

Discussion of “The Macroeconomic Effects of Neighborhood Policies: A Dynamic Analysis”

by Alessandra Fogli, Veronica Guerrieri, Mark Ponder, and Marta Prato

Diego Daruich*

NBER Macro Annual 2026

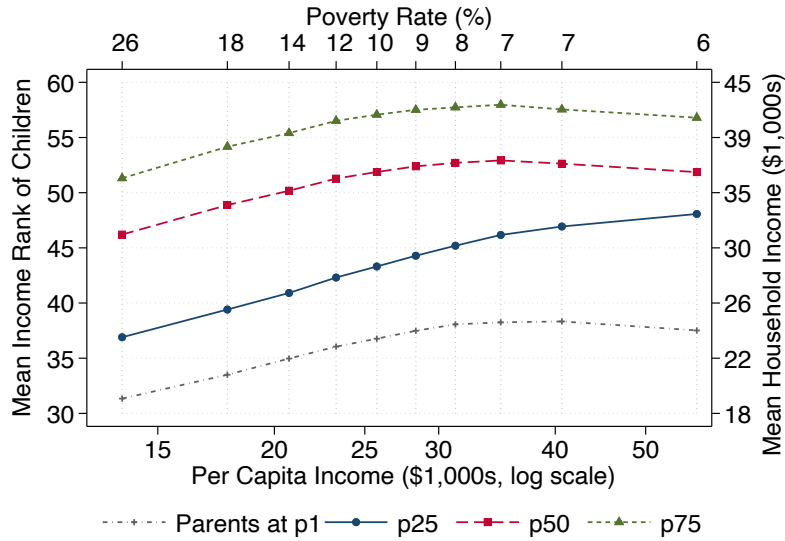
1 The Geography of Opportunity and Policy Evaluation at Scale

Where children grow up matters for their long-run economic outcomes. The Opportunity Atlas documents large geographic variation in children’s adult incomes, even conditional on parental income, at the Census tract level (Chetty et al., 2018). Figure 1 illustrates this variation: children who grow up in low-income neighborhoods earn less in adulthood than children of similar-income parents who grow up in higher-income areas. For instance, among children of parents at the lowest income percentile, growing up in a 5th-decile rather than a 1st-decile neighborhood is associated with a 16 percentage point lower childhood neighborhood poverty rate and 17% higher adult income.

Experimental and quasi-experimental evidence confirms that at least part of this variation reflects causal neighborhood effects. Table 1 summarizes the key estimates. Analysis of the Moving to Opportunity (MTO) experiment—which gave randomly selected low-income families housing vouchers to move from high- to lower-poverty neighborhoods—finds that young children (ages 0–12) whose families relocated to lower-poverty neighborhoods experienced a 31% gain in adult income, having moved to neighborhoods with poverty rates about 22 percentage points lower (Chetty, Hendren and Katz, 2016). Studies of involuntary relocations from public housing demolitions document comparable long-run benefits for young children (Chyn, 2018). Notably, while MTO finds a statistically insignificant negative point estimate for children who move after age 12, Chyn (2018) finds positive effects for older children as well.

*University of Southern California – Marshall School of Business. Email: daruich@usc.edu.

Figure 1: Children’s adult outcomes by neighborhood of upbringing



Note: Figure 1 plots children’s adult outcomes by the income decile of the neighborhood in which they grew up, shown separately for children of parents at the 1st, 25th, 50th, and 75th income percentiles. The left axis reports the child’s adult income rank and the right axis the corresponding adult income level. The top axis shows the average poverty rate in their childhood neighborhoods. Dollar amounts are in 2012 US dollars. Source: Opportunity Atlas (Chetty et al., 2018) and 2012–2016 American Community Survey data.

