an regular interval. The percentage that generally fixed are 10 percent, 15 percent or at 20 percent.

Pre and Post Market Session

It is the time of trading beyond the normal trading time of 9.30 am to 4.00 pm form Monday to Friday. Important financial information of any company have great impact on its share price and may have a great chance to misrepresent its intrinsic value if the announcement is made during the normal trading time period which may cause abrupt volatility in the market too. If a company's last quarter earnings report is lower than expected by the investor then price of that stock may go down abruptly which will lead to a great loss . But the value of the stock can steel move when the market is not open. This is why the after hour session is important because the investor want access to trade the stock when its value changed. So when an investor trade that security after the publication of the financial report it can react to the information in a better way and in other war it will help to keep intact the intrinsic price of that securiety and there by reducing the unexpected volatility of stock market.

Market timings of various products / markets in India

SL. NO.	PRODUCT	MARKETING TIME
1.	Cash Market	9:55 am to 3:30 pm
2.	Equity Derivatives	9:55 am to 3:30 pm
3.	Currency Derivatives	9:00 am to 5:00 pm
4.	Commodity Derivatives	10:00 am to 11:30 pm
5	Power Exchange	10:00 am to 12:00 noon

Another discussion is also going on regarding an additional day of opening the stock market that is on Saturday to reduce the volatility because presently market is open from Monday to Friday presently. Presently the volatility in Monday normally seems more as because the accumulation of information for Saturday is reflected in Monday. If the stock market would be opened for Saturday than Mondays volatility will be less.

V. CONCLUSION

Stock Market is the mitigation of risk through the spreading of investments across multiple entities, which is achieved by the pooling of a number of small investments into a large bucket. Stock Market is the most suitable investment for the common man as it offers an opportunity to invest in a diversified, professionally managed portfolio at a relatively low cost. The review of literature has brought to light that:

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- Enlistment of corporate securities in more than one stock exchange at the same time improves liquidity of securities and functioning of stock exchange.
- There is existence of wild speculation in the Indian stock market.
- Risk is not measurable or quantifiable. But risk is calculated on the basis of historic volatility.
- Stock market movements are largely influenced by, broad money supply, inflation, C/D ratio and fiscal deficit apart from political stability.
- Low execution costs make the derivatives especially futures, very suitable for frequent and short term trading to manage risk, more effectively.

The analysis of the stock market cycles shows that in general over the reference period the bull phases are longer, the amplitude of bull phases is higher and the volatility in bull phases is also higher. The gains during expansions are larger than the losses during the bear phases of the stock market cycles. The bull phase in comparison with its pre liberalization character is more stable in the post liberalization phase. The results of our analysis also show that the stock market cycles have dampened in the recent past. Volatility has declined in the post liberalization phase for both the bull and bear phase of the stock market cycle.

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