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### **Research Working Papers**

### **Urban Growth Shadows**

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Although locations near metropolitan areas have experienced faster population growth since 1920, this growth has diminished since 2000, suggesting the largest metropolitan areas will grow more slowly over coming decades.

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Does a location's growth benefit or suffer from being geographically close to large economic centers? Spatial proximity may lead to competition and hurt growth, but it may also improve market access and enhance growth. Using data on U.S. counties and metro areas for the period 1840-2017, we document this trade off between urban shadows and urban access. Proximity to large urban centers was negatively associated with growth between 1840 and 1920, and positively associated with growth after 1920. Using a two-city spatial model, we show that the secular evolution of inter-city and intra-city commuting costs can account for this. Alternatively, the long-run decline in inter-city shipping costs relative to intra-city commuting costs is also consistent with these observed patterns.

JEL Classification: R11, R12, N91, N92

#### **Article Citations**

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#### **Related Research**

- Desmet, Klaus, and Jordan Rappaport. 2017. "The Settlement of the United States, 1800-2000: The Long Transition to Gibrat's Law." Journal of Urban Economics, vol. 98, pp. 50-68.
- Rappaport, Jordan. 2005. "The Shared Fortunes of Cities and Suburbs." Federal Reserve Bank of Kansas City, *Economic Review*, vol. 90, no. 3, pp 33-59.

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Jordan Rappaport is a senior economist at the Federal Reserve Bank of Kansas City. He joined the Bank in 1999 following completing his Ph.D. in economics at Harvard University. Jordan also holds a bachelors' degree from Brown University, from which he graduated in 1990. Jordan's research focuses on issues related to local growth. His articles for the Bank's *Economic Review* primarily focus on U.S. metropolitan area growth and on housing. His empirical research published in peer-reviewed journals has documented the persistence and causes of long run local population growth. His published theoretical research shows that even small costs associated with moving are sufficient to cause high persistence in net population flows and that small productivity and amenity differences can cause very large differences in local population density. Jordan is an associate editor of *Regional Science and Urban Economics* and the *Journal of Regional Science*.