



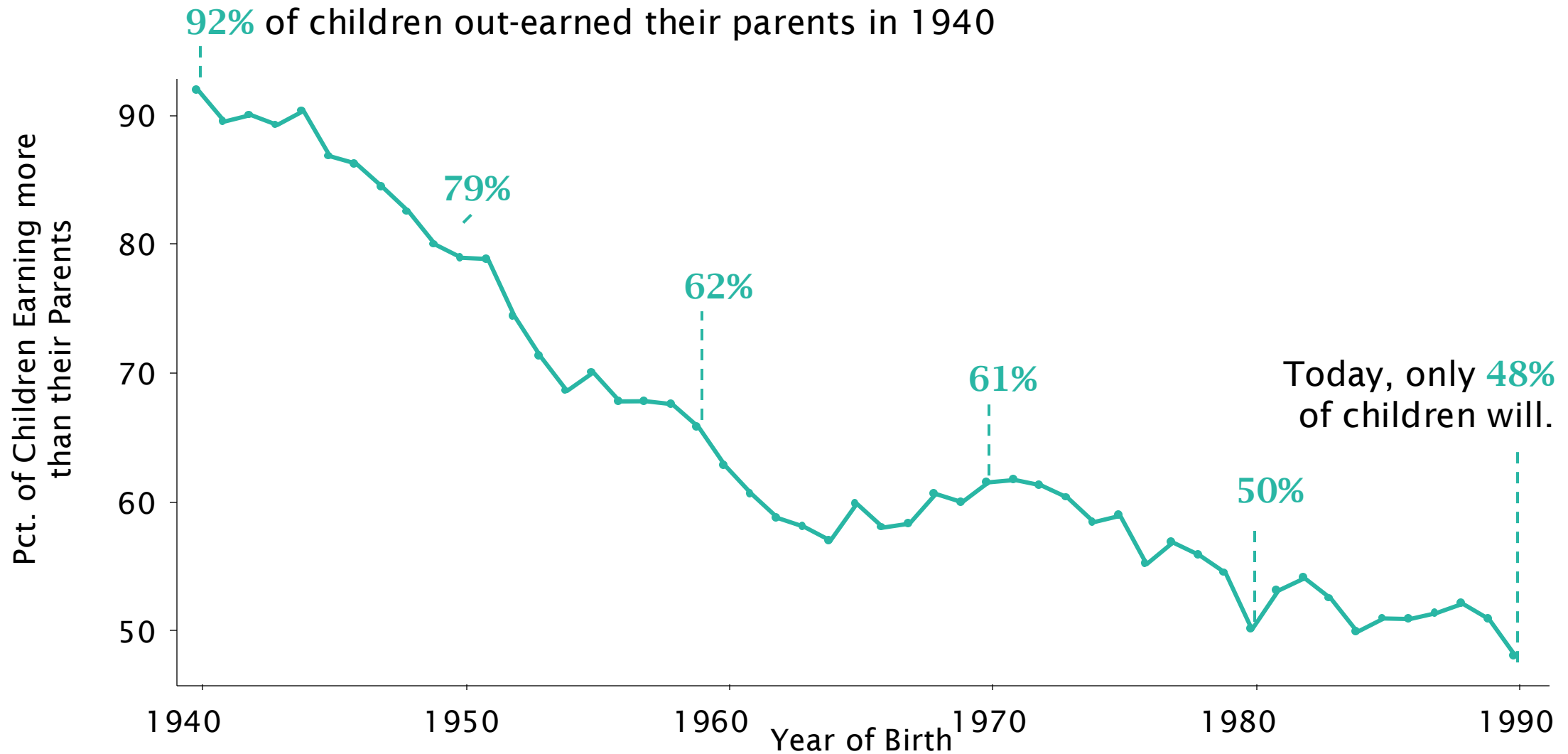
# Creating Economic Opportunity

Raj Chetty  
Harvard University

Yrjo Jahnsson Lectures | June 2026

# The Fading American Dream: Upward Mobility by Birth Cohort

Percent of Children Earning More than Their Parents, by Year of Birth

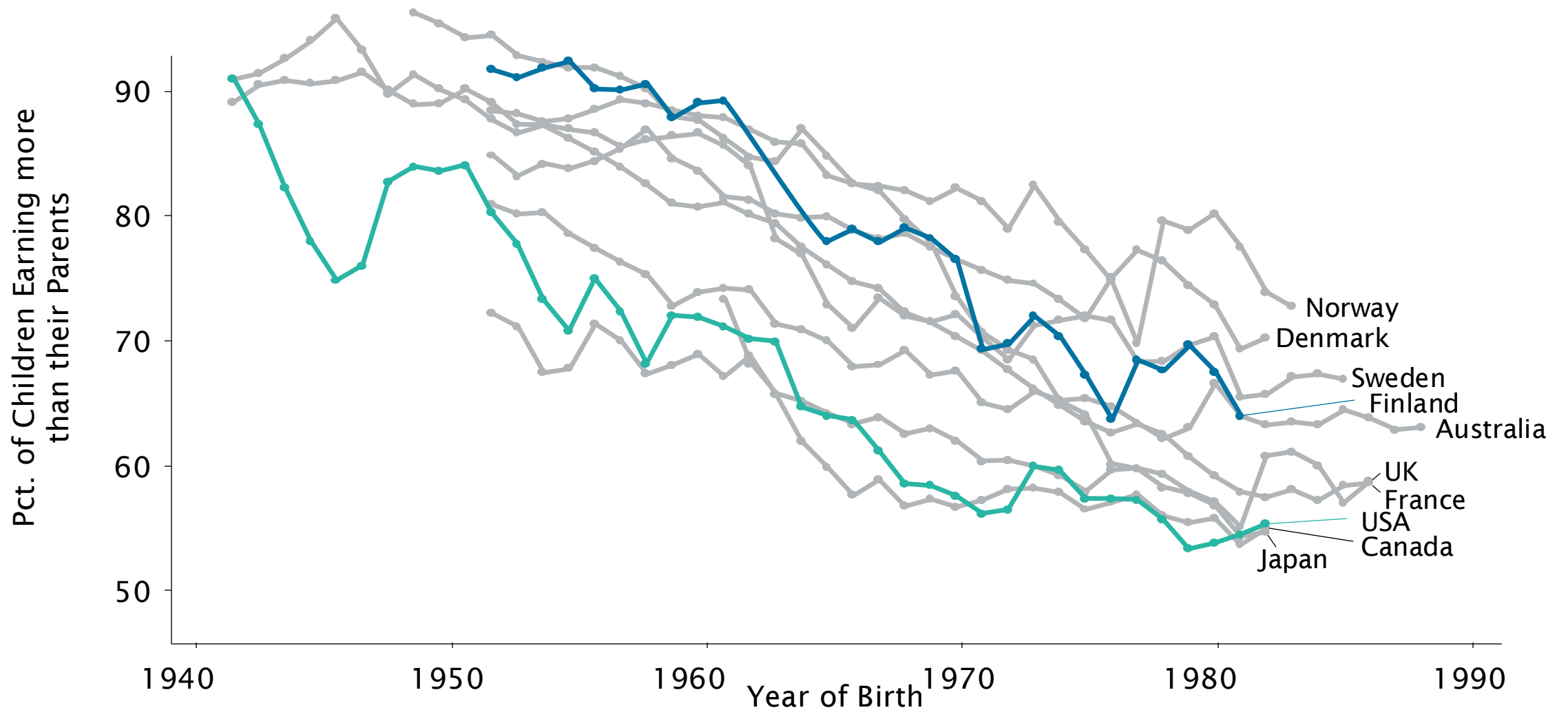


Source: Chetty, Grusky, Hell, Hendren, Manduca, Narang (Science 2017)



# Fading Opportunity Around the World

Percent of Children Earning More than Their Parents, by Country and Year of Birth

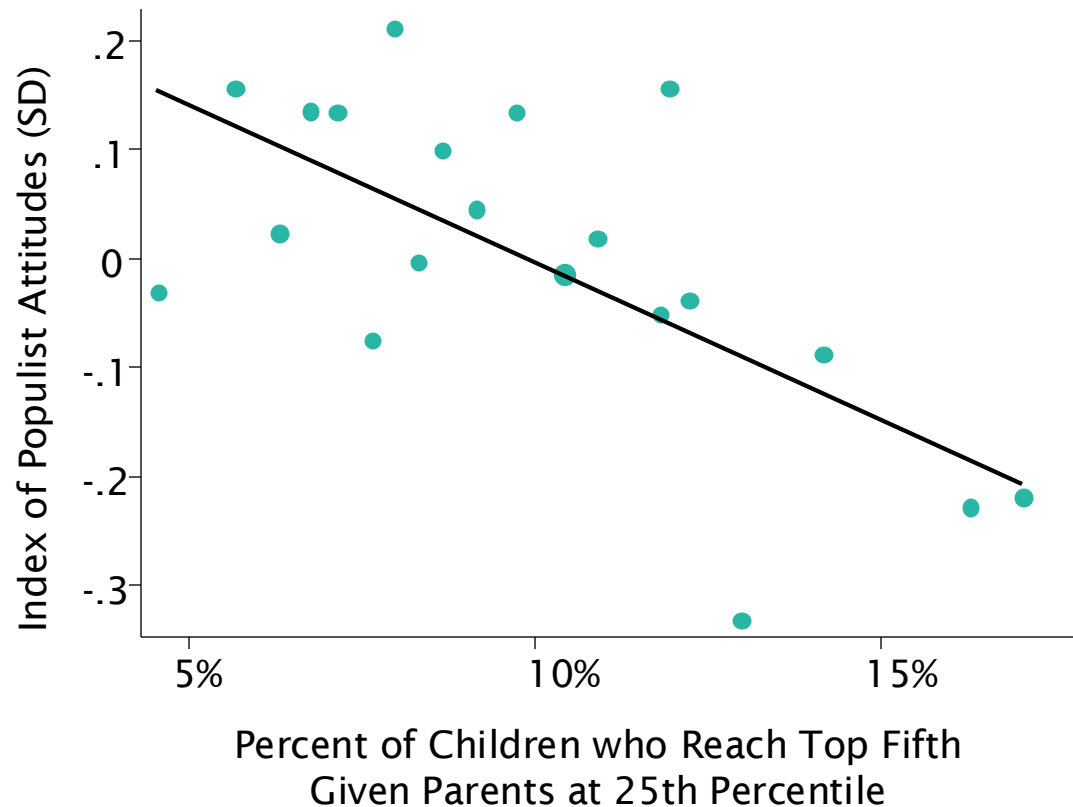


Source: Berman (AEJ: Applied Economics 2022); see also Manduca et al. (AEJ Applied 2024)



# Social and Political Consequences of Fading Opportunity

**Populist Attitudes vs. Social Mobility  
Across Metro Areas in the U.S.**



*“Areas with lower social mobility exhibit higher populist attitudes and greater support for Donald Trump.”*

**Meister**, “Populism and Narratives of Social Mobility” (DIW Berlin wp 2026)

*“We find a strong relationship between mobility and support for the far right across 11 European countries.”*

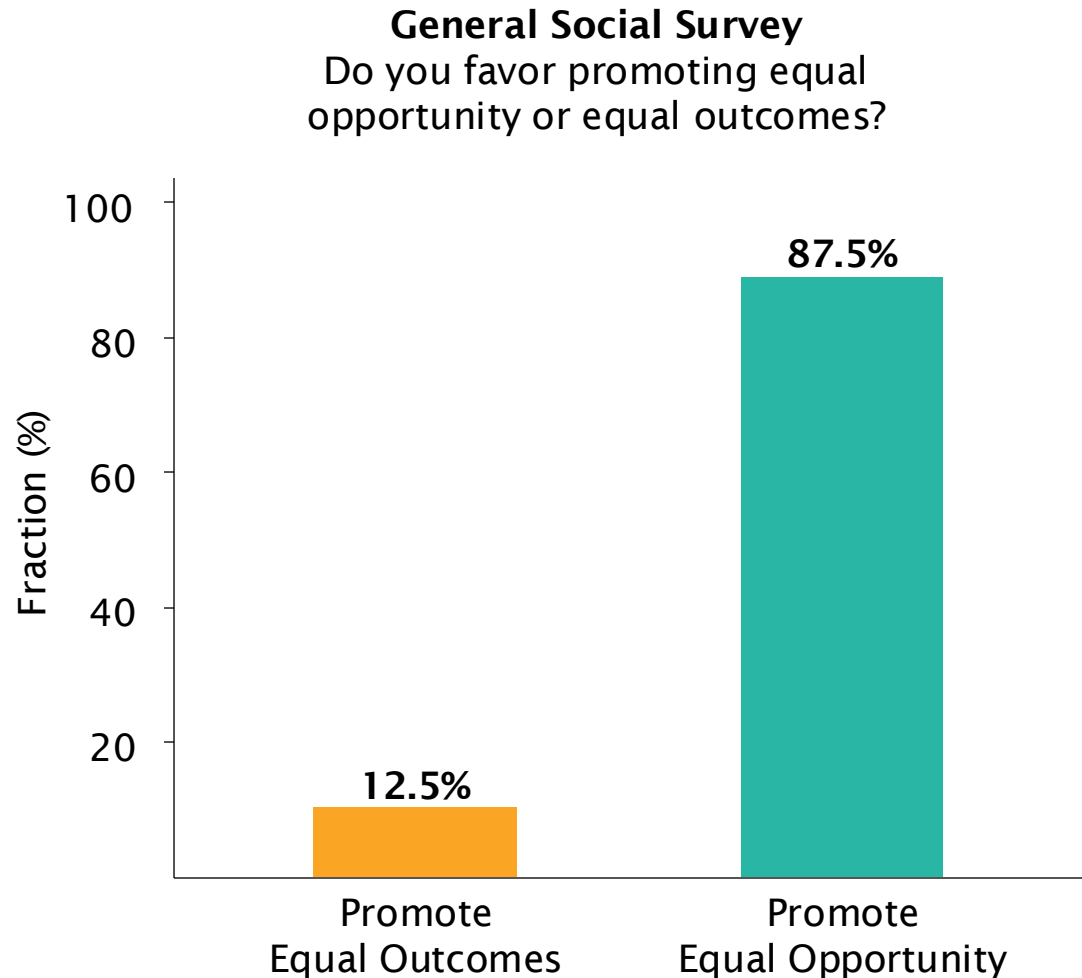
**Guriev**, “Economic Drivers of Populism” (AEA P&P 2018)

*“Inequality of opportunity... [has] played an important role in the recent rise of antiestablishment sentiment.”*

**Jacobs and Kayser**, “Downward Mobility and Far-Right Party Support: Broad Evidence” (CPS 2025)



# Social and Political Consequences of Fading Opportunity



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# Two Overarching Questions

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1. What are the key drivers of economic opportunity?
    - Lecture 1: The Science of Economic Opportunity
  2. What can we do to increase upward mobility?
    - Lecture 2: Policies to Increase Economic Mobility
- Based on research with John Friedman, Nathan Hendren, Matthew Jackson, Lawrence Katz, Theresa Kuchler, Johannes Stroebel, and many others at Opportunity Insights



# Lecture 1: The Science of Economic Opportunity



# Using “Big Data” to Study the Determinants of Economic Opportunity

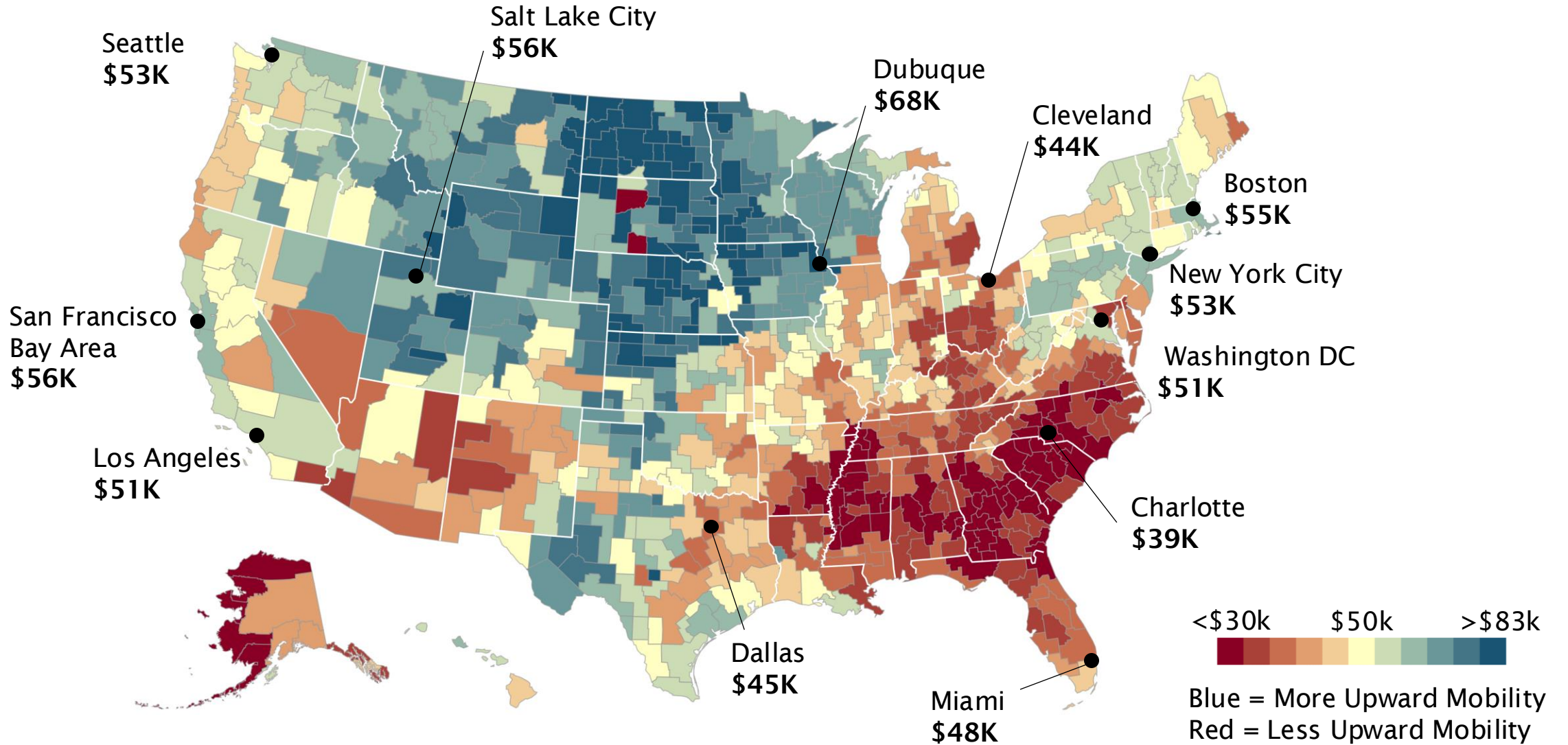
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- Study the determinants of economic opportunity using large-scale longitudinal administrative data (e.g., tax records, social network data)
  - Disaggregate data across subgroups
  - Use quasi-experimental methods to analyze mechanisms



# The Geography of Upward Mobility in the United States

Average Household Income at Age 35 for Children whose Parents Earned \$41K (25th percentile)



Source: Chetty, Hendren, Kline, Saez (QJE 2014); parents and children's incomes in real 2025 dollars



# The Geography of Upward Mobility in Boston

Average Household Income at Age 35 for Children whose Parents Earned \$41K (25th percentile)



Source: Chetty, Friedman, Hendren, Jones, Porter (AER 2026); parents and children's incomes in real 2025 dollars



# Causal Effects of Childhood Environment



# Causal Effects of Environment vs. Selection

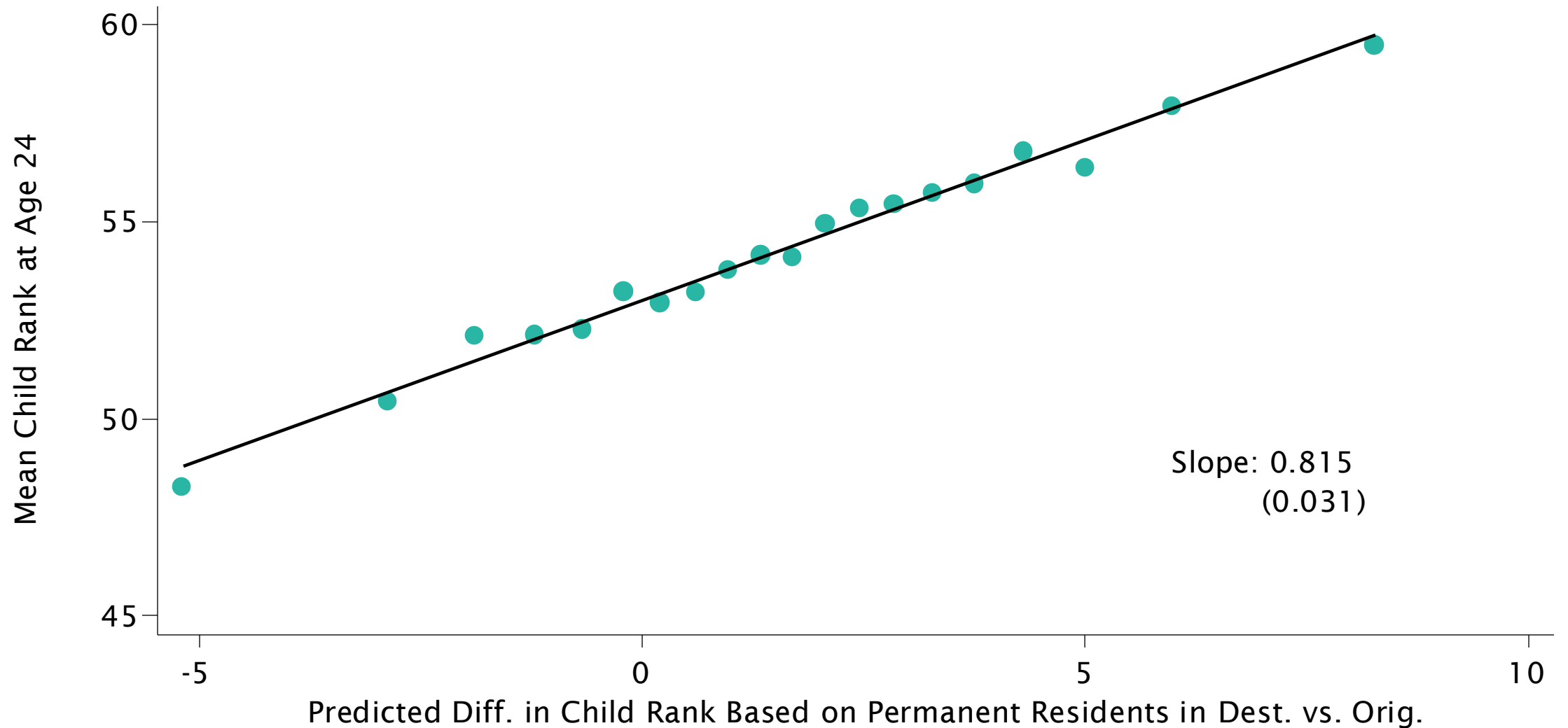
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- To what extent is the geographic variation in children's outcomes driven by **causal effects** of place vs. sorting?
- Canonical question in social science: longstanding debate on role of nature vs. nurture
- Identify causal effects by studying 5 million families that move across areas
  - Exploit variation in **timing** of moves between families who move between the same places, controlling for parental income and demographics  
[Chetty and Hendren QJE 2018a,b]

