

Centre for Economic Performance Lionel Robbins Memorial Lectures

Policies to Improve Upward Mobility

Professor Raj Chetty

Professor of Economics, Stanford University

Professor Robin Burgess

Chair, LSE

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THE LONDON SCHOOL
OF ECONOMICS AND
POLITICAL SCIENCE ■

Improving Equality of Opportunity New Lessons from Big Data

Lecture 2: Policies to Improve Upward Mobility

Raj Chetty

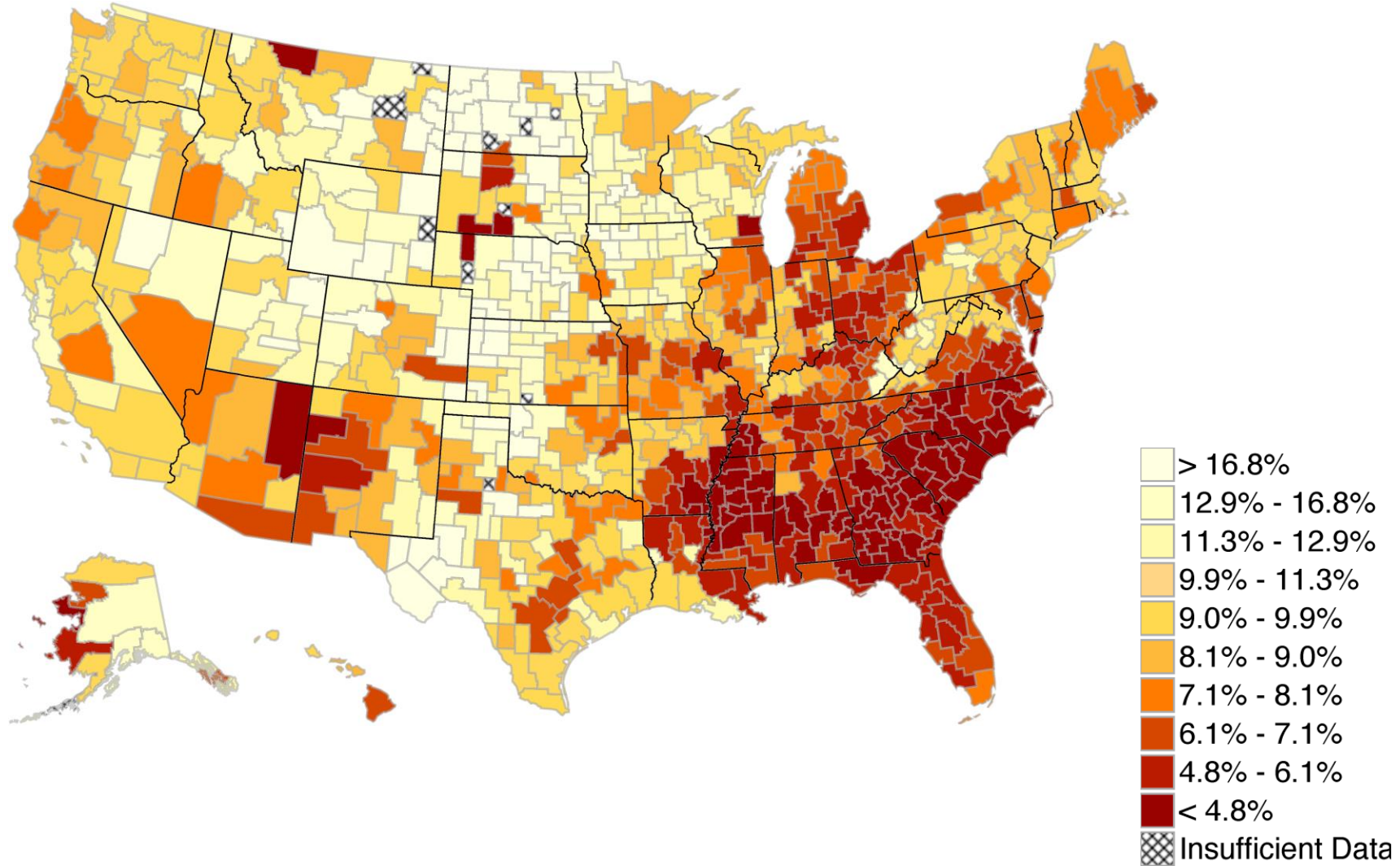
Stanford University

Photo Credit: Florida Atlantic University



The Geography of Upward Mobility in the United States

Probability of Reaching the Top Fifth Starting from the Bottom Fifth



Note: Lighter Color = More Upward Mobility

Download Statistics for Your Area at www.equality-of-opportunity.org

Improving Social Mobility: Two Policy Questions

- How can we improve social mobility in areas with low rates of mobility?
- Focus on two of the correlations identified in the last lecture
 1. Segregation
 2. School Quality
 3. Income Inequality
 4. Family Structure
 5. Social Capital

Improving Social Mobility: Two Policy Questions

- How can we improve social mobility in areas with low rates of mobility?
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 1. Segregation
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Lecture 2 Outline

1. Segregation and Housing Policy

2. Education Policy

■ Lecture 2 is based primarily on two sets of papers:

1. Chetty, Hendren, Katz. “The Long-Term Effects of Exposure to Better Neighborhoods: New Evidence from the Moving to Opportunity Experiment” AER 2016.
2. Chetty, Friedman, Rockoff. “Measuring the Impacts of Teachers I and II” AER 2014a,b

Part 1

Segregation and Housing Policy

Segregation and Affordable Housing Policies

- Many potential policies to try to promote integration:
 - Subsidized housing vouchers to rent better apartments
 - Mixed-income affordable housing developments
 - Changes in zoning regulations and building restrictions
- Are such housing policies effective in increasing social mobility?
 - Standard economic theory actually predicts that cash grants of an equivalent dollar amount are better

Segregation and Affordable Housing Policies

- Understanding effects of housing policies on mobility is of particular interest given the amount governments spend on such policies
- U.S. spends \$45 billion per year on housing vouchers, tax credits for developers, and public housing
- Are these policies effective, and how can they be better designed if one wishes to improve social mobility?

Moving to Opportunity Experiment

- Begin with an empirical analysis of the effectiveness of housing voucher subsidies
- 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:
 1. Experimental: housing vouchers restricted to low-poverty (<10%) Census tracts
 2. Section 8: conventional housing vouchers, no restrictions
 3. Control: public housing in high-poverty (50% at baseline) areas

Experimental
Wakefield
Bronx

Section 8
Soundview
Bronx

Control
ML King
Towers
Harlem

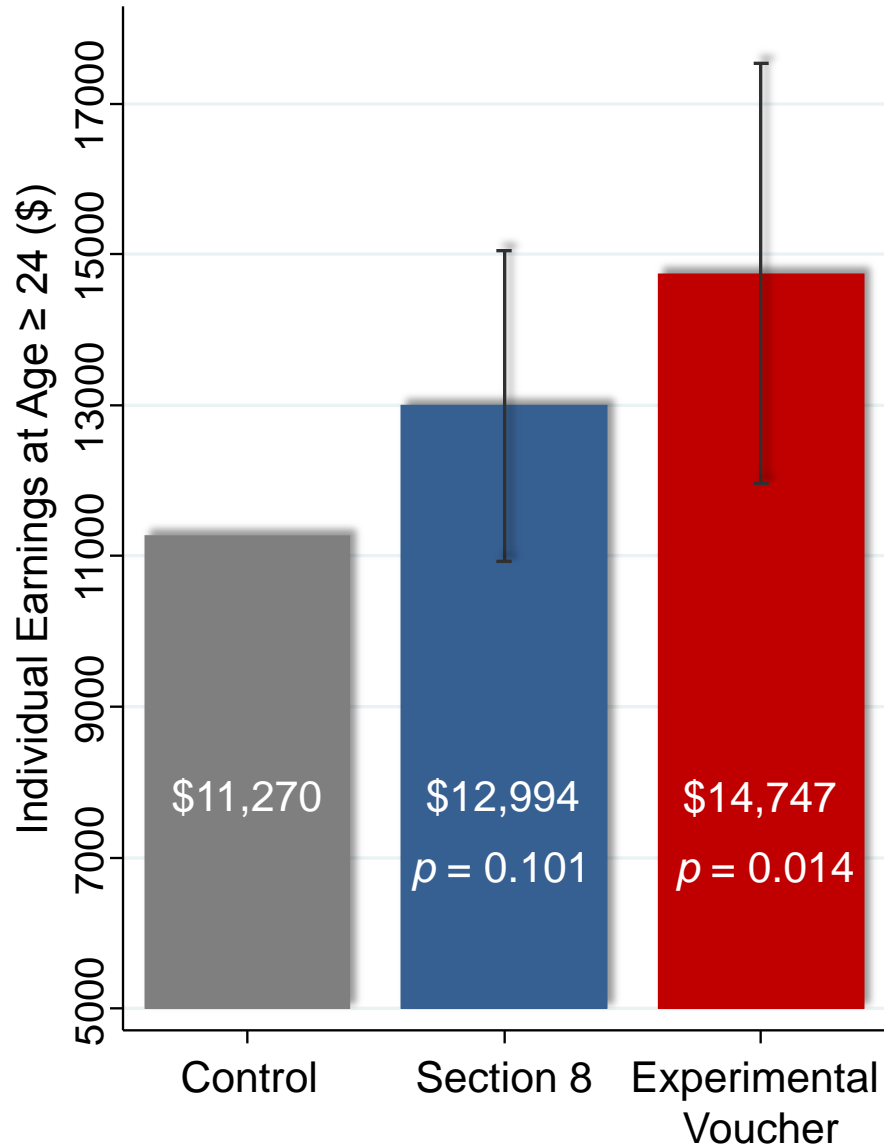
Section 8 Soundview Bronx

MTO Experiment: Exposure Effects?

