Exchange Rates as Exchange Rate Common Factors

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Summary

The evolution of exchange rates through time is well described by a small number of common factors. Moreover, these factors remain significant and quantitatively important after controlling for macroeconomic fundamental determinants of exchange rates. A further deepening of our understanding of exchange rates along these lines, however, is obstructed by a lack of identification of these common factors with variables that enter our economic models. This paper provides such an identification.

We identify the euro/dollar, Swiss-franc/dollar and yen/dollar exchange rates as empirical counterparts to three common factors extracted from a panel of 23 exchange rates against the U.S. dollar. Due to the euro's and yen's dominance in foreign exchange trading and the safe-haven role of the yen and the Swiss franc, our identification makes a certain amount of sense. Armed with this identification, we show that these empirical exchange rate factors can be usefully embedded in a prediction framework to produce forecasts that impressively beat the random walk with drift.