

On the Unstable Relationship between Exchange Rates and Macroeconomic Fundamentals

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Summary

It is well known from anecdotal, survey and econometric evidence that the relationship between the exchange rate and macro fundamentals is highly unstable. This could be explained when structural parameters are known and very volatile, neither of which seems plausible. Instead we argue that large and frequent variations in the relationship between the exchange rate and macro fundamentals naturally develop when structural parameters in the economy are unknown and change very slowly. We show that the reduced form relationship between exchange rates and fundamentals is driven not by the structural parameters themselves, but rather by expectations of these parameters. These expectations can be highly unstable as a result of perfectly rational "scapegoat" effects. This happens when parameters can potentially change much more in the long run than the short run. This generates substantial uncertainty about the level of parameters, even though monthly or annual changes are small. This mechanism can also be relevant in other contexts of forward looking variables and could explain the widespread evidence of parameter instability found in macroeconomic and financial data. Finally, we show that parameter instability has remarkably little effect on the volatility of exchange rates, the in-sample explanatory power of macro fundamentals and the ability to forecast out of sample.