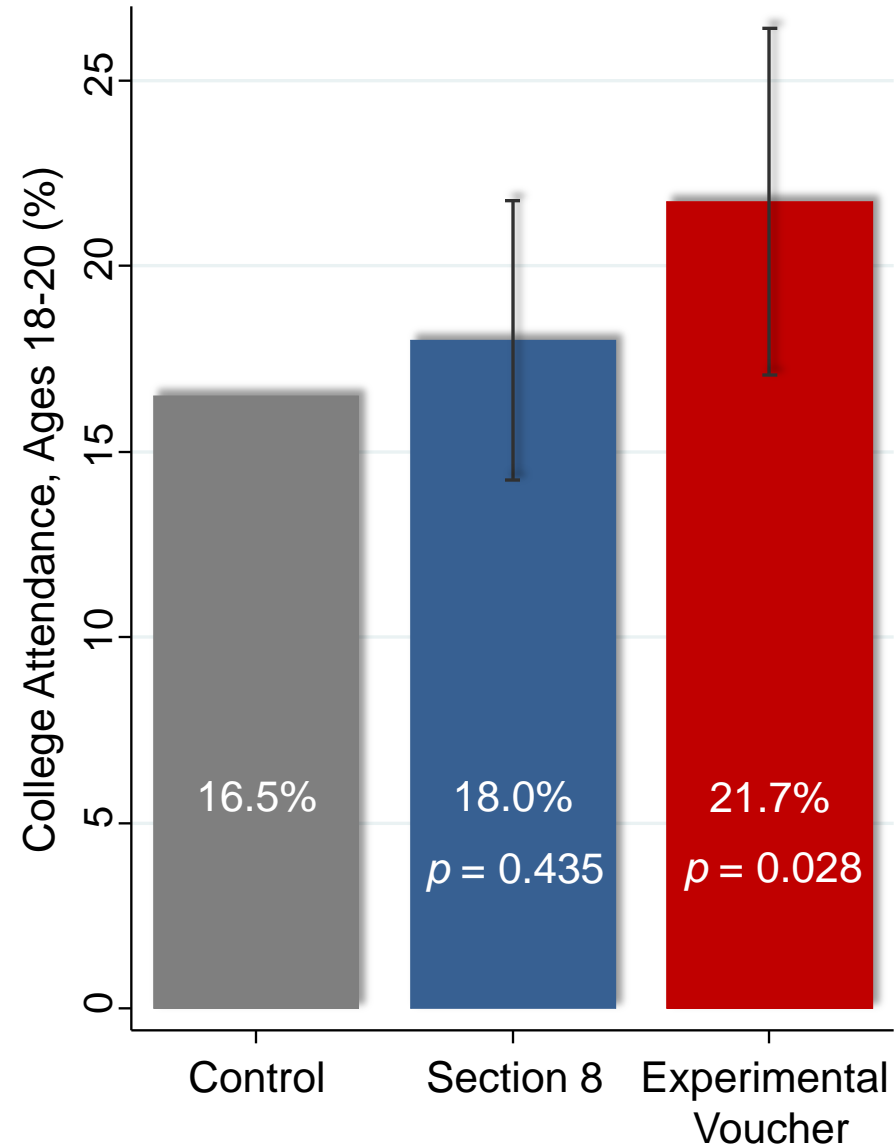
- Prior research on MTO has found little impact of moving to a better area on economic outcomes such as earnings
 - But has focused on adults and older youth at point of move [e.g., Kling, Liebman, and Katz 2007]
- We test for exposure effects among children
 - Does MTO improve outcomes for children who moved when young?
 - Link MTO to tax data to study children's outcomes in mid 20's

