The Real Exchange Rate, Real Interest Rates, and the Risk Premium

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Summary

A well-known empirical finding is that when comparing the rates of return on short-term interest-bearing assets across countries, the asset that has the higher interest rate also tends to have the higher expected rate of return. That is, even when taking into account the currency return on the asset, the expected return inclusive of the expected change in the exchange rate tends to be higher for the country with the higher interest rate. An explanation for this empirical phenomenon based on optimizing behavior by risk-averse investors says that the high-interest rate currency offers higher expected returns as compensation for a foreign-exchange risk premium.

A second well-known empirical finding is that a country's currency tends to be stronger when its interest rate is relatively high. This empirical finding pertains to the level of the country's exchange rate. For example, in real terms, high-interest rate countries have stronger currencies.

This paper verifies these two findings empirically. We find, in fact, that the strength of the currency in real terms for the high-interest rate currency is stronger than would be predicted by a model of uncovered interest parity.

These two findings lead to an apparent contradiction. On the one hand, a risk-based explanation of why the high-interest-rate country's short-term bonds have a higher expected return requires that this country's assets bear a risk premium. On the other hand, to explain why the currency is excessively (relative to the uncovered interest parity benchmark) strong when the interest rate is high, a risk-based explanation requires that the high-interest-rate country's short-term bonds are less risky than the foreign country's.

The paper explores these empirical findings and their implications for models of excess returns and the foreign exchange risk premium. The conclusion is that no current state-of-the-art model can account for these findings.