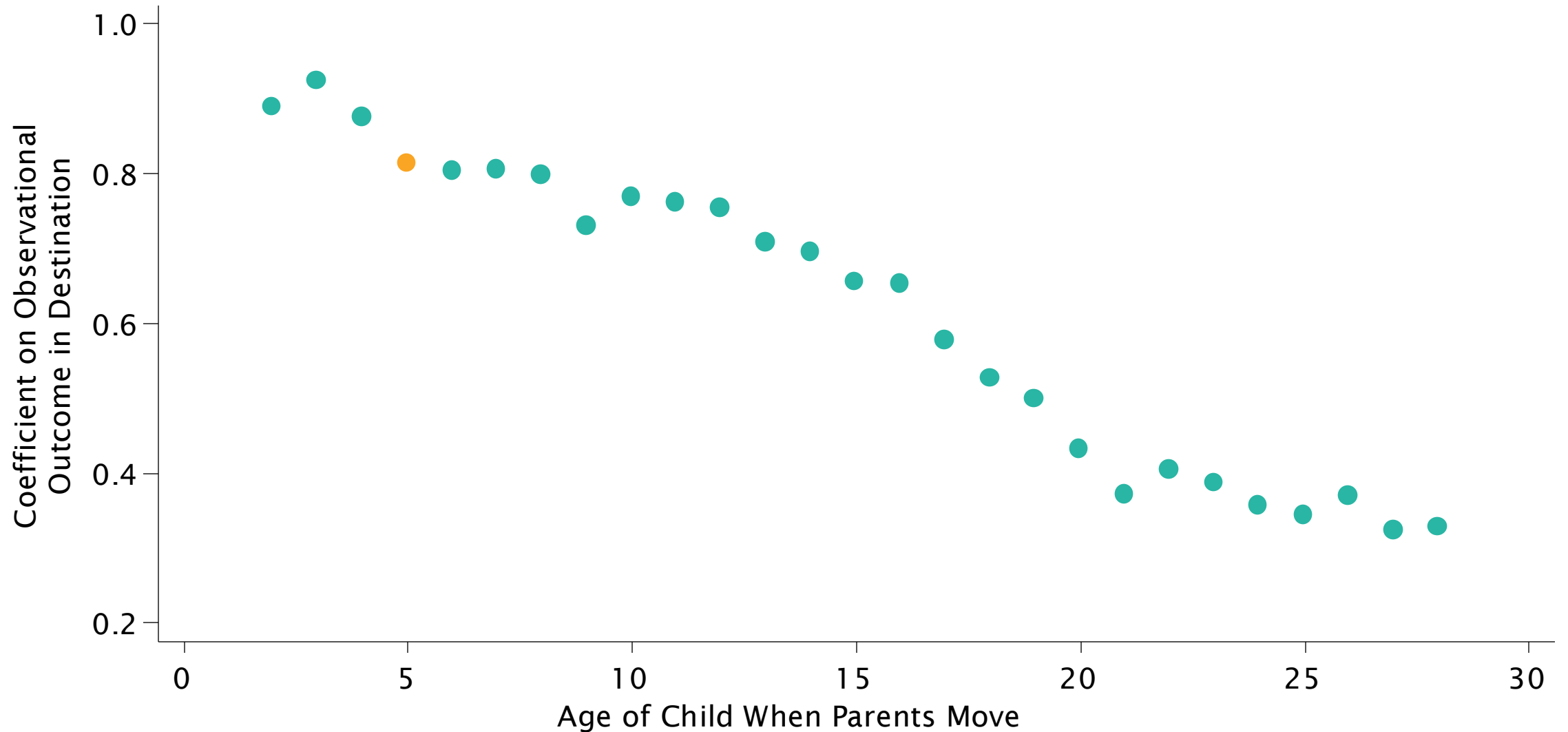


# Movers' Incomes vs. Mean Ranks of Children in Destination

For Children Who Move at Age 5



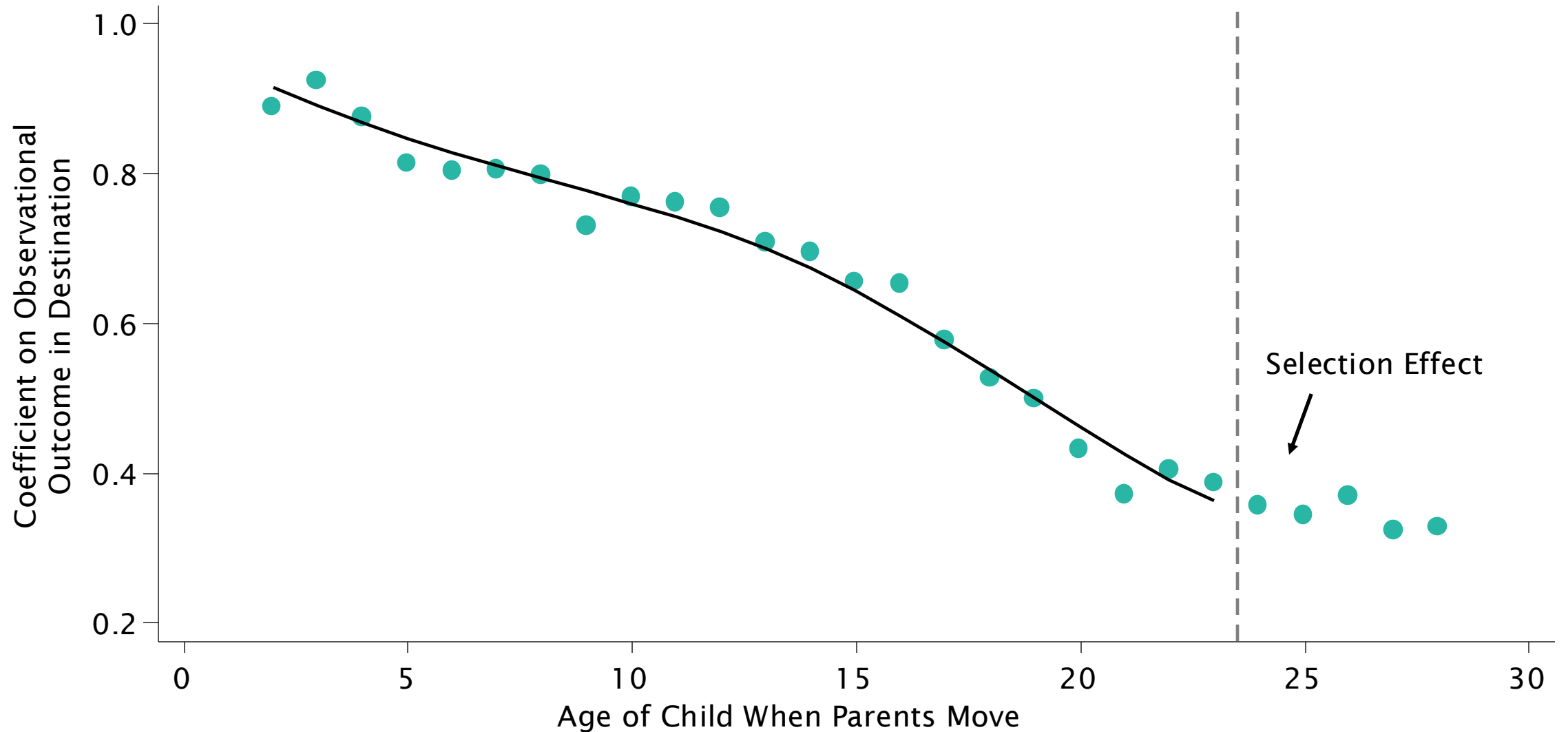
# Childhood Exposure Effects on Household Income Rank at Age 24



Source: Chetty and Hendren (QJE 2018); Chetty, Friedman, Hendren, Jones, Porter (AER 2026)



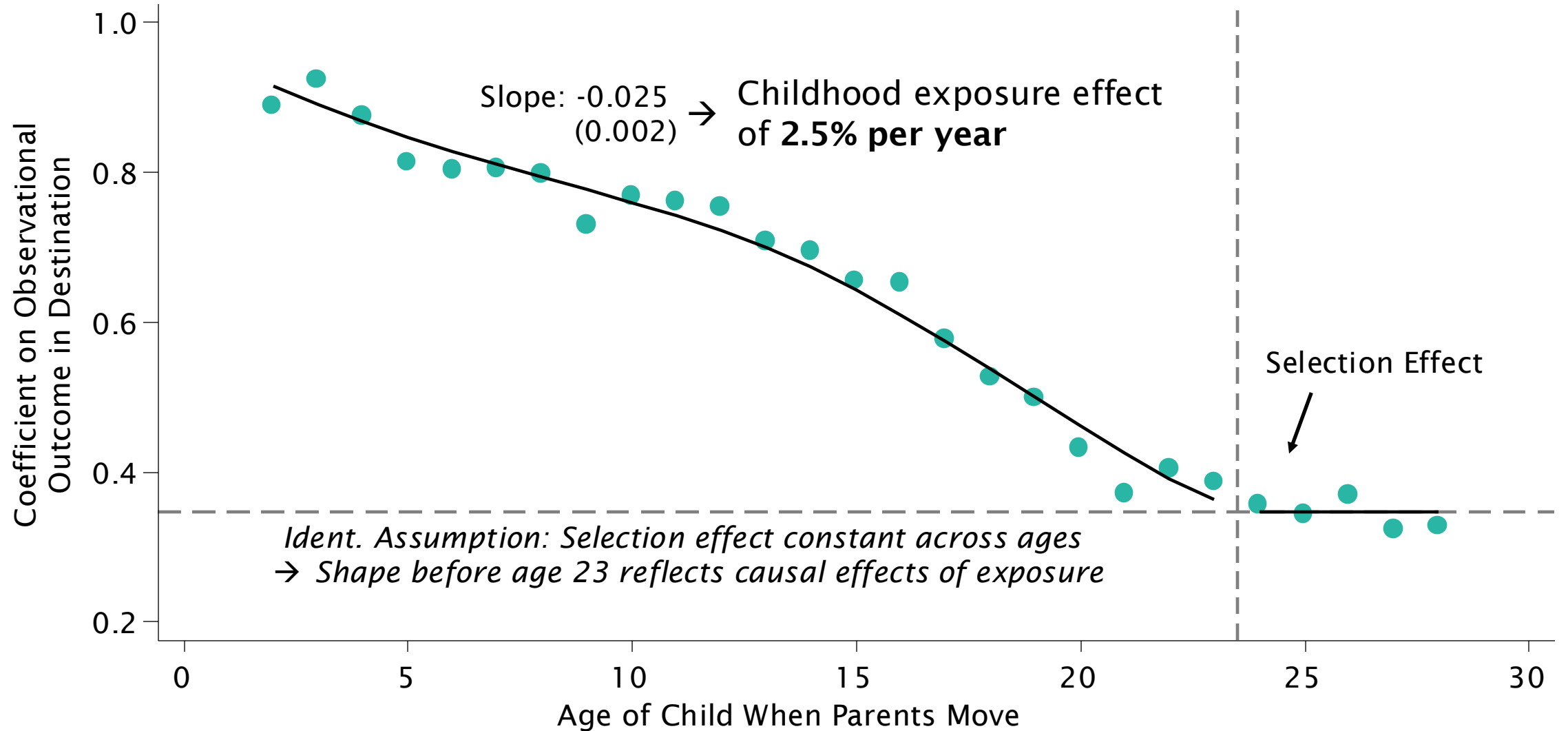
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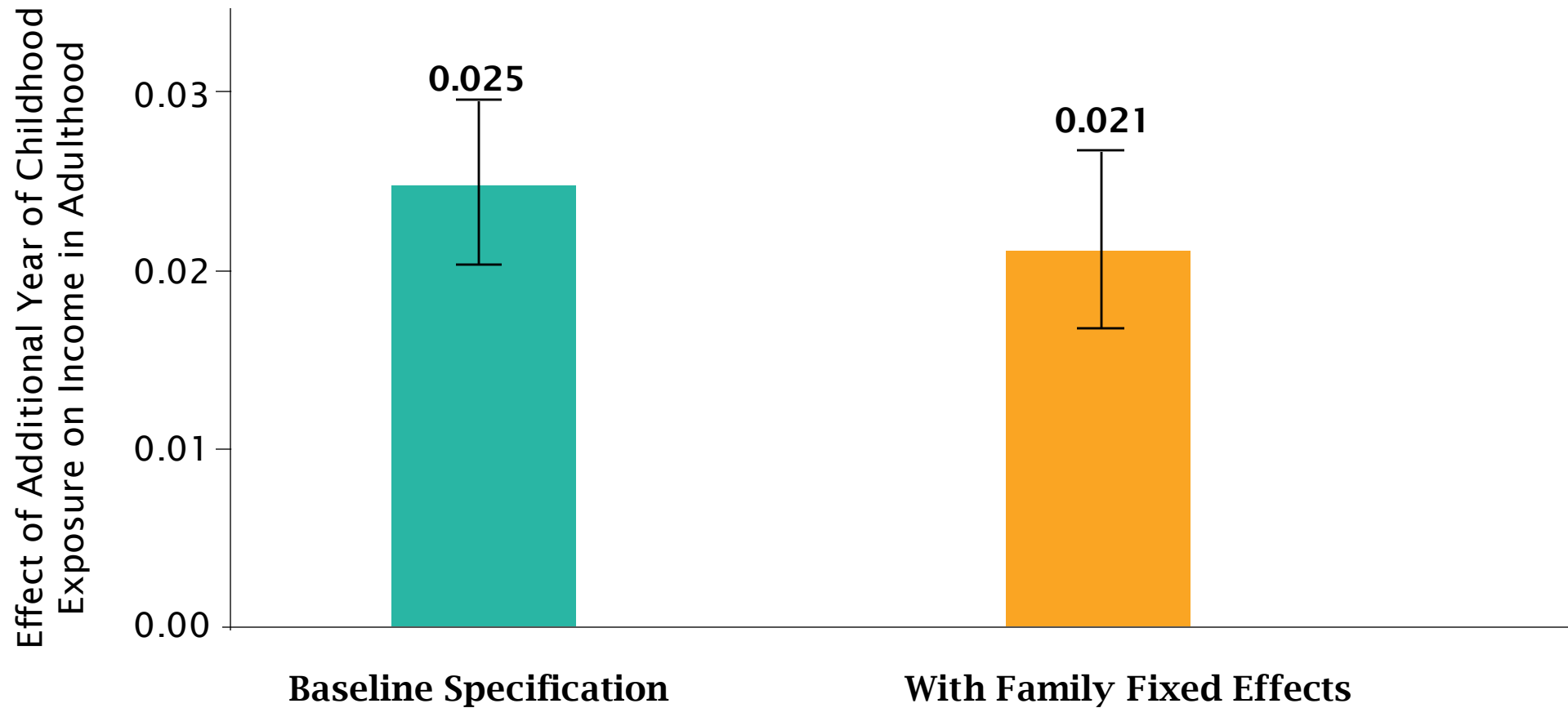


# Childhood Exposure Effects on Household Income Rank at Age 24



# Childhood Exposure Effects on Income in Adulthood: Sibling Comparisons

Regression Estimates Based on Movers Across Tracts

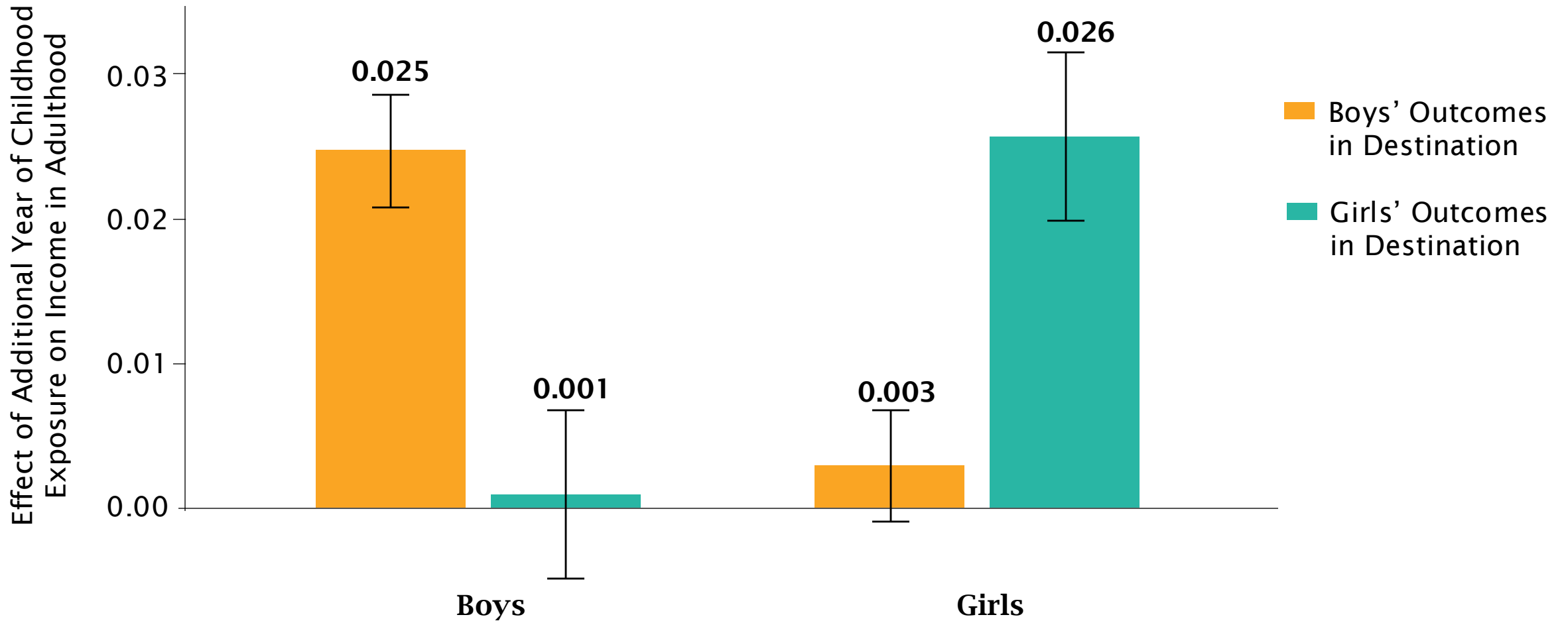


Source: Chetty and Hendren (QJE 2018); Chetty, Friedman, Hendren, Jones, Porter (AER 2026)



# Gender-Specific Childhood Exposure Effects on Income in Adulthood

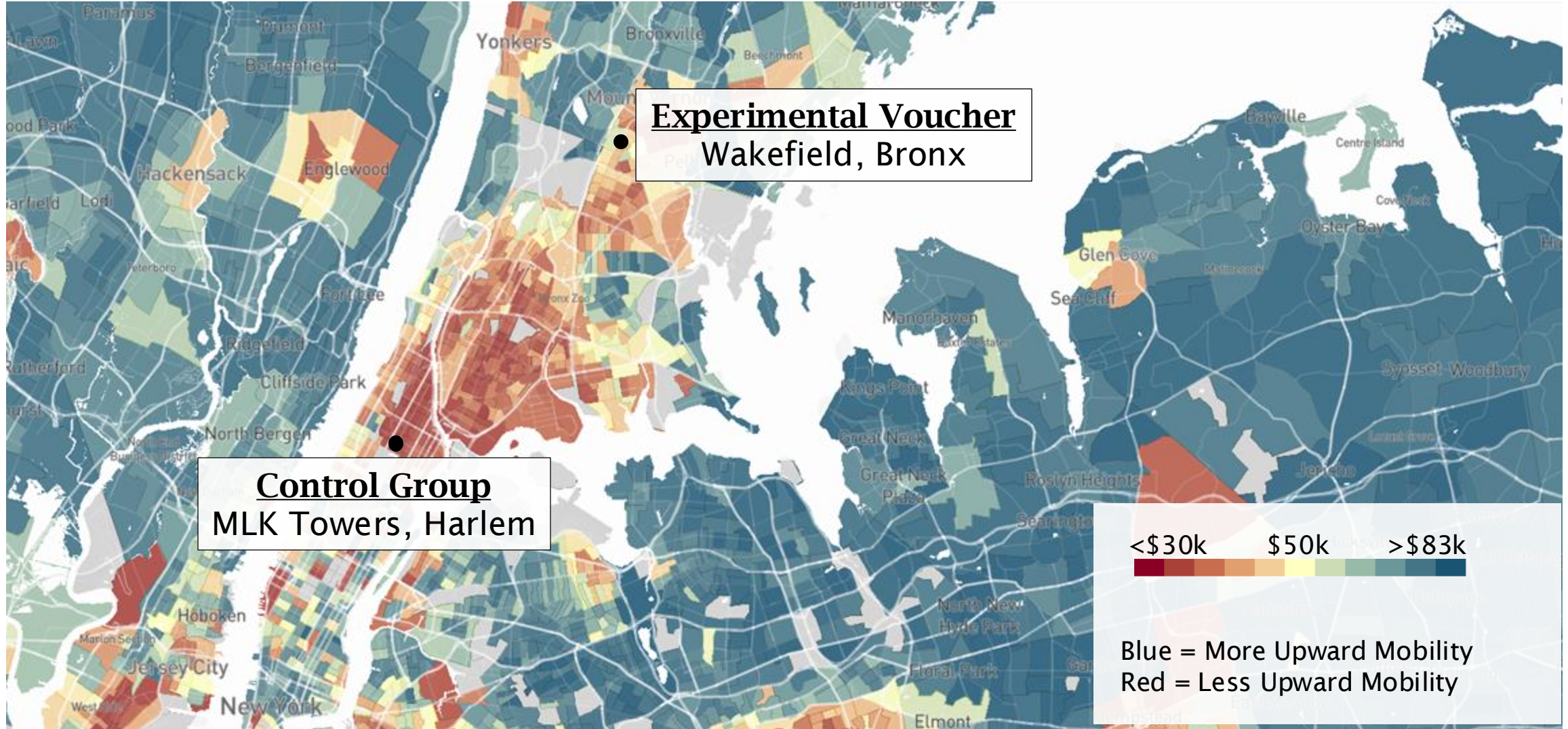
Regression Estimates Based on Movers Across Tracts



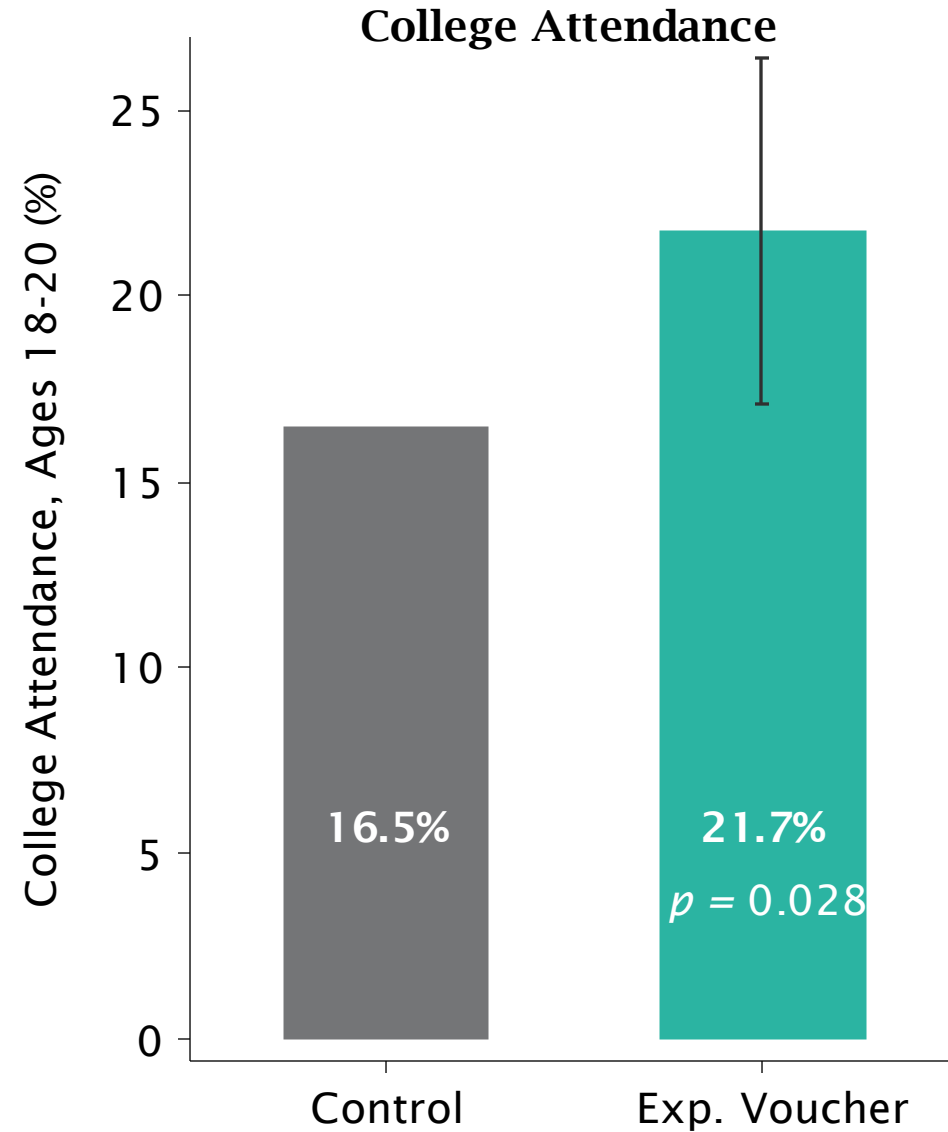
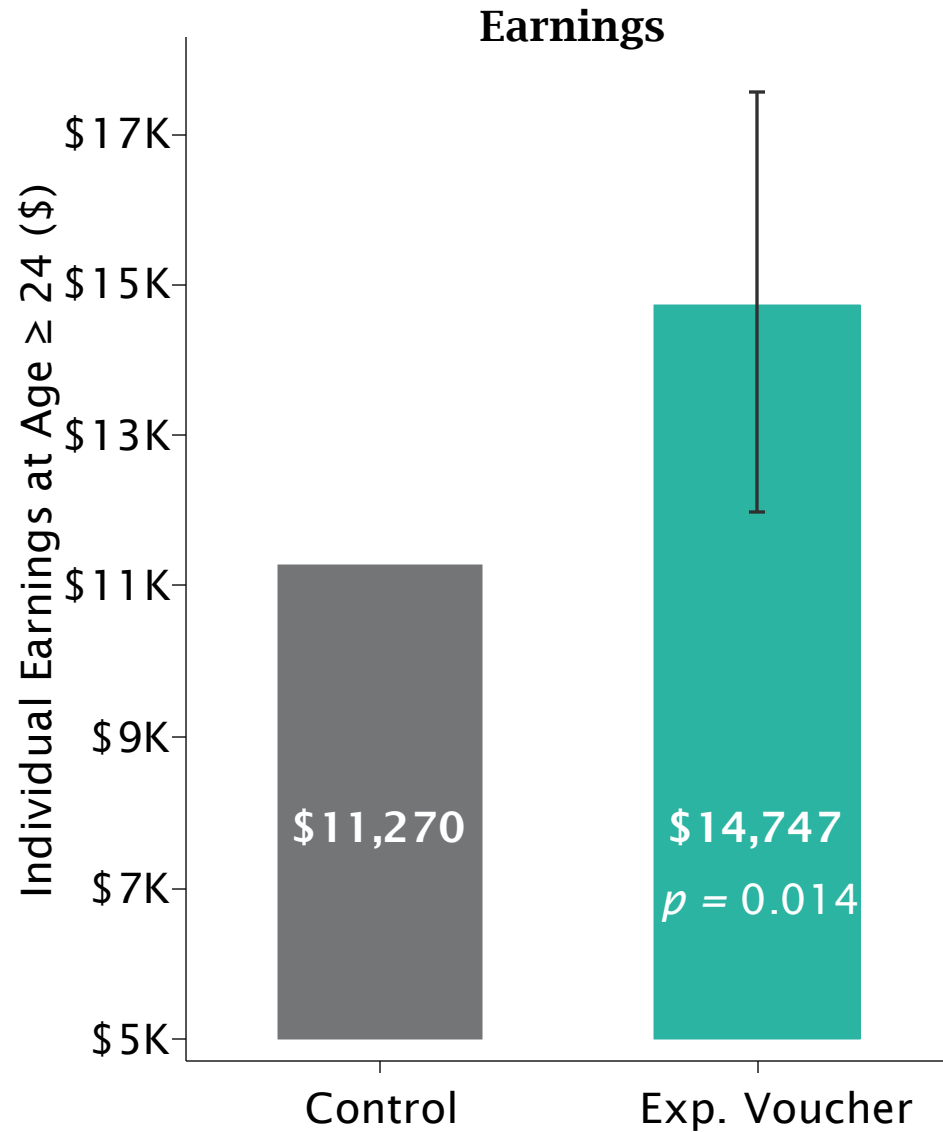
Source: Chetty and Hendren (QJE 2018); Chetty, Friedman, Hendren, Jones, Porter (AER 2026)