Table 1: Neighborhood effects on children’s adult outcomes

	Δ Poverty	Δ Income
<i>Opportunity Atlas</i> (Chetty et al., 2018, low-income parents)		
1st \rightarrow 5th decile	–16 p.p.	+17%
1st \rightarrow 8th decile	–19 p.p.	+22%
<i>Moving to Opportunity</i> (Chetty, Hendren and Katz, 2016)		
Young children (0–12)	–22 p.p.	+31%
Older children (13–18)	–25 p.p.	~ 0
<i>Public Housing Demolitions</i> (Chyn, 2018)		
Young children (7–12)	–14 p.p.	+24%
Older children (13–18)	–14 p.p.	+14%

Note: Table 1 summarizes neighborhood effects on children’s adult outcomes. Poverty rates refer to the neighborhood in which children grew up; income changes refer to children’s adult income. Baseline (or control-group) neighborhood poverty is about 26% in the Opportunity Atlas comparison, 40–50% in the MTO sample, and roughly 69% in the demolition sample. Opportunity Atlas rows compare average adult outcomes for children of bottom-percentile-income parents across neighborhood income deciles (Chetty et al., 2018), with neighborhood poverty rates drawn from the 2012–2016 American Community Survey; MTO rows are experimental estimates by child age at random assignment (Chetty, Hendren and Katz, 2016); demolition rows are quasi-experimental estimates (Chyn, 2018).

In light of this evidence, a natural question is: how should governments design neighborhood policies to improve outcomes for children at scale? The answer depends on general equilibrium responses that small-scale empirical evidence cannot capture. Housing voucher programs directly relocate poor families into richer neighborhoods, which may alter the composition of those neighborhoods, generating spillovers on incumbent residents and potentially eroding the quality that made the destination attractive. Place-based investments, though designed to improve conditions in situ rather than move families, can also generate residential sorting: by raising school quality and neighborhood attractiveness, they push up housing costs and may displace the very families they were intended to help. These responses operate at scale and over time—precisely the margins that are hardest to identify with experimental or quasi-experimental methods.

Fogli, Guerrieri, Ponder, and Prato (henceforth FGPP) develop a dynamic general equilibrium framework to evaluate these neighborhood policies. Their model combines overlapping generations, endogenous sorting, local spillovers on children, and parental investment in education. Using this framework, they compare two interventions—housing vouchers (MTO-style) and place-based investment in schools (PBI)—under the constraint that both cost the same in fiscal terms.¹

FGPP build on a long tradition of spatial-macro models with neighborhood effects and human capital formation (Benabou, 1996a; Bénabou, 1996b; Durlauf, 1996; Fernandez and Rogerson, 1996, 1998). Their earlier work (Fogli et al., Forthcoming) established the quantitative link between rising income inequality and residential segregation; the present paper extends that framework to evaluate policy interventions. The model features an overlapping-generations economy with a city divided into three neighborhoods: a rich area (A), a middle-income area (B), and a poor area (C). Agents live for two periods—childhood and parenthood. Parents choose a neighborhood and also invest money in their children’s education. Children’s human capital is shaped by parental investments and by a local spillover that depends on neighborhood composition. The model is calibrated to 1980 US data, with a skill premium shock in 1990 and each period corresponding to ten years.² FGPP compare two equal-cost policies: MTO provides housing vouchers that subsidize moves from C to A, while PBI directs investment toward schools in C.

¹FGPP also study a third policy: place-based transfers (PBT). This yields the largest average welfare gains in the short run but is less effective at reducing inequality and segregation. I focus on the MTO–PBI contrast, which most sharply poses the mobility-versus-investment trade-off.

²Each of the two life stages lasts ten years, so individuals live for twenty years in total. The brevity of the single childhood period is worth keeping in mind when mapping the model to age-specific empirical estimates, which I discuss below.