Impacts of MTO on Children Below Age 13 at Random Assignment

(a) Earnings

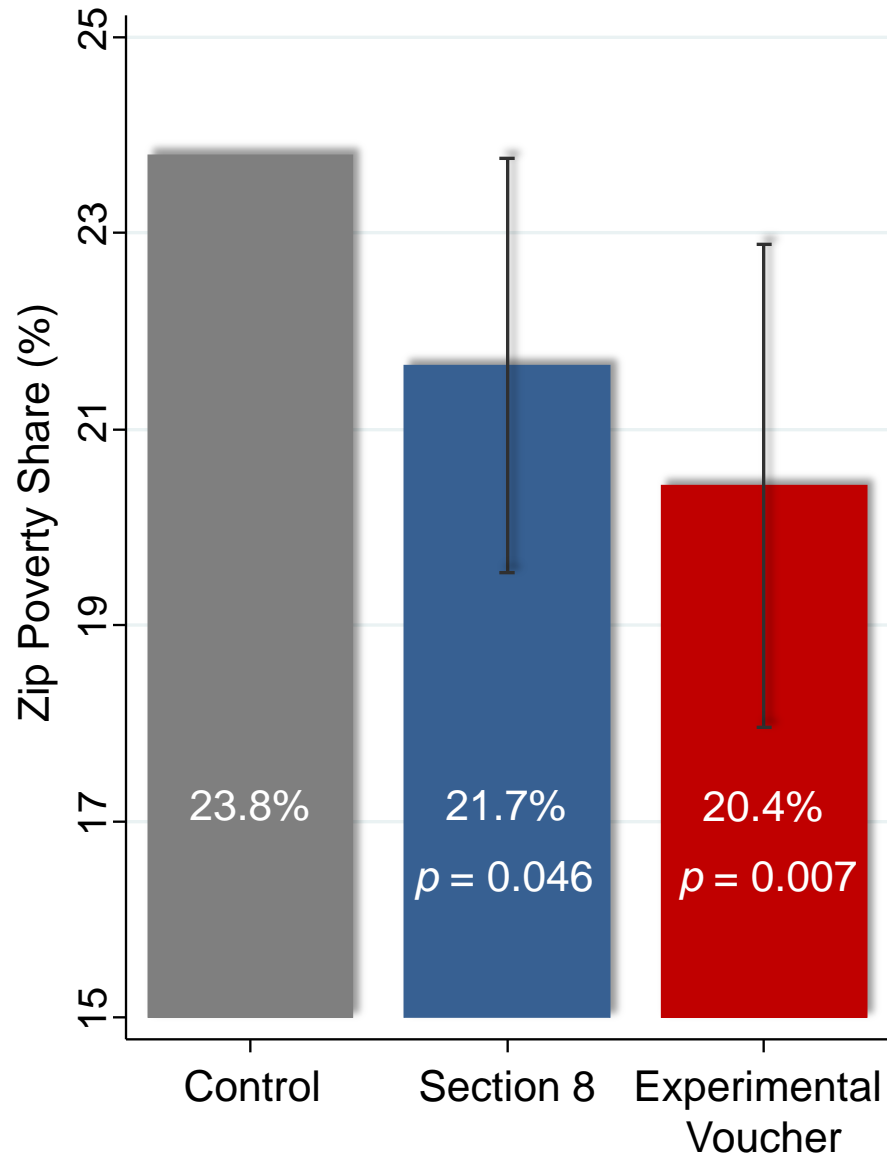


(b) College Attendance

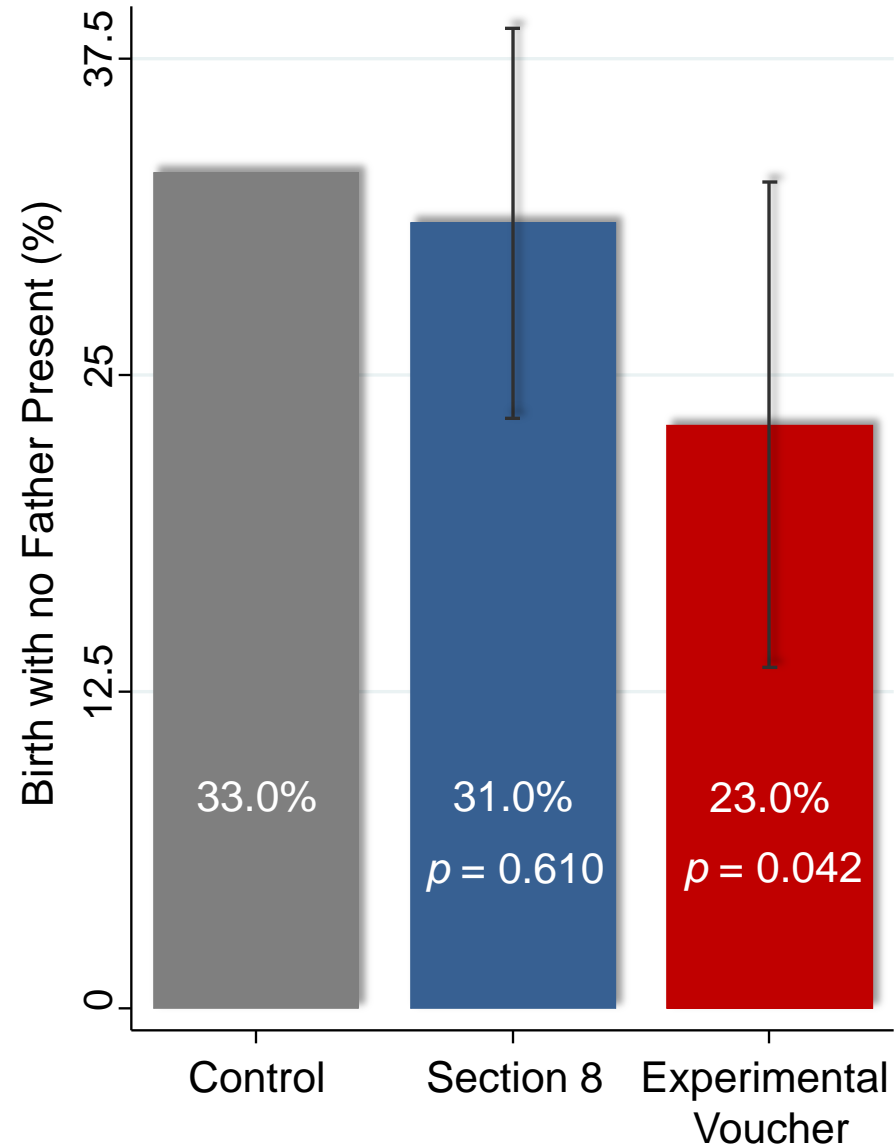


Impacts of MTO on Children Below Age 13 at Random Assignment

(c) Neighborhood Quality

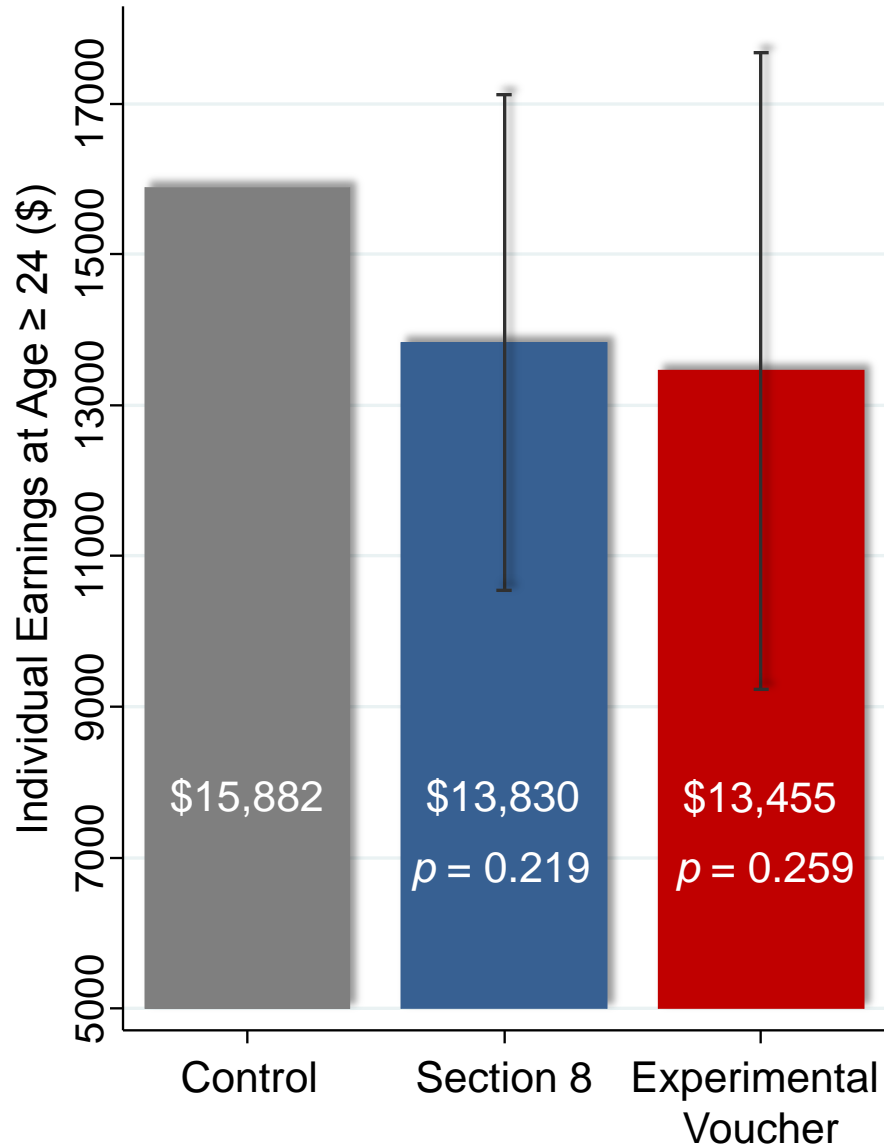


(d) Fraction Single Mothers

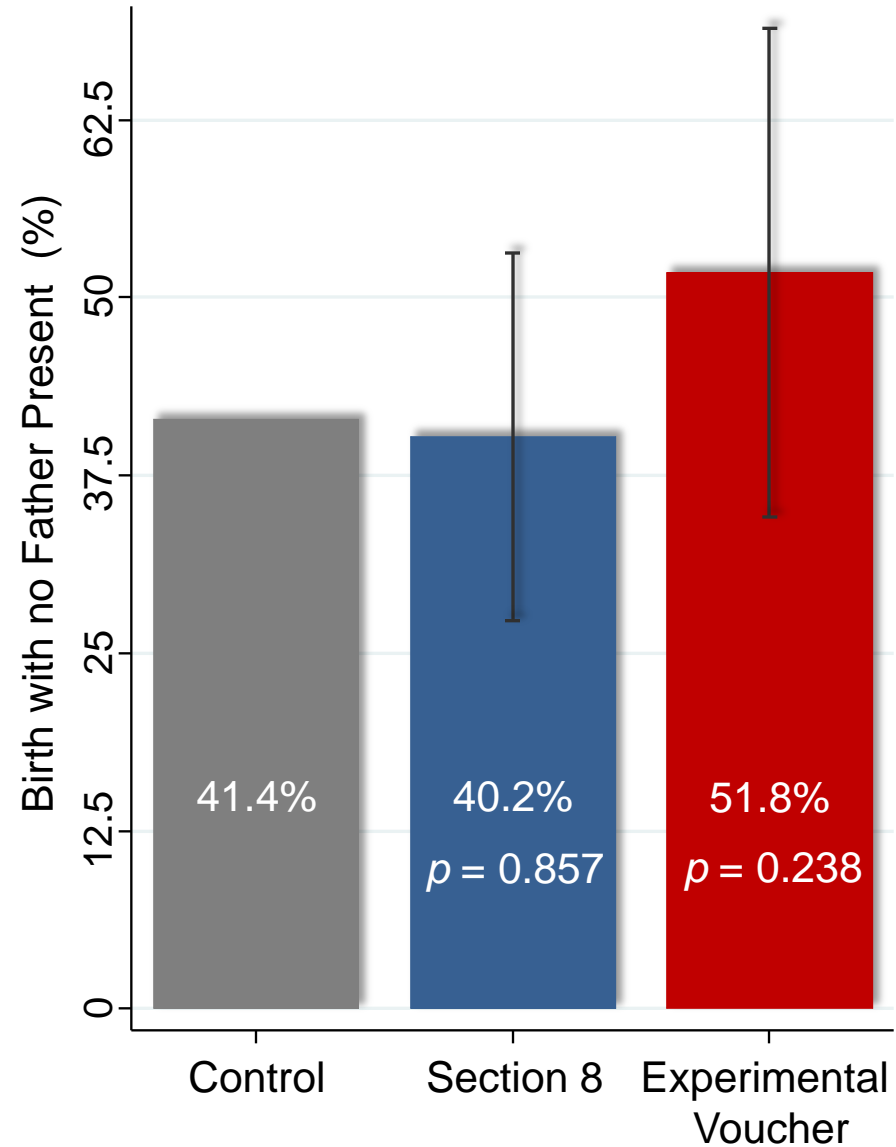


Impacts of MTO on Children Age 13-18 at Random Assignment

(a) Earnings

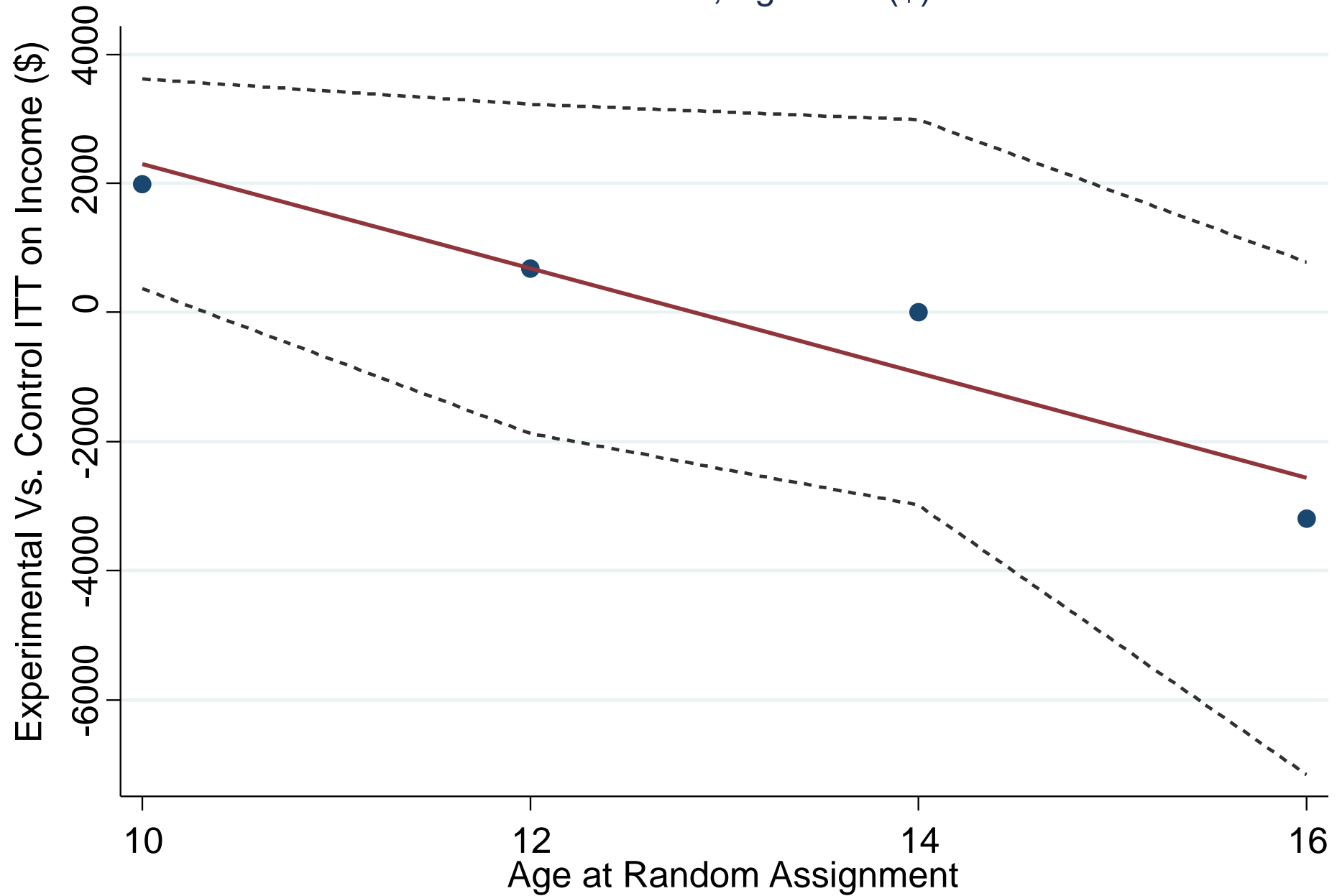