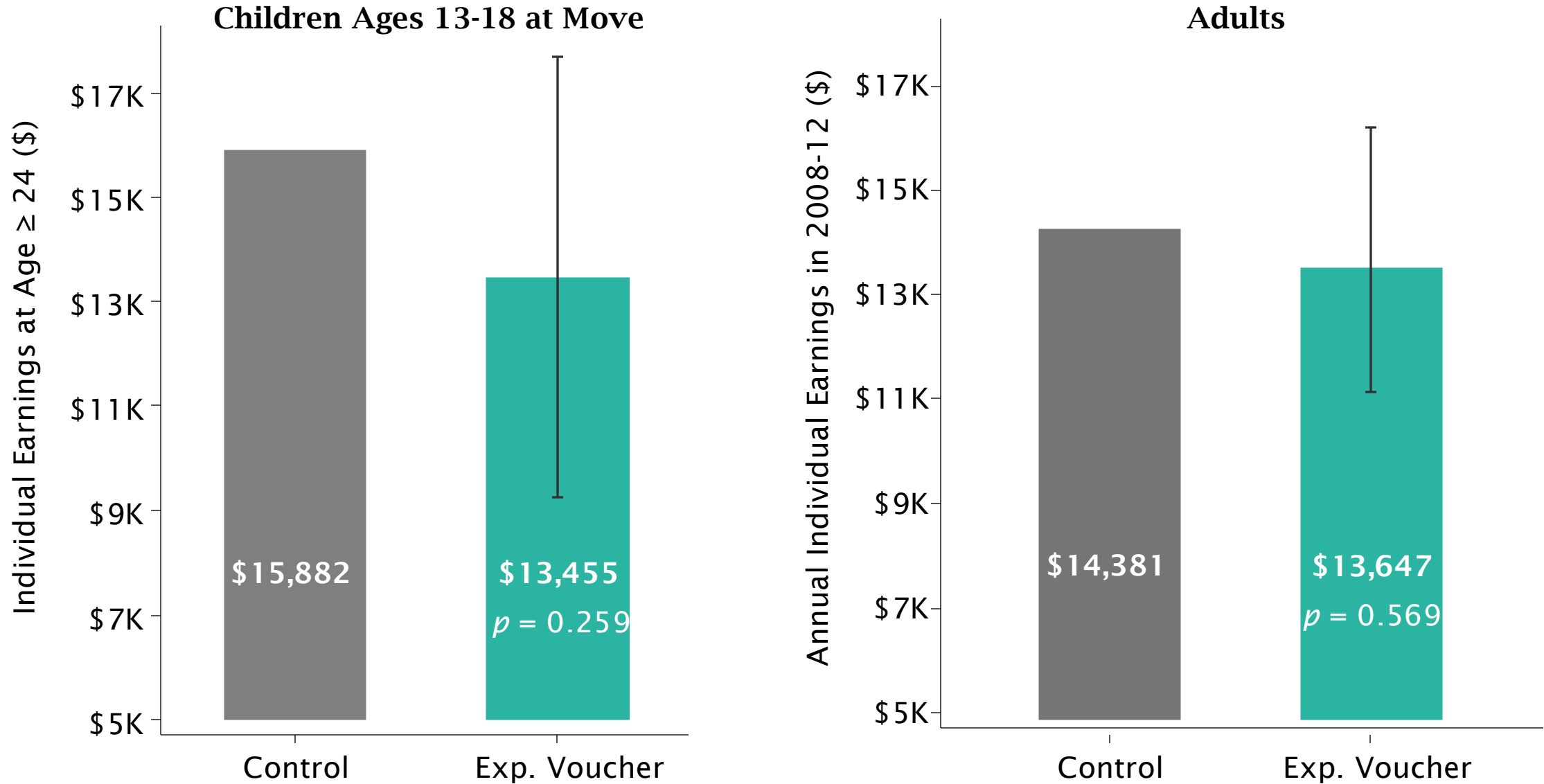
# The Moving to Opportunity Experiment



# Impacts of MTO on Children Below Age 13 at Random Assignment



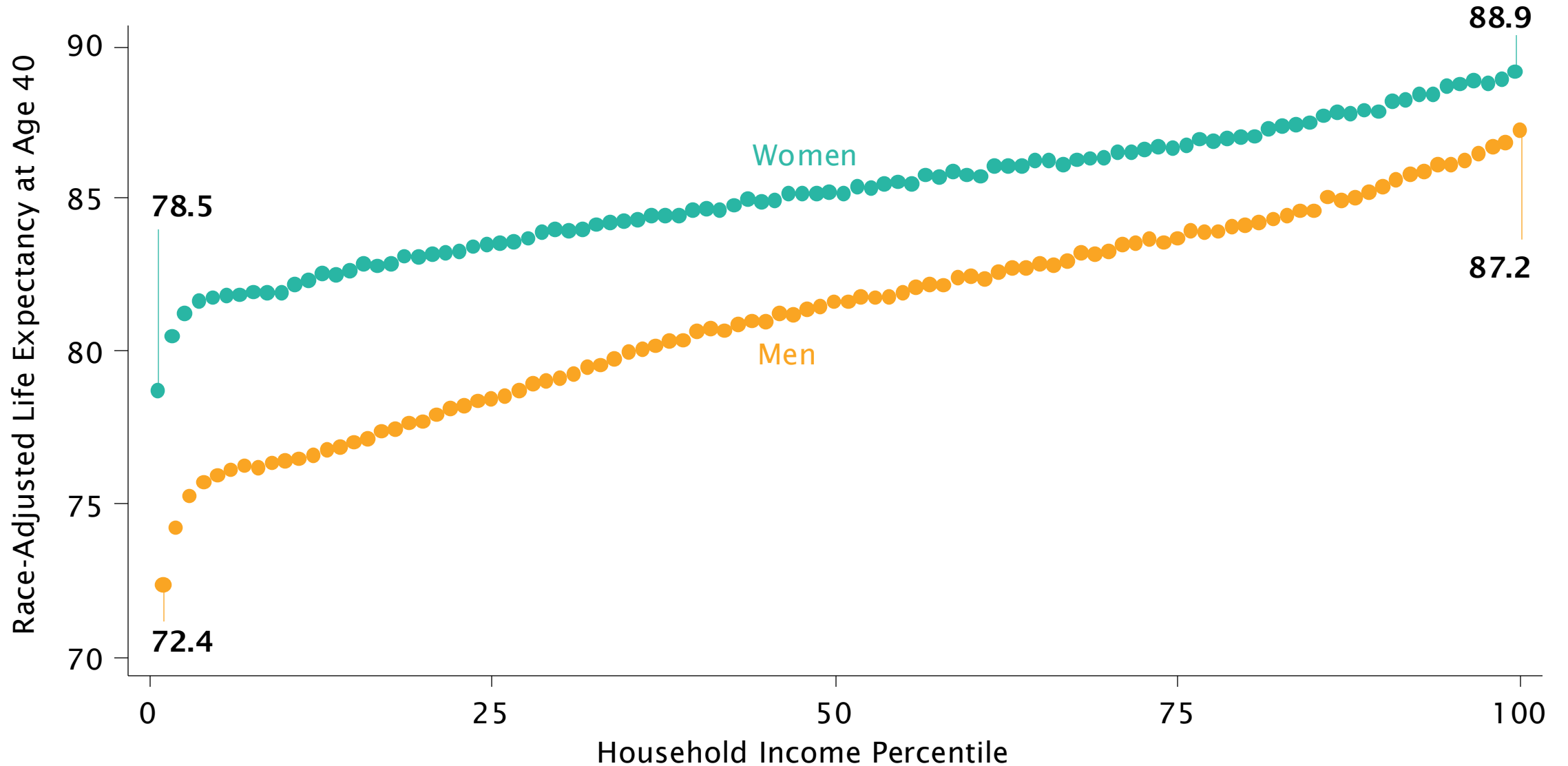
# Impacts of MTO on Adolescents Ages 13-18 and Adults' Earnings



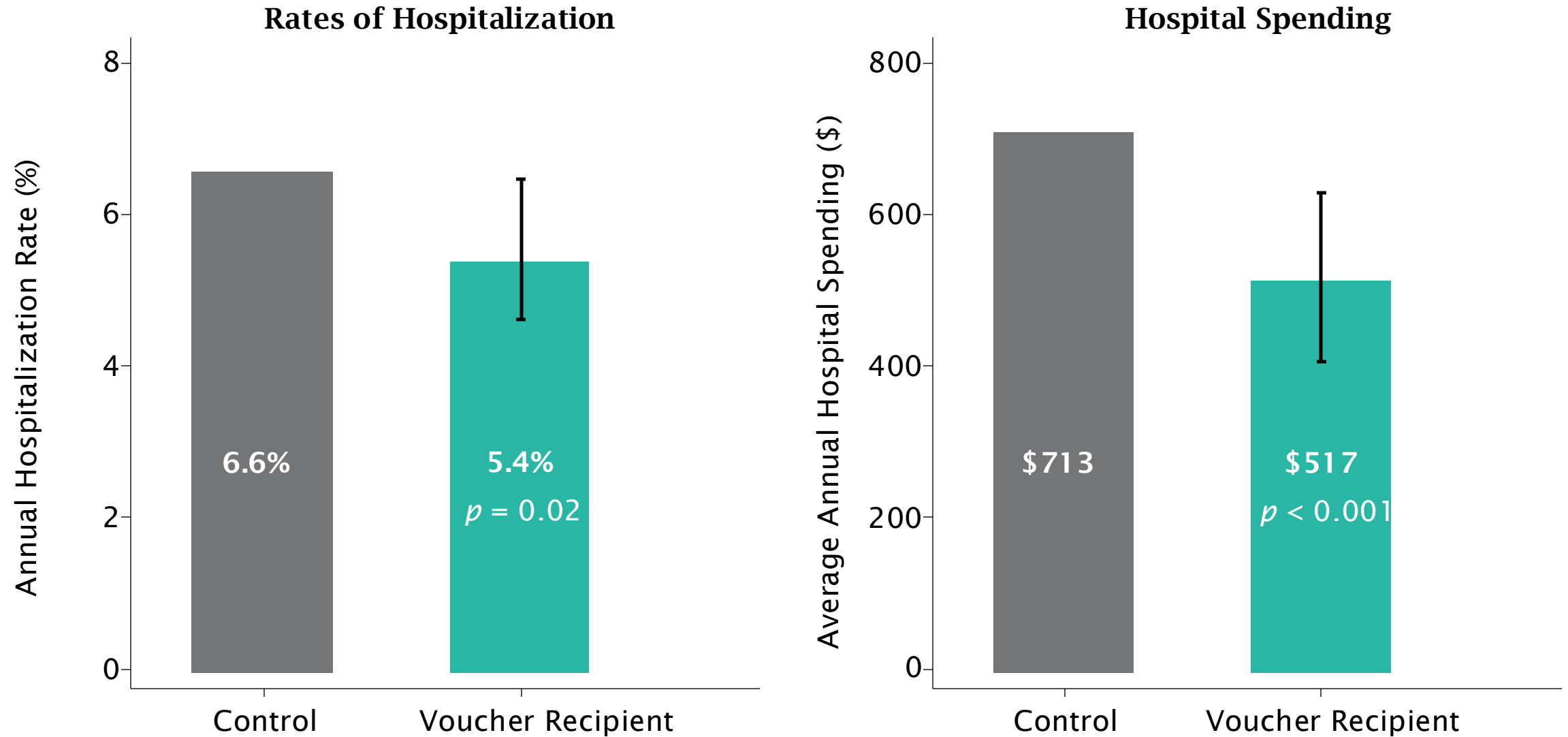
Source: Chetty, Hendren, Katz (AER 2016)



# Life Expectancy at Age 40 vs. Household Income



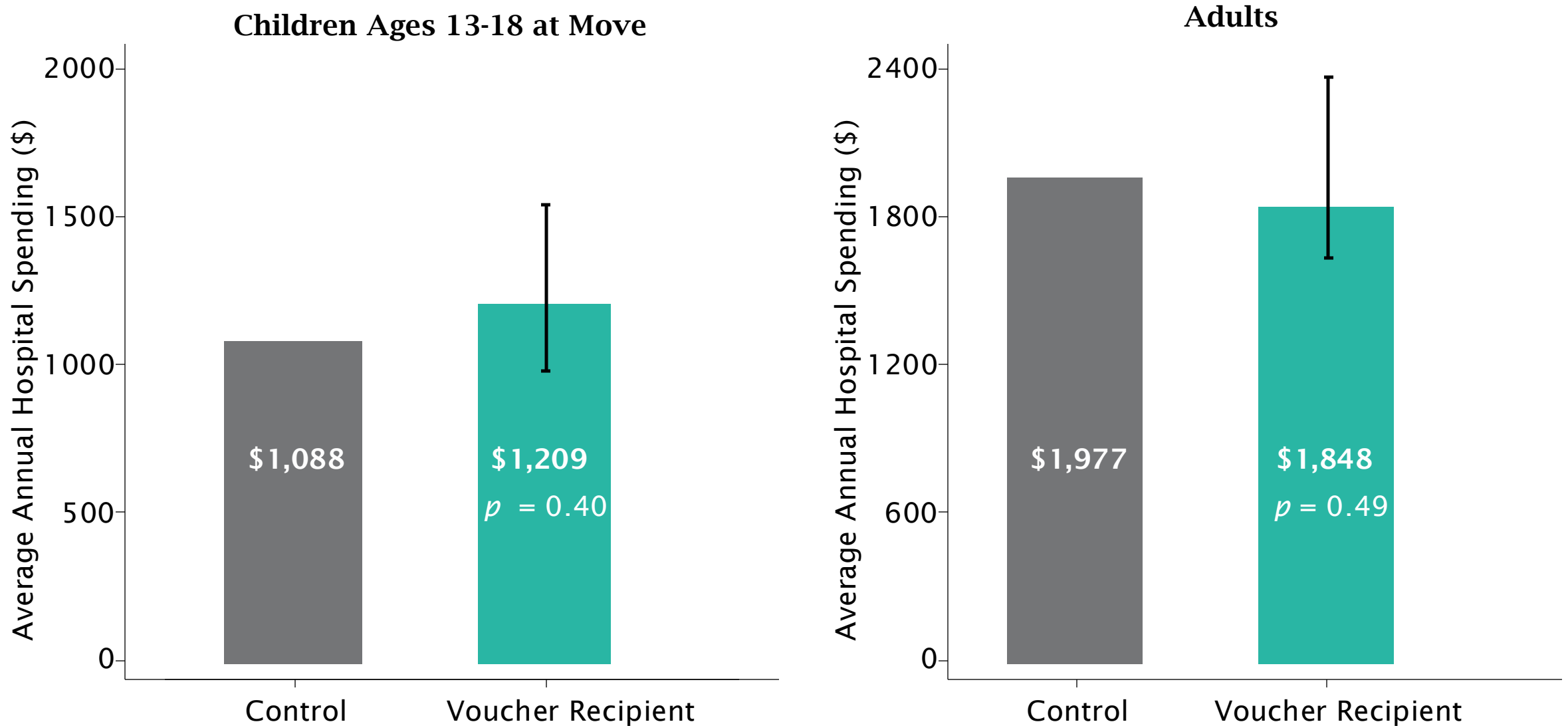
# Impacts of MTO on Children Below Age 13 on Health in Early Adulthood



Source: Pollack, Blackford, Du, Deluca, Thornton, Herring (JAMA 2019)



# Impacts of MTO on Adolescents' and Adults' Hospital Spending

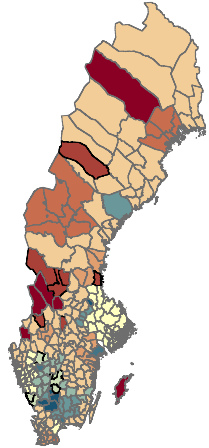


Source: Pollack, Blackford, Du, Deluca, Thornton, Herring (JAMA 2019)

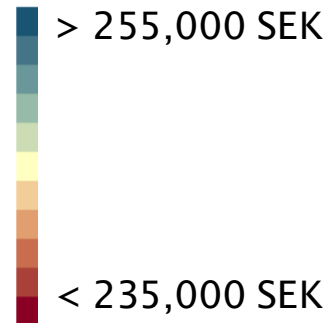


# The Geography of Economic Opportunity Around the World

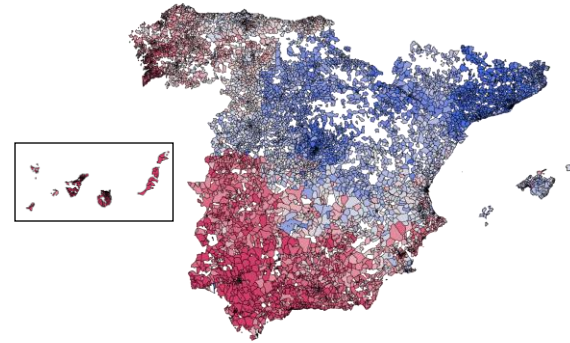
## Sweden



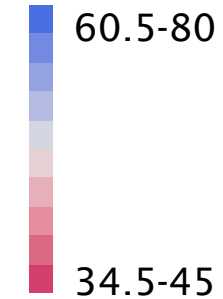
Annual Individual Income  
at Age 32-34 (2010)



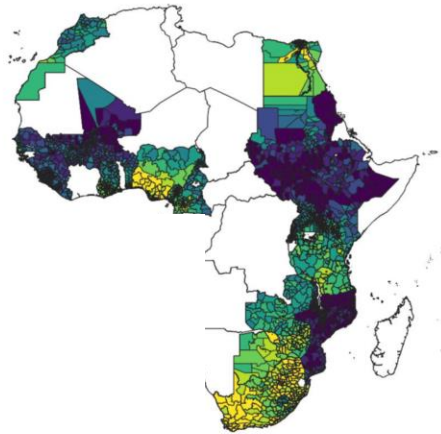
## Spain



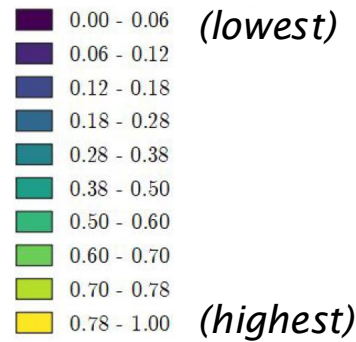
Average Household Income for  
Children with Parents at 25th  
Percentile



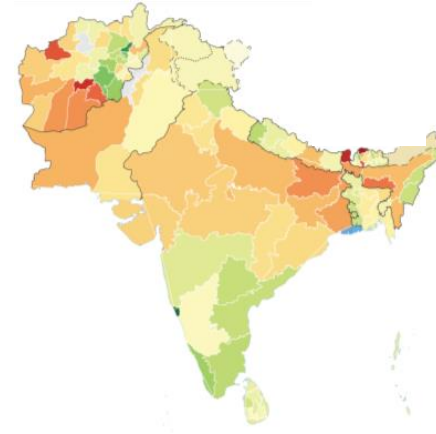
## Africa



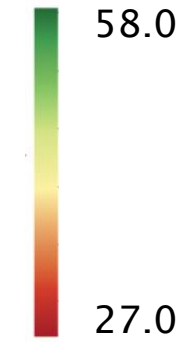
Upward Mobility



## South Asia



Mean Education Rank for Children  
with Less-Educated Parents

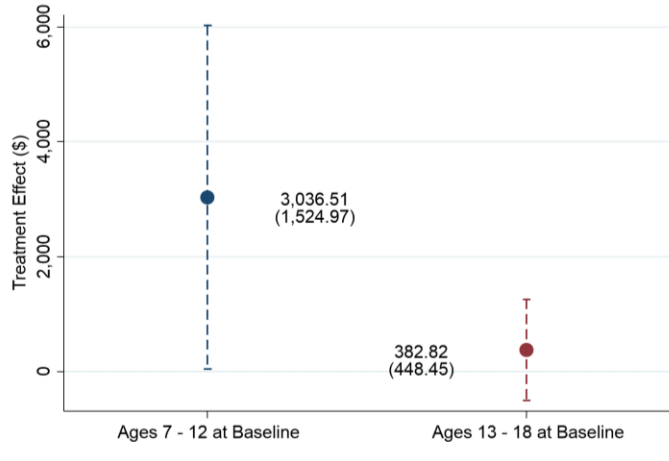


**Source:** Heidrich (2017); Atlas de Oportunidades (2020); Alesina, Hohmann, Michalopoulos, Papaioannou (2021); Asher, Bhowmick, Bussolo, and Novosad (2023)

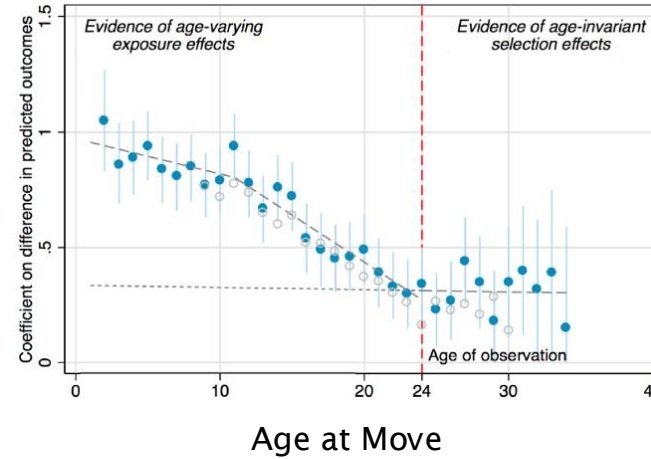


# Childhood Exposure Effects Around the World

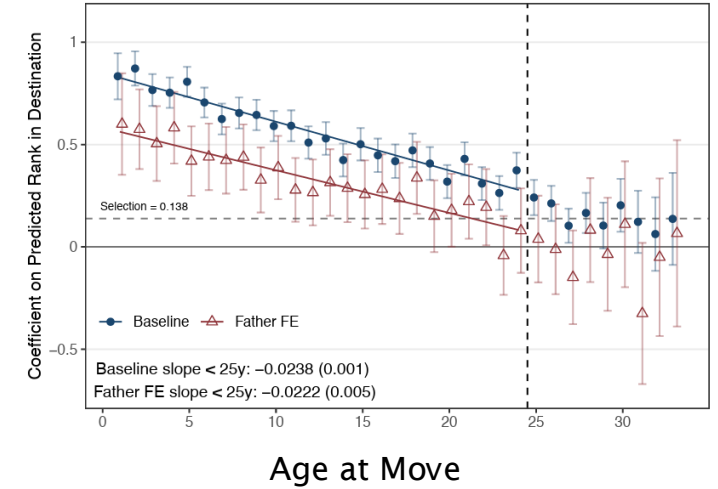
## Chicago Public Housing Demolitions



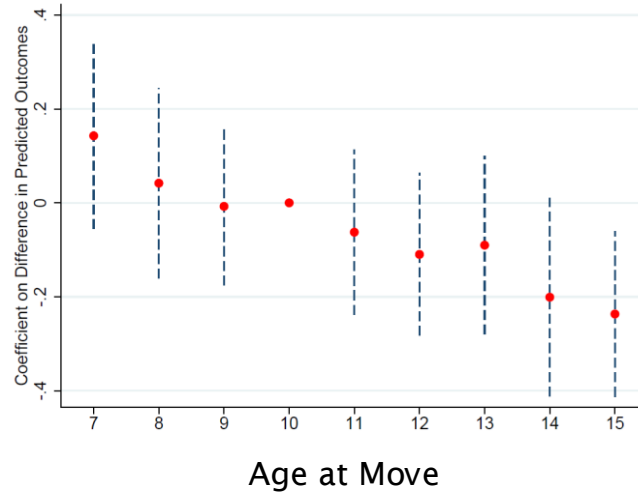
## Australia



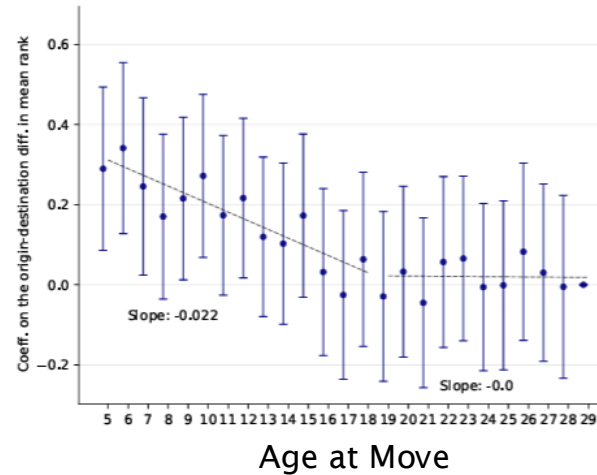
## Brazil



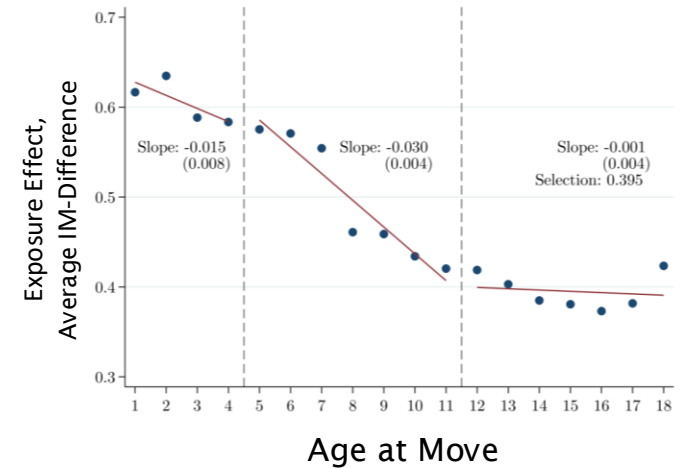
## Canada



## Israel



## Africa



# Sources of Geographic Variation in Economic Mobility



# Why Does Upward Mobility Vary Across Neighborhoods?

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- Large interdisciplinary literature has used Opportunity Atlas data to study predictors of economic mobility
  - **Economics:** Aaronson et al. 2021; Derenoncourt 2022; Chyn et al. 2026
  - **Sociology:** Sharkey and Torrats-Espinosa 2017; Manduca and Sampson 2021
  - **Education:** Rothstein 2019; Biasi 2023
  - **Demography:** Berger 2018; Robertson and O'Brien 2018
  - **Geography:** Ewing et al. 2016; Connor et al. 2023
  - **Environmental science:** Colmer et al. 2022
- Many factors are related to differences in economic mobility, from historical factors to current differences in environment and resources