FGPP contribute to a growing quantitative literature that evaluates neighborhood and education policies in general equilibrium, including [Agostinelli et al. \(2023\)](#), [Bellue \(2024\)](#), [Davis et al. \(2021\)](#), [Eckert and Kleineberg \(2021\)](#), and [Gregory, Kozlowski and Rubinton \(2024\)](#). FGPP’s analysis is particularly close to two papers. [Chyn and Daruich \(2025\)](#) evaluate housing vouchers and place-based development programs—but not school investment—in a dynamic spatial model with intergenerational transmission. [Zheng and Graham \(2022\)](#) study school finance equalization in a spatial general equilibrium framework with human capital formation. FGPP’s contribution is to bring both classes of policy—mobility-based interventions and school investment—into a single unified dynamic framework.

The main results are as follows. MTO generates large gains for recipient families, but these are partially offset by negative spillovers in the receiving neighborhood as its composition changes. At scale, the city-wide welfare effect of MTO turns negative, and the losses grow over time. PBI produces smaller short-run effects but dominates in the long run: as school investment accumulates and compounds through better-educated children who become better parents, PBI reduces inequality and segregation while improving intergenerational mobility. PBI’s increasing gains over time resemble those found by [Zheng and Graham \(2022\)](#) for school finance equalization, where the compounding of human capital across generations drives long-run welfare improvements. The MTO results, however, differ from those in [Chyn and Daruich \(2025\)](#), who find that a voucher program can generate welfare gains for newborns when comparing steady states.

Two features of FGPP’s analysis push the comparison in the same direction, plausibly overstating the return to PBI and understating the gains from MTO. The first is a calibration choice: the PBI return is pinned to the most favorable estimate in [Biasi, Lafortune and Schönholzer \(2025\)](#)—essential infrastructure such as HVAC—whose high return may not keep accruing as investment grows.³ The second is not a calibration choice but reflected in the validation: the model’s 17% MTO gain falls short of the 31% gain experienced by young movers—the group to which the model’s single, full-exposure childhood period corresponds.⁴ Regardless of whether the ranking of policies changes with the calibration, the paper’s central contribution—bringing equilibrium responses and intergenerational dynamics into the evaluation of neighborhood policies—is important and reshapes how

³I thank the authors for adding both an altruism sensitivity analysis and a robustness appendix on the PBI return.

⁴FGPP instead validate the model against a 16% benchmark that averages the young-mover gain (31%) with the negligible effect for older children; but because the model has a single, full-exposure childhood period, its treated child is in effect a young mover, so the 31% estimate is the more appropriate comparison.

these policies should be assessed.

This discussion is organized as follows. Section 2 highlights additional forces that are relevant for policy evaluation: intergenerational dynamics, the life cycle, school funding feedback, context-specific policies, and the computational frontier for many-neighborhood models. Section 3 discusses the broader question of decomposing neighborhood mechanisms and concludes.

2 Other Policy-Relevant Forces

FGPP’s framework captures several important channels—endogenous sorting, local spillovers, and intergenerational transmission—but necessarily abstracts from others. This section discusses additional forces that are quantitatively relevant for the MTO-PBI comparison.

2.1 *Intergenerational Dynamics and the Life Cycle*

FGPP’s model features intergenerational transmission: PBI’s advantage grows over time as better-educated children become better parents and neighbors. While this channel is present in their framework, FGPP do not isolate its quantitative contribution. Quantifying it requires models that explicitly track the transmission of neighborhood effects across generations. In Chyn and Daruich (2025), accounting for intergenerational dynamics—the feedback from better neighborhoods to higher-skilled children to better parents and neighbors—raises the welfare gain from a small-scale voucher program from 4.2% to 7.1%, an increase of 2.9 percentage points, or about three-fifths of the RCT effect.⁵ This suggests that static or short-horizon evaluations of neighborhood policies miss a quantitatively important component of their benefits.

Empirical estimates of neighborhood effects generally capture only the direct effect on the treated generation. They miss both the likely negative general equilibrium feedback that arises at scale *and* the potentially positive dynamic feedback that operates through intergenerational transmission. The net sign of what is missed is therefore ambiguous and raises the value of the structural policy evaluation developed by FGPP.