(b) Fraction Single Mothers

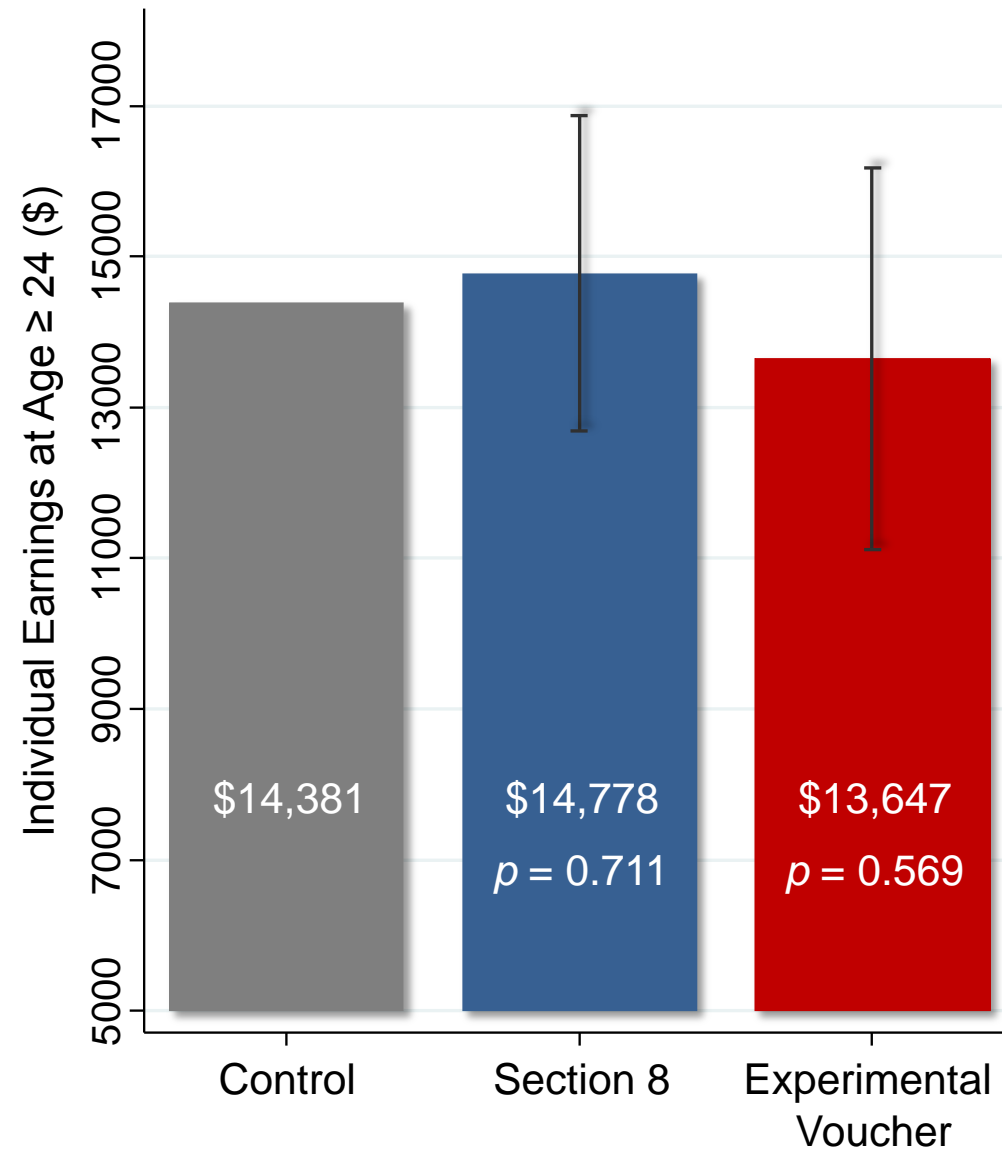


Impacts of Experimental Voucher by Age of Random Assignment

Household Income, Age ≥ 24 (\$)



Impacts of Moving to Opportunity on Adults' Earnings



Implications for Housing Voucher Policy

- Housing vouchers can be very effective but must be targeted carefully
- 1. Vouchers should be targeted at families with young children
 - Current U.S. policy of putting families on waitlists is especially inefficient