# Strongest Contemporary Predictors of Economic Mobility

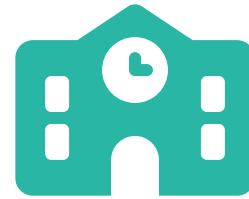
Correlations with Upward Mobility Across Census Tracts



**Lower  
Poverty Rates**



**More Stable  
Family Structure**



**Better  
School Quality**



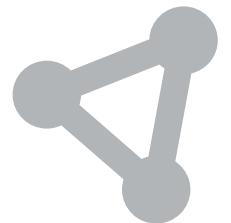
**Greater  
Social Capital**



# Measuring Social Capital Using Facebook Data

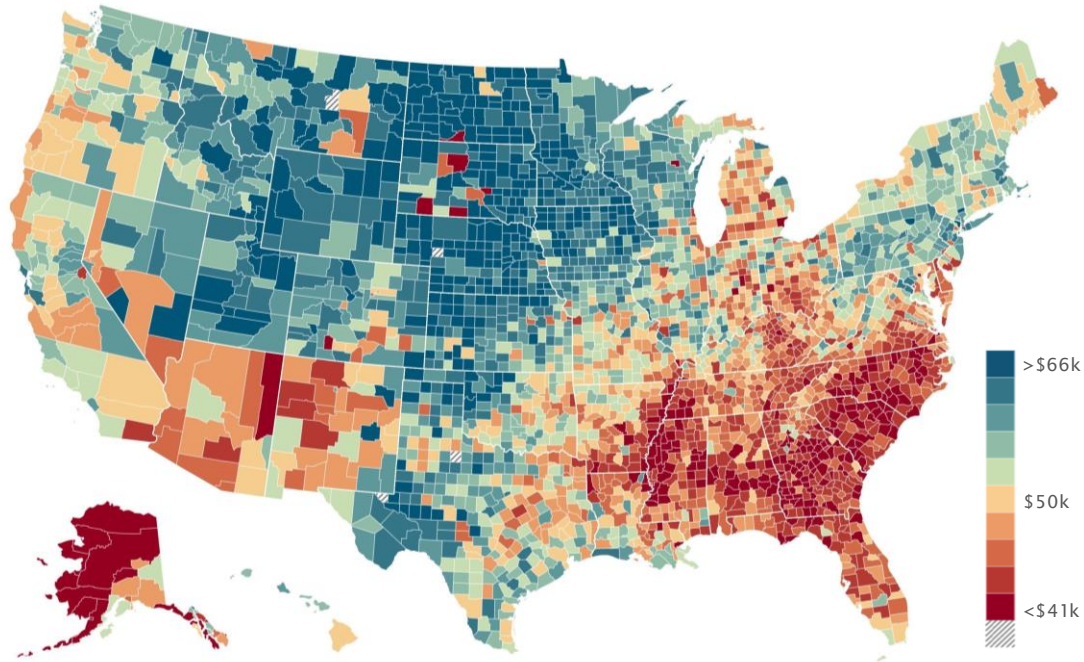
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- Analyze U.S. Facebook users between ages 25–44 who are active on the platform in May 2022 [Chetty, Jackson, Kuchler, Stroebel et al. Nature 2022a,b]
  - 72.2 million individuals, 21 billion friendships
  - **84% coverage** of 25–44-year-old population in U.S.
  - Validate friendship measures against AddHealth survey and socioeconomic status measures generated using machine learning models against tax data
- Construct several measures of social capital discussed in prior literature (e.g., bridging and bonding measures)



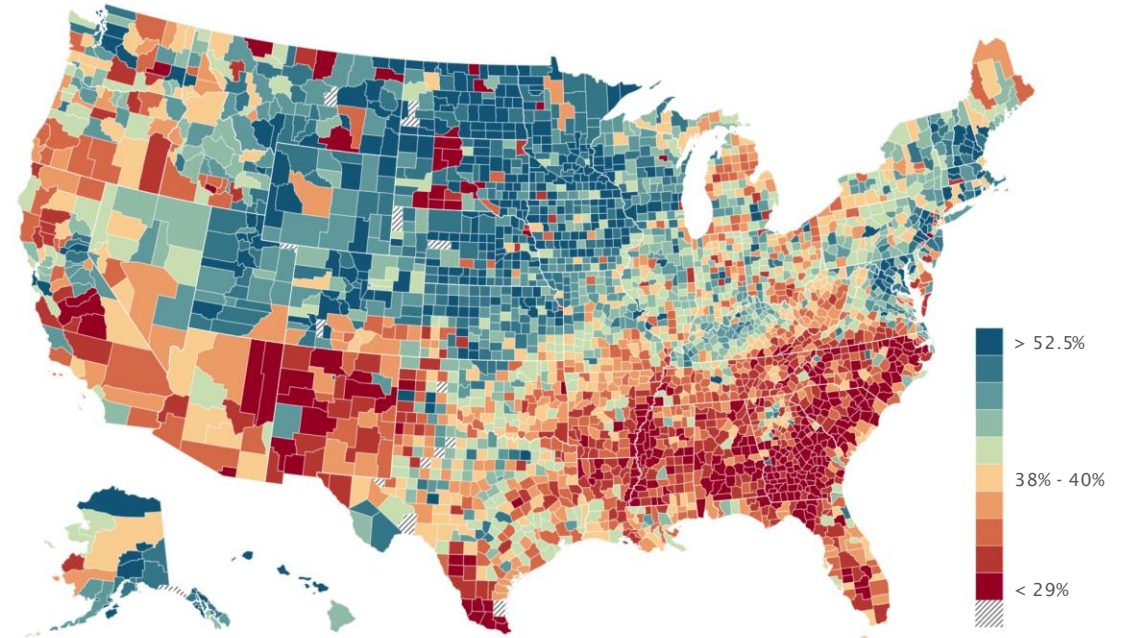
# Upward Mobility and Social Capital

## Upward Mobility Based on Tax Records



Average Household Income at Age 35  
for Children whose Parents Earned \$41k

## Economic Connectedness Based on Facebook Data



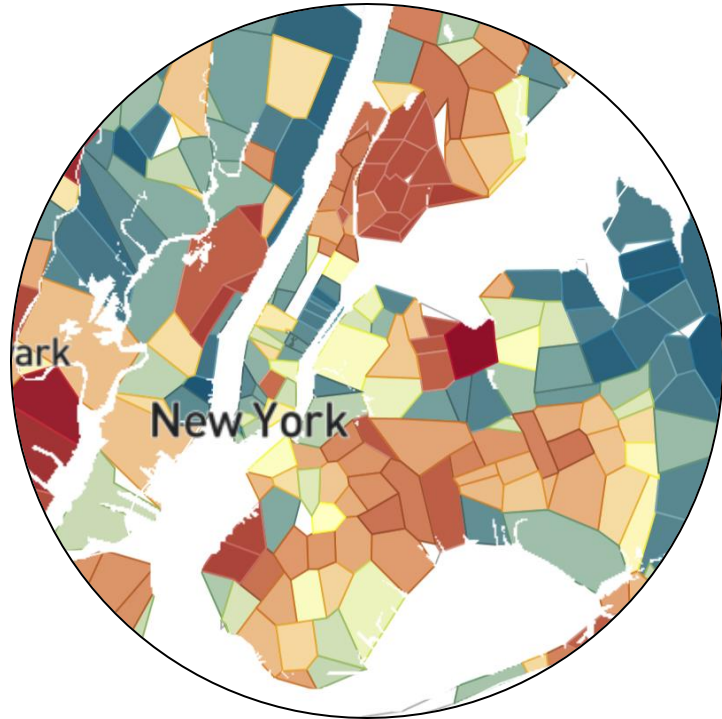
Share of Above-Median-Income Friends  
among Below-Median-Income People



# Upward Mobility and Social Capital

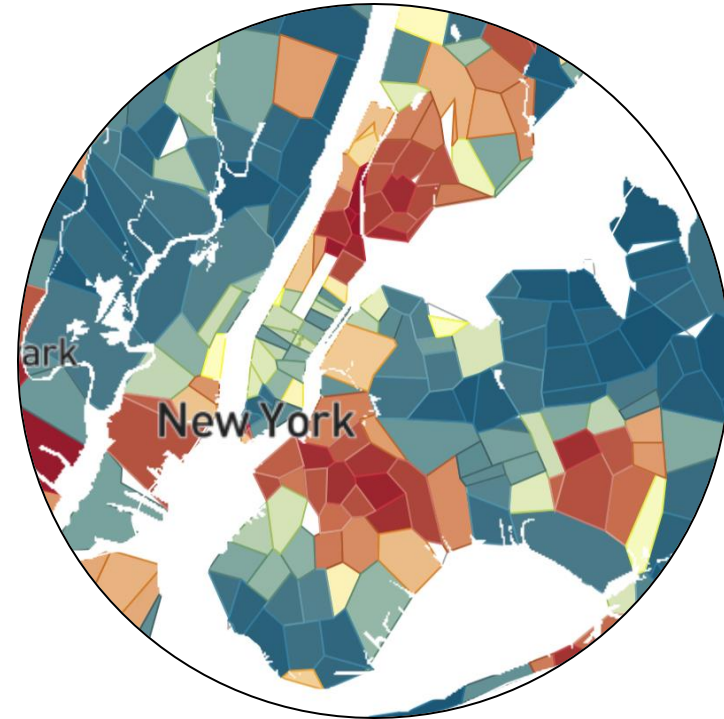
New York City

## Upward Mobility Based on Tax Records



Average Household Income at Age 35  
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## Economic Connectedness Based on Facebook Data

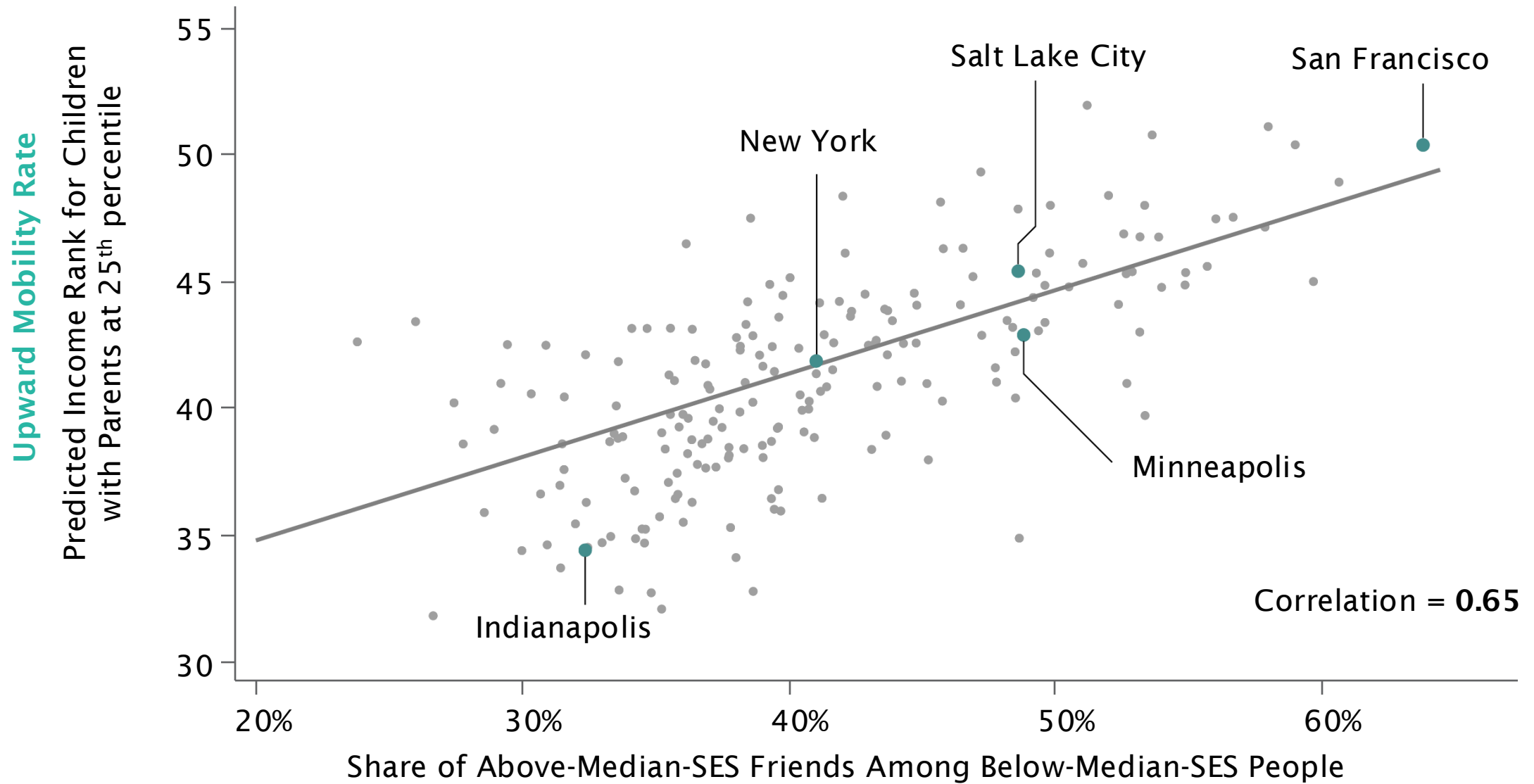


Share of Above-Median-Income Friends  
among Below-Median-Income People



# Upward Mobility vs. Economic Connectedness, by County

200 Largest Counties

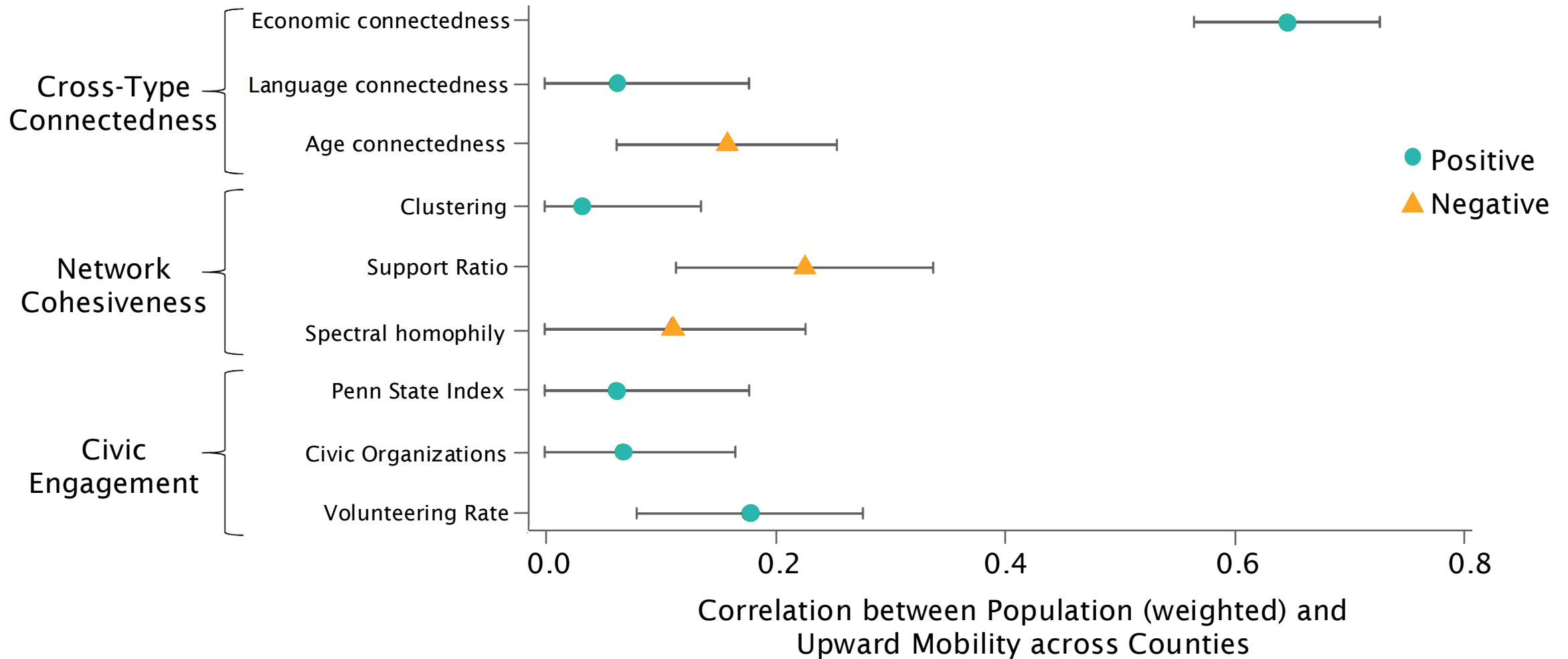


Source: Chetty, Jackson, Kuchler, Stroebel et al. (Nature 2022)



# Correlations between Upward Mobility and Measures of Social Capital

County-level Univariate Correlations



# Causal Effects of Economic Connectedness on Upward Mobility

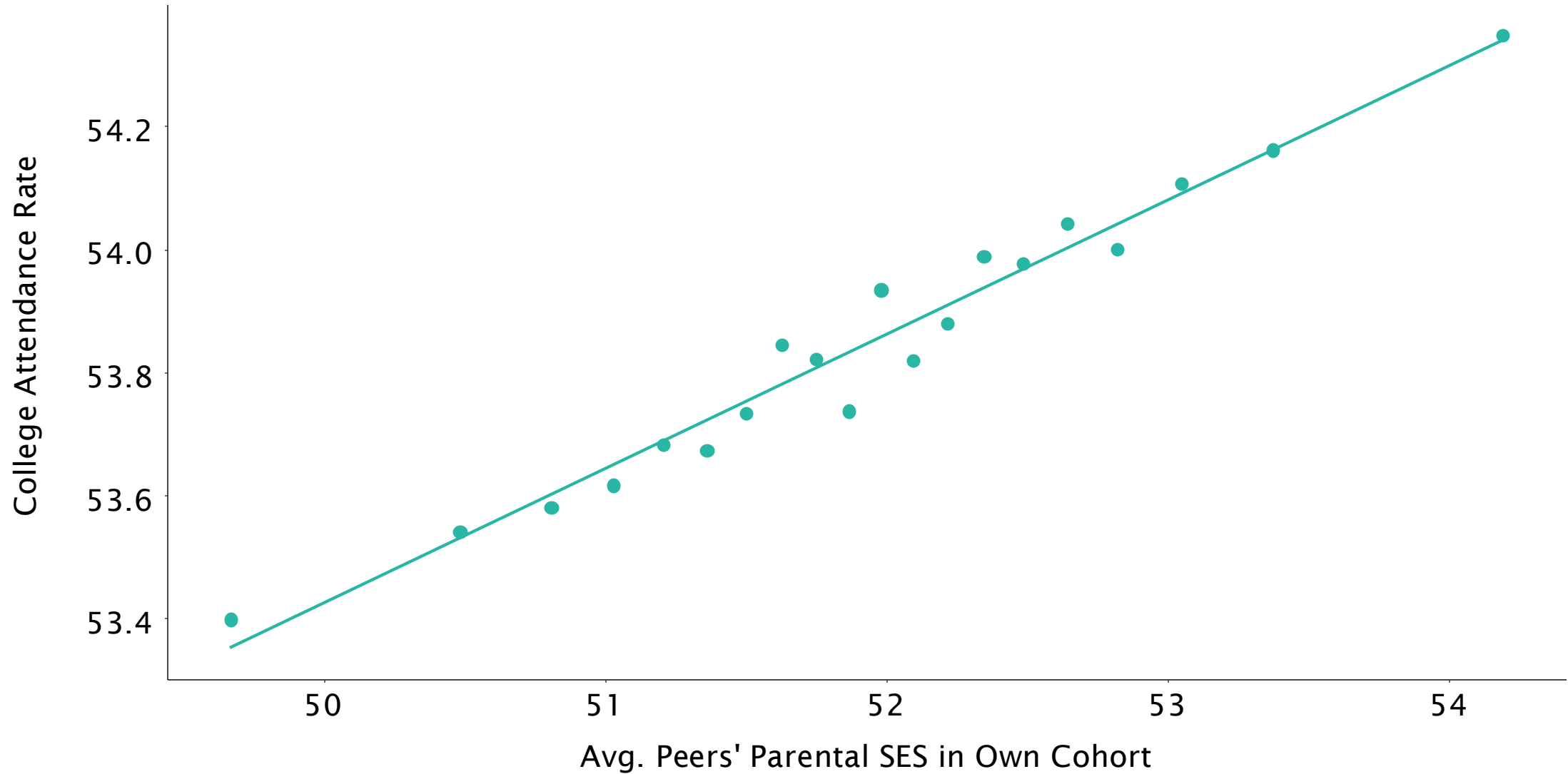
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- Does having higher SES friends have a **causal effect** on children's outcomes?  
[Chetty, Jackson, Johnston, Kuchler, Stroebel, Bailey 2026]
- Research design: use variation in socioeconomic backgrounds of school peers due to finite-sample random fluctuations across cohorts  
[following Hoxby 2001; Sacerdote 2011; Fletcher et al., 2020; Cattan et al., 2022; Campa 2025]
  - Average parent SES rank of peers fluctuates randomly across cohorts
  - Compare two students at same school: does student who has more high-SES peers in their cohort by chance earn more in adulthood?



# Causal Effect of Own-Cohort Composition Shock

College Attendance Rates



Source: Chetty, Jackson, Johnston, Kuchler, Stroebel, Bailey (2026)



# Causal Effect of Own-Cohort Composition Shock

Own Income in Adulthood



Source: Chetty, Jackson, Johnston, Kuchler, Stroebel, Bailey (2026)



# Why Do Peers with Higher-Income Parents Improve Outcomes?

## Exposure

(holding friending fixed)



Being in a classroom with high-income peers affects children's outcomes (e.g., information or effects on grading curve)

## Friending

(holding exposure fixed)



Befriending high-income peers affects children's outcomes (e.g., via connections or changes in aspirations)

Test between these explanations by exploiting homophily in friendship patterns across subgroups



# Using Homophily to Distinguish Friending vs. Exposure Effects

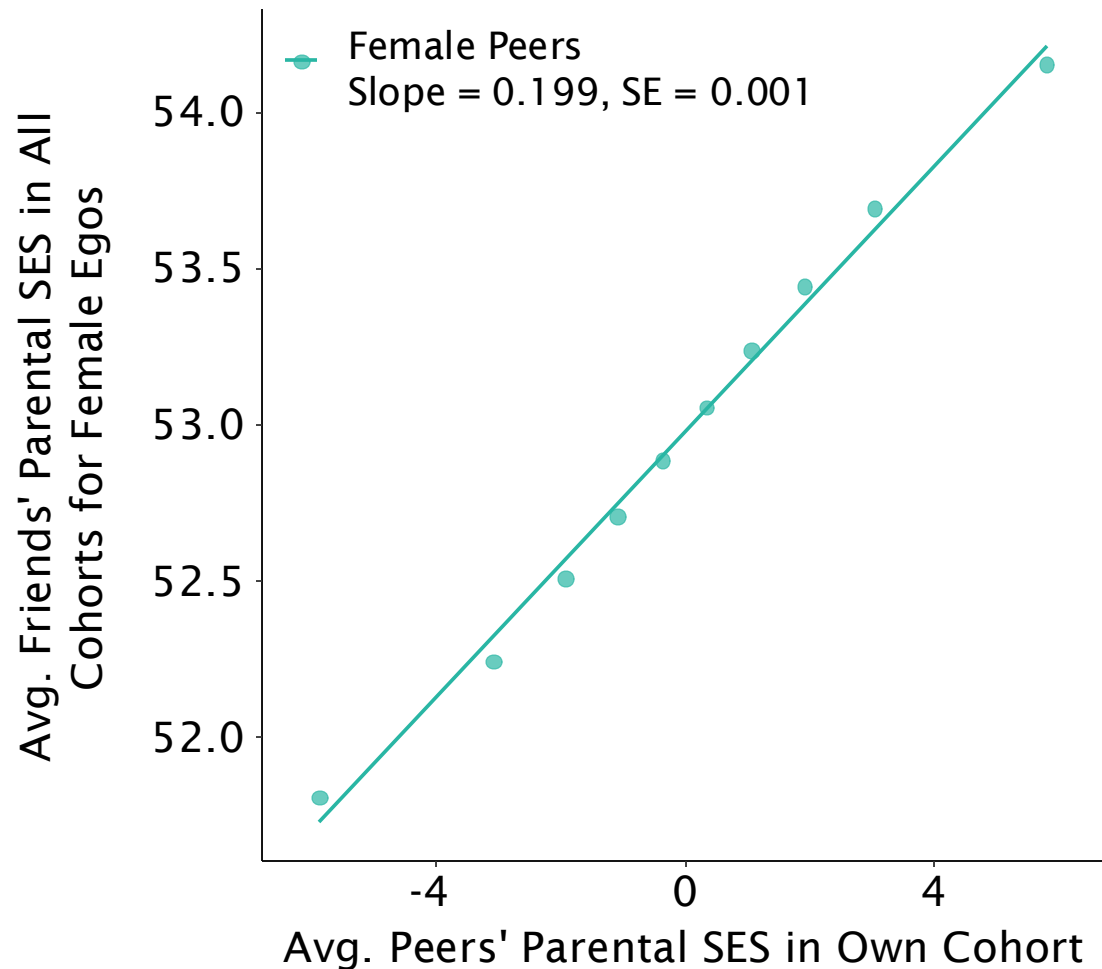
- Friendships exhibit homophily within subgroups
  - Ex: girls tend to have more female friends than male friends
- How do shocks to male vs. female peer parent SES affect girls' outcomes?
  - Exposure effect predicts that effects will be the same
  - Friending effect predicts that **female** peers' parent SES will matter more



