HKUST ECON Seminar

September 2 (Wed), 3:00 - 4:30 pm

A Networked Monetary Union: Accounting for Comovement in the Euro Area

Benjamin Born, Anastasiia Antonova, Luis Huxel, Gernot J. Mueller, Florian Stammwitz

Abstract:

Production networks shape the co-movement of business cycles across countries. This is particularly relevant for monetary unions, where the costs of a common monetary policy depend not only on the degree of business-cycle synchronization and cross-country heterogeneity, but also on their underlying sources. Against this background, we develop and estimate a New Keynesian model of a monetary union with a production network spanning its member states. We calibrate the model to capture the heterogeneous production network of the euro area and estimate it using time-series data for ten euro-area countries. Through counterfactual exercises, we quantify the role of cross-border input-output linkages in generating co-movement. We find that the production network generates substantial synchronization in response to country-specific shocks, leaving a more limited role for common shocks. We then use the estimated model to assess the welfare implications of alternative monetary-policy arrangements.