# The Effects of Exposure to Better Neighborhoods on Children

Raj Chetty, Nathaniel Hendren and Lawrence F. Katz

Presentation By Max Feld

# The Moving To Opportunity Experiment

- Federal Government (HUD) experiment to test if moving to a low-poverty neighborhood has a beneficial effect on low-income families
- Conducted in the 1990s with participants in Baltimore, Boston, Chicago, LA and NY

# **Experimental Design**

- Selected families in public housing located in highpoverty (40% +) census tracts were randomized into three groups:
  - Control group-no additional support
  - Partial treatment group-offered standard Section 8 vouchers
  - Full treatment group-offered special vouchers that can only be used in census tracts with <10 poverty</li>

## **Experimental Balance and Uptake**

- There was only one statistically significant difference at p=.05 between treated and control groups on baseline characteristics in Chetty et al.'s analysis
- Voucher usage was not universal, less than half offered the low-poverty tract vouchers used them
- Those who did use vouchers-restricted or normal Section 8 moved to tracts with statistically significantly less poverty

#### **Initial Results**

- Studies released in the first 10-15 years after randomization showed mixed results
- Some positive gains for adult mental health and girls' education
- Insignificant impacts on parents' or children's earnings and negative impacts on boys' delinquency rates

# Chetty et al. Approach

- Linked tax records to MTO families for followup after official surveys of participants ended
- Examined heterogenous treatment effects for younger (below 13 at time of move) and older (13 or above) children

# **Key Findings**

- For children in the full treatment group under 13 at the time of move, there are statistically significant increases in earnings in adulthood
- For children who moved 13-18, full treatment estimates are negative but not significant
- Children in either age range with regular Section 8 vouchers show few significant effects

# Adult Income Gains/Losses for Younger (Rising Line) and Older (Falling Line) MTO Children

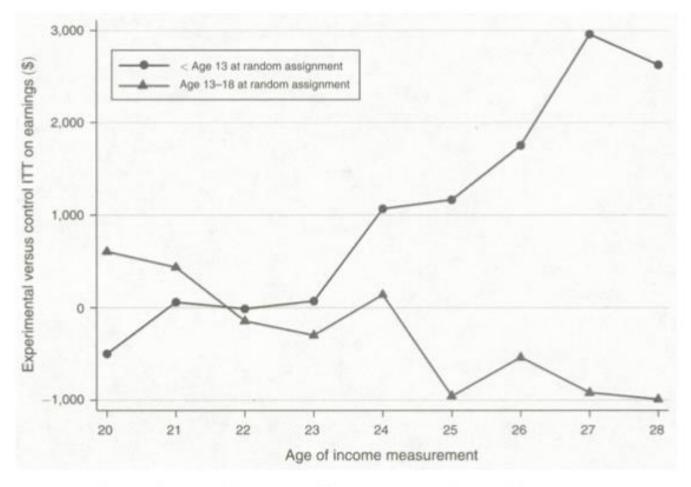
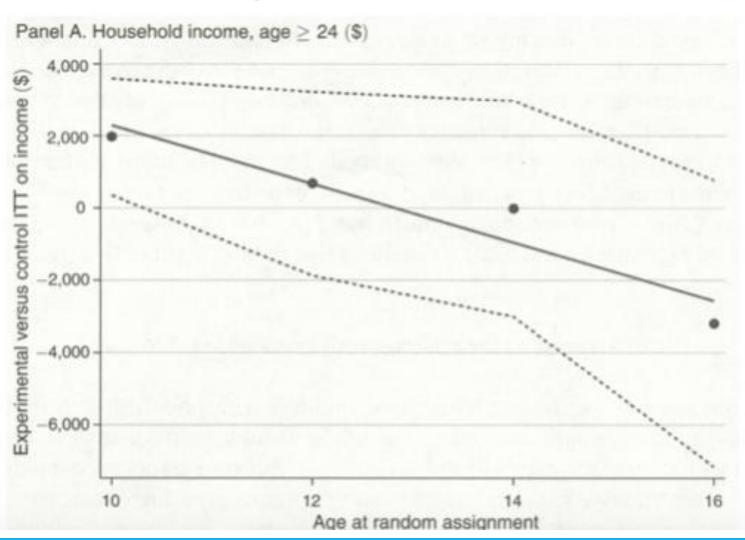


