A Macro Economic Model with a Financial Sector

By Yuliy Sannikov and M. Brunnermeier, Princeton University

Abstract

We incorporate a financial sector in a macroeconomic model to study
(1) the stability of the financial sector (2) the impact of the financial sector on real economy (3) externalities, and their impact on system dynamics and (4) welfare impacts of economic policies. We find that when the financial system deviates away from the steady state, the dynamics becomes highly unstable. Negative shocks cause price declines not only through the erosion of net worth of the financial sector, but also through increased price volatility, which leads to deleveraging and fire sales. The associated large drop in asset prices impairs real economic activity. Externalities get stronger with financial innovations, securitization and greater complexity of the financial system.