Neighborhood Effects

Urban Economics

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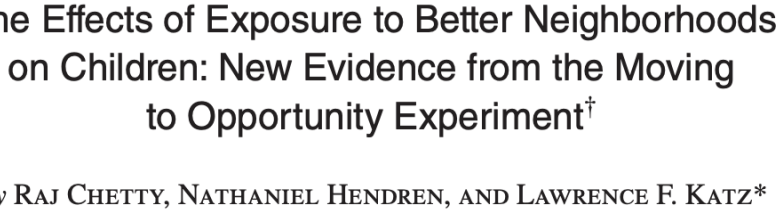
Intro

- I'm going to discuss Chetty et al (2014) AER



The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment†

By Raj Chetty, Nathaniel Hendren, and Lawrence F. Katz*

- Disclaimer: these slides are based on their slides

Motivation

- Substantial disparities in economic outcomes across low vs. high poverty neighborhoods [e.g., Wilson 1987, Jencks and Mayer 1990, Cutler and Glaeser 1997]
- These disparities motivated the HUD Moving to Opportunity (MTO) experiment in the mid 1990's
- Offered a randomly selected subset of families living in high-poverty housing projects housing vouchers to move to lower-poverty areas
- Large literature on MTO has found significant effects on adult health and subjective well-being
- But these studies have consistently found that the MTO treatments had no impact on earnings or employment rates of adults and older youth [e.g. Katz, Kling, and Liebman 2001, Oreopoulous 2003, Sanbonmatsu et al. 2011]

Revisit MTO

- We revisit the MTO experiment and focus on its impacts on children who were young when their families moved to better neighborhoods
- Re-analysis motivated by a companion paper that presents quasi-experimental evidence on neighborhood effects [Chetty and Hendren 2015]
- Key finding: childhood exposure effects
- Every year in a better area during childhood $\rightarrow$ better outcomes in adulthood
- Implies that gains from moving to a better area are larger for children who move when young

Revisit MTO

- In light of this evidence on childhood exposure effects, we returned to MTO data to examine treatment effects on young children
- Link MTO data to tax data to analyze effects of MTO treatments on children's outcomes in adulthood
- Children we study were not old enough to observe outcomes in adulthood at the time of the MTO Final Impacts Evaluation (which used data up to 2008)

Moving to Opportunity Experiment

- HUD Moving to Opportunity Experiment implemented from 1994-1998
- 4,600 families at 5 sites: Baltimore, Boston, Chicago, LA, New York
- Families randomly assigned to one of three groups:
  - Experimental: housing vouchers restricted to low-poverty (¡10%) Census tracts
  - Section 8: conventional housing vouchers, no restrictions
  - Control: public housing in high-poverty (50% at baseline) areas

Moving to Opportunity Experiment

Data

- MTO data obtained from HUD
  - 4,604 households and 15,892 individuals
  - Primary focus: 8,603 children born in or before 1991
- Link MTO data to federal income tax returns from 1996-2012
  - Approximately 85% of children matched
  - Match rates do not differ significantly across treatment groups
  - Baseline covariates balanced across treatment groups in matched data

Estimation I

- Estimation 1:

$$y_i = \alpha + \beta_E^{ITT} Exp_i + \beta_S^{ITT} S8_i + \delta s_i + \epsilon_i \tag{1}$$

- These intent-to-treat (ITT) estimates identify effect of being offered a voucher to move through MTO

Estimation II

- Experimental take-up: 48% for young children, 40% for older children
- Section 8 take-up: 65.8% for young children, 55% for older children

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- Experimental take-up: 48% for young children, 40% for older children
- Section 8 take-up: 65.8% for young children, 55% for older children
- 2SLS

