Abstract

Forecasting has always been an area of interest for the researchers in various realms of finance especially in the stock market e.g. stock index, return on a stock, etc. Stock market volatility is one such area. Since the inception of implied volatility index (VIX) by the Chicago Board of Options Exchange (CBOE) in 1993, VIX index has generated a lot of interest. This study examines the predicting ability of several technical indicators related to VIX index to forecast the next trading day’s volatility. There is a wide set of methods available for forecasting in finance. In this study, Artificial neural network (ANN) modeling technique has been employed to forecast the upwards or downwards movement in next trading day’s volatility using India VIX (a volatility index based on the NIFTY Index Option prices) based indicators. The results of the study reveal that ANN models can be real handy in forecasting the downwards movement in VIX. The knowledge about a more probable downwards movement in volatility might be significant value add for the investors and help them in making decisions related to trading.
- Kim KJ. 2006. Artificial Neural Networks with Evolutionary Instance Selection for
- White paper on India VIX. http://www.nseindia.com/content/vix/white_paper_IndiaVIX.pdf [12 December 2012]

Index Terms

Computer Science
Neural Networks
Keywords
Artificial Neural Network  India VIX  Forecasting  NIFTY Index options