

# **Convergence: A Spatial Dynamic Panel Data Approach**

Lung-Fei Lee, Ohio State University  
and  
Jihai Yu, University of Kentucky

## **Abstract**

A spatial dynamic panel data approach is used to study regional growth convergence in the US economy. In a neoclassical growth model, countries are assumed to be independent from each other, which is not valid in the real world. We introduce technological spillovers and factor mobility into the neoclassical framework, showing that the convergence rate is higher and there is spatial correlation. By exploiting data on personal state income spanning period 1961-2000 for the 48 contiguous states, we obtain empirical results consistent with the model prediction.