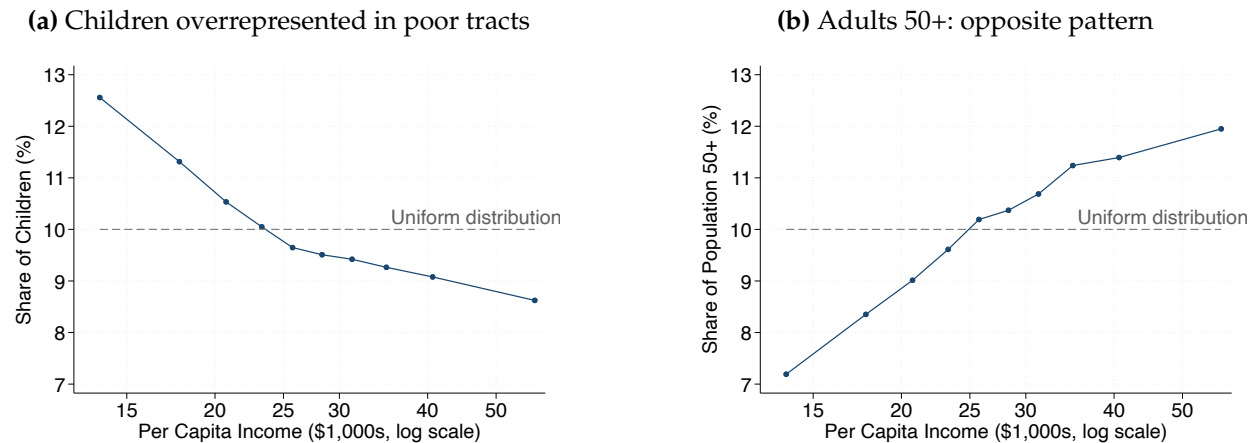
2.2 *Life-Cycle Heterogeneity*

FGPP’s two-period structure—childhood and parenthood—captures the essential intergenerational channel but abstracts from within-lifetime dynamics. A richer life-cycle struc-

⁵FGPP’s results are consistent with this finding: the PBI policy’s effects compound precisely because each generation of treated children grows up to improve the neighborhood for the next generation.

ture matters because the demographic composition of neighborhoods varies systematically with age. Figure 2, built from the 2012–2016 American Community Survey, shows that children are disproportionately concentrated in poor neighborhoods, while adults over 50 exhibit the opposite pattern.

Figure 2: Distribution of children and older adults across neighborhood income deciles



Note: Figure 2 plots the share of children (panel a) and adults over 50 (panel b) across neighborhood income deciles. Children are concentrated in the poorest tracts, while older adults show the opposite pattern. Dollar amounts are in 2012 US dollars. Source: 2012–2016 American Community Survey.

This compositional pattern has implications for policy design. Displacing older adults from good neighborhoods—for instance, through the rent increases that accompany voucher-driven demand—is less costly in intergenerational terms, since these households are less likely to have children whose human capital would be affected. A voucher that is not targeted to families with children will therefore subsidize moves by older adults without generating the intergenerational spillovers that make vouchers valuable. **Chyn and Daruich (2025)** find that child-independent vouchers generate welfare *losses* (in line with FGPP), in contrast to the welfare gains obtained when vouchers are targeted to families with young children. This targeting margin is absent from FGPP’s two-period framework: all modeled households are parents, so the model cannot ask whether vouchers should be directed toward families with children rather than childless or older households. This distinction also bears on displacement. When vouchers move poor families into the better neighborhood at scale, rising rents push out some incumbents; in FGPP’s model these displaced households are not disproportionately those without children, so displacement falls only on families whose children thereby lose access to the better neighborhood. A

policy that concentrated displacement on childless households would impose smaller intergenerational costs and, thus, increase the gains from MTO.

