Revisiting the Interest Rate-Exchange Rate Nexus: A Markov Switching Approach

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Abstract

In this paper the interest rate-exchange rate nexus and the effectiveness of interest rate defence are investigated theoretically and empirically. We construct a simple theoretical model by incorporating Taylor rule in the model proposed by ?. Considering the theory of exchange rate determination with noise trading and monetary policy rule, we present a model with multiple equilibria, which thereafter implies a possible switching between the regimes of high and low volatility of the exchange rates. The theoretical model motivates us to adopt a Markov-switching specification of the nominal exchange rate with time-varying transition probabilities. By investigating the data of Indonesia, South Korea, the Philippines, Thailand, Mexico, Hong Kong, and Turkey, it is shown that raising nominal interest rates leads to a higher probability of switching to a crisis regime. Thus, the empirical results presented here support the views that high interest rate policy is unable to defend the exchange rate. Unlike other studies which consider linear models only, our findings are robust and consistent over different countries and crisis episodes (Asian 1997 crises, Mexico 1994 crisis, and Turkey 1994, 2001 crises). In addition, this paper provides some evidences supporting the view of “fear of floating”.

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