

Macroeconomic Volatility, Debt Dynamics, and Sovereign Interest Rate Spreads

Hans Genberg

Hong Kong Monetary Authority
Hong Kong Institute for Monetary Research

and

Astrit Sulstarova

Graduate Institute for International Studies

October 2005

Summary

While the relationship between volatility and risk is central to much of the financial literature it has not been incorporated systematically into assessment of sovereign debt sustainability. This paper attempts to fill this gap by studying how the probability distribution of sovereign debt to GDP ratios depends on the stochastic properties of underlying macroeconomic variables. Using the right hand-tail of the distribution as a measure of the risk we are able to show how the volatility of the underlying variables as well as potential interactions between them influence country risk.