



## Fixed Income

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# Time-Varying Expected Returns in International Bond Markets

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A growing body of literature describes predictable variation in U.S. and international asset returns. There are two competing views regarding the source of the predictability. Some authors interpret it as evidence of market inefficiency, while others attribute it to rational variation in required asset returns.

- In this article, I study predictable variation in international government bond returns, focusing on two questions:
- Can the excess returns of long-term bonds be forecast using global or country-specific instruments?
- Is the observed behavior of expected excess bond returns consistent with a simple asset pricing model, market efficiency and international market integration?

This paper characterizes time-variation in expected excess government bond returns in six countries and tests whether this variation is consistent with a simple asset pricing model.

A small set of financial market variables can forecast 4% to 12% of monthly variation in excess returns of international bonds. Wealth-dependent relative risk aversion appears to be an important source of the bond return predictability.

Expected excess bond returns in all six countries are high when relative wealth is low and when real bond yields and term spreads are high. These findings are statistically and economically significant. Expected excess returns are very highly correlated across international bond markets but not across bond and stock markets. An international asset-pricing model with one risk factor and constant conditional betas is able to explain the bond return predictability if the factor is proxied by the world excess bond return, but not if it is proxied by the world excess stock return.

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