Determinantion of INR/USD
Exchange Rate: Modelling and Forecasting

Pami Dua, Rajiv Ranjan and Leema Mohan

Abstract

This paper empirically examines the relationship between the INR/USD exchange rate and macroeconomic fundamentals as well as microeconomic dynamics. The conventional monetary model is extended based on Dua and Ranjan (2010) by including capital flows, the forward rate, volatility of the capital flows, order flows and intervention by the Central bank as additional variables that influence the exchange rate. In addition to the variables included by Dua and Ranjan (2010), the stock price differential is also added as an additional determinant. The cointegrating equation is estimated from July 1996 to April 2013. Granger causality tests reveal that the exchange rate is granger caused by most of the variables. A further estimation of the generalised variance decomposition of forecast errors shows that important determinants of INR/USD in descending order of importance include money supply differential, volatility of capital inflows, inflation rate differential, output differential, stock price index differential, interest rate differential and the forward rate. The forecasting performance of the model is also examined using VAR and BVAR models.