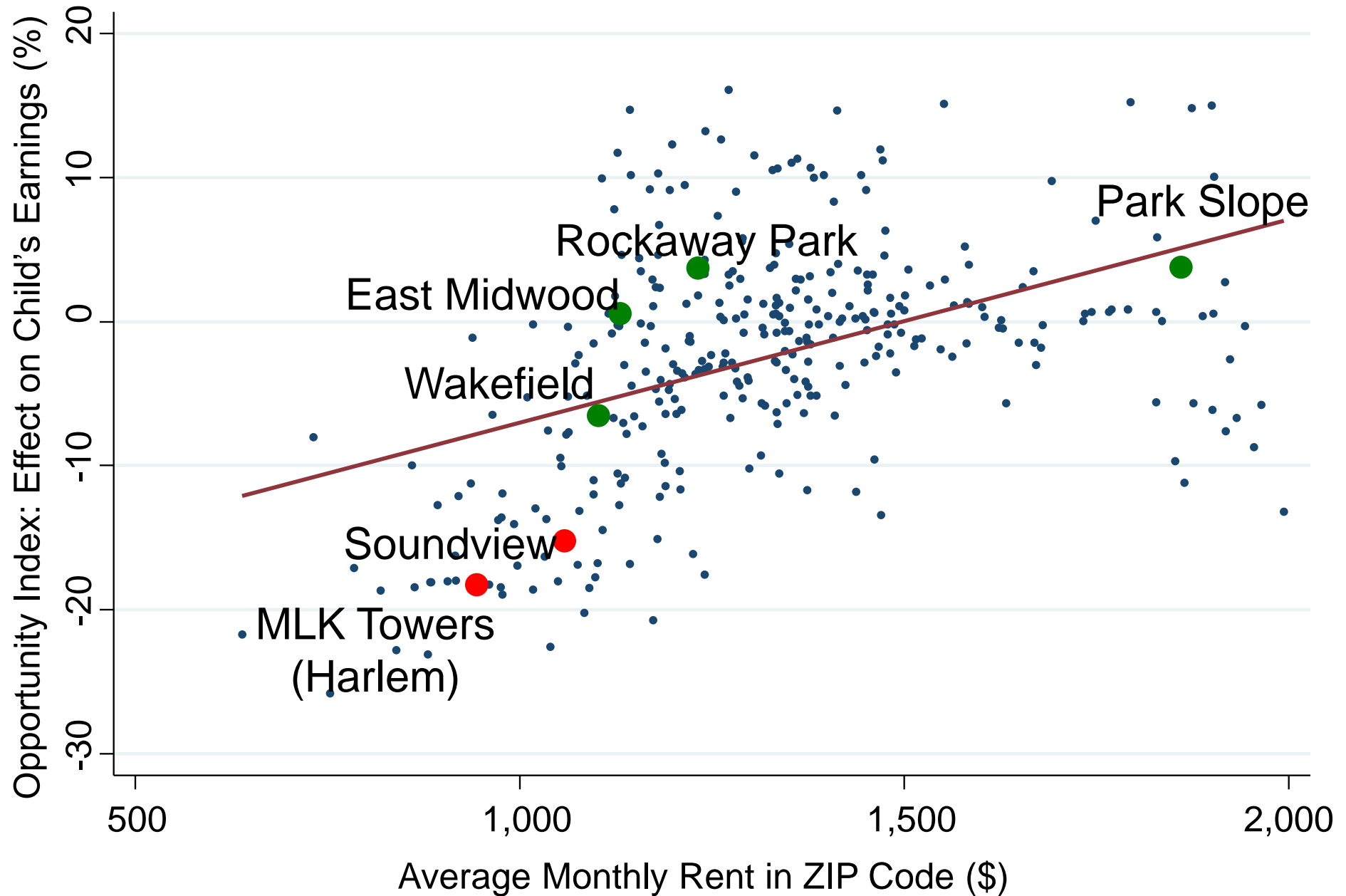
Implications for Housing Voucher Policy

- Housing vouchers can be very effective but must be targeted carefully
 1. Vouchers should be targeted at families with young children
 2. Vouchers should explicitly encourage families to move to affordable, high-opportunity areas (opportunity bargains)
 - In MTO experiment, unrestricted “Section 8” vouchers produced *smaller* gains even though families could have made same moves
 - Low-income families rarely use cash transfers to move to better neighborhoods [Jacob et al. QJE 2015]
 - These results suggest that behavioral biases may be important in understanding housing choices [Chetty AER 2015]

Integration through Housing Vouchers: Potential Concerns

1. Costs: areas that offer better opportunity tend to be more expensive
 - There are many *opportunity bargains*: areas with relatively low rents that offer good opportunities for kids

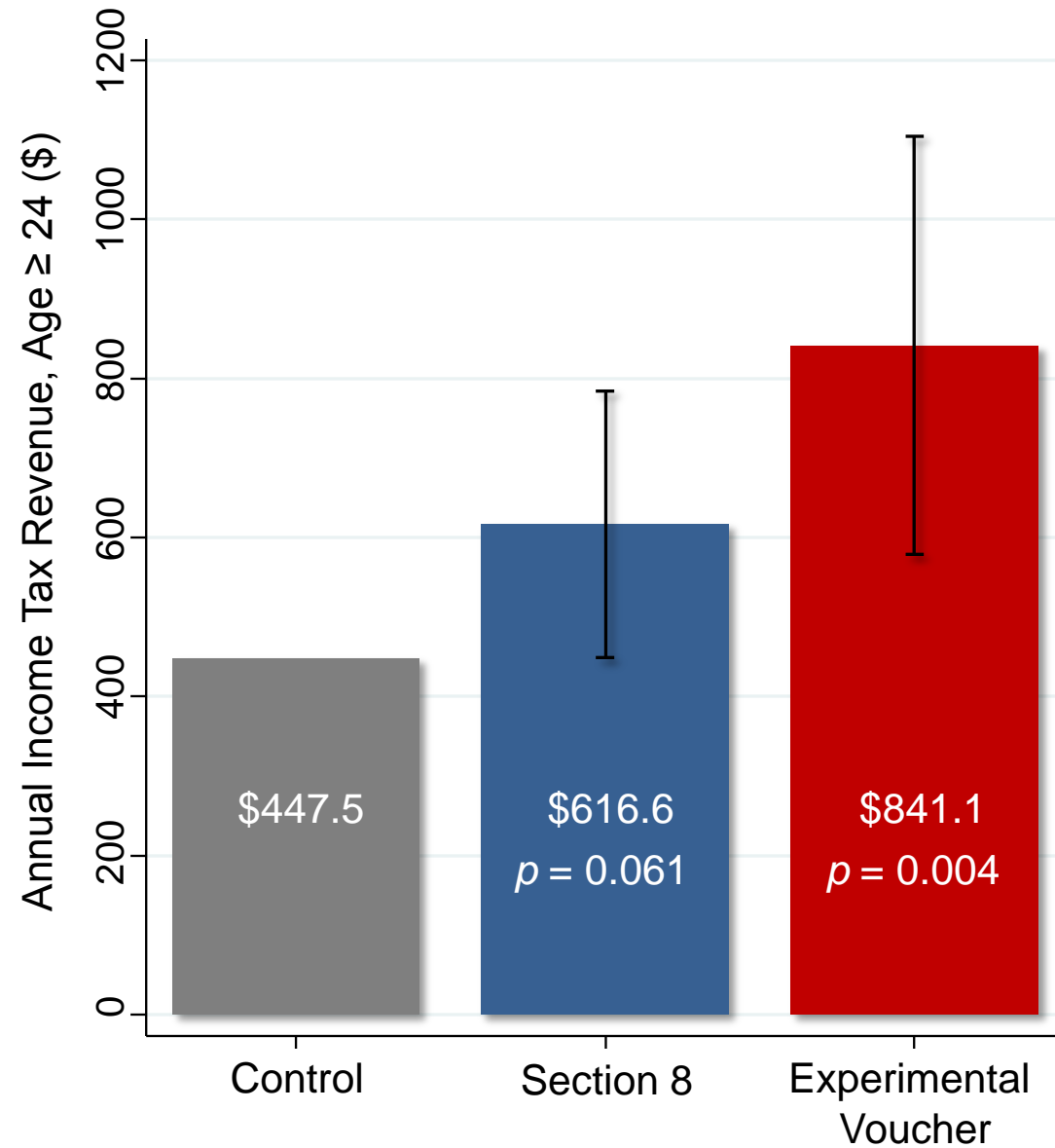
Opportunity Bargains at the ZIP Code Level in the New York Area



Integration through Housing Vouchers: Potential Concerns

1. Costs: areas that offer better opportunity tend to be more expensive
 - There are many *opportunity bargains*: areas with relatively low rents that offer good opportunities for kids
 - Vouchers can save taxpayers money relative to public housing projects in long run

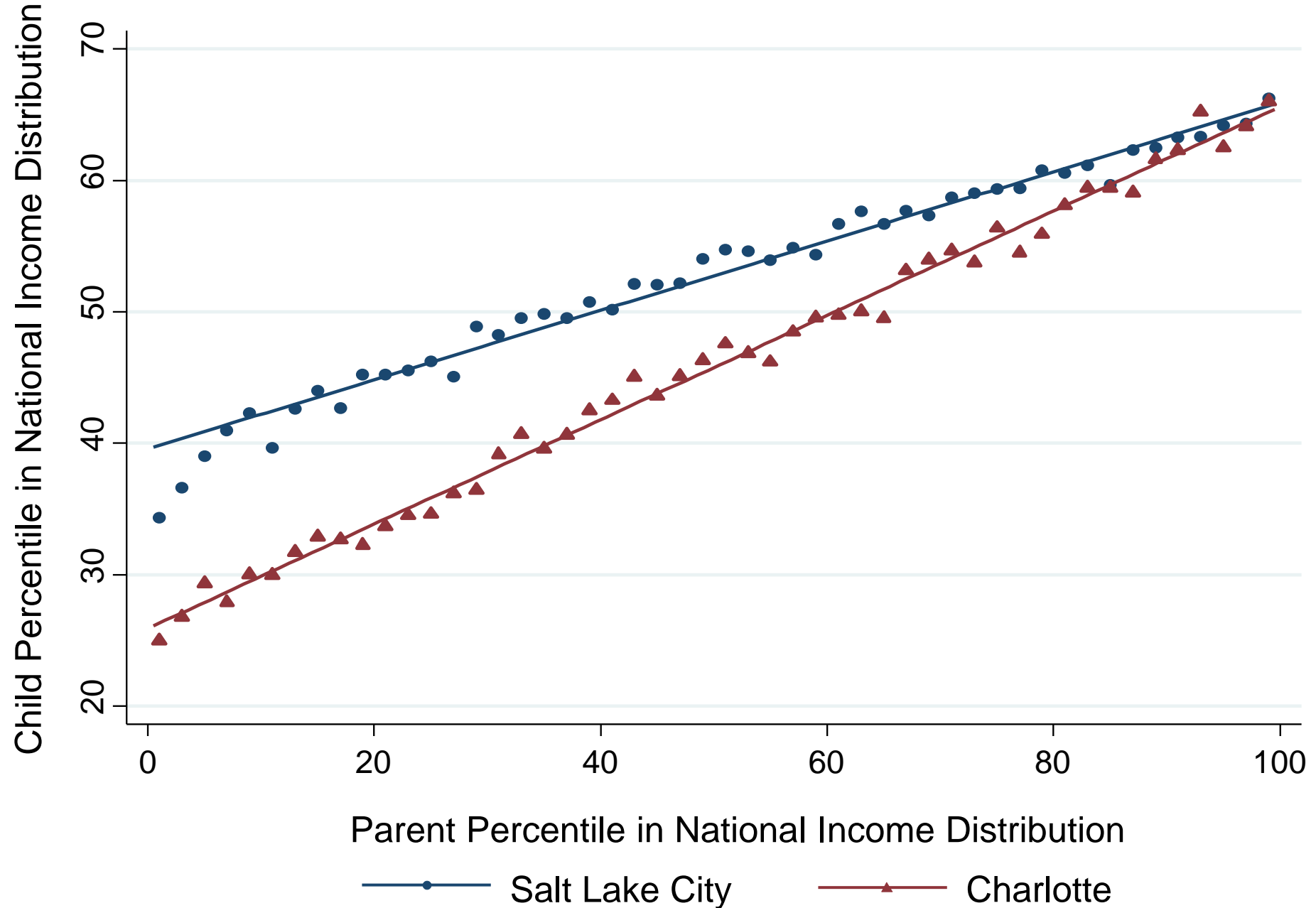
Impacts of MTO on Annual Income Tax Revenue in Adulthood for Children Below Age 13 at Random Assignment



