The Possible Trinity: Optimal interest rate, exchange rate, and taxes on capital flows in a DSGE model for a Small Open Economy

Guillermo Escudé
Central Bank of Argentina

Abstract

A traditional way of thinking about the exchange rate (XR) regime and capital account openness has been framed in terms of the impossible trinity or trilemma, in which policymakers can only have 2 of 3 possible outcomes: open capital markets, monetary independence and pegged XR. This paper is an extension of Escudé (2012), which focused on interest rate and XR policies, since it introduces the third vertex of the trinity, in the form of taxes on private foreign debt. These affect the risk-adjusted uncovered interest parity equation and hence influence the SOE’s international financial flows. A useful way to illustrate the range of policy alternatives is to associate them with the faces of a triangle. Each of 3 possible government intervention policies taken individually (in the domestic currency bond market, in the FX market, and in the foreign currency bonds market) corresponds to one of the vertices of the triangle, each of the 3 possible pairs of intervention policies correspond to one of its 3 edges, and the 3 simultaneous intervention policies taken jointly correspond to its interior. This paper shows that this interior, or possible trinity, is quite generally not only possible but optimal, since the CB obtains a lower loss when it implements a policy with all three interventions.