

**VOLATILITY MEASUREMENT AND COMPARISON BETWEEN  
SPOT AND FUTURES MARKETS**

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**ABSTRACT**

It has been almost a decade since the introduction derivatives instruments like Options and Futures trading in Indian bourses and almost two decades since the introduction and implementation of liberalization, privatization and globalization policies in Indian economy. This has resulted in sea change in growth and development of Indian economy and enhanced activity and trade in Indian stock markets. This paper measures and compares volatility in spot and futures markets through use of certain descriptive statistical measures first and then through measures of conditional variance modeled in different ARCH family of frameworks for NIFTY index as well as ten selected blue chip sensex stocks. Through the measure of standard deviation, we observed that variability is more for index and most of the stocks traded in futures market. Contradictory results are observed through the use of GARCH (1,1) model. It is observed that the unconditional as well as the conditional volatility is lower in futures market compared to spot market for the underlying index and nine out of ten stocks. Only exception is HINDALCO stock. Thus, it can be concluded that the returns in futures market exhibit lesser volatility than returns in underlying spot market considering GARCH class of models which process volatility over time.

**KEYWORDS :** *Conditional & Unconditional Volatility, GARCH model, Volatility Forecasting*