# Effects of Shocks to Peers' Parents' SES on Girls' Own Adult SES Ranks

By Peer Gender

## Effect on Friends' Parent SES



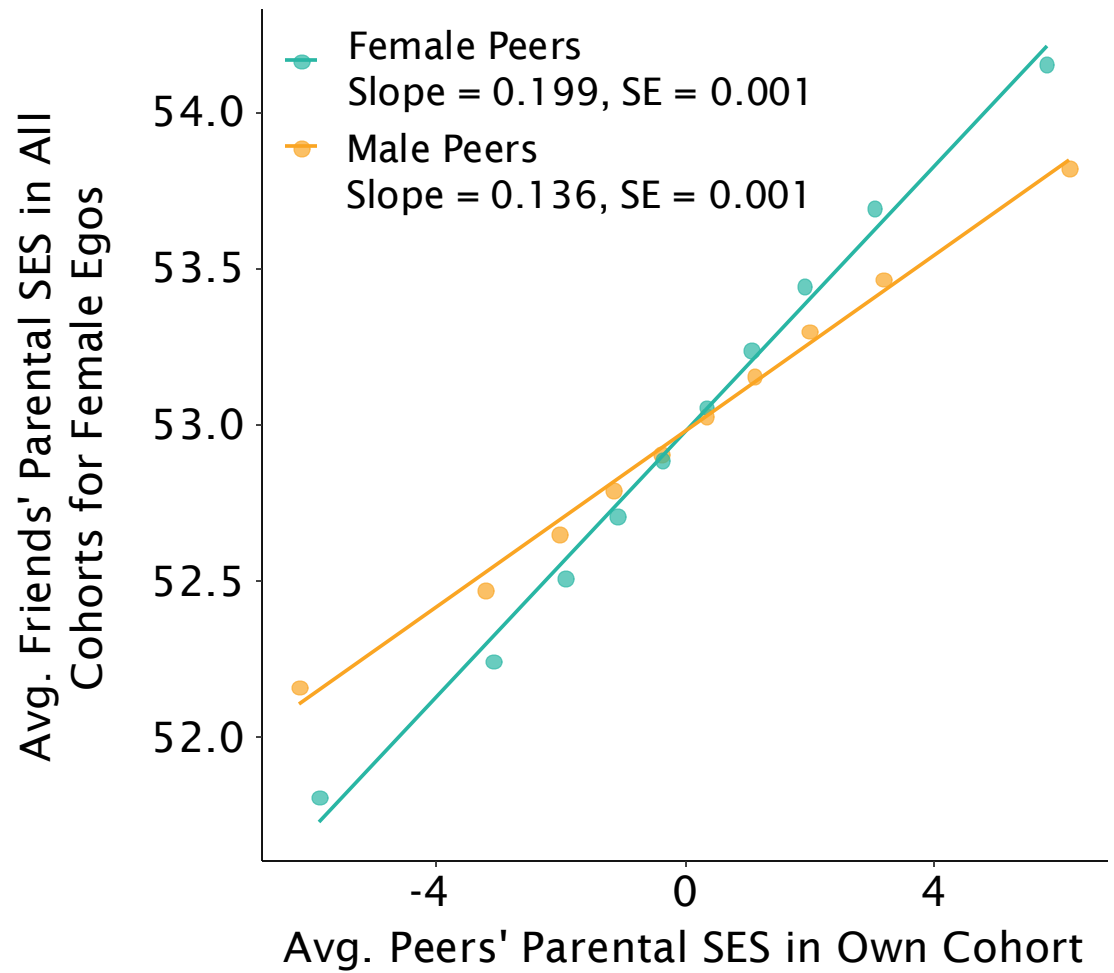
Source: Chetty, Jackson, Johnston, Kuchler, Stroebel Bailey (2026)



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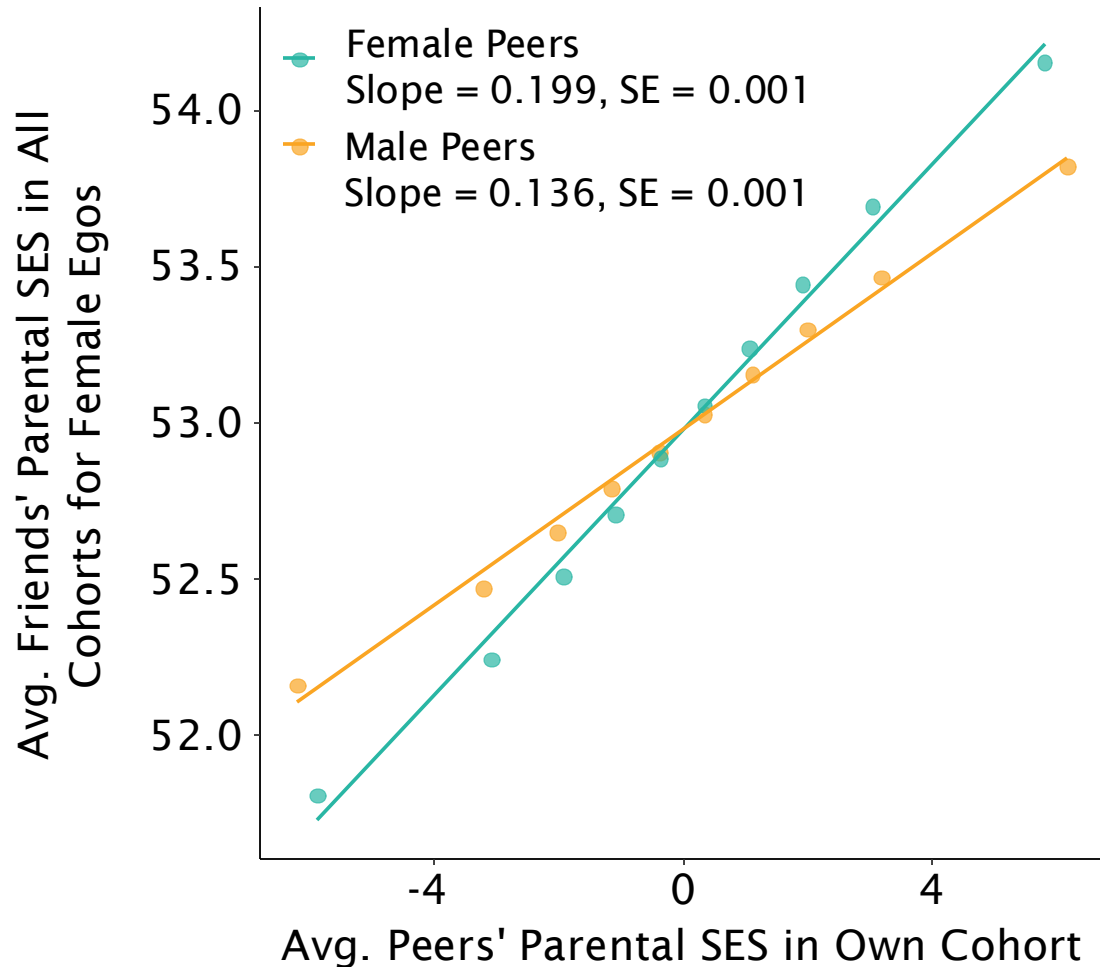
Source: Chetty, Jackson, Johnston, Kuchler, Stroebel Bailey (2026)



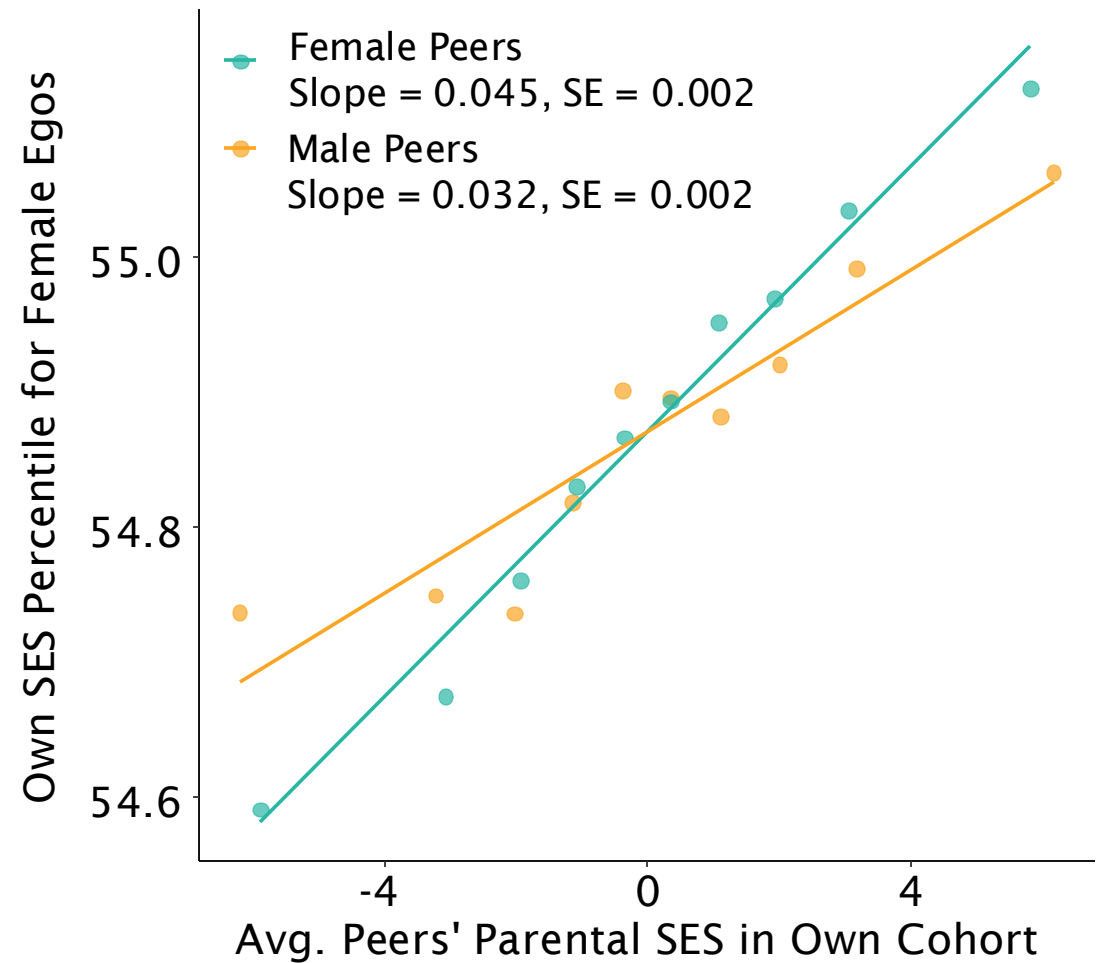
# Effects of Shocks to Peers' Parents' SES on Girls' Own Adult SES Ranks

By Peer Gender

## Effect on Friends' Parent SES



## Effect on Own SES in Adulthood



# Estimating Effect of Exposure vs. Friends

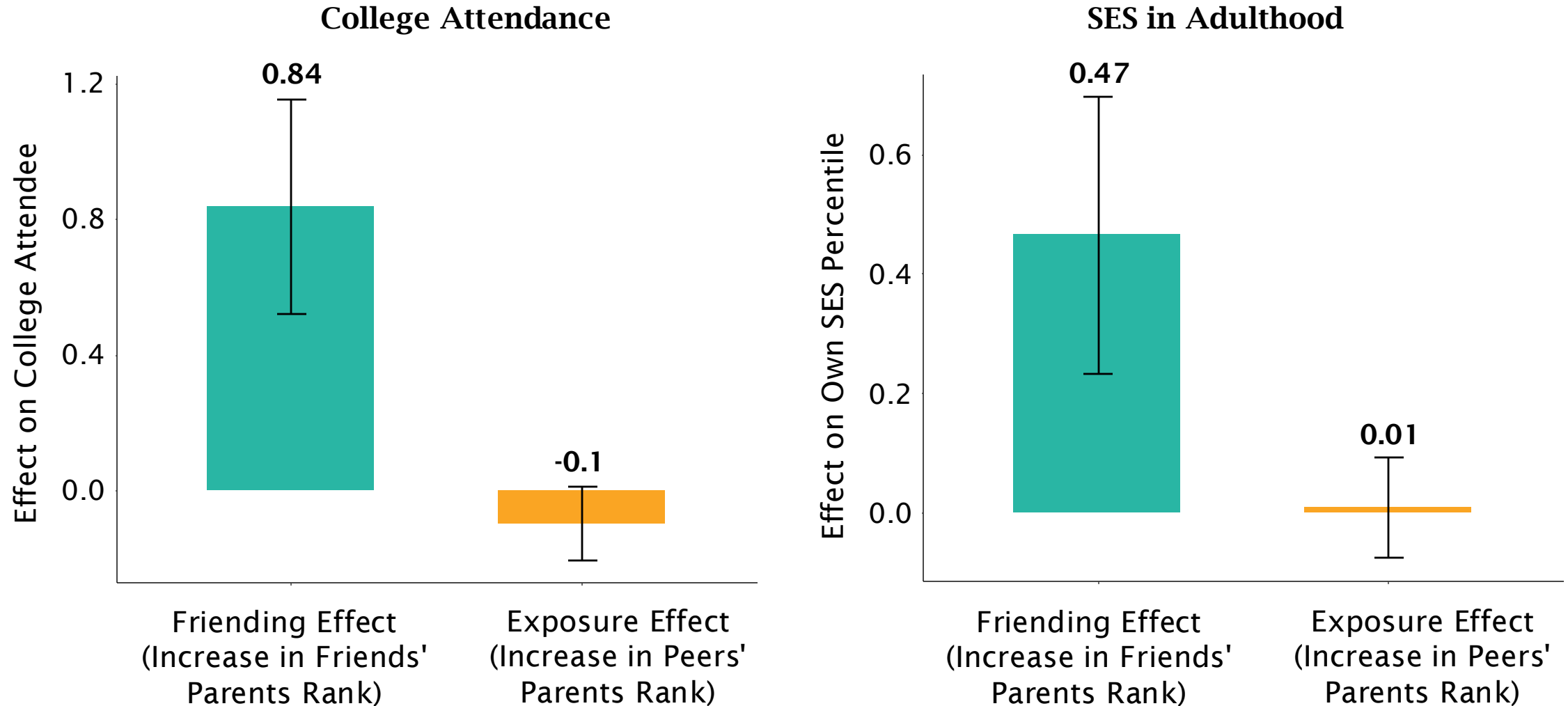
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- Identify exposure and friending effects by regressing children's outcomes in adulthood on both average peer rank and average friend rank in high school
- Instrument for average friend rank with subgroup-specific parent SES shocks interacted with subgroup indicators



# Effects of Exposure vs. Friending on Children's Long-Term Outcomes

Instrumental Variable Estimates

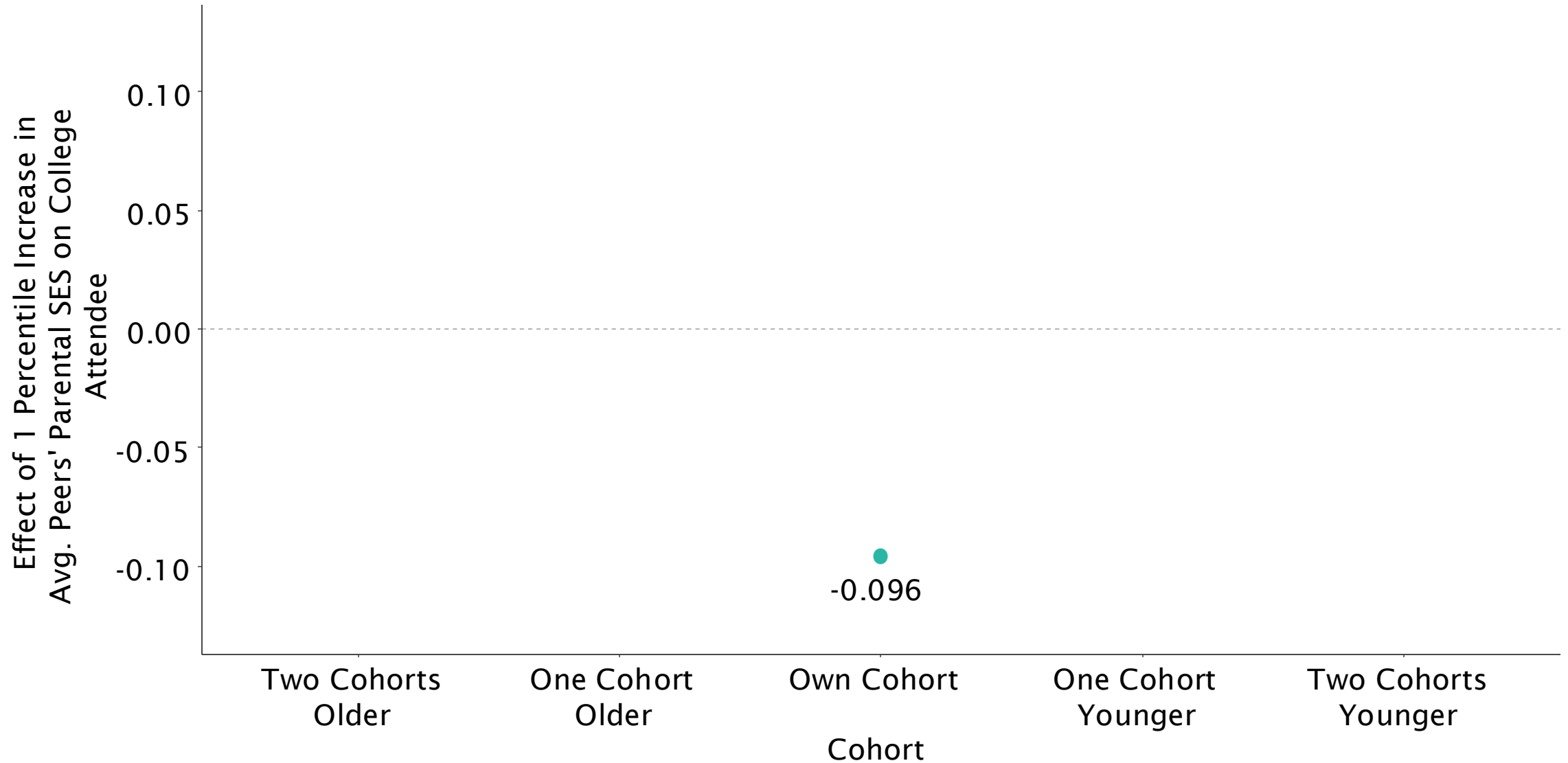


Source: Chetty, Jackson, Johnston, Kuchler, Stroebel Bailey (2026)



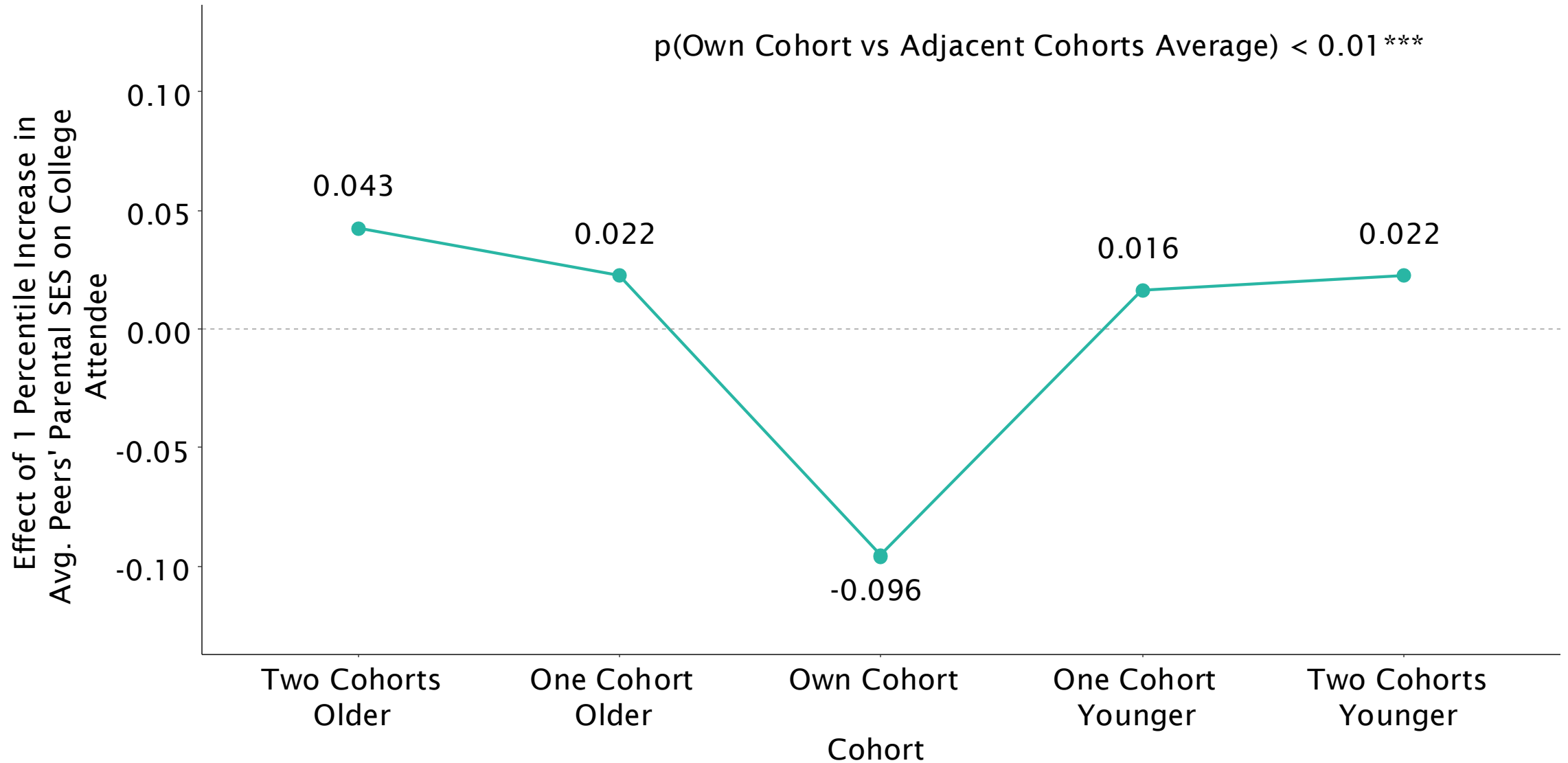
# Effects of Exposure on College Attendance

Instrumental Variable Estimates, by Cohort



# Effects of Exposure on College Attendance

Instrumental Variable Estimates, by Cohort



# The Importance of Cross-Class Connections for Economic Mobility

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- Cross-class friendships are central: income integration without interaction is not enough -- and may even be detrimental – for economic mobility
- Befriending higher-parental-income peers has large effects on own income in adulthood
  - 1 percentile increase in high school friends' parents SES raises own SES in adulthood by **0.47 percentiles**
  - Comparable to or larger than association with own-parent income: 1 percentile increase in own parent income increases own income by 0.35 percentiles



# An Equilibrium Theory of Social Capital and Economic Mobility



# Theories of Economic Mobility

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- Build a model of economic mobility informed by recent empirical evidence  
[Chetty and Jackson 2026]
- Goals: predict equilibrium outcomes and inform policies to promote mobility
- Begin with canonical economic model of income mobility as a benchmark  
[Becker and Tomes 1986]



# An Economic Model of Intergenerational Income Mobility

Becker and Tomes (1986)



Parent<sub>i</sub>



Child<sub>i</sub>



# An Economic Model of Intergenerational Income Mobility

Becker and Tomes (1986)



Parent<sub>i</sub>



Child<sub>i</sub>

$$Y_1^i = \theta_i e$$



child's  
income



# An Economic Model of Intergenerational Income Mobility

Becker and Tomes (1986)



Parent<sub>i</sub>



Child<sub>i</sub>

$$\max_e \underbrace{Y_0^i - e}_{\text{parent consumption}}$$

$$\underbrace{Y_1^i = \theta_i e}_{\text{child's income}}$$



# An Economic Model of Intergenerational Income Mobility

Becker and Tomes (1986)



Parent<sub>i</sub>



Child<sub>i</sub>

$$\max_e \underbrace{Y_0^i - e}_{\text{parent consumption}} + \underbrace{\delta E[Y_1^i]}_{\text{expected child utility}}$$

$$\underbrace{Y_1^i = \theta_i e}_{\text{child's income}}$$



# An Economic Model of Intergenerational Income Mobility

Becker and Tomes (1986)



Parent<sub>i</sub>



Child<sub>i</sub>

$$\max_e \underbrace{Y_0^i - e}_{\text{parent consumption}} + \underbrace{\delta E[Y_1^i]}_{\text{expected child utility}} \quad s.t. \quad \underbrace{e \leq Y_0^i}_{\text{liquidity constraint}} \quad \underbrace{Y_1^i = \theta_i e}_{\text{child's income}}$$



# An Economic Model of Intergenerational Income Mobility

Becker and Tomes (1986)



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Child<sub>i</sub>

$$\max_e \underbrace{Y_0^i - e}_{\text{parent consumption}} + \underbrace{\delta E[Y_1^i]}_{\text{expected child utility}} \quad s. t. \quad \underbrace{e \leq Y_0^i}_{\text{liquidity constraint}} \quad \underbrace{Y_1^i = \theta_i e}_{\text{child's income}}$$

Poverty persists across generations  $\left(\frac{dY_1}{dY_0} > 0\right)$  because  $\frac{de}{dY_0} > 0$  even if ability  $\theta_i \perp Y_0^i$



# An Economic Model of Intergenerational Income Mobility

Becker and Tomes (1986)