Integration through Housing Vouchers: Potential Concerns

1. Costs: areas that offer better opportunity tend to be more expensive
2. Negative spillovers: does integration hurt the rich?
 - Empirically, more integrated neighborhoods do not have worse outcomes for the rich

Intergenerational Mobility in Salt Lake City vs. Charlotte



Integration through Housing Vouchers: Potential Concerns

1. Costs: areas that offer better opportunity tend to be more expensive
2. Negative spillovers: does integration hurt the rich?
3. Limits to scalability: general equilibrium effects
 - Moving *everyone* in Harlem to Bronx is unlikely to have significant effects
 - Ultimately need to turn to policies that increase integration in other ways rather than moving low-income families

Place-Based Approaches to Integration

- A variety of other policies could potentially increase residential housing integration
 - Providing tax credits to encourage building affordable properties in higher-income neighborhoods
 - Retaining housing options for low and middle income families as city centers gentrify
 - Improved urban planning, e.g. changes in zoning regulations and transportation
 - Investing in local public infrastructure, such as schools

Part 2

Education Policies

Education Policy

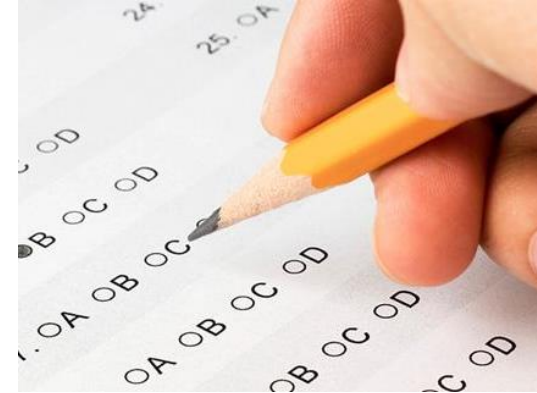
- Improving school quality is one widely discussed approach to improving children's outcomes
- But simply spending more on schools may not be enough [Hanushek 2001]
 - U.S. spends more than most other developed countries on education, yet has significantly worse outcomes
- Need to understand which educational inputs matter most for children's long-term success: class size, teachers, resources?
 - Each of these has been studied in detail in recent work; focus here on teachers as an example

Using Big Data to Study Teachers' Impacts

School district records

2.5 million children

18 million test scores



Tax records

Earnings, College

Attendance, Teen Birth



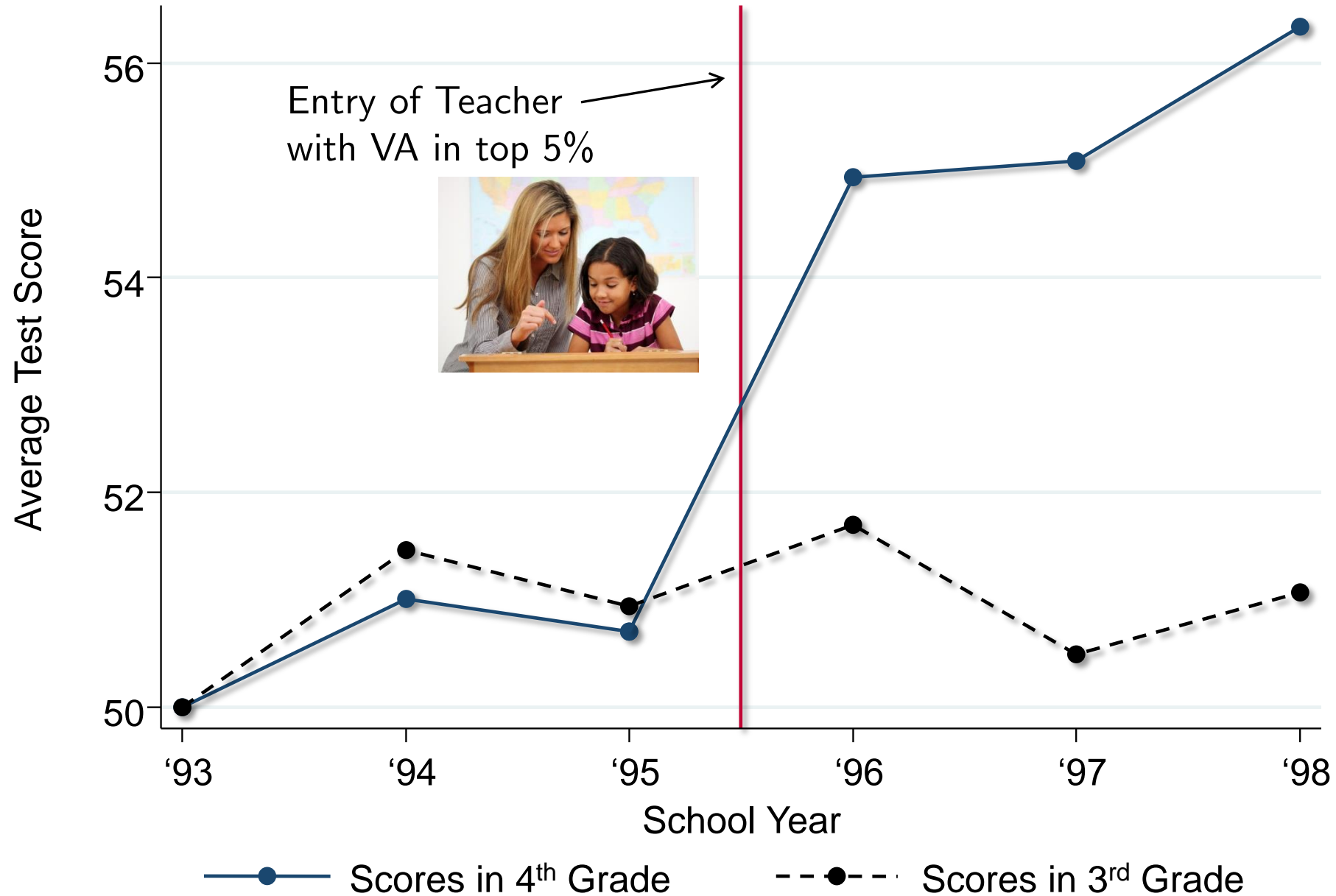
Measuring Teacher Quality: Test-Score Based Metrics

One prominent measure
of teacher quality:
teacher *value-added*

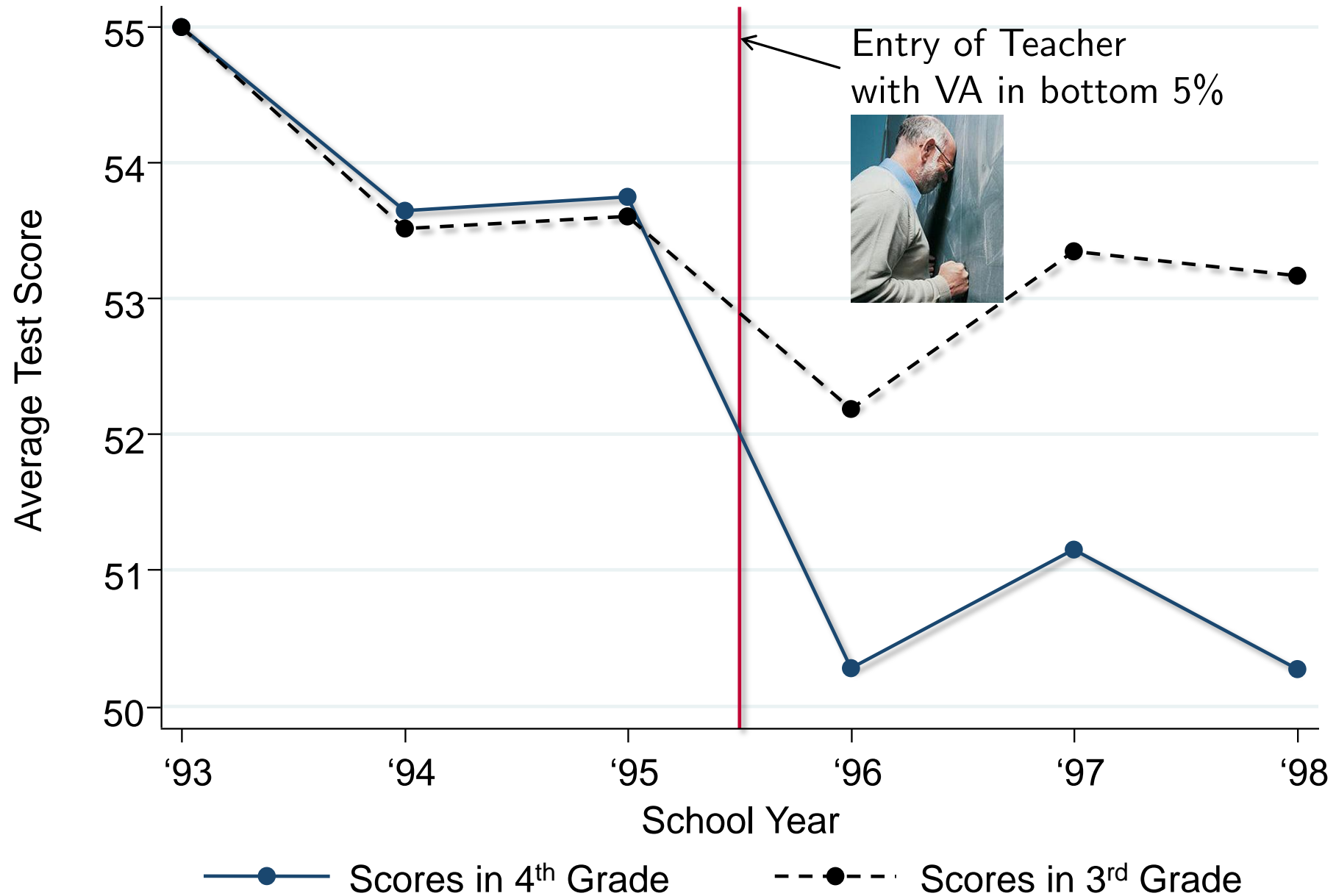
How much does a
teacher raise her/his
students' test scores
on average?