2.3 *School Funding, Gentrification, and the Need for More Neighborhoods*

FGPP's PBI policy improves schools in the poorest neighborhood, which raises a natural feedback question: what happens to housing prices? In many US jurisdictions, school funding depends on local property taxes (Zheng and Graham, 2022). If PBI improves schools in a poor area, demand for housing in that area increases, pushing up prices. This generates a *positive* feedback loop: higher prices lead to more tax revenue, which leads to further school improvement. FGPP's framework captures this positive feedback indirectly. However, the same house price increase may generate a *negative* feedback by displacing the poor families the policy was designed to help. Gentrification erodes the targeting of place-based investment. This negative channel is hard to capture in a model with only three neighborhoods: if prices rise in C, poor families have nowhere cheaper to sort into. In reality, they would move to a less advantaged area that the model does not represent. Adding a fourth neighborhood below C would allow displaced families to sort downward, revealing the negative feedback of targeted PBI that three neighborhoods cannot capture. This is a refinement of an existing mechanism rather than a missing one: prices already rise in C, but with C at the bottom the model cannot represent where the displaced go, and hence the loss borne by the families the policy targets.

This points to a broader limitation. Most dynamic quantitative spatial models of neighborhoods that affect children (my own work included) use 2–3 locations, a computational necessity given that models with heterogeneous, forward-looking agents, incomplete markets, and endogenous neighborhood composition generate a high-dimensional state space. With many locations, general equilibrium effects could look quite different: spillover dilution may be smaller if movers disperse across many neighborhoods, or it may be amplified if incumbents sort away from receiving areas.

Recent work has made progress on this computational frontier. For example, Sun (2025) develops a framework for dynamic spatial economies with sequential location choices that leverages deep learning to handle high-dimensional state spaces. Greaney (2025) and Greaney, Parkhomenko and Van Nieuwerburgh (2025) propose a mixed-time computational approach that enables dynamic models with many locations. These methods expand the set of tractable models, but neither has yet been combined with human capital formation, parental investment, and intergenerational dynamics—the key ingre-

dients of the neighborhood effects literature. Combining these new computational techniques with the economic forces highlighted in FGPP is a natural next step for this literature.

2.4 Context-Specific Policies and the Political Economy of Housing Supply

The optimal policy instrument likely depends on local conditions. One key dimension is housing supply elasticity. In cities with elastic supply, voucher-induced demand can be accommodated by new construction, limiting rent increases and preserving the targeting of the subsidy. In supply-constrained cities—New York, San Francisco—the same demand increase is absorbed primarily through higher rents, displacing incumbents and eroding neighborhood quality. [Chyn and Daruich \(2025\)](#) provide quantitative evidence on this margin: at the average US elasticity, rent vouchers generate a welfare gain of 4.9%, but at elasticities representative of New York or San Francisco, voucher gains fall to approximately zero and place-based investment dominates. The MTO-vs-PBI comparison is therefore not a universal ranking but depends on the local housing market. A deeper issue is that housing supply elasticity is itself endogenous. Incumbents who own property in desirable neighborhoods have incentives to resist new construction ([Glaeser, Gyourko and Saks, 2005](#)), and zoning regulations are the instruments through which this resistance operates ([Glaeser and Gyourko, 2018](#); [Hsieh and Moretti, 2019](#)). The urban economics literature has extensively studied the aggregate consequences of supply restrictions, but has largely abstracted from their intergenerational impact. If supply restrictions limit families' access to high-opportunity neighborhoods, and if neighborhoods causally affect children, then the welfare costs of restrictive zoning may be substantially larger than existing estimates suggest ([Daruich, 2026](#)). More broadly, FGPP's framework could be extended to explore this and other forms of heterogeneity (such as baseline segregation patterns or local labor market conditions) so that our policy conclusions may become more nuanced and better targeted.