Parent<sub>i</sub>



Child<sub>i</sub>

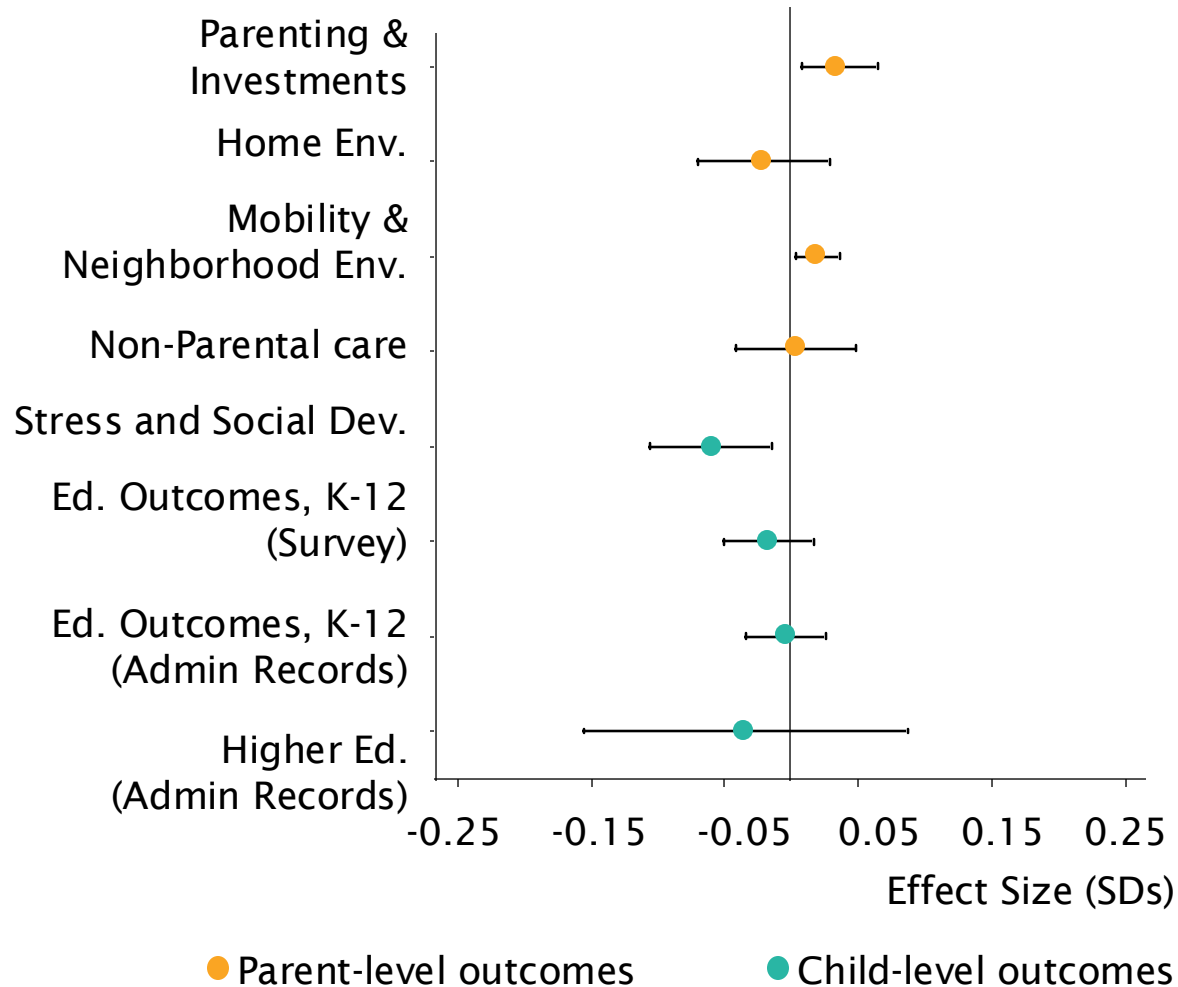
$$\max_e \underbrace{Y_0^i - e}_{\text{parent consumption}} + \underbrace{\delta E[Y_1^i]}_{\text{expected child utility}} \quad s. t. \quad \underbrace{e \leq Y_0^i}_{\text{liquidity constraint}} \quad \underbrace{Y_1^i = \theta_i e}_{\text{child's income}}$$

Poverty persists across generations  $\left(\frac{dY_1}{dY_0} > 0\right)$  because  $\frac{de}{dY_0} > 0$  even if ability  $\theta_i \perp Y_0^i$

→ **Prediction:** Loans for education or cash transfers increase upward mobility



# Impacts of Cash Transfers on Children's Outcomes



*“This paper examines the impact of a large, randomized cash transfer [\$1,000 per month for three years]. The transfer did not have a meaningful effect on most educational outcomes.”*

**Krause, Rhodes, Miller, Bartik, Broockman, and Vivaldi**, “The Impact of Unconditional Cash Transfers on Parenting and Children”



# Impacts of Cash Transfers on Children's Outcomes

## Wealth, Health, and Child Development: Evidence from Administrative Data on Swedish Lottery Players

Cesarini et. al (Quarterly Journal of Economics, 2016)

*"...our findings suggest that in affluent countries with extensive social safety nets, causal effects of wealth are not a major source of the wealth-mortality gradients, nor of the observed relationships between child developmental outcomes and household income."*

## Parental Resources and College Attendance: Evidence from Lottery Wins

Bulman et. al (American Economic Review, 2021)

*"We examine U.S. children whose parents won the lottery to trace out the effect of financial resources on college attendance. The results imply that...household financial constraints alone do not inhibit attendance."*

## The Long-Term Effects of Cash Assistance

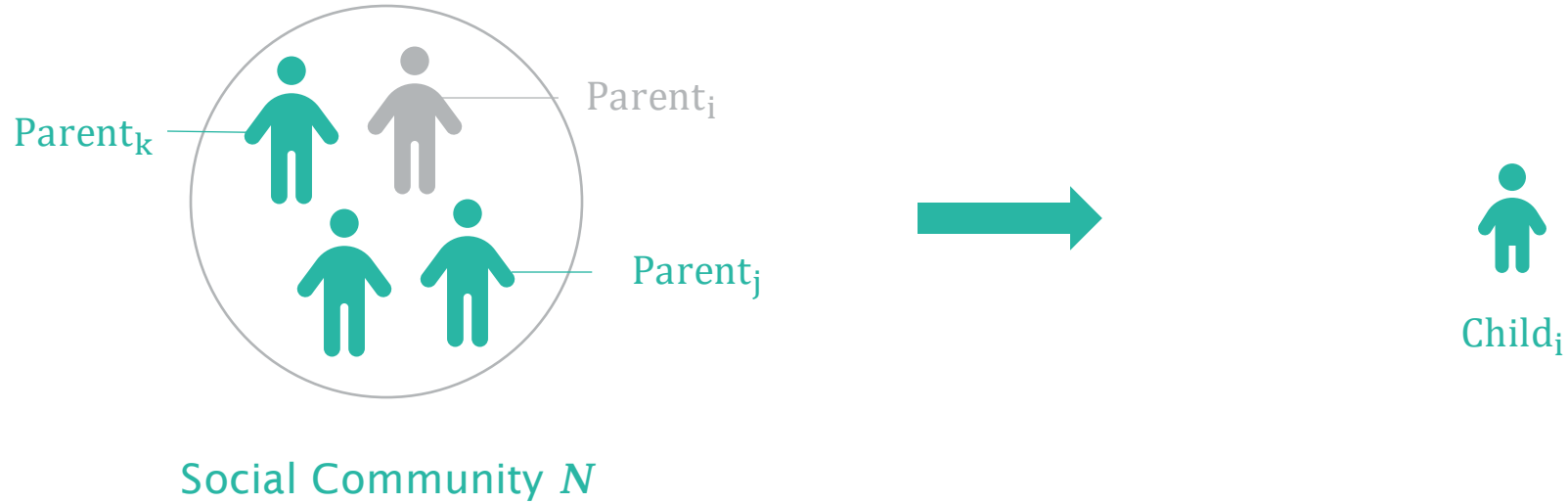
Price and Song (AEJ: Applied Economics, Forthcoming)

*"Treated families in [the Seattle-Denver Income Maintenance Experiment] received thousands of dollars in extra government benefits for three or five years....children experienced no significant effects on earnings."*



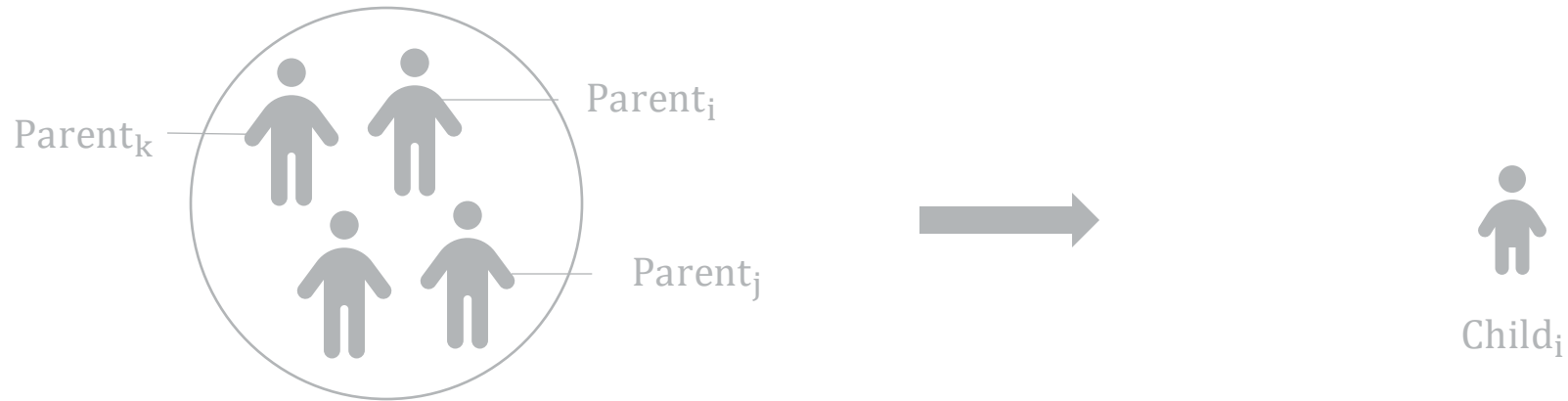
# A Model of Social Capital and Economic Mobility

Effects of Social Capital on Children's Outcomes



# A Model of Social Capital and Economic Mobility

Effects of Social Capital on Children's Outcomes



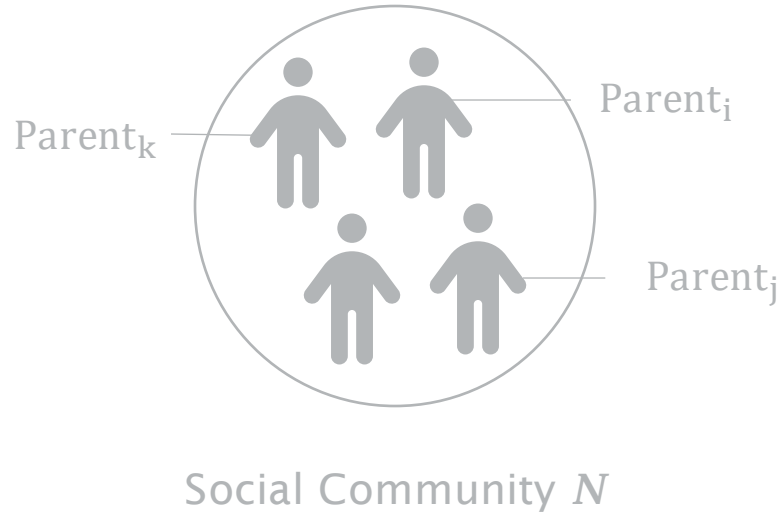
Social Community  $N$

$$\max_e Y_1^i = \underbrace{p\theta_i e}_{\text{payoff to education}}$$



# A Model of Social Capital and Economic Mobility

Effects of Social Capital on Children's Outcomes



Child<sub>i</sub>

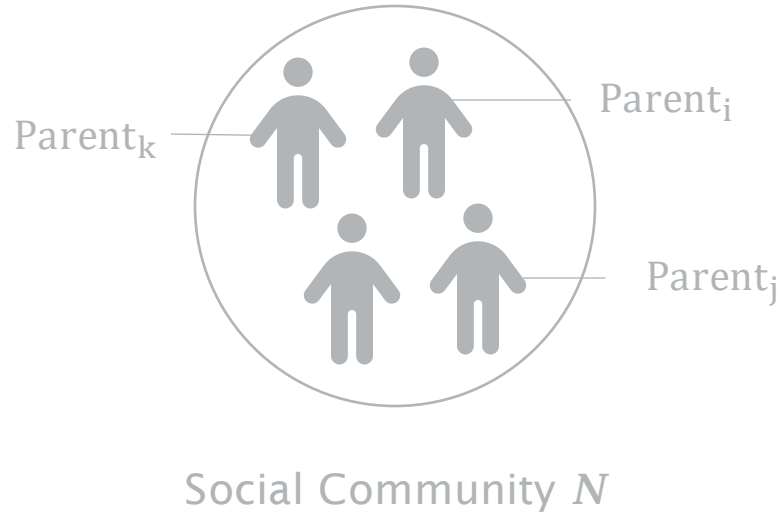
$$\max_e Y_1^i = p\theta_i e + \underbrace{(1-p)S_{i,N}}_{\text{social capital in neighborhood}}$$

social capital in neighborhood



# A Model of Social Capital and Economic Mobility

Effects of Social Capital on Children's Outcomes



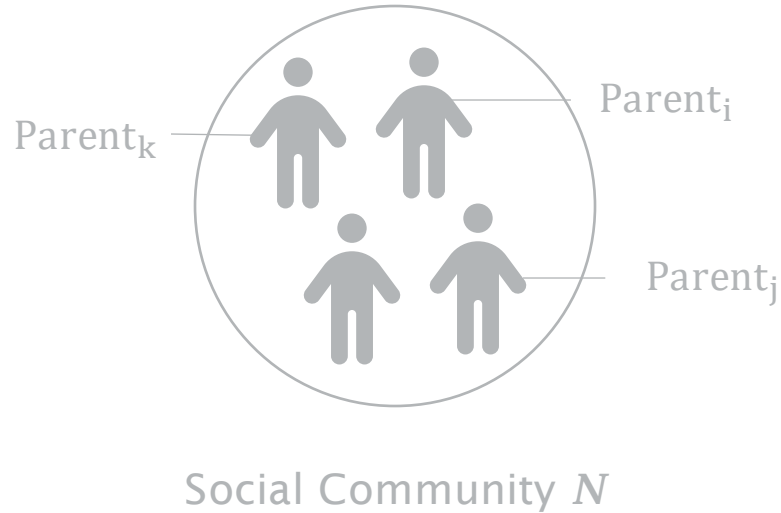
$$\max_e Y_1^i = p\theta_i e + (1-p)S_{i,N}$$

$$S_{i,N} = \left[ \underbrace{\lambda e_{p(i)}^\beta}_{\text{own parent}} + (1-\lambda) \underbrace{\bar{e}_N^\beta}_{\text{friends' parents}} \right]^{1/\beta}$$



# A Model of Social Capital and Economic Mobility

Effects of Social Capital on Children's Outcomes



$$\max_e Y_1^i = p\theta_i e + (1-p)S_{i,N}$$

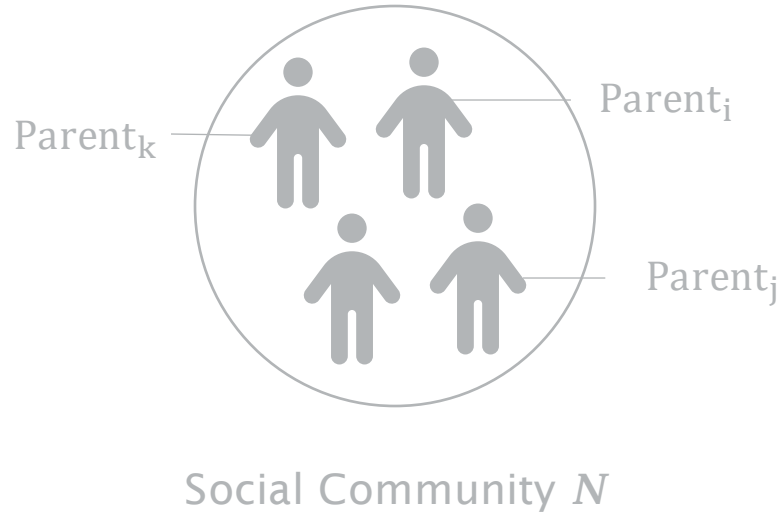
$$S_{i,N} = \left[ \underbrace{\lambda e_{p(i)}^\beta}_{\text{own parent}} + (1-\lambda) \underbrace{\bar{e}_N^\beta}_{\text{friends' parents}} \right]^{1/\beta}$$

$\lambda$  = importance of parents vs. friends' parents =  $\frac{1}{2}$



# A Model of Social Capital and Economic Mobility

Effects of Social Capital on Children's Outcomes



$$\max_e Y_1^i = p\theta_i e + (1 - p)S_{i,N}$$

$$S_{i,N} = \left[ \underbrace{\lambda e_{p(i)}^\beta}_{\text{own parent}} + (1 - \lambda) \underbrace{\bar{e}_N^\beta}_{\text{friends' parents}} \right]^{1/\beta}$$

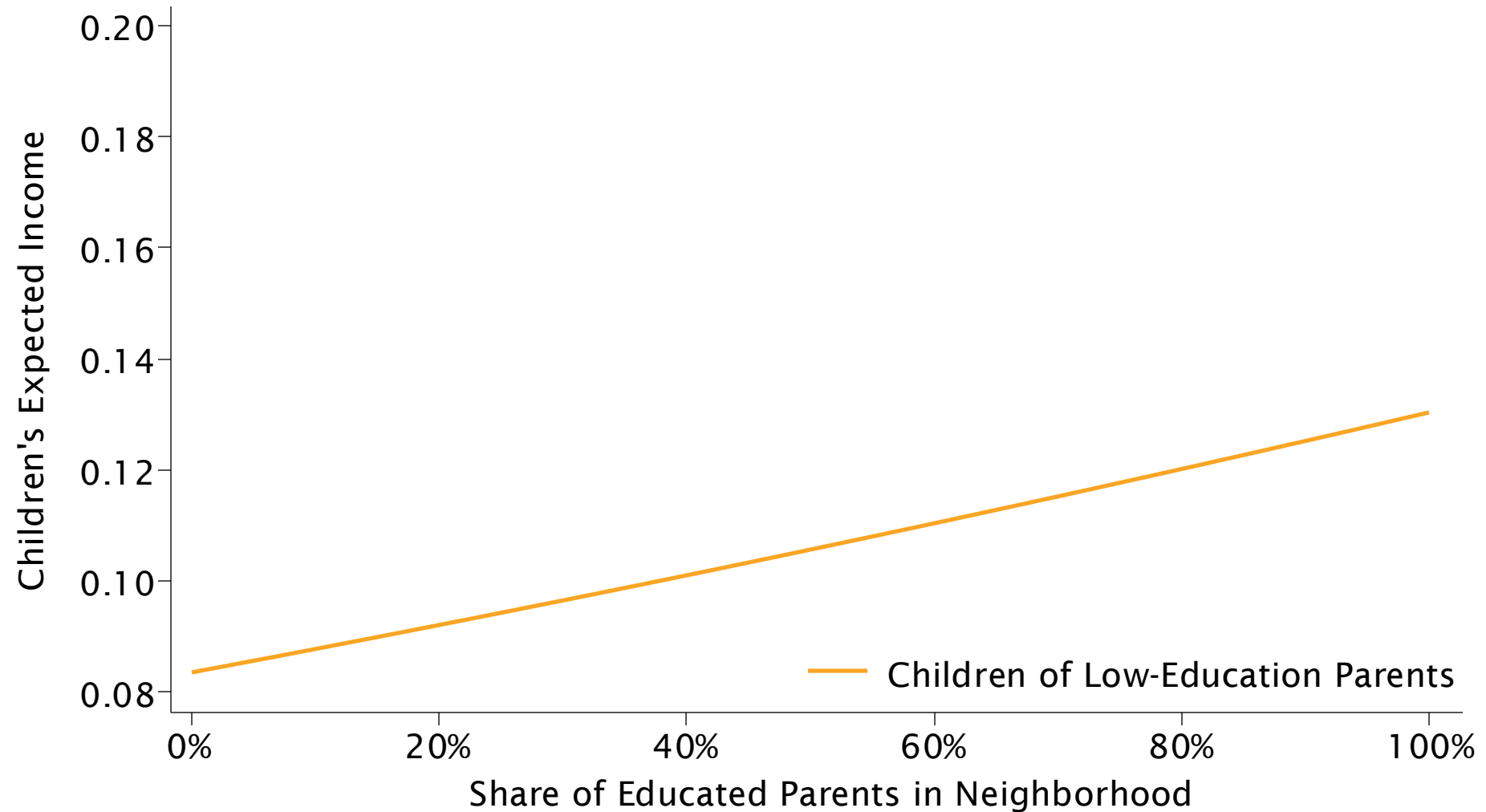
$\lambda$  = importance of parents vs. friends' parents

$\beta$  = elasticity of substitution between parents and friends



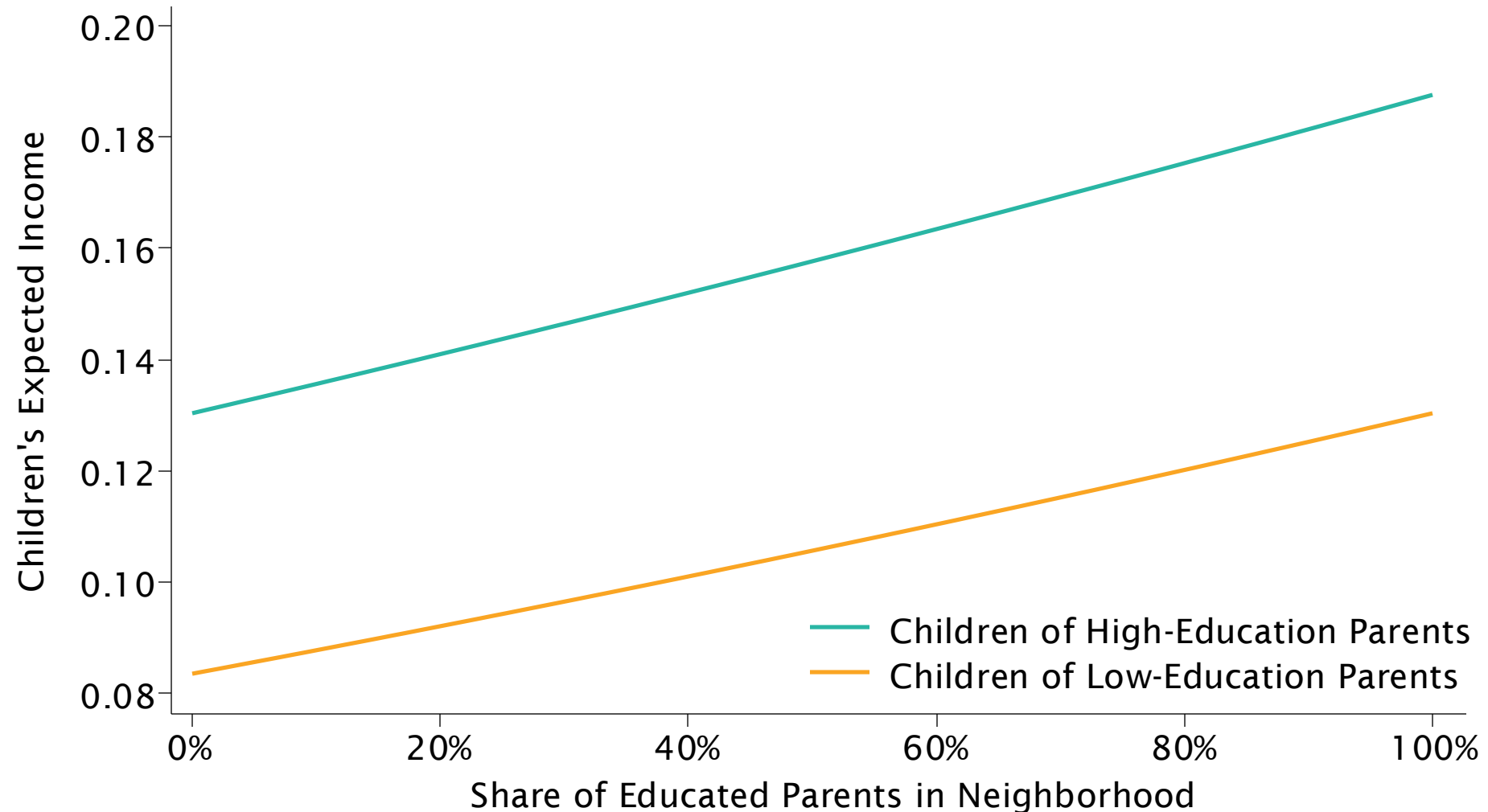
# Children's Expected Income vs. Mean Education in Neighborhood

$\beta = 1$



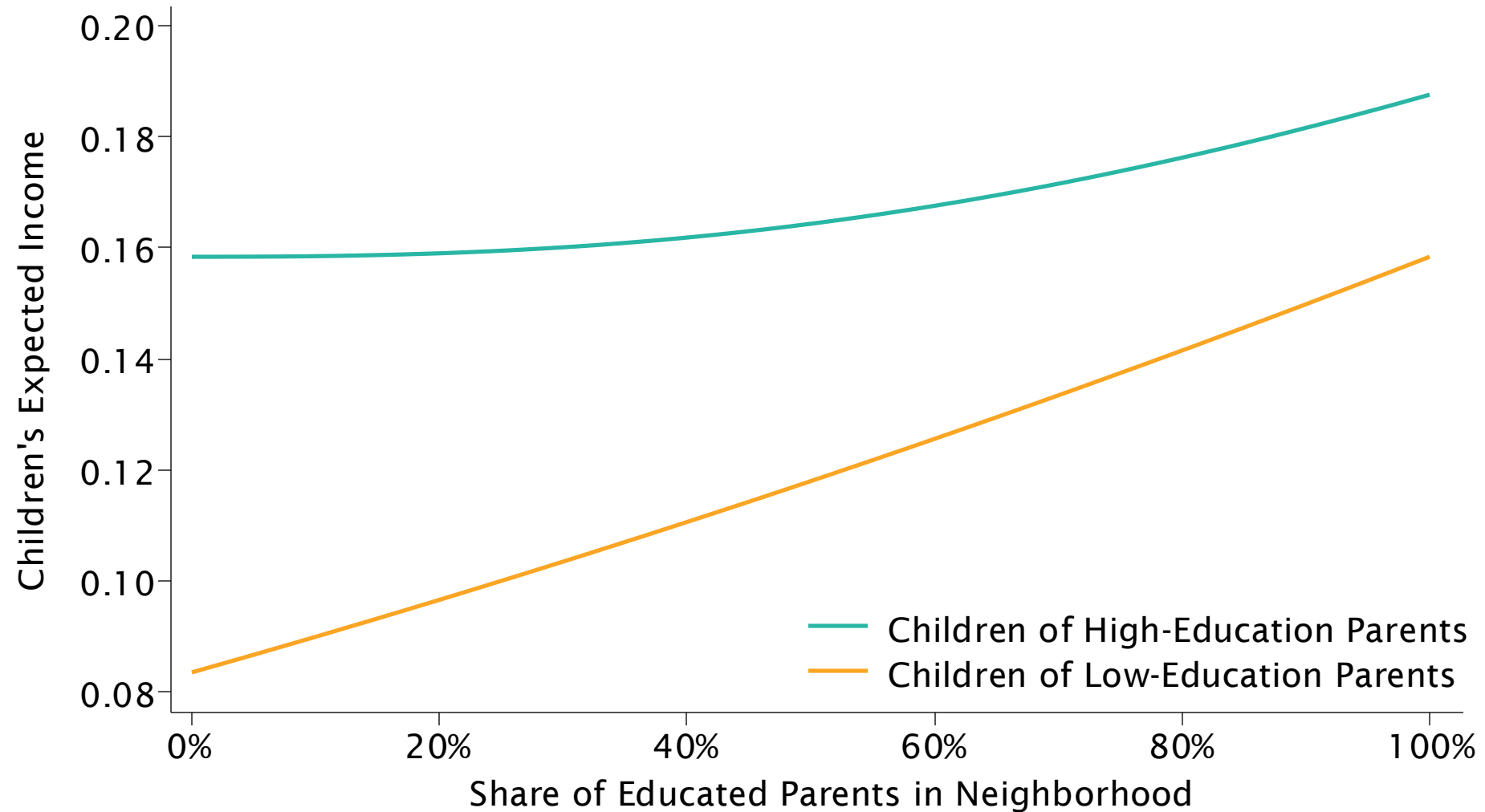
# Children's Expected Income vs. Mean Education in Neighborhood

