

EconWorld2016@Barcelona

Multi Scale Analysis of Stock Prices, Interest Rates and Exchange Rates: A Study of India

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ABSTRACT

This study analyses dynamic linkage between stock price, exchange rate and interest rate for India using maximum overlap discrete wavelet transform (MODWT) which is very much appropriate when the variables are in discrete in nature. We use monthly data on stock return, exchange rate and interest rate from January 2000 to December 2014. Our major findings indicate that the empirical relationship between these variables is not significant at lower scales. As we go on higher scales, there is a linkage between them and three markets are associated with each other. Moreover, the direction and type of the relationship depends on the frequency bands and finally with the help of Granger causality tests we established a lead/lag relationship between stock price, exchange rate and interest rate.

KEYWORDS Exchange Rate; Stock Price; Interest Rate; modified overlap discrete wavelet transform (MODWT); India

JEL C22, E44, G15