Essays on Government Debt and Sovereign Default

Tongli Zhang

Monetary Backstop and Sovereign Default on Domestic Debt (Job Market Paper)

Abstract: Central banks can provide a monetary backstop for government debt by generating seigniorage at the cost of high inflation. This paper presents a sovereign default model to study how a monetary backstop affects the sustainable level of government debt and household welfare. The model features a government which adjusts fiscal policy infrequently. Uncertainty about fiscal adjustment reduces the government’s ability to roll over its debt and leads to the possibility of government default at relatively low debt-to-GDP ratios. The monetary backstop can lift the government’s debt limit, giving the government more room to roll over its debt until it can adjust fiscal policy. I calibrate the model to match data on government debt for a group of advanced economies. The model is able to explain the long-run cycles of government debt-to-GDP ratios and the behaviors of several macroeconomic variables within the cycle. The quantitative analysis shows that the benefit of avoiding a default outweighs the cost of inflation. A monetary backstop improves household welfare. It also suggests that if a central bank commits itself to providing a monetary backstop for government debt, it is better to choose a relatively high inflation target of around 15%.

Sovereign Debt Crises and Banks Bailouts: Why Does Inequality Matter for Fiscal Policy Efficiency?

Abstract: How do distribution and taxation affect the likelihood of observing the transfer of risks from the financial sector towards the government? How are the government’s sovereign borrowing and default decisions and the financial sector health affected by inequality? What is the impact of income distribution in the efficiency and the optimality of fiscal policy tools that respond to financial sector risks? To address these questions, we extend a model of endogenous sovereign default and endogenous financial sector crises to include agents’ heterogeneity in terms of their source of their income (labor versus capital income) and the benefits that they obtain from a fiscal policy to financial stress. Our results show that income inequality increases both the likelihood of sovereign default and financial crisis and reduces the optimal level of policy response by the government to financial instability risks. Tax progressivity is useful in restoring the efficiency of the fiscal policy response to such financial instability, e.g., government guarantees to the financial sector.
Implicit Guarantees for Local Government Debt in China

Abstract: While local government debt in China has long been viewed as having implicit payment guarantees from the central government, recent market-oriented reforms have started to break this regime. This paper computes the market-perceived probability of guarantees for local government debt at the city level using data on yields and credit ratings of Municipal Corporate Bonds and local government bonds. Moreover, I investigate how the probabilities of the guarantees change over time and how they vary by geographic location, fiscal status, and type of issuing entity. Finally, I study how the perceived probabilities of government guarantees are influenced by the recent events of default on local government debt vehicles.