$\beta = 1$



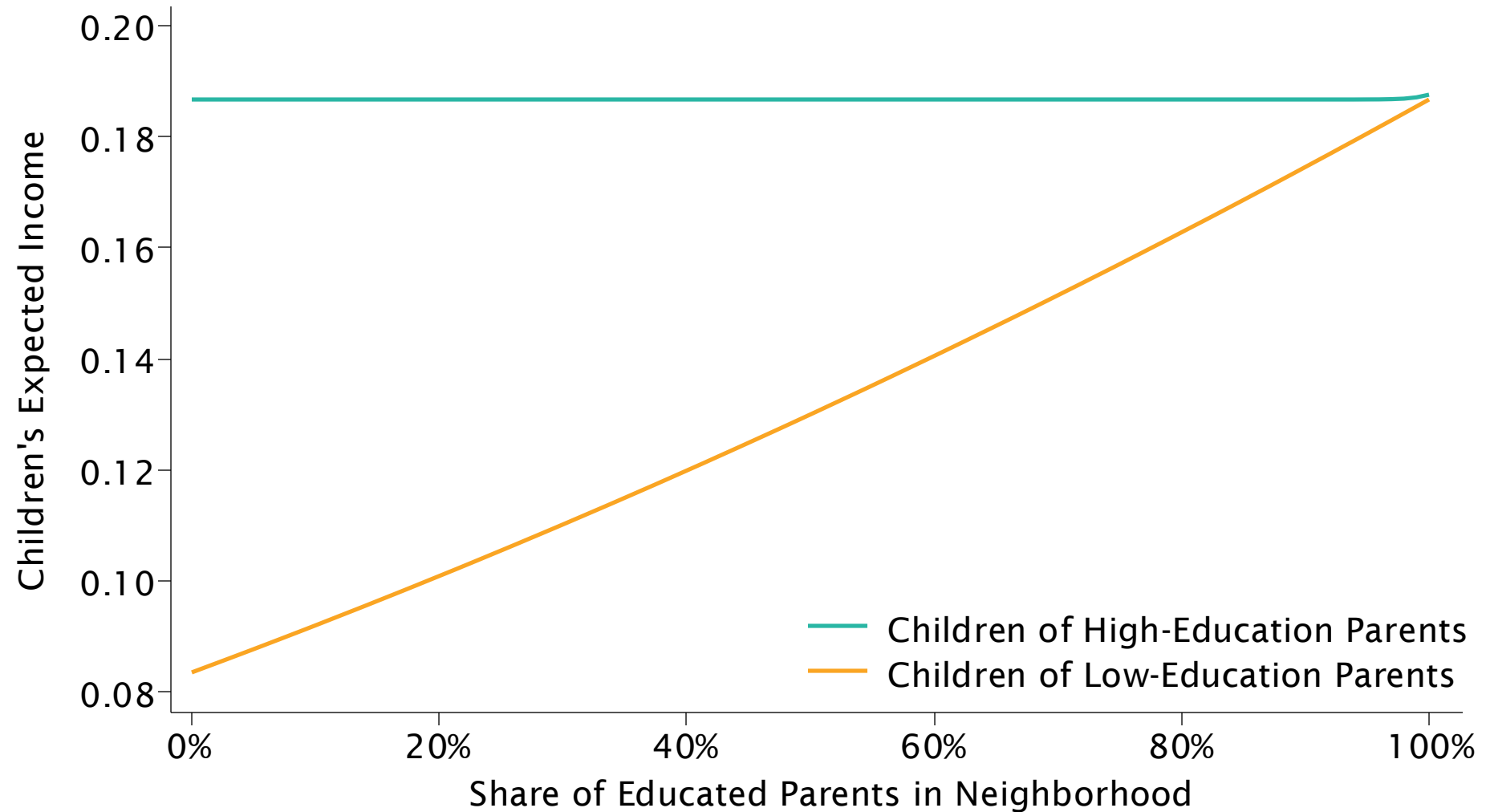
# Children's Expected Income vs. Mean Education in Neighborhood

$\beta = 2.5$



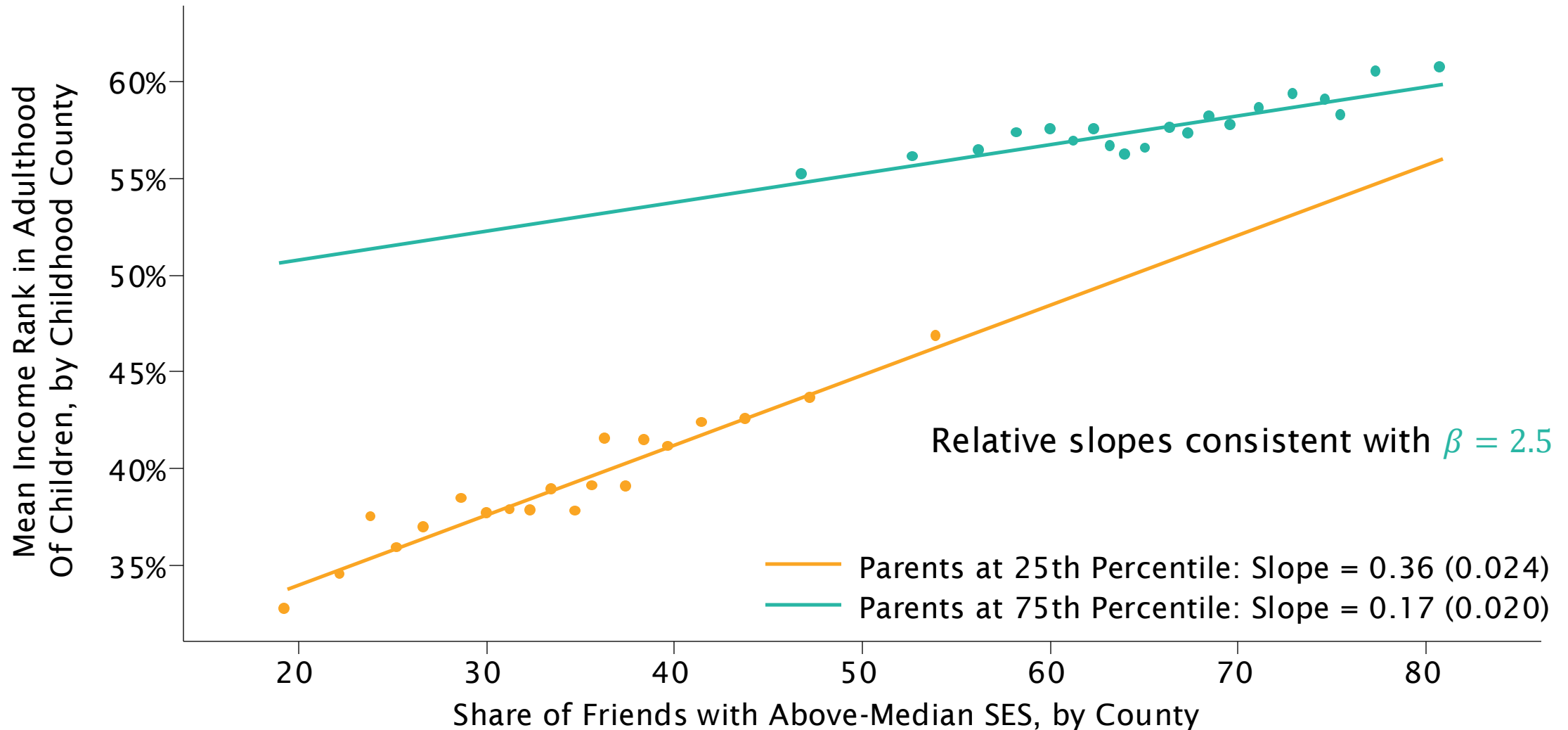
# Children's Expected Income vs. Mean Education in Neighborhood

$\beta = \infty$



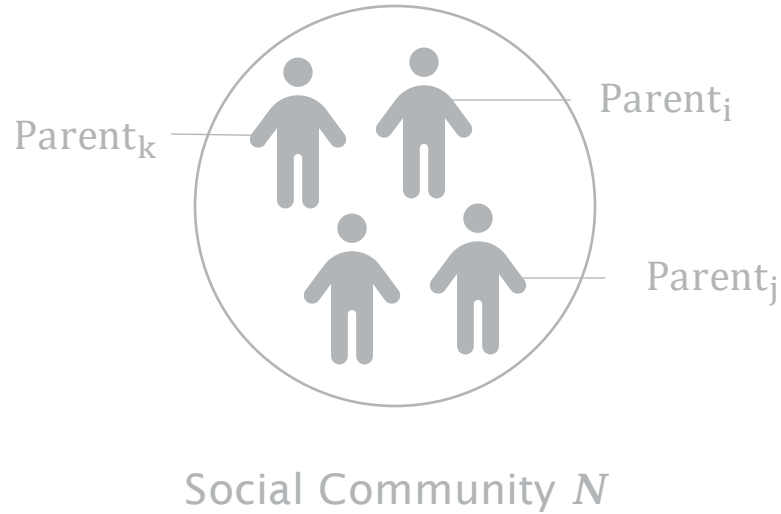
# Children's Income in Adulthood vs. High-Income Friend Share, by County

Empirical Estimates from Tax and Facebook Data



# A Model of Social Capital and Economic Mobility

Effects of Social Capital on Children's Outcomes



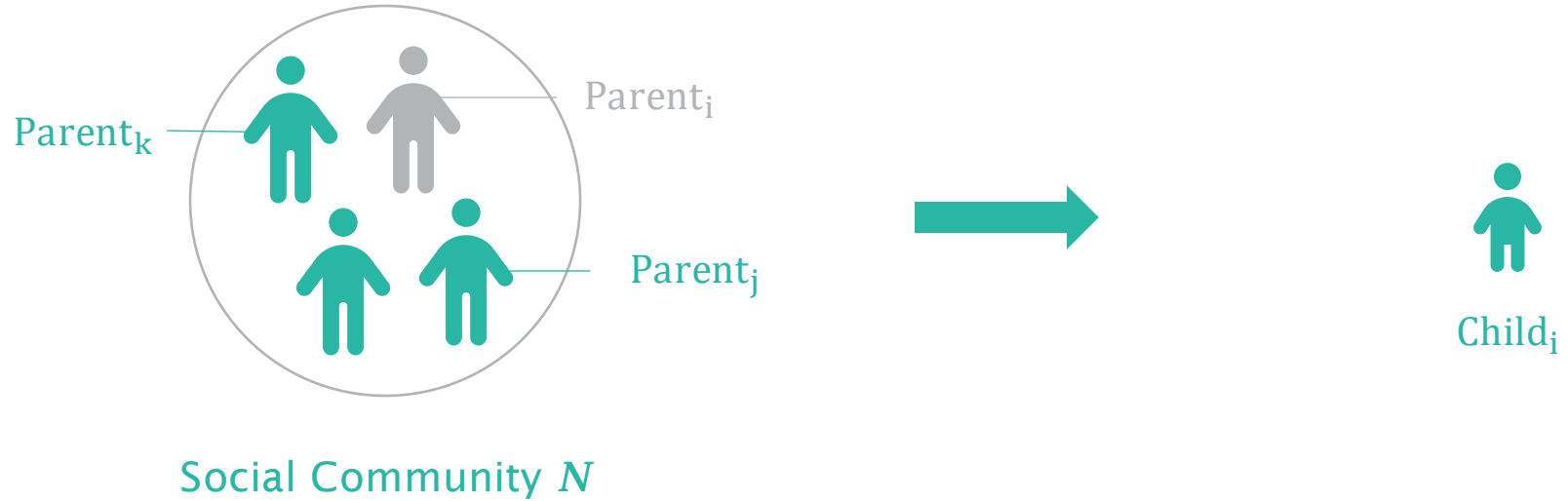
$$\max_e Y_1^i = p\theta_i e + (1 - p)S_{i,N} - \underbrace{c \cdot e}_{\text{cost of education}}$$

Child makes discrete choice of education:  $e \in \{0, e_H\}$



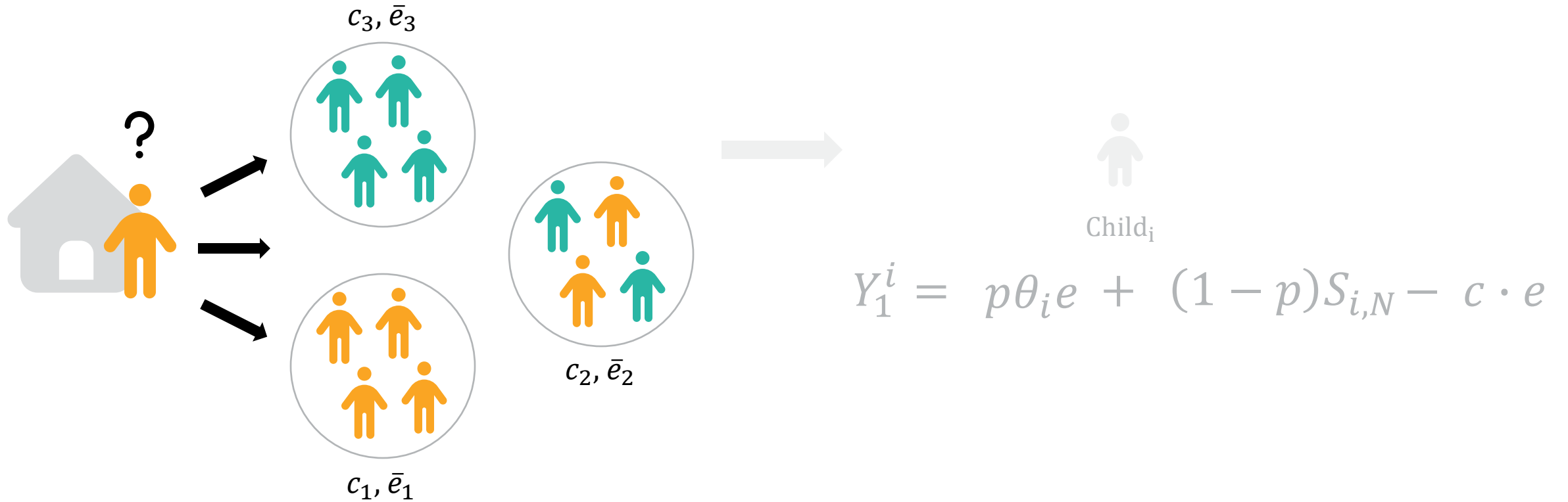
# A Model of Social Capital and Economic Mobility

Parent's Choice of Neighborhood



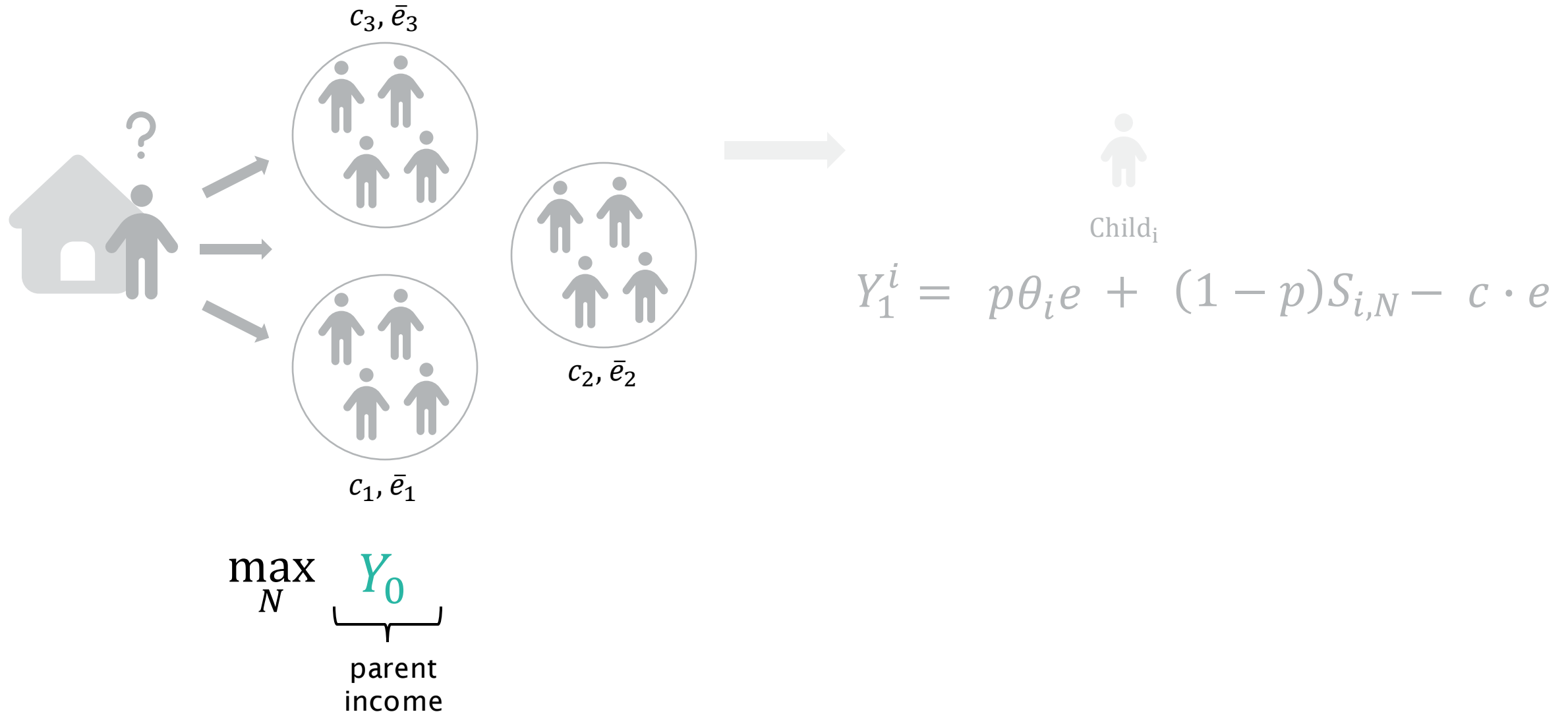
# A Model of Social Capital and Economic Mobility

## Parent's Choice of Neighborhood



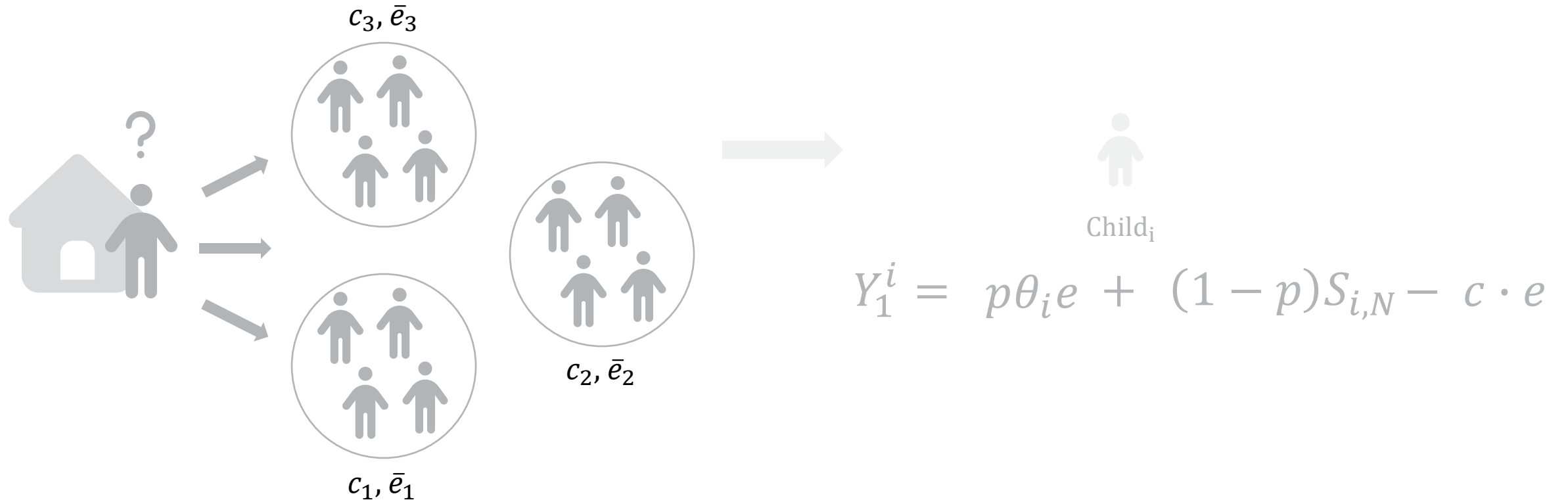
# A Model of Social Capital and Economic Mobility

## Parent's Choice of Neighborhood



# A Model of Social Capital and Economic Mobility

## Parent's Choice of Neighborhood

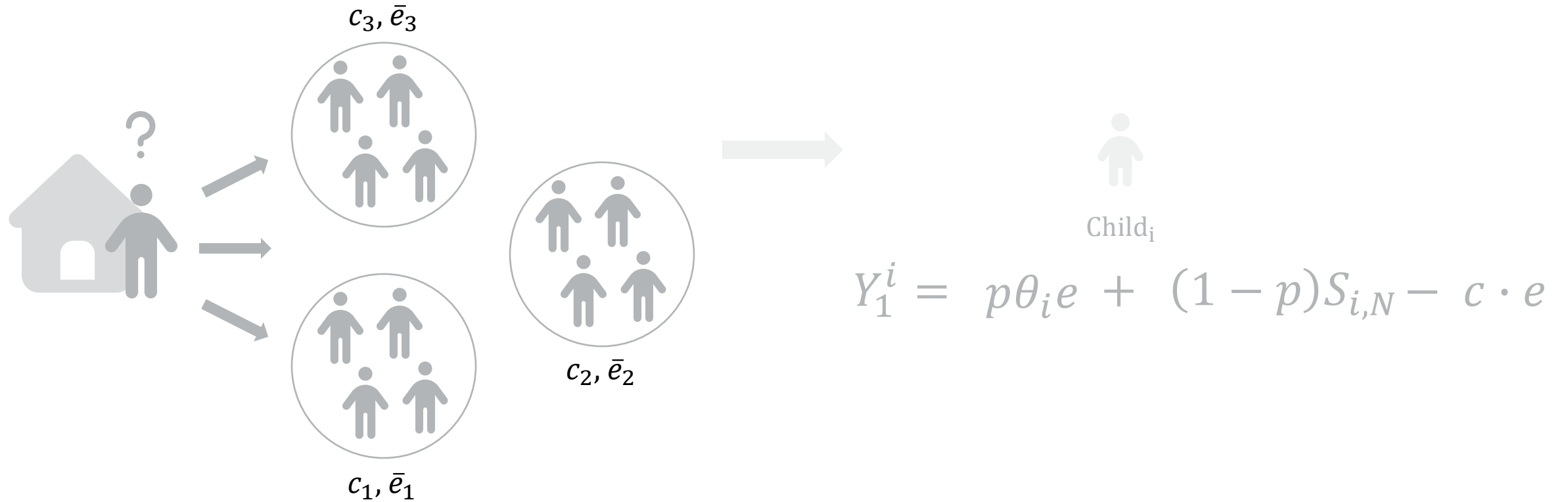


$$\max_N Y_0 + \underbrace{\delta E[Y_1^i]}_{\text{expected child utility}}$$



# A Model of Social Capital and Economic Mobility

## Parent's Choice of Neighborhood

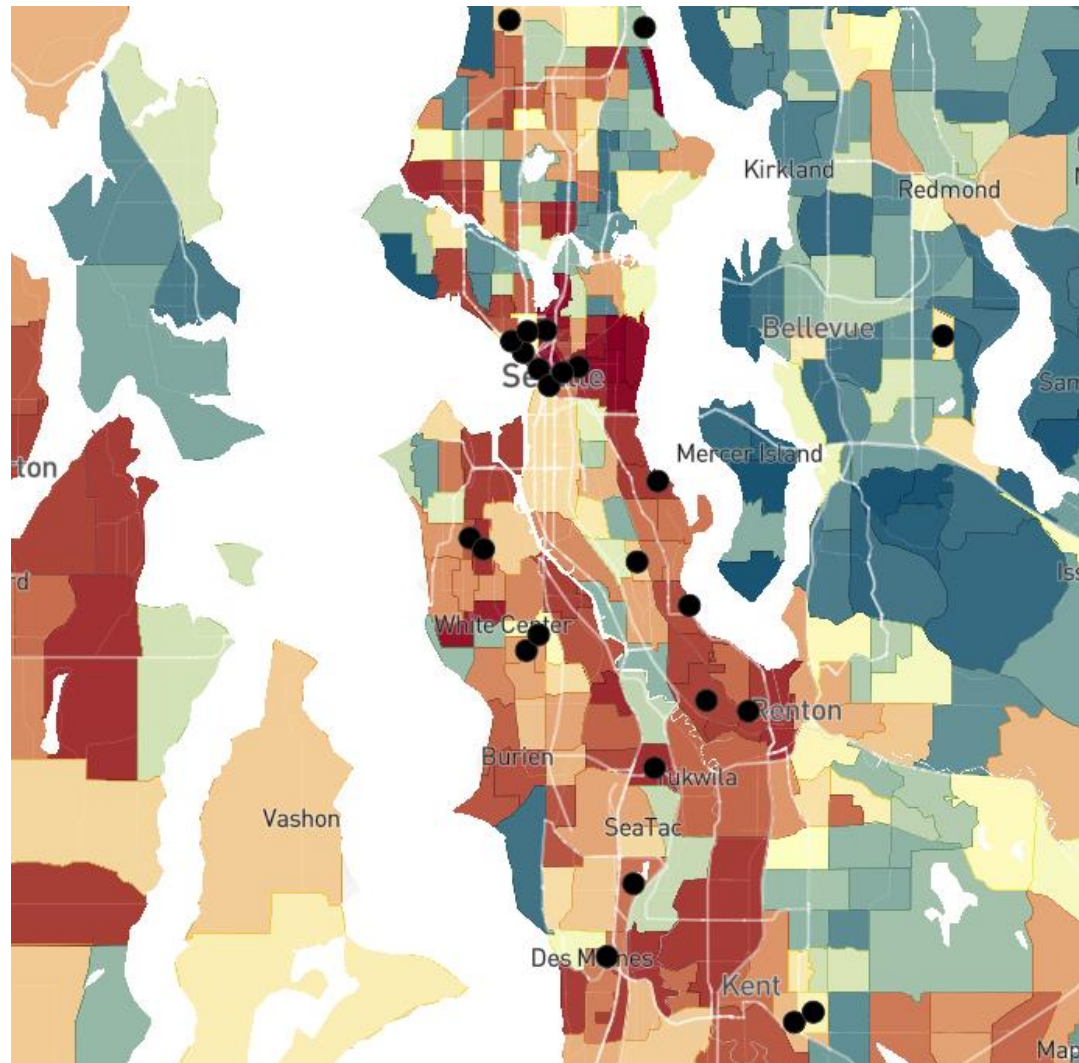


$$\max_N Y_0 + \delta E[Y_1^i] - \underbrace{c_N}_{\text{house price in nbhd. } N}$$

