

# Are the weekly highest and lowest Indian CNX NIFTY cointegrated: Full Information Maximum Likelihood approach of Søren Johansen \*

AMAL KUMAR BOSE †

## Abstract

The time series features of weekly high and low NIFTY (stock index) at the Indian NSE were examined at length through VEC model. Data for the period starting from 24th May 2004 to 14th August 2006 were used for the study. The parameters were estimated through FIML approach using the algorithm developed by Søren Johansen. Various tests were performed to check the desirability of parameters. Finally in-sample and out-of-sample forecasts were compared with actual. The model provided reasonably good forecast. Accordingly we concluded that there was a cointegrating relation. The model could describe dynamics of the leading Indian stock index.

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*Key words and phrases:* Cholesky factorization; concentrated log likelihood; covariance proportion of mean squared error; likelihood ratio test; triangular representation; vector auto regression; Wiener process.

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† *Mailing Address:* D.P.K. Housing Society; Nayabad; Post Office: Mukundapur; Kolkata; West Bengal; Pin code : 700099; India. *E-mail:* amalbose477@hotmail.com. *Telephone:* (033)-24261310 (India).