The Spatial Distribution of Poverty and the Long Reach of the Industrial Makeup of Places: New Evidence on Spatial and Temporal Regimes

Katherine J. Curtis
University of Wisconsin – Madison

Junho Lee
King Abdullah University of Science and Technology

Heather A. O’Connell
Louisiana State University

Jun Zhu
University of Wisconsin – Madison

Does the Spatial Clustering of Industry Underlie the Spatial Pattern of Poverty Over Time?

A wealth of research identifies industrial structure as a central correlate of place-level poverty and suggests that changes in and the clustering of industry contribute to the spatial clustering of poverty over time. However, few studies have investigated the spatial and temporal dimensions simultaneously, and none have effectively examined spatio-temporal interactions. Consequently, a core tenet of theory on poverty in place has not been adequately examined.

To address this limitation, we test for systematic variation in the poverty-industry relationship over time and across space using a new method to quantify dynamic associations by simultaneously accounting for spatial and temporal autocorrelation and relationship heterogeneity.

The Upper Midwest is our study site given dramatic regional changes in dominant industries and poverty during the past several decades. Our approach yields a more precise and reliable understanding of the long reach of local industrial structure on the spatial clustering of poverty.

Industry Protectiveness and Industry Dependence

The specific character of the poverty-industry relationship systematically varies along both the temporal and spatial dimensions: industry is more protective in certain periods than in others according to sector trends, and it is more protective in certain places than in others conditional on sector dependence. Industry dependence is more complicated and results point to the potential influences of changes in dependence and alternative forces (e.g., unionization and worker protection).

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