Cross-asset contagion in the financial crisis: A Bayesian time-varying parameter approach

Guidolin, Massimo

Hansen, Erwin

Pedio, Manuela

The recent U.S. subprime crisis provides us with a perfect framework to study cross-asset contagion mechanisms in the U.S. financial markets. Specifically, we look at how and to what extent a negative shock that initially occurred in the asset-backed security (ABS) low-quality market propagated to ABS higher grade, Treasury repos, Treasury note, corporate bond, and stock markets. We rely on dynamic time series models estimated with Bayesian methods to capture the (potentially) time-varying relation among the different financial markets. We provide evidence of structural changes in the cross-asset relationships and therefore of contagion. Moreover, by observing the impulse response functions of the models, we conclude that contagion mainly occurred through the flight-to-liquidity, risk premium, and the correlated information channels.