

Exchange Rate Dynamics Under Alternative Optimal Interest Rate Rules

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Summary

In a standard monetary model of exchange rate determination, the role of monetary policy is not explicitly incorporated. Engel and West (2005, 2006) consider the exchange rate equation derived from the Taylor rule – an interest rate reaction function that is quite popular in the monetary policy literature and the uncovered interest parity.

In this paper, we explore the role of interest rate policy in the exchange rate determination process using interest rate rules that are theoretically optimal under a few alternative settings. The exchange rate equation depends on its underlying interest rule and its performance could vary across evaluation criteria and sample periods. The exchange rate equation implied by the interest rate rule that allows for interest rate and inflation inertia under commitment offers some encouraging results – exchange rate changes “calibrated” from the equation have a positive and significant correlation with actual data, and offer good direction of change prediction. Our exercise also demonstrates the role of the foreign exchange risk premium in determining exchange rates and the difficulty of explaining exchange rate variability using only policy based fundamentals.