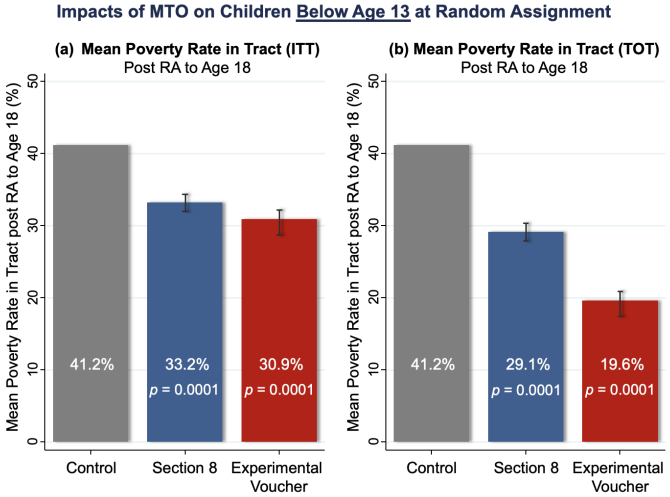
$$y_i = \alpha + \beta_E^{TOT} TakeExp_i + \beta_S^{TOT} TakeS8_i + \delta s_i + \epsilon_i \quad (2)$$

- *TakeExp* and *TakeS8* are endogenous, and are instrumented with *Exp* and *S8* that were randomly assigned
- Under the assumption that MTO voucher offers only affect outcomes through the actual use of the voucher to lease a new residence, β_E^{TOT} and β_S^{TOT} can be interpreted as the causal effect of taking up the experimental and Section 8 vouchers and moving to a lower-poverty neighborhood

Results I: Where they live

- ”First degree” effects of MTO experiment on poverty rates
- Measure mean poverty rates from random assignment to age 18 at tract level using Census data
- Use poverty rates as an index of nbhd. quality, but note that MTO treatments naturally changed many other features of neighborhoods too

Results I: Where they live



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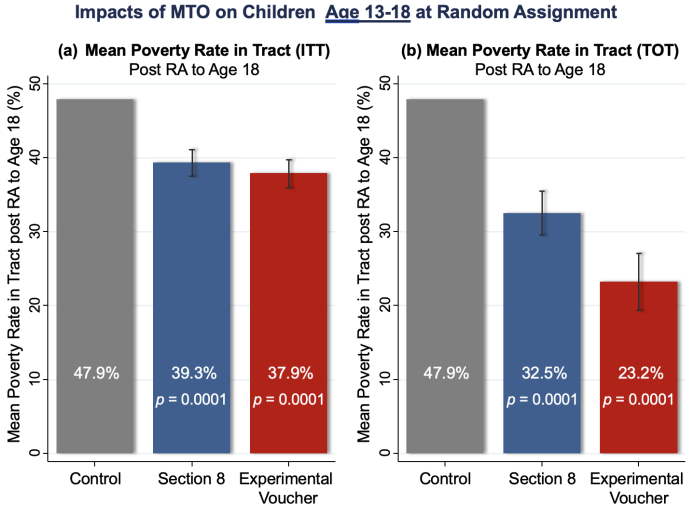
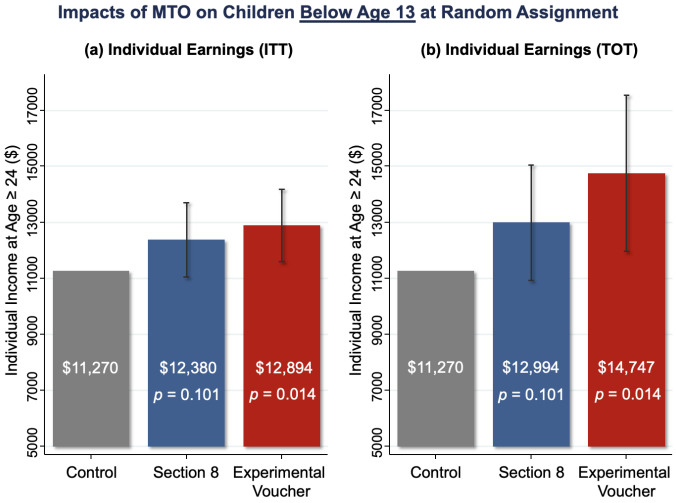


