Country Fundamentals and Cross-Section of Currency Excess Returns

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Abstract

A number of previous studies have documented the existence of significant excess returns and the failure of the uncovered interest parity (UIP). Our empirical analysis confirms that excess returns are significant for many currencies. It also shows that excess returns vary significantly across currencies.

We explore the explanatory power of country fundamentals in a multi-factor model framework. We include the variables reflecting macroeconomic fundamentals, such as interest rate, default risk, and size of the capital market. We also include the variables reflecting foreign exchange policy orientation. We construct factor-mimicking portfolios--a la Fama and French--from the fundamental variables and examine whether the returns to these portfolios can be used as proxies for systematic risk. Our analysis shows that these variables do have explanatory power for the cross-section of currency excess returns.

Our main findings can be summarized as follows. First, when the currencies are sorted on the basis of forward premium, exchange regime, the degree of capital control, and the size of capital markets, there are persistent return differences between high-ranked and low-ranked currencies. When the currencies are sorted by default risk, the return differences between high-ranked and low-ranked currencies are not persistent. As far as forward premium is concerned, the pattern has been discussed extensively in the previous literature. However, the same cannot be said about the other fundamental variables.

Second, forward premium, the degree of capital control, and the size of capital markets are significant factors; that is, they help to explain the cross-section of currency excess returns. While the significance of the forward premium has already been reported in the literature, the significance of the other variables in this context has not been discussed. When we split the sample into DM and EM currencies, we find that the exchange regime also is a significant factor in both cases, although with opposite signs. We estimate two three-factor models—one including the forward rate, default risk, and exchange regime and the other replacing the default risk with

the size of capital markets—for each currency. We find that the models cannot be rejected for 13 out of 19 currencies.

Finally, the investment-style factors of Pojarliev and Levich are mostly not significant as pricing factors. When a three-factor model based on investment-style factors was estimated for individual currencies, the model was rejected except for five currencies. Certainly, country fundamentals are better factors than investment-style returns.

In recent years, the persistent profits of so-called carry trades have drawn the attention of many authors. Carry traders buy a high-yield currency and sell a low-yield currency, or, equivalently, take a long forward position in a high-yield currency against a low-yield currency. Such trades exploit the failure of the UIP. If the UIP holds, the excess returns cannot be predicted by interest rate or forward premium. In reality, a negative forward premium tends to be followed by positive excess returns, generating profits to carry traders. We are not examining carry profits per se in this study; however, since we examine the relationship between forward premiums and excess returns, our analysis may help to explain carry profits as well.