

ABSTRACT

The main objective of this paper is to search the best time series model among autoregressive moving average (ARMA), autoregressive conditional heteroscedasticity (ARCH), generalized autoregressive conditional heteroscedasticity (GARCH), and threshold generalized autoregressive conditional heteroscedasticity (TARCH) to give best prediction of exchange rates. The other objective is to compare the best models for India, Pakistan, Nepal, Sri Lanka and see if the same model fits all. The data used in present study consists of daily nominal exchange rates of India, Pakistan, Nepal, Sri Lanka with respect to US dollar for the period ranging from January 2000 to March 2014 obtained from IMF website.

GARCH (1,1) is found to be best to remove the persistence in volatility while TARCH(1,1) successfully overcome the leverage effect in the exchange rate returns under study.

Keywords: Conditional variance, Exchange rates, GARCH, TARCH, Volatility modeling