

## Determining Suited Volatility Model for Bombay Stock Exchange Sectoral Indices

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### ABSTRACT

The Indian capital market is playing a vital role in the economic development through the investment opportunity to various groups like FII's, DII's and individual investors in many companies. The perspective of the investor return and volatility are the major elements in deciding their investment decision. Investors are in a confusion to determine the suitable methods for volatility measurement, the study investigates the best model to measure the volatility by reviewing the past studies pertaining to the volatility. This study empirically investigates the volatility pattern of Indian stock market based on time series data which consists of daily closing prices of three Bombay stock exchange (BSE) sectoral Indices namely BSE-Auto, BSE-IT and BSE-Reality Index for 5-year period from 1<sup>st</sup> January 2012 to 31<sup>st</sup> December 2016, which are a major impact on the Indian economic development. To select the best model to measure volatility, unit root test has conducted and ARCH family models such as GARCH, EGARCH and TARARCH were applied and compared. The best model selected based on Akaike Information Criterion (AIC) and Schwarz Information criterion (SIC).

**KEYWORDS:** Investment, Volatility, Performance, Bombay stock exchange, Modelling.

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