3 Mechanisms and Concluding Remarks

FGPP advance the quantitative literature on neighborhood policies by comparing mobility-based and place-based interventions within a unified dynamic framework that features endogenous sorting, human capital formation, and intergenerational transmission. Their finding that place-based investment dominates housing vouchers in the long run provides a useful benchmark for policy evaluation, even if the quantitative margin depends

on calibration choices. More broadly, the neighborhood effects literature has established that places matter for children. The next frontier is understanding *why* they matter and *how* to intervene at scale—accounting for intergenerational dynamics, life-cycle heterogeneity, gentrification feedback, context-specific local conditions, and the mechanisms through which neighborhoods shape human capital.

A limitation shared by FGPP and much of the quantitative neighborhood effects literature (my own work included) is that “neighborhood quality” enters the model as a reduced-form function of local composition. This is a useful modeling device, but it obscures the specific mechanisms through which neighborhoods affect children. There is no consensus on the relative importance of the leading candidates: school quality (Jackson, Johnson and Persico, 2016; Biasi, Lafortune and Schönholzer, 2025), peer effects (Agostinelli et al., 2023), crime and violence (Damm and Dustmann, 2014), environmental factors such as pollution and lead exposure (Currie et al., 2014), and social networks (Wilson, 1987; Chetty et al., 2022).

This matters for policy. If the dominant channel is school quality, then PBI directed at schools is well-targeted. If peer effects dominate, then the composition of who lives in a neighborhood matters more than institutional infrastructure, and voucher policies that change composition may be more effective if the potentially negative spillover imposed on incumbents is dominated by the positive one on recipient households. If social networks are the key mechanism, the optimal policies should also aim to facilitate cross-class connections (Chetty et al., 2022). Progress on this front requires structural models that decompose neighborhood quality into identifiable channels with separate policy implications—a challenging task, but one that would sharpen the conclusions of frameworks like FGPP’s.

References

- Agostinelli, Francesco, Matthias Doepke, Giuseppe Sorrenti, and Fabrizio Zilibotti.** 2023. “It Takes a Village: The Economics of Parenting with Neighborhood and Peer Effects.” *Journal of Political Economy*.
- Bellue, Suzanne.** 2024. “Why Don’t Poor Families Move? A Spatial Equilibrium Analysis of Parental Decisions with Social Learning.” CREST Working Paper.
- Benabou, Roland.** 1996a. “Equity and Efficiency in Human Capital Investment: The Local Connection.” *The Review of Economic Studies*, 63(2): 237.

