Why Are Exchange Rate So Smooth: A Household Finance Explanation

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Abstract

Empirical moments of asset prices and exchange rates imply that pricing kernels have to be almost perfectly correlated across countries. If they are not, real exchange rates are too smooth to be consistent with high Sharpe ratios in asset markets. However, the cross-country correlation of macro fundamentals is far from perfect. We reconcile these empirical facts in a two-country stochastic growth model with heterogeneous trading technologies for households and a home bias in consumption. In our model, only a small fraction of households actively participate in international risk sharing by frequently trading domestic and foreign equities. These active traders, who induce high cross-country correlation to the pricing kernels, are the marginal investors in foreign exchange markets. In a calibrated version of our model, we show that this mechanism can quantitatively account for the excess smoothness of exchange rates in the presence of highly volatile pricing kernels and weakly correlated macro fundamentals. We also provide evidence for this mechanism in the empirical part.