CHRISTIAN JULLIARD
(with Kathy Yuan and Edward Dembee)

Liquidity Choice: A Structural Estimation of Interbank Network Effects and Key Players

Abstract:
This paper studies whether structural properties of inter-bank networks affect individual bank's incentive to provide liquidity. Assuming liquidity provision is a public good, when a neighbouring bank has a lot of liquidity, an individual bank may choose to provide less. Following Ballester, Calvo-Armengol and Zenou (2005), we show that, at the Nash equilibrium, the outcome of each individual bank embedded in a network is proportional to its Katz-Bonacich centrality measure. This measure takes into account of the liquidity provision of both direct and indirect neighbours of each bank but puts less weight to banks with distant connections. We then bring the model to the data by using a very detailed dataset of interbank networks and casting our equilibrium model in a spatial error framework. After controlling for observable individual bank characteristics, aggregate risk and unobservable network specific factors, we find evidence for a substantial, and time varying, network risk.