- Bénabou, Roland.** 1996b. "Heterogeneity, Stratification, and Growth: Macroeconomic Implications of Community Structure and School Finance." *American Economic Review*, 86(3): 584–609.
- Biasi, Barbara, Julien Lafortune, and David Schönholzer.** 2025. "What Works and for Whom? Effectiveness and Efficiency of School Capital Investments Across the U.S." *Quarterly Journal of Economics*, 140(3): 2329–2379.
- Chetty, Raj, John N. Friedman, Nathaniel Hendren, Maggie R. Jones, and Sonya R. Porter.** 2018. "The Opportunity Atlas: Mapping the Childhood Roots of Social Mobility." National Bureau of Economic Research Working Paper 25147.
- Chetty, Raj, Matthew O. Jackson, Theresa Kuchler, Johannes Stroebel, Nathaniel Hendren, Robert B. Fluegge, Sara Gong, Federico Gonzalez, Armelle Grondin, Matthew Jacob, Drew Johnston, Martin Koenen, Eduardo Laguna-Muggenburg, Florian Mudekereza, Tom Rutter, Nicolaj Thor, Wilbur Townsend, Ruby Zhang, Michael Bailey, Pablo Barberá, Monica Bhole, and Nils Wernerfelt.** 2022. "Social Capital I: Measurement and Associations with Economic Mobility." *Nature*, 608: 108–121.
- Chetty, Raj, Nathaniel Hendren, and Lawrence F. Katz.** 2016. "The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment." *American Economic Review*, 106(4): 855–902.
- Chyn, Eric.** 2018. "Moved to Opportunity: The Long-Run Effects of Public Housing Demolition on Children." *American Economic Review*, 108(10): 3028–3056.
- Chyn, Eric, and Diego Daruich.** 2025. "An Equilibrium Analysis of the Effects of Neighborhood-Based Interventions on Children." *American Economic Review*, 115(12): 4476–4522.
- Currie, Janet, Joshua Graff Zivin, Jamie Mullins, and Matthew Neidell.** 2014. "What Do We Know About Short- and Long-Term Effects of Early-Life Exposure to Pollution?" *Annual Review of Resource Economics*, 6: 217–247.
- Damm, Anna Piil, and Christian Dustmann.** 2014. "Does Growing Up in a High Crime Neighborhood Affect Youth Criminal Behavior?" *American Economic Review*, 104(6): 1806–1832.
- Daruich, Diego.** 2026. "Zoning Out Opportunities." Working Paper.
- Davis, Morris A., Jesse Gregory, Daniel A. Hartley, and Kegan T.K. Tan.** 2021. "Neighborhood Effects and Housing Vouchers." *Quantitative Economics*, 12(4): 1307–1346.
- Durlauf, Steven N.** 1996. "A Theory of Persistent Income Inequality." *Journal of Economic Growth*, 1(1): 75–93.
- Eckert, Fabian, and Tatjana Kleineberg.** 2021. "Education Policies in Spatial General Equilibrium." Working Paper.
- Fernandez, Raquel, and Richard Rogerson.** 1996. "Income Distribution, Communities, and the Quality of Public Education." *Quarterly Journal of Economics*, 111(1): 135–164.
- Fernandez, Raquel, and Richard Rogerson.** 1998. "Public Education and Income Distribution: A Dynamic Quantitative Evaluation of Education-Finance Reform." *American Economic Review*, 88(4): 813–833.
- Fogli, Alessandra, Veronica Guerrieri, Mark Ponder, and Marta Prato.** Forthcoming.

- "The End of the American Dream? Inequality and Segregation in US Cities." *Journal of Political Economy*.
- Glaeser, Edward L., and Joseph Gyourko.** 2018. "The Economic Implications of Housing Supply." *Journal of Economic Perspectives*, 32(1): 3–30.
- Glaeser, Edward L., Joseph Gyourko, and Raven Saks.** 2005. "Why is Manhattan So Expensive? Regulation and the Rise in Housing Prices." *Journal of Law and Economics*, 48(2): 331–369.
- Greaney, Brian.** 2025. "Spatial Dynamics." Working Paper.
- Greaney, Brian, Andrii Parkhomenko, and Stijn Van Nieuwerburgh.** 2025. "Neighborhood Dynamics." Working Paper.
- Gregory, Victoria, Julian Kozlowski, and Hannah Rubinton.** 2024. "The Impact of Racial Segregation on College Attainment in Spatial Equilibrium." Federal Reserve Bank of St. Louis Working Paper.
- Hsieh, Chang-Tai, and Enrico Moretti.** 2019. "Housing Constraints and Spatial Misallocation." *American Economic Journal: Macroeconomics*, 11(2): 1–39.
- Jackson, C. Kirabo, Rucker C. Johnson, and Claudia Persico.** 2016. "The Effects of School Spending on Educational and Economic Outcomes: Evidence from School Finance Reforms." *Quarterly Journal of Economics*, 131(1): 157–218.
- Sun, Jeffrey.** 2025. "Dynamic Spatial Economics with Sequential Choices." Working Paper.
- Wilson, William Julius.** 1987. *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*. University of Chicago Press.
- Zheng, Angela, and James Graham.** 2022. "Public Education Inequality and Intergenerational Mobility." *American Economic Journal: Macroeconomics*.