Fiorella Pizzolon, University of Virginia

Optimal Time-Consistent Monetary and Fiscal Policy and Currency Denomination of Sovereign Debt

(Job Market Paper)

In the past two decades, the share of external sovereign debt in emerging economies denominated in foreign currency (FC) has fallen. I document that in Latin America, this type of debt was mainly substituted by debt denominated in local currency (LC), while inflation-indexed debt represented a small proportion, with the exception of Uruguay. To study the evolution over time and across countries of the currency denomination of sovereign debt, I use an infinite horizon small open economy model in which inflation and taxes are costly. Each period, a government that cannot default and lacks commitment regarding its monetary and fiscal policy, optimally chooses inflation, taxes, and the issuance of LC, FC and inflation-indexed debt.

First, I analyze the trade-offs faced by the government. FC debt acts as a commitment device, because its value cannot be diluted, so the textbook optimal policy response to an increase in government debt applies: monetary policy should actively target inflation, and fiscal policy should smooth taxes while ensuring debt stability. Because in these economies exchange rates and income are negatively correlated, the cost of repaying FC debt increases during booms and vice versa, making LC and inflation-indexed debt useful securities in terms of hedging. Nevertheless, a government that cannot commit is tempted to use inflation surprises, in the case of LC debt, and real exchange rate depreciation surprises, in both cases, to dilute the value of its debt. On the fiscal side, when the government cannot commit, tax smoothing is no longer optimal: the government front loads taxes to reduce the debt level, and with it the temptation to dilute its value. Consequently, the government balances the incentive costs generated by inflation, real exchange rate depreciations and tax distortions; and the hedging benefits of LC and inflation-indexed debt.

Finally, I derive numerical results to show the effects of economic evolution and institutional changes in monetary regimes and tax systems on the currency composition of these countries. A prolonged period of expansion, a low inflation target and a high cost of deviating from it, and a reduction in tax distortions, can explain the increase in the share of LC debt and the small share of inflation-indexed debt.

JEL classification: E63, F34

Keywords: Government Debt, Currency Denomination, Monetary Policy, Fiscal Policy, Time Consistency Policy