The Composition of Capital Inflows and Optimal Monetary Policy in Sudden Stop Economies

(Dissertation)
Hasan Halit Toprak
University of Virginia

Recent literature emphasizes the role of both the volume and composition of capital inflows on financial instability in recipient countries. In my dissertation, I study the policy implications of this observation.

First, I study whether monetary policy should deviate from price stability to reduce borrowing and improve insurance, thus, lean against the wind and be prudent in emerging market economies. I develop an open economy New Keynesian model in which agents trade multiple assets subject to a collateral constraint. First, I derive theoretical results, then calibrate the model and conduct a quantitative analysis. Monetary policy is not prudential if either (1) capital controls targeting both the level and composition of capital inflows are available; or (2) capital controls can only regulate the level of flows and commitment is not possible. In all other cases, monetary policy is prudential, albeit less effective than capital controls. Compared to single bond setups, allowing multiple assets further reduces monetary policy’s prudential effectiveness. Therefore, macroprudential instruments that target both the level and composition of capital inflows are an essential part of a policy mix. Without capital controls, committing to inflation targeting welfare-dominates a prudential discretionary policy.

In the second paper, I argue that countries with a larger dollar share in external liabilities than in imports are exposed to a greater real debt revaluation when there is a US monetary policy shock. Using high-frequency Federal Reserve monetary policy shocks and employing an event-study methodology, I show that US monetary policy transmits internationally through this real debt revaluation channel. A contractionary US monetary policy leads to (1) a greater increase in domestic monetary policy rate, (2) more depreciation in their currencies, and (3) a higher currency premium in countries with a larger dollar share in external debt than in imports. To rationalize these findings, I develop a small open economy model with nominal rigidities and international financiers with limited risk-bearing capacity.

The third paper demonstrates that countries with a different currency composition in their financial accounts than that of trade experience more severe and frequent sudden-stops. I incorporate currency choice in debt issuance into an otherwise standard sudden-stop model. A different currency composition in debt than in trade leads to greater debt revaluation in a sudden-stop. Private agents don’t internalize this and choose an excessively higher proportion of cheaper and riskier debt. A social planner, however, chooses a currency composition of debt similar to that of trade to mitigate the increase in debt burden during a sudden-stop. These results suggest capital controls should alter the currency mix of inflows.

JEL: E44, E52, F38, F41, D62, G01, G18
Keywords: Monetary policy, sudden stops, portfolio choice, debt composition, financial crises, time-consistency, externalities, capital controls