FIGURE 1. IMPACTS OF EXPERIMENTAL VOUCHER BY AGE OF EARNINGS MEASUREMENT

# Differential Age Effects are Robust to Alternatives to Splitting Over and Under 13



#### ITT Vs. TOT Estimates

- Intention to Treat (ITT)-Results for those you select for treatment, whether or not they actually receive treatment
- Treatment on the Treated (TOT)-What would the results have been if everyone received treatment?
- Chetty et al. use Two Stage Least Squares (2SLS) to estimate TOT, as one would for an Instrumental Variables model

## Chetty et al. Main ITT and TOT Results

TABLE 3-IMPACTS OF MTO ON CHILDREN'S INCOME IN ADULTHOOD

	W-2 earn- ings (\$) 2008–2012 ITT (1)	Individual earnings 2008–2012 (\$)			Individual earnings (\$)		Employed (%)	Hhold. inc. (\$)	Inc. growth (\$)
		ITT (2)	ITT w/ controls (3)	TOT (4)	Age 26 ITT (5)	2012 ITT (6)	2008– 2012 ITT (7)	2008–2012 ITT (8)	707
Panel A. Children < Exp. versus control	age 13 at rai 1,339.8** (671.3)	ndom assigni 1,624.0** (662.4)	nent 1,298.9** (636.9)	3,476.8** (1,418.2)	1,751.4* (917.4)	1,443.8** (665.8)	1.824 (2.083)	2,231.1*** (771.3)	1,309.4** (518.5)
Sec. 8 versus control	687.4 (698.7)	1,109.3 (676.1)	908.6 (655.8)	1,723.2 (1051.5)	551.5 (888.1)	1,157.7* (690.1)	1.352 (2.294)	1,452.4** (735.5)	800.2 (517.0)
Observations	8,420	8,420	8,420	8,420	1,625	2,922	8,420	8,420	8,420
Control group mean	9,548.6	11,270.3	11,270.3	11,270.3	11,398.3	11,302.9	61.8	12,702.4	4,002.2
Panel B. Children a	ge 13–18 at ra	andom assigi	nment						
Exp. versus control	-761.2 (870.6)	-966.9 (854.3)	-879.5 (817.3)	-2,426.7 (2,154.4)	-539.0 (795.4)	-969.2 (1,122.2)	-2.173 (2.140)	-1,519.8 (11,02.2)	-693.6 (571.6)
Sec. 8 versus control	-1,048.9 (932.5)	-1,132.8 (922.3)	-1,136.9 (866.6)	-2,051.1 (1,673.7)	-15.11 (845.9)	-869.0 (1213.3)	-1.329 (2.275)	-936.7 (11,85.9)	-885.3 (625.2)
Observations Control group mean	11,623 13,897.1	11,623 15,881.5	11,623 15,881.5	11,623 15,881.5	2,331 13,968.9	2,331 16,602.0	11,623 63.6	11,623 19,169.1	11,623 4,128.1

# Why Do Chetty et al.'s Results Differ from Earlier Studies?

- As in Solon (1992), it is important when and how you measure adult incomes
- Many of the younger children were too young to show income gains (which appear around age 24) when earlier evaluations were done
- Looking at all children together can hide gains for those younger at move

# Why Do Older Children Not Gain?

- Moving to a new neighborhood may be more disruptive for adolescents
- Adolescents may already have strong social networks and drift back to their old communities
- Critical cognitive or social-emotional development may happen at younger ages

# Why Weaker Results for Regular Section 8 Group?

- Section 8 families moved to tracts with only moderately less poverty compared to full treatment group
- Section 8 families often moved to tracts that were geographically closer to control neighborhoods than full treatment group

## Impacts Beyond Income

- Chetty et al. find significant gains for young children moving to low-poverty tracts in:
  - College attendance
  - Avoiding single parenthood
  - Living in lower poverty neighborhoods as adults
- For older children, some college and single parenthood estimates show significantly negative effects

# Moving to Intergenerational Mobility

- Given significant impacts on the generation that spent only part of their childhood in lowpoverty circumstances, MTO may have a more profound impact on the next generation
- By inducing treated children to live in lowerpoverty neighborhoods, those participants could pass the higher-mobility impact onto their children, with longer exposure to lowpoverty circumstances

# Policy Implications

- Chetty et al. TOT estimate of increased tax payments of \$11,200 is substantially higher than the \$3,700 average spent on a treated family in the study
- Housing vouchers may be an inexpensive tool to increase intergenerational mobility
- To assure a substantial impact, voucher programs need to move recipients to significantly lowerpoverty neighborhoods, preferably when children are young