Exploratory Space-Time Analysis of Regional Income Evolutions

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Abstract

The topics of regional income convergence, divergence and inequality have received enormous attention in the literatures across the social sciences. Despite the inherent geographic dimensions that underlie the data used in empirical analysis, the role of spatial effects has only recently begun to attract attention. Welcomed as this recent shift is, the methods of exploratory spatial data analysis and spatial econometrics employed in these studies are geared towards analyzing geographical cross-sectional variation and are limited in addressing the dynamic components of regional economic evolutions. This paper introduces a series of new empirical measures that shed light on the role of geographical structure in shaping the dynamics of macro-regional economic growth. These measures also gauge the temporal stability of spatial patterns of income disparities as well as the spatial heterogeneity of the growth paths of individual and cliques of regional economies.