Results II: Treatment Effects on Outcomes in Adulthood below age 13 at RA

- Now turn to impacts on outcomes in adulthood
- Begin by analyzing effects on children below age 13 at RA
- Start with individual earnings (W-2 earnings + self-employment income)
  - Includes those who don't file tax returns through W-2 forms
- Measured from 2008-12, restricting to years in which child is 24 or older
  - Evaluate impacts at different ages after showing baseline results

Results II: Treatment Effects on Outcomes in Adulthood below age 13 at RA



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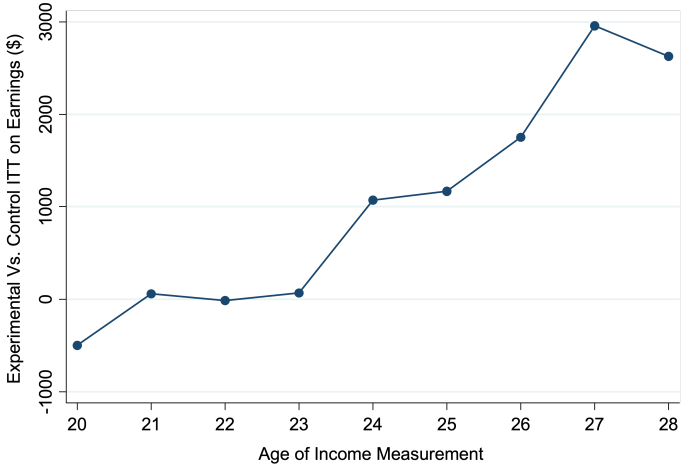
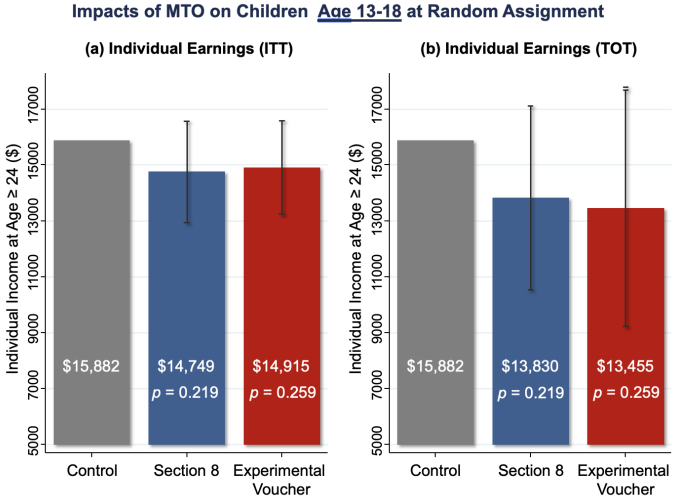


Results II: Treatment Effects on Outcomes in Adulthood ages 13-18 at random assignment



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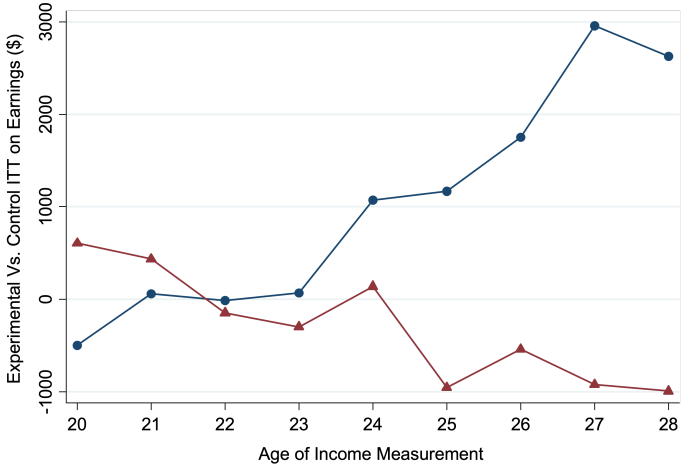
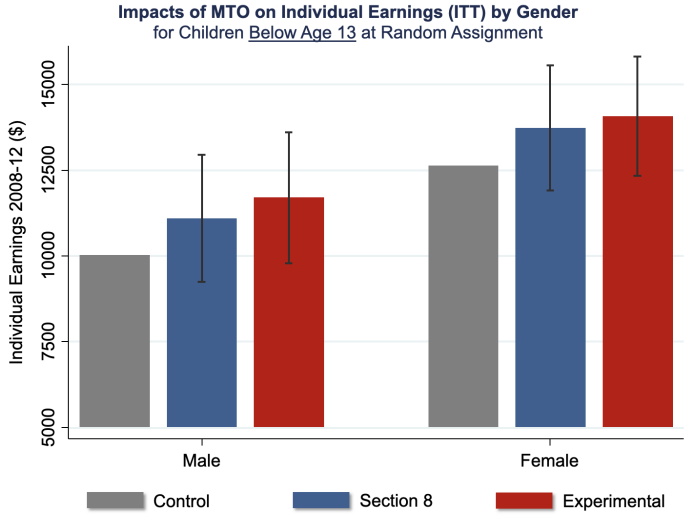


