A Logical Indication Of Stock Price Volatility In Bombay Stock Exchange

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ARTICLE INFO	ABSTRACT
	The term 'volatile' refers to a price series or economic indicator that fluctuates significantly and swings wildly. This straightforward and easy-to-understand concept is at the root of many problems in finance. Unlike many other market indicators that can be measured directly, volatility must be measured. This is challenging (if not downright impossible) because we can't say with confidence that volatility is 'stochastic' or that it fits any mathematical model. All we can say with confidence is that volatility is unpredictable. A good estimate of volatility, however, is essential for many applications, such as risk measurement, risk management, option pricing, and hedging. **Keywords:** volatile, economic, fluctuations, empirical, unpredictability, dispersion, index, patient, tabulated, positive, exceptions.

By means of their model, Black & Scholes emphasized the significance of the volatility parameter. In order to determine the price of an option, practitioners were now required to estimate just one parameter the volatility and enter it into a rather straightforward calculation. Of the three unknown factors, volatility fluctuations have the most effect on an option's price.

The stock price is often tracked at predetermined periods of time in order to experimentally evaluate the volatility of the price. These time frames may consist of days, weeks, or months two. But before any calculations are made, it is necessary to determine if an exchange-traded instrument's volatility is the same while the exchange is active and when it is closed. Some contend that information continues to flow even after a transaction closes, and that this ought to affect the price. Numerous empirical investigations have been conducted, and the results have consistently shown that open exchanges have significantly more volatility than closed ones. This has the effect of suggesting that days, if daily data are used to estimate volatility, Volatility is an easy-to-understand idea. It alludes to fluctuations in stock values. With the shifting bull and bear phases, stock market volatility is an essential component. It is impossible to obtain better results without volatility. However, excessive volatility is seen to be a sign of an inefficient stock market since it implies a higher level of risk. The variability or dispersion around a central tendency is measured by volatility. Stated differently, it represents the degree to which the present value of an item differs from its mean historical values. The volatility will increase as the divergence increases. The inability of developing economies to attract investment is mostly due to return unpredictability. It affects financial investments.

The study adds to the helpful empirical investigation of the relationship between volatility, stock broker service quality, and the effects of speculation. It is hampered by the coverage of only a few BSE indices. In order to evaluate the form of market efficiency theory known as the random walk hypothesis, Ahmad (2008) examined the behavior of the stock prices of 24 different companies. According to his research, share price shocks will have a prolonged impact on the stock market's performance. They claim that the screen-based method has decreased settlement issues and transaction costs have decreased. The author came to the conclusion that, notwithstanding improvements brought about by reforms, the Indian stock market remains inefficient. Gupta (1997b) addressed the issue of the patient being older and less.

When using the aforementioned formula, it will be assumed that a trader's maximum loss is limited to half of the index's high-low spread for a certain time frame, such as a day or a month. In this investigation, this formula is used. This recipe is better and more effective than the one recommended by the SEBI. The study's goal will be achieved by the sole collection of data from secondary sources. The information was gathered from the BSE's

official website. In addition, necessary information is gathered from periodicals, journals, and published and unpublished works in the subject. The information is analyzed, tabulated, and processed. Whereas volatility is determined using the difference between the yearly average of each BSE index, dispersion is determined using. The sensex stock price dispersion and the sectoral index price dispersion are given as absolute numbers. Table 1 displays the dispersion in the sectoral and BSE sensex indexes during a ten-year period. The Table shows that, amid ups and downs, the dispersion in the sensex has grown from 446.42 points in 2001 to 1382.01 points in 2010. The lowest point total was 295.8 in 2002, and the highest point total was 2901.28 in 2008. Throughout the aforementioned time, it stood at 1131.25 points annually on average. From 95.61 points in 2001 to 1163.79 points in 2010, the consumer goods (CG) sector's price stock dispersion has expanded.

The degree of price change in a share, in a share price series of a single share, in the prices of a group of shares, or in any index, is indicated by share price volatility. A scrip that exhibits minimal high-low spread and steady price creation is considered good. Volatile price series are those that fluctuate a lot and exhibit large swings. Overvolatility has a detrimental effect on the flow of investments and introduces dangerous uncertainty into the market. The solvency of the stock market is threatened by excessive and erratic price movements. This is the case due to a higher likelihood of clients not keeping their commitments.

In contrast to several other factors that are observable immediately, volatility requires estimation. Many applications, including proper risk assessment, depend on an accurate estimate of volatility. A measure of volatility for a given year is the average volatility in the indexes over the course of the 12 months. The average volatility during the course of the research period is represented by the average of ten years.

Additionally, Table 3 displays the percentage of maximum volatility, average volatility, and number of years with high volatility for the sensex and sectoral indices. The average volatility for the index plus three standard deviations, or 5.76 + (3X0.019), is used to calculate the high volatility. Three of the last ten years have had the most volatility on the sensex. This represents 30% of the entire time frame. It shows that uncertainty brought on by significant share price volatility has hurt the market 30% of the time.

With ups and downs during the course of the period, the BSE sensex's dispersion climbed from 446.42 points in 2001 to 1382.01 points in 2010. The lowest was recorded in 2002 with 295.8 points, while the best was in 2008 with 2901.28 points. With to and for fluctuations, the consumer goods (CG) sector's price stock dispersion grew from 95.61 points in 2001 to 1163.79 points in 2010. When all equities listed on the BSE are taken into account, the average annual price dispersion from 2001 to 2010 comes out to 543.55 points.

Between 2001 and 2010, the sensex's average volatility decreased from 6.43 percent to 3.82 percent. Over a ten-year period, the sensex's annual mean volatility was 5.76 percent. At 1.97 percent, the standard deviation (SD) was recorded. Without fail, the sectoral indexes' average volatility decreased in 2010 compared to 2001. The FMCD sector has the highest average annual volatility (8.18%) and the lowest (5.06%). The IT industry has the greatest SD, followed by the TECH and CG sectors, and then the BSE100, FMCD, PSU, HC, and FMCG sectors. The average annual percentage deviation (SD) for all BSE equities during a ten-year period is 2.10 percent. With the exception of the BSE 100 and the FMCG sector, sectoral indexes have greater volatility years. It's noteworthy to notice that, while recording the highest volatility in six out of ten years, the HC sector has a low average volatility of 5.06 percent. In the TECH sector, the volatility is 50%, which is considered moderate. With a few notable exceptions, it can be said that the dispersion in the sensex and other sectoral indexes has been steadily increasing over time. With a few notable exceptions, sensex has surprisingly shown less volatility than other sectors indexes. Additionally, all of the studied indicators had a positive relationship, with a few exceptions.

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