

## The Consequence of Volatility Index on Stock Market Returns

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### Abstract

Globally investors purchase or sell in the financial exchange with ravenousness and dread during the times of vulnerability or high instability. Subsequently, markets over the world and India have dispatched the Volatility Index (VIX) to gauge instability. Unpredictability likewise decides the Futures value, Open Interest, and Turnover which will be reflected in the hidden Spot cost. Our investigation looks at the different market pointers and their impact on the development of the market. We give direct proof on how changes in chosen pointers influence the estimation of the Market record. Our outcomes show that VIX straightforwardly impacts Futures cost (decidedly) more than its backhanded impact with Open Interest and Turnover however VIX by implication with Open Interest, Futures and Turnover impacts Spot costs (contrarily) which is considerably less than its immediate impact.

A financial specialist who puts resources into the securities exchange, by and large, meets with the stock records for any adjustments in the general market whereby they take suitable speculation choices. The records are utilized to gage the speculators' abundance as well as the current situation of the economy. In the market, utilization of prospects have gotten mainstream among the financial specialists to support against any unfriendly future value developments simultaneously examiners are the other significant recipients of these agreements. Obviously, speculators screen the market with the exchanging volume as institutional financial specialists' mass and square exchanging can overpower the value development showed by these lists. All around the world financial specialists purchase or sell in the securities exchange with avarice and dread during the times of vulnerability or high instability. Occurrences like Lehman Brothers breakdown in 2008, drove speculators to dump their stocks in alarm which caused the worldwide budgetary Crisis. This emergency made financial specialists worry on deciding the venture techniques dependent on the hidden and fates lists. Post-emergency speculators zeroed in on expanding their ventures with evolving volatilities. Thus, markets over the world and India have dispatched the Volatility Index (VIX) to quantify instability. VIX is developed to quantify the market hazard and furthermore considered as a financial specialists dread measure as it tracks the market responses. Instability Index is figured dependent on the cost of different alternatives and infers a total estimation of unpredictability. A high VIX worth would imply that the market expects significant changes in the market record, while a low VIX esteem expects just a negligible change accordingly negative relationship exists between the two. Our investigation will analyze the different market

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### INTRODUCTION

pointers and their impact on the development of the market. This examination has suggestions for the two scholastics and professionals. We give direct proof on how changes in chosen pointers influence the estimation of the Market record. We find that VIX has a huge (1%) positive effect on Open Interest and Turnover. Second, we find that VIX has a huge (1%) negative impact on Futures and Spot Prices. Third, we discover Open Interest has a noteworthy (1%) negative effect on Futures Price and Turnover has a huge (1%) positive impact on Futures cost. At last, we discover VIX and Open Interest have a critical (1% and 5%) negative effect on Spot costs (Nifty). Turnover and Futures costs have a huge (1%) positive impact on spot costs (Nifty). Generally speaking it clarifies 99% of the difference in Spot costs (Nifty).

### DATA AND METHODOLOGY

Information for the examination were every day shutting estimations of Volatility Index (VIX), Index Futures (Nifty Futures), Index Futures Open Interest, Index Futures Turnover and Nifty 50 from March 2009 to March 2011, taken from NSE site. The paper's essential target is to comprehend the impact of instability list on future and spot market by examining the different market pointers and to discover how they impact the Futures and Spot costs of the Market (Nifty 50). Figure 1 the market pointers considered for the examination were VIX (Volatility Index), Index Futures, Open Interest (Liquidity), Futures Turnover and Spot (Nifty). The underline hypothesis says that there exists a mind boggling connection between the previously mentioned market pointers [24] and this varies from market to showcase. Basic Equation Modeling (SEM) method is endeavored to comprehend the multifold connection and how every one of the four factors

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VIX, Index Futures, Futures Turnover and Open premium impacts the Spot (Market) and furthermore needed to see the immediate and backhanded impact of them on the future and spot market. VIX is a record that quantifies the desires for the unpredictability of the Nifty 50, in straightforward terms, it gauges the market instability and it is processed by the National Stock Exchange. Fates are the cost of the Futures agreement of Nifty 50 Index normally called as Index prospects, Open Interest alludes to the all out number of fates gets that have not been settled, which Liquidity of the market. Prospects Turnover is the complete estimation of all the Index fates contracts exchanged. The spot is the cost of Nifty Index which is a very much broadened 50 stock file representing 22 areas of the economy. The model is organized in such a manner to break down the Influence of VIX on Open Interest (Liquidity) since exchanging the fates market is generally dictated by volatility, VIX on Index Future because volatility is one of the underlying variables in determining the price of the future contracts, VIX on Futures turnover as volatility may determine the number of contracts traded and VIX on Nifty as VIX determines the fluctuations in the Market. Finally, the combined influence of VIX, Open Interest (Liquidity), Futures Turnover and Index Futures on Spot (Nifty) are ascertained.

## RESULTS AND DISCUSSION

Exchanging doesn't happen in void, for which pointers and reports show what other market members are doing can be an important expansion to the exchanging framework. Speculators go into fates contract voluminously, during high instability to support against their presentation to hazard which prompts an expansion in Liquidity and this prompts a decline in Futures Prices which thus assumes a significant function in influencing the Spot Market Index. In this manner Futures market (subordinates market) assumes a key part in pushing/pulling the Nifty 50 returns (basic spot market) whereby the degree of VIX, Open Interest and Turnover gives the data to the speculators to defend themselves against the future danger whereby one can go about as a danger unwilling financial specialist. In this way, Volatility quantifies the movement at which market moves sequential, and how fiercely it swings i.e., "rate and greatness of changes in costs" soon. Since VIX is a gauge of future unpredictability it straightforwardly impacts the Futures cost and in a roundabout way the spot market (Nifty) i.e., the prospects, thus, influence the spot costs [30,31]. Then, Nifty Index is utilized for an assortment of purposes, for example, benchmarking portfolios, indexbased subordinates and record reserves, the pointers which impacted the development of Nifty 50 Index are viewed as a helpful instrument for catching vulnerability in the market costs. Accordingly instability (VIX), fates value developments (Futures Index), liquidity (Open Interest) and Turnover (Futures Trade) are the key pointers of

the subordinates market which ought to be mulled over by the market members while settling on their purchase or sell choice in the basic spot market. To close VIX straightforwardly impacts prospects cost (decidedly) more than its roundabout impact with Open Interest and Turnover yet VIX by implication with Open Interest, Futures and Turnover impacts spot costs (adversely) which is considerably less than its immediate impact. It has been customarily accepted that it is Volatility (VIX) that assumes a significant function in value assurance and by following unpredictability one can undoubtedly comprehend the value conduct. In any case, this has been refuted from the discoveries of this paper it is simply not VIX but rather the mix of other market factors that assume a function in value assurance of Derivatives. All around the world trades have begun to bring to the table subordinates on VIX as it gives financial specialists a way to fence against hazard and enhance their portfolio. In such a situation, VIX may push financial specialists to adequately oversee hazard and enhance a portfolio. The discoveries of this investigation can illuminate making proper exchange techniques from which speculators can settle on their planning of entering or leaving the market. The examination can be reached out by utilizing intra-day developments of value, instability, and volume whereby the merchants could profit more with the data.

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