Banking Network Amplification Effects on Cross-Border Bank Flows

Faculty of Economics, Yamaguchi University
Shugo Yamamoto

Abstract
The global factor often referred to as the volatility index (VIX) is said to be the most important determinant of cross-border bank flows. Contrary to established theory, we investigate the spatial amplification of the network origins of the aggregate fluctuation effect on cross-border bank flows. Results show that first, amplification effects from networks of core–core countries can explain a large share of global shocks, which will replace VIX. Second, because the US is located at the core of the network, the US amplifies shock originating in other countries. Furthermore, monetary policy shocks originating in the US have large amplification effects not only the US itself, but also on the rest of the world. Therefore, domestic shocks apparently propagate throughout the international banking network, affecting other countries, and generating a sizable global factor.

JEL Classification Code: F30, F34
Keywords: Core–periphery, Global factor, Spatial effect, VI