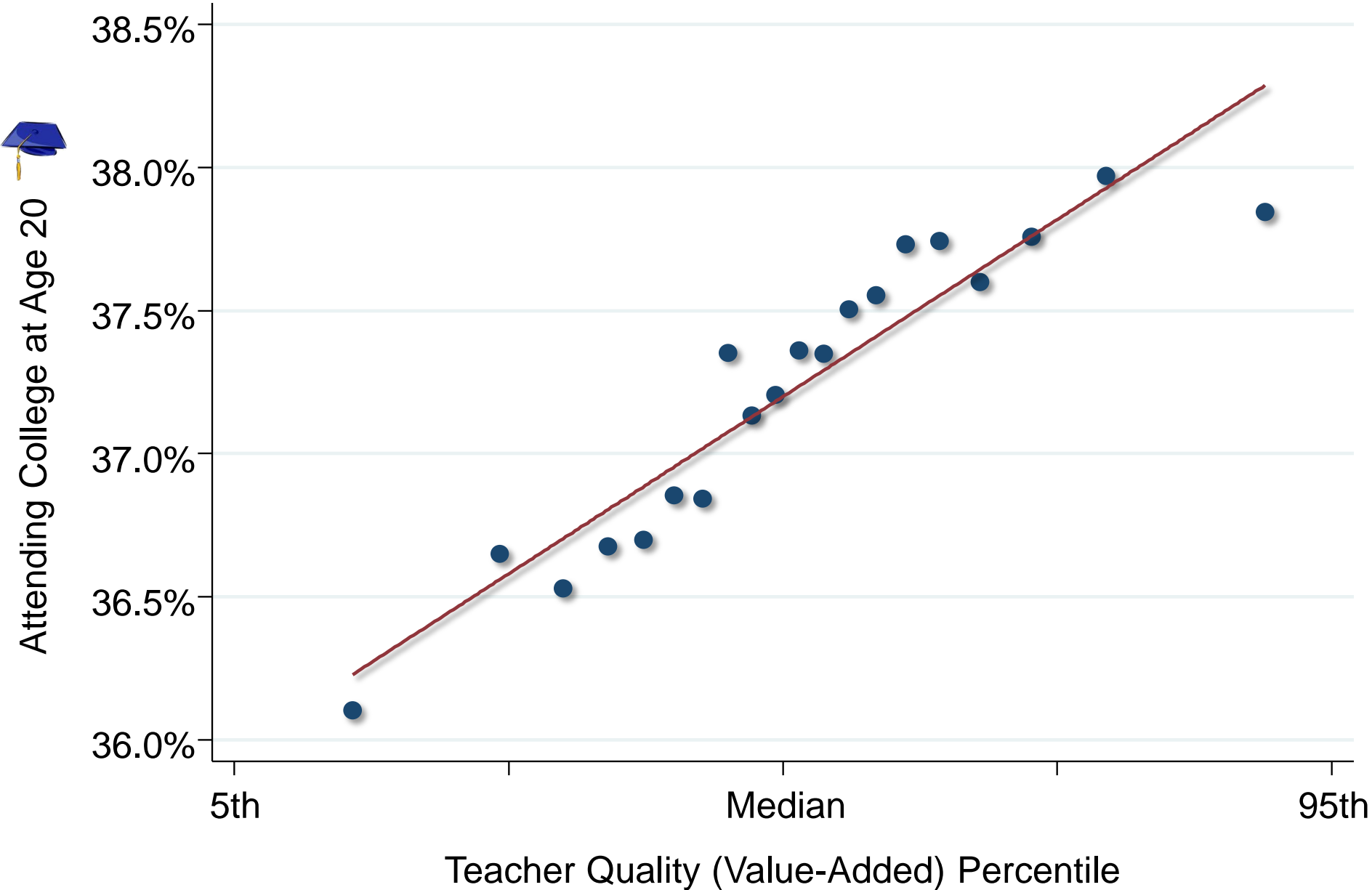
A Quasi-Experiment: Entry of High Value-Added Teacher



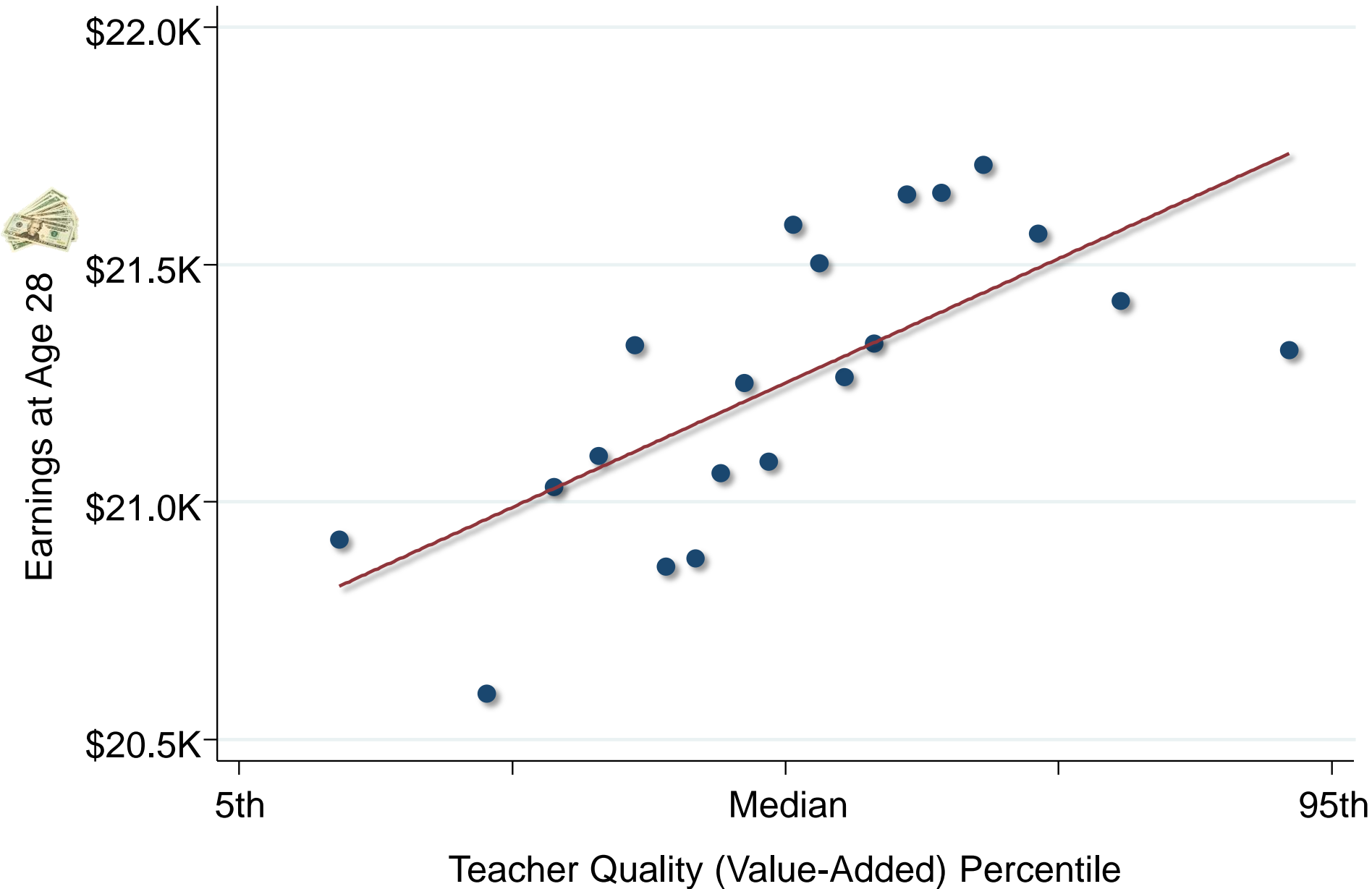
A Quasi-Experiment: Entry of Low Value-Added Teacher



