

Currency Risk and Pricing Kernel Volatility

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Abstract

A basic tenet of lognormal asset pricing models is that a risky currency is associated with a *low* pricing kernel volatility. Empirical evidence implies that a risky currency is associated with a relatively *high* interest rate. Taken together, these two statements associate high-interest-rate currencies with low pricing kernel volatility. We document evidence suggesting that the opposite is true. We approximate the volatility of the pricing kernel with the volatility of the short interest rate. We find that, across currencies, *relatively* high interest rate volatility is associated with relatively high interest rates. This contradicts the prediction of lognormal models. One possible reason is that our approximation of the volatility of the pricing kernel is inadequate. We argue that this is unlikely, in particular for questions involving currencies. We conclude that lognormal models of the pricing kernel are inadequate for explaining currency risk and that future work should place increased emphasis on higher moments.

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