Sovereign Risk and the Real Exchange Rate: A Non-Linear Approach

Working Paper No. 970 Keep in mind
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We estimate a model of real exchange rate determination which is based on interest rate, term structure and purchasing power parities. This model takes into account sovereign risk as a key determinant with possibly non-linear effects. Estimations are performed for five Latin-American economies: Brazil, Chile, Colombia, Mexico and Peru. The results show that the model has good fit for all countries and the expected sign holds for most estimated coefficients. In particular, it is found that sovereign risk has a significant positive relation with the real exchange rate. There is evidence of the non-linearity of this relation for all countries except Mexico. This non-linearity implies coefficients that change with smooth transition as a function of international volatility indicators. In addition, we perform misalignment analyses and show that real exchange rates became over-depreciated during the initial development of the great financial crisis. Then, between 2011 and 2013, they went through a few periods of over-appreciation as international monetary and fiscal policies became expansive and international capital flows were bound to emerging economies searching for higher yields. Finally, the strong reduction of commodity prices led to a new over-depreciation episode during the second half of 2015.

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