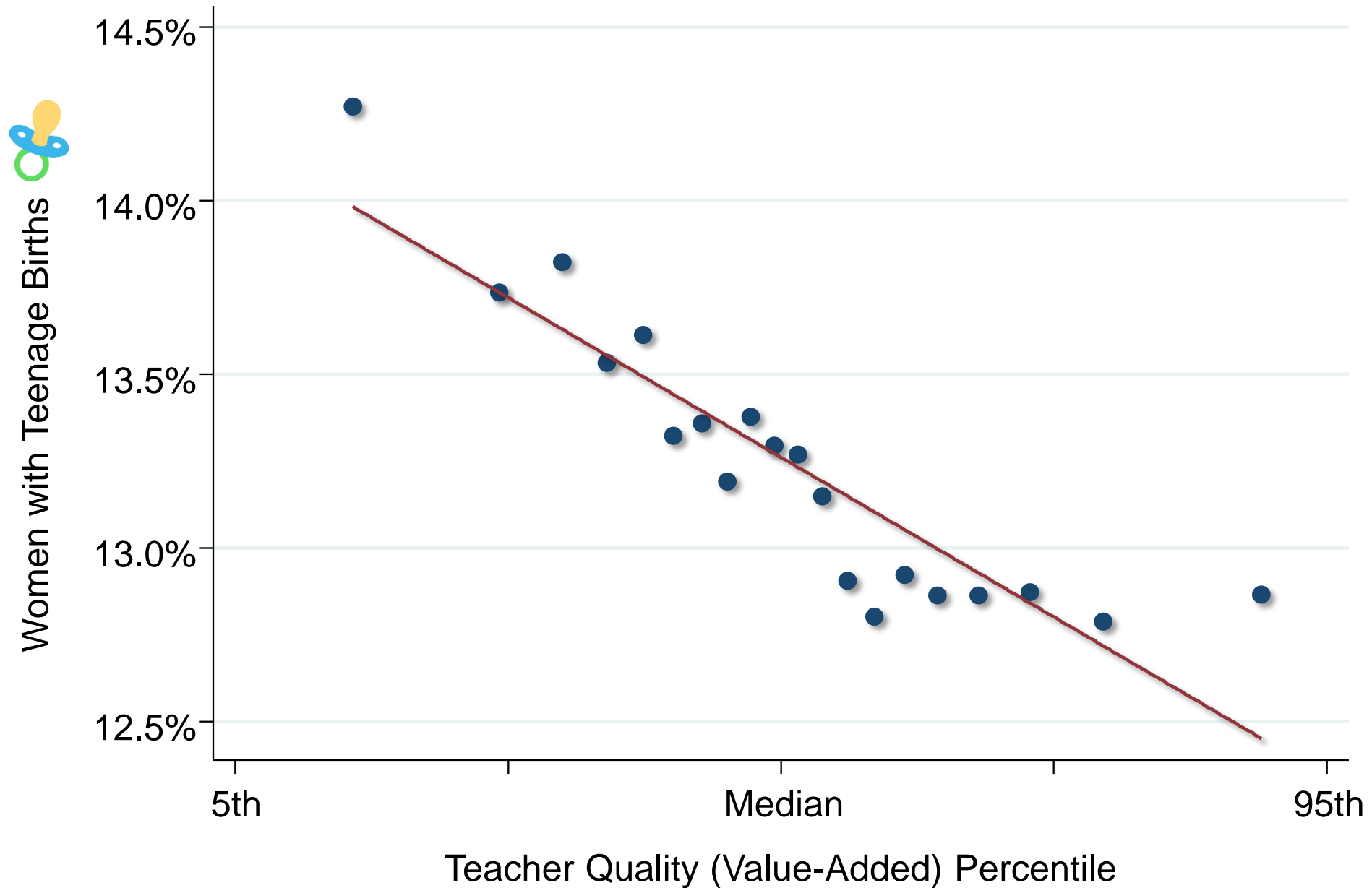
Effect of Teacher Quality on College Attendance Rates



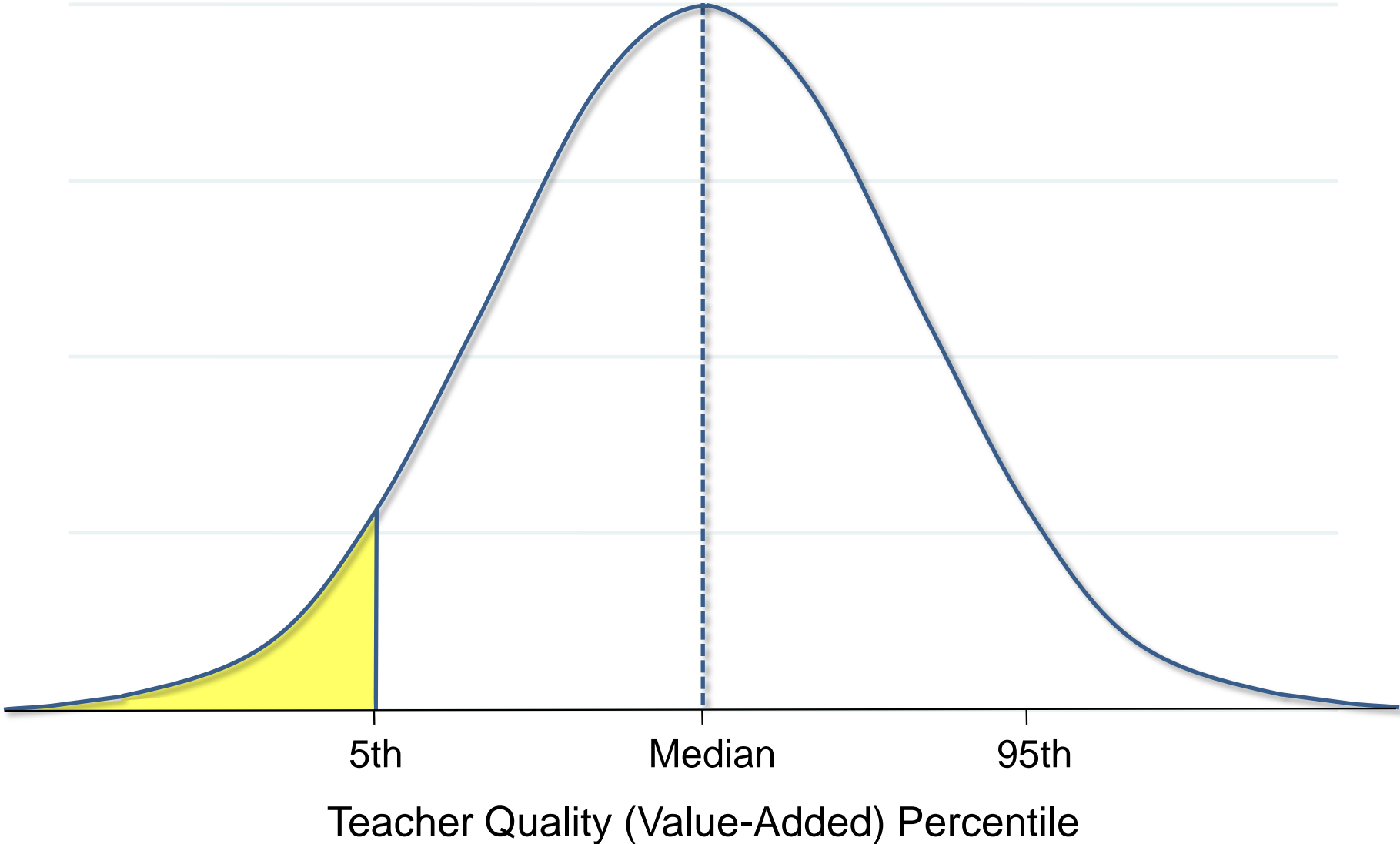
Effect of Teacher Quality on Earnings



Effect on Teacher Quality on Teenage Birth Rates



The Value of Improving Teacher Quality



The Value of Improving Teacher Quality

+\$50,000 lifetime earnings per child
= \$1.4 million per classroom of 28
students
= \$250,000 in present value at 5% int.
rate

5th

Media

95th

Teacher Quality (Value-Added) Percentile

Education: Policy Lessons

- Improving quality of elementary education can be a key policy tool to increase upward mobility
 - Teacher quality appears to be particularly important, perhaps more so than reductions in class size
 - Better teachers have roughly the same effect on long-term outcomes from grades K-8

Education: Policy Lessons

- Critical to attract and retain top talent in teaching in primary school
 - Superstar model: reward and retain talented teachers
 - Higher salaries can help but ultimately may require efforts to change professional status (e.g., Finland)
 - Programs such as Teach First have been successful but would be more effective if teachers stay

Policy Impacts



“We know a good teacher can increase the lifetime income of a classroom by over \$250,000.... Every person in this chamber can point to a teacher who changed the trajectory of their lives”

- Barack Obama, *State of the Union*,
2012



“A recent study by Harvard and Columbia economists found that students with effective teachers are less likely to become pregnant, more likely to go to college and more likely to get higher-paying jobs....Ineffective teachers are hurting our students’ futures – we can’t allow that.”

- Michael Bloomberg, *State of the City*,
2012

Is Increasing Social Mobility Desirable?

- Thus far we have assumed that our objective should be to increase social mobility
- But policies that increase mobility may not be desirable from an efficiency perspective
 - Random allocation of college seats maximizes social mobility
 - But violates principles of meritocracy and would likely reduce total economic output and growth
- Tomorrow's lecture: assess tradeoff between mobility and growth, focusing on innovation as a driver of growth

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