Results III: Heterogenity



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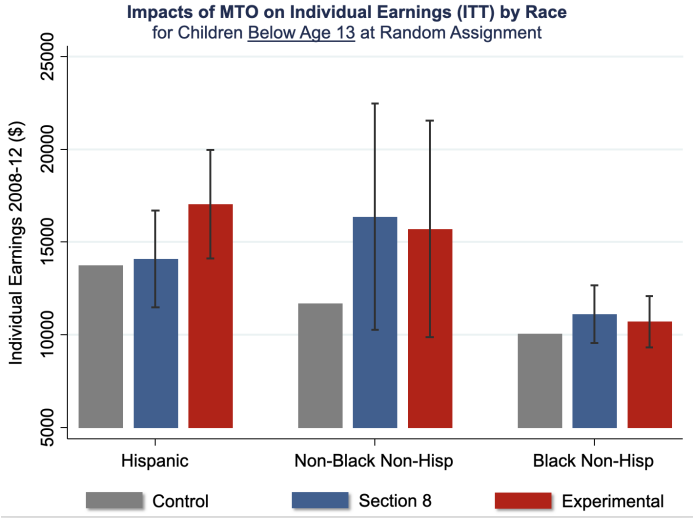

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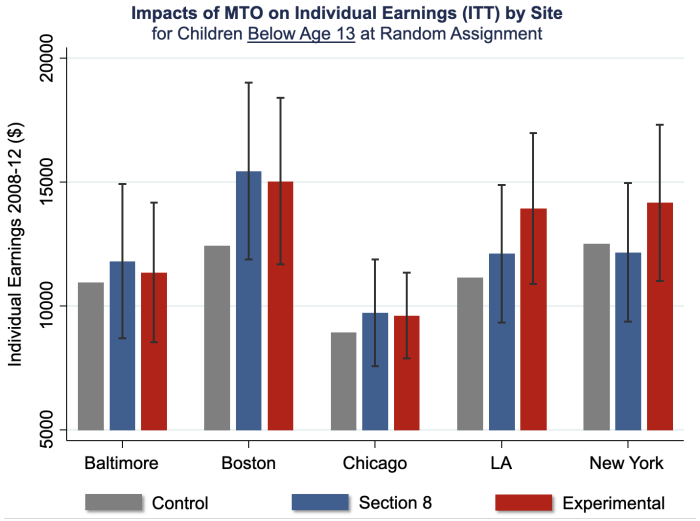

MTO Limitations

- MTO experiment shows that neighborhoods matter, but has two limitations:
- Sample size insufficient to determine which ages of childhood matter most
- Does not directly identify which neighborhoods are good or bad
- Chetty and Hendren agenda look

Conclusion: Policy Lessons

- How can we improve neighborhood environments for disadvantaged youth?
- Short-term solution: Provide targeted housing vouchers at birth conditional on moving to better (e.g. mixed-income) areas
- Taxpayers may ultimately gain from this investment
- Long-term solution: improve neighborhoods with poor outcomes, concentrating on factors that affect children
- Estimates here tell us which areas need improvement, but further work needed to determine which policies can make a difference