house price in  
nbhd.  $N$



# Where Housing Voucher Holders Live in Seattle



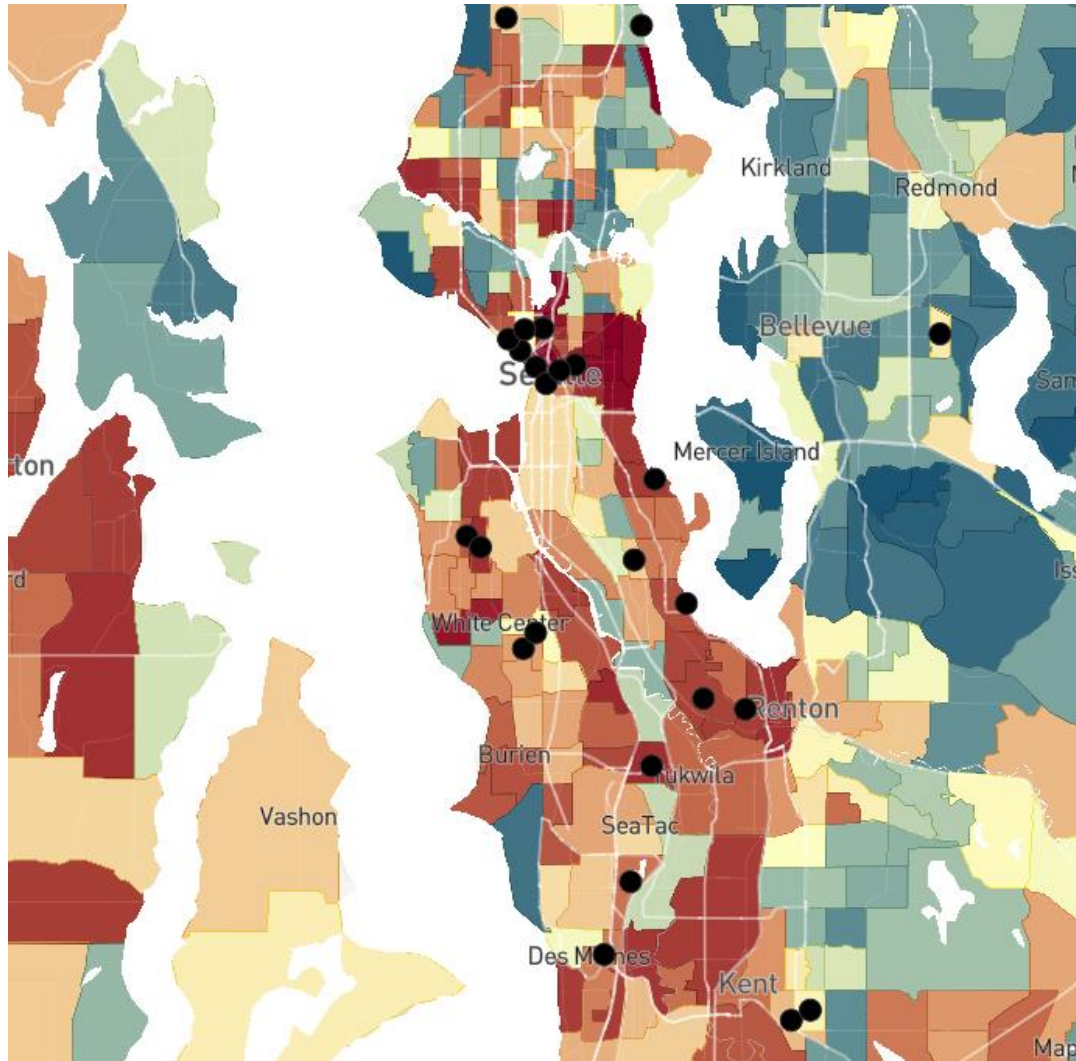
● 25 most common tracts where voucher holders lived in 2015-19

<\$36k    \$57k    >\$84k

Blue = More Upward Mobility  
Red = Less Upward Mobility



# Where Housing Voucher Holders Live in Seattle



*“We take advantage of a randomized housing voucher lottery in Chicago in 1997 to examine the long term impact of housing assistance.... Receipt of housing assistance has little, if any, impact on neighborhood or school quality or on a wide range of important child outcomes.”*

**Jacob, Kapustin & Ludwig**, “The Impact of Housing Assistance on Child Outcomes: Evidence from a Randomized Housing Lottery” (QJE 2015)

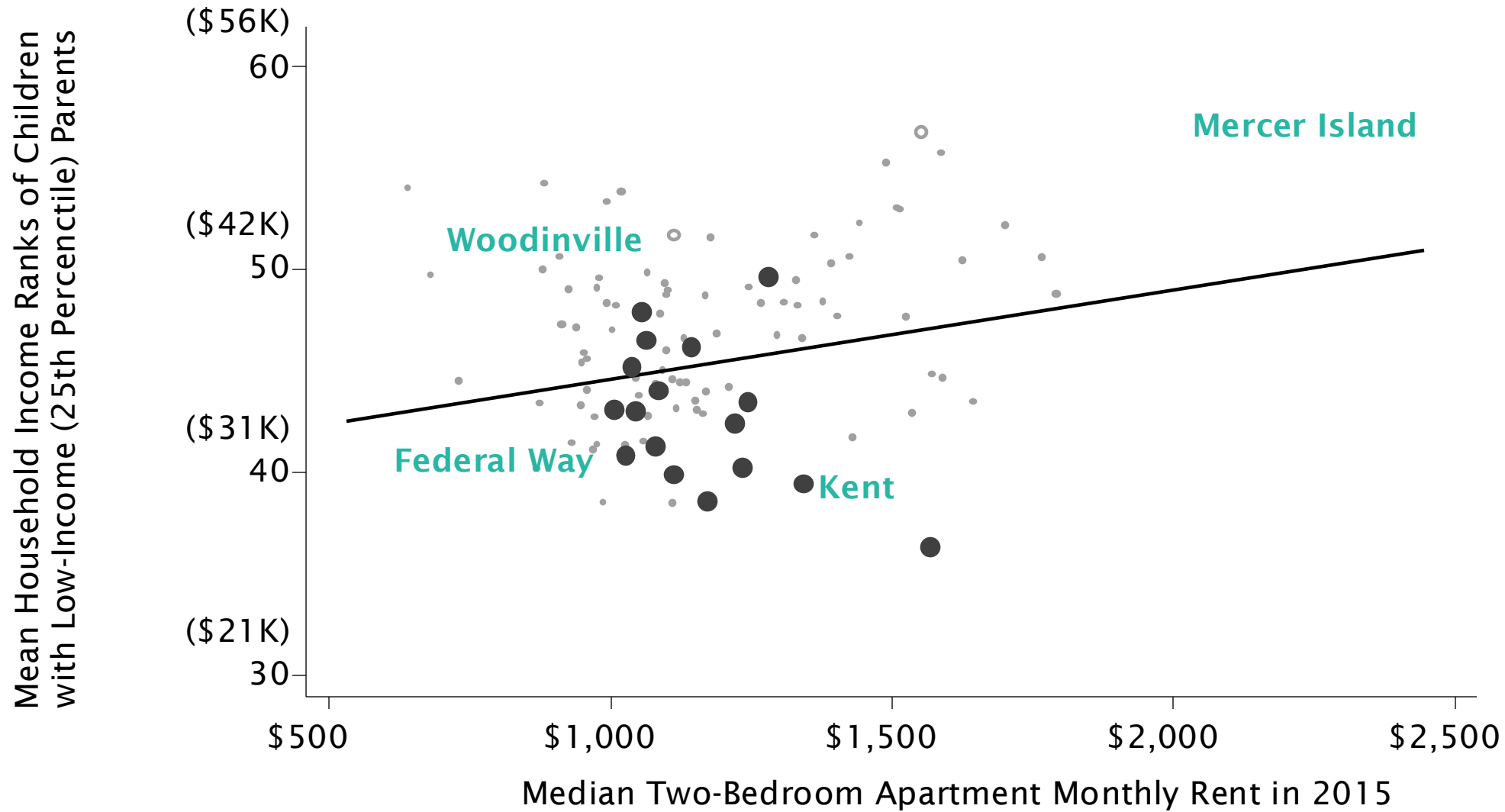
*“Parents were randomly selected to receive a \$1,000 per month...although treated families were more likely to move, we did not detect changes in most measures of neighborhood quality.”*

**Krause, Rhodes, Miller, Bartik, Broockman, & Vivaldi**, “The Impact of Unconditional Cash Transfers on Parenting and Children” (NBER 2026)



# The Price of Opportunity in King County

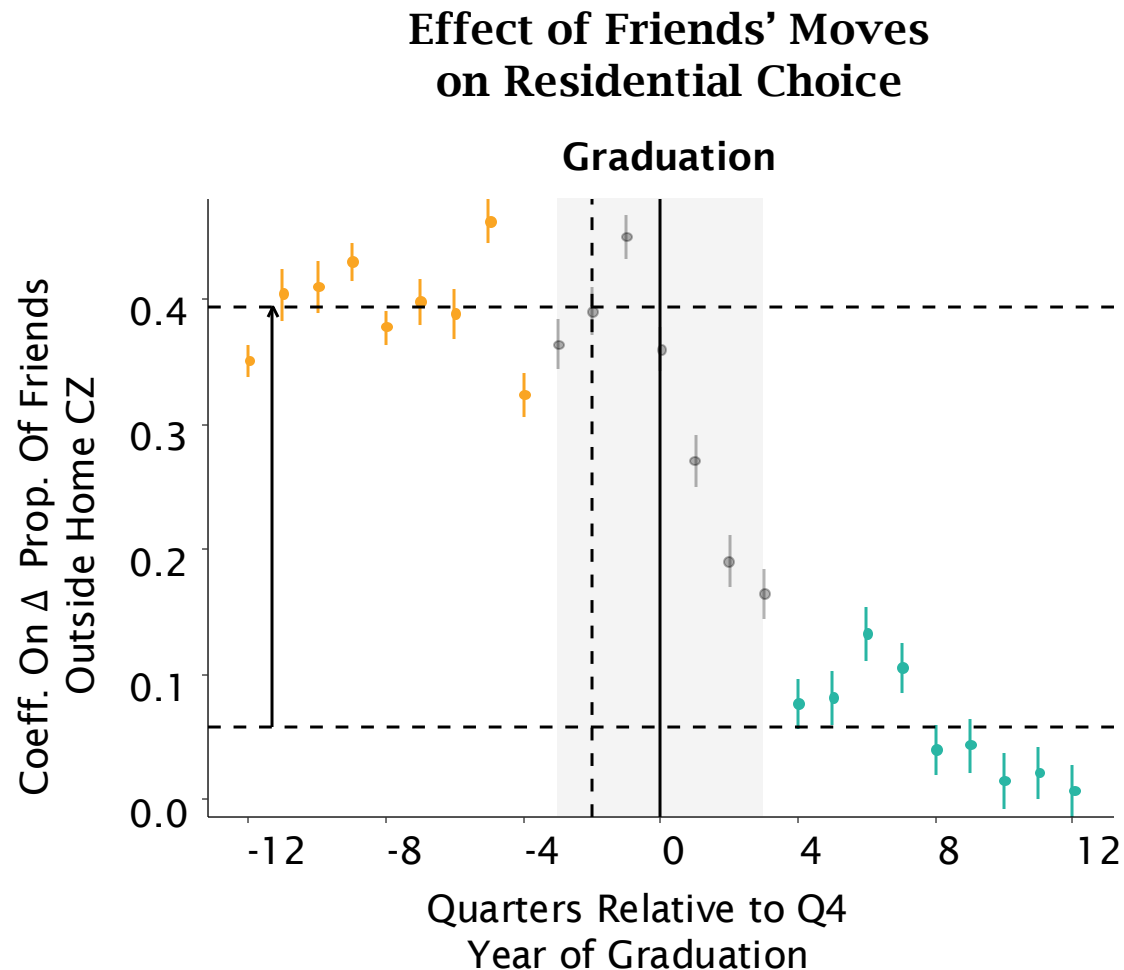
Upward Mobility vs. Rents, by Census Tract



Source: Chetty, Friedman, Hendren, Jones, Porter (AER 2026)



# Social Networks Shape Neighborhood Choice



*“When one randomly chosen African American moved from a Southern birth town to a destination county, then 1.9 additional Black migrants made the same move on average.”*

**Stuart and Taylor**, “Migration Networks and Location Decisions” (AEJ: Applied Economics 2021)

*“A one-standard-deviation increase in a sailor’s exposure to shipmates from different states raises the probability of out-migration from his own state by 4-5% by 1950.”*

**Green**, “Networks and Geographic Mobility: Evidence from World War II Navy Ships” (LSE wp 2024)

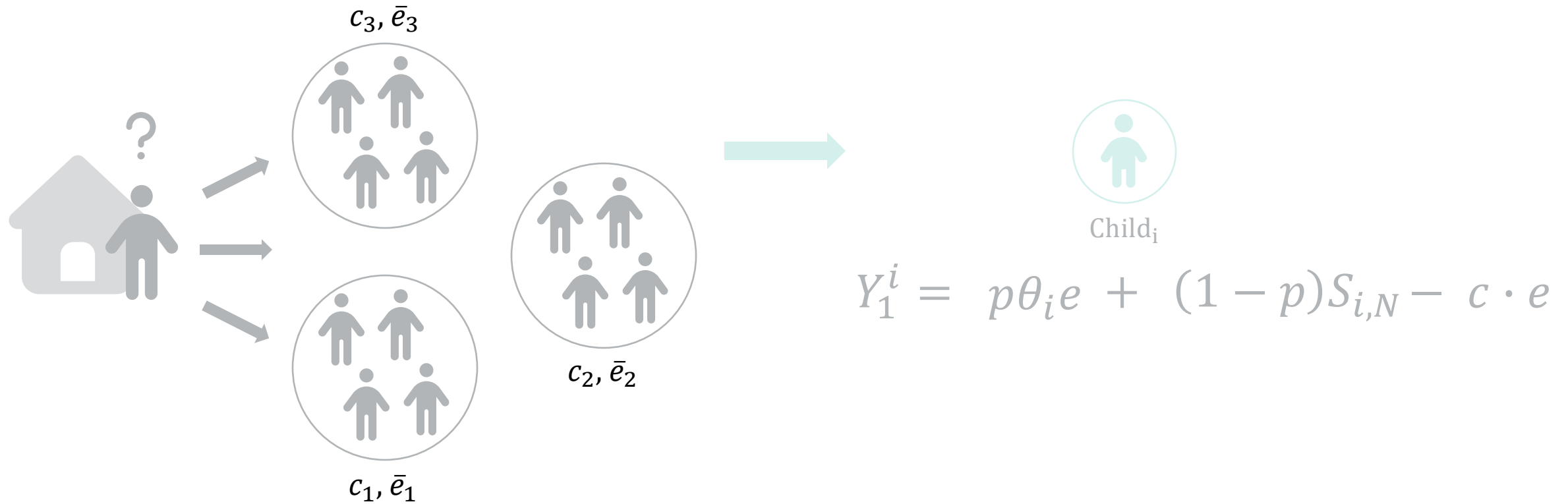
*“Minority families must trade off preferences for high-performing schools against preferences for a predominantly minority school.”*

**Hastings et. al**, “Heterogeneous Preferences and the Efficacy of Public School Choice” (NBER wp 2009)



# A Model of Social Capital and Economic Mobility

## Parent's Choice of Neighborhood

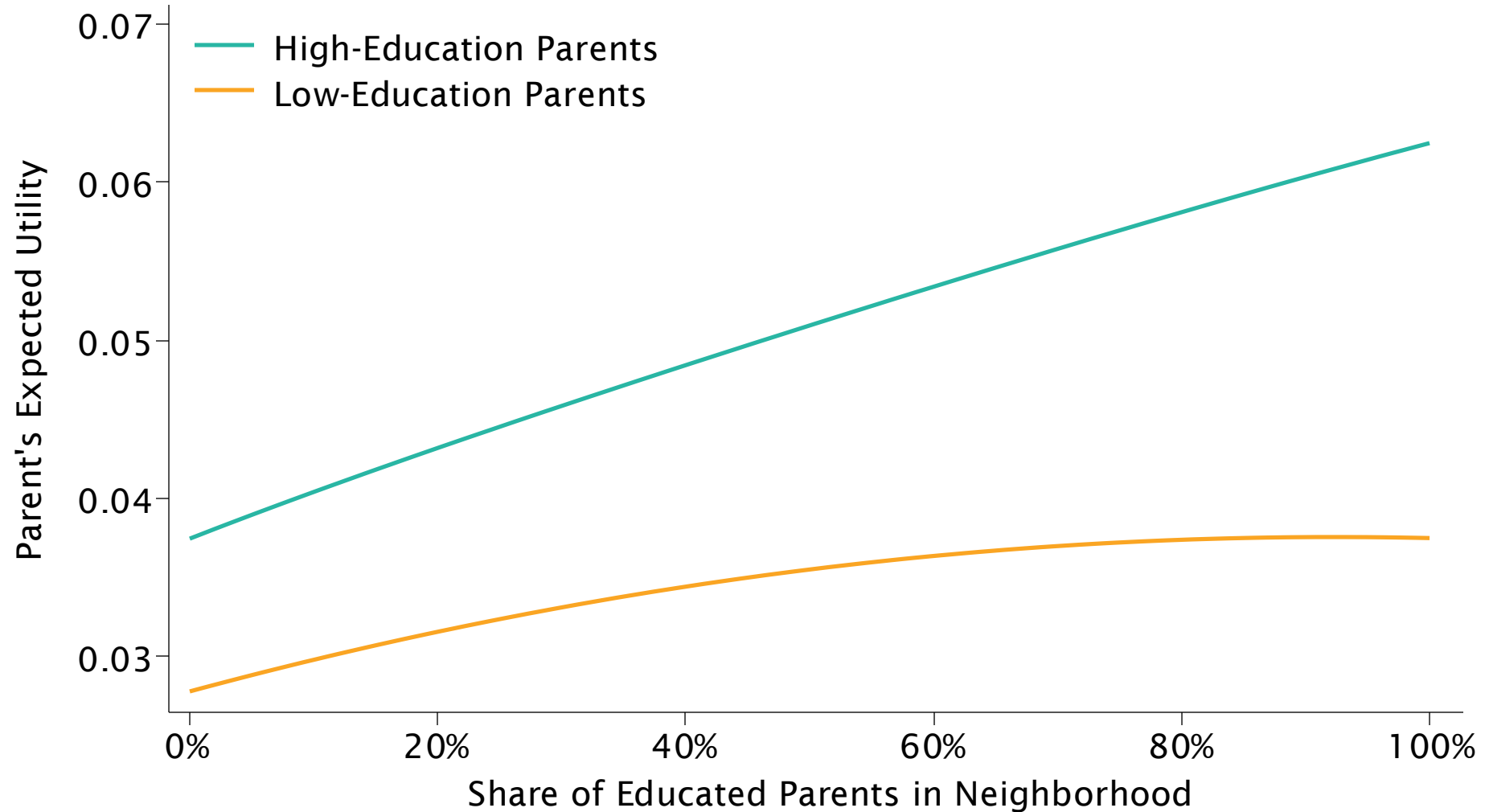


$$\max_N Y_0 + \delta E[Y_1^i] - c_N - \underbrace{h_p (e_{p(i)} - \bar{e}_N)^2}_{\text{non-conformity cost}}$$



# Parent's Utility vs. Mean Education in Neighborhood

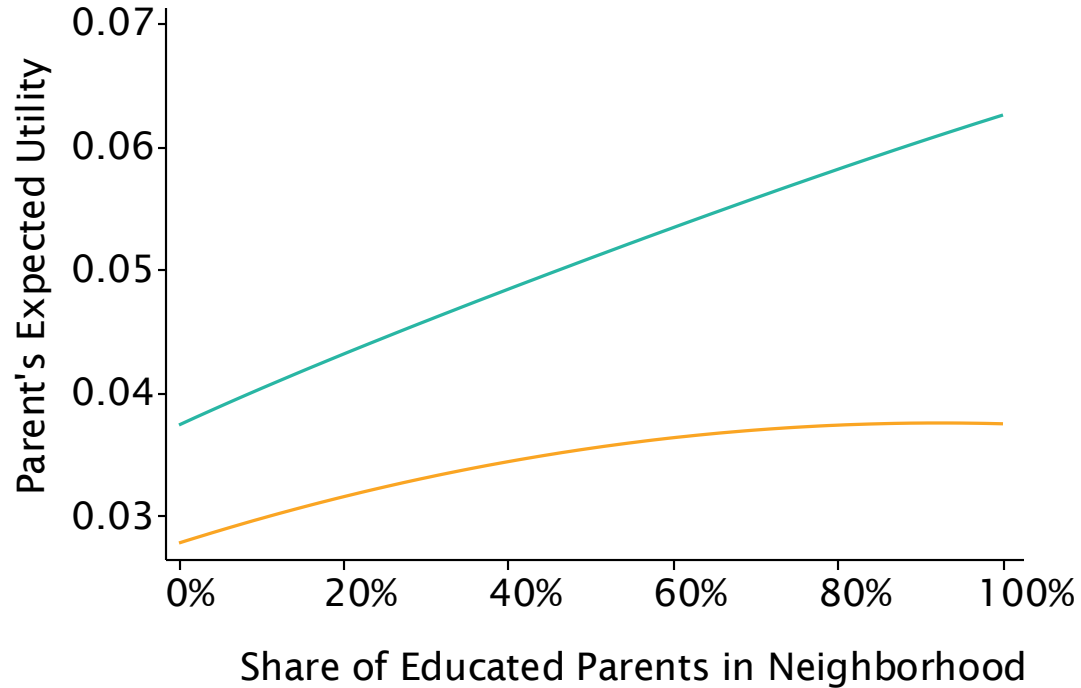
$\beta = 2.5$



# Children's vs. Parent's Utility vs. Mean Education in Neighborhood

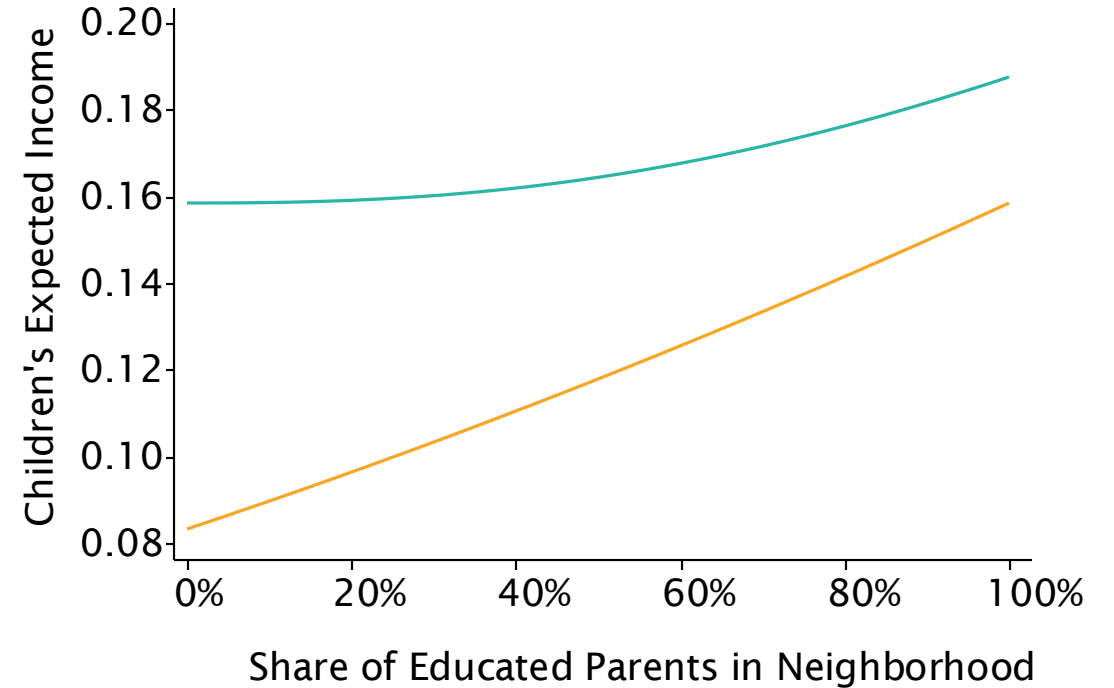
$\beta = 2.5$

## Parents



— High-Education Parents  
— Low-Education Parents

## Children



— Children of High-Education Parents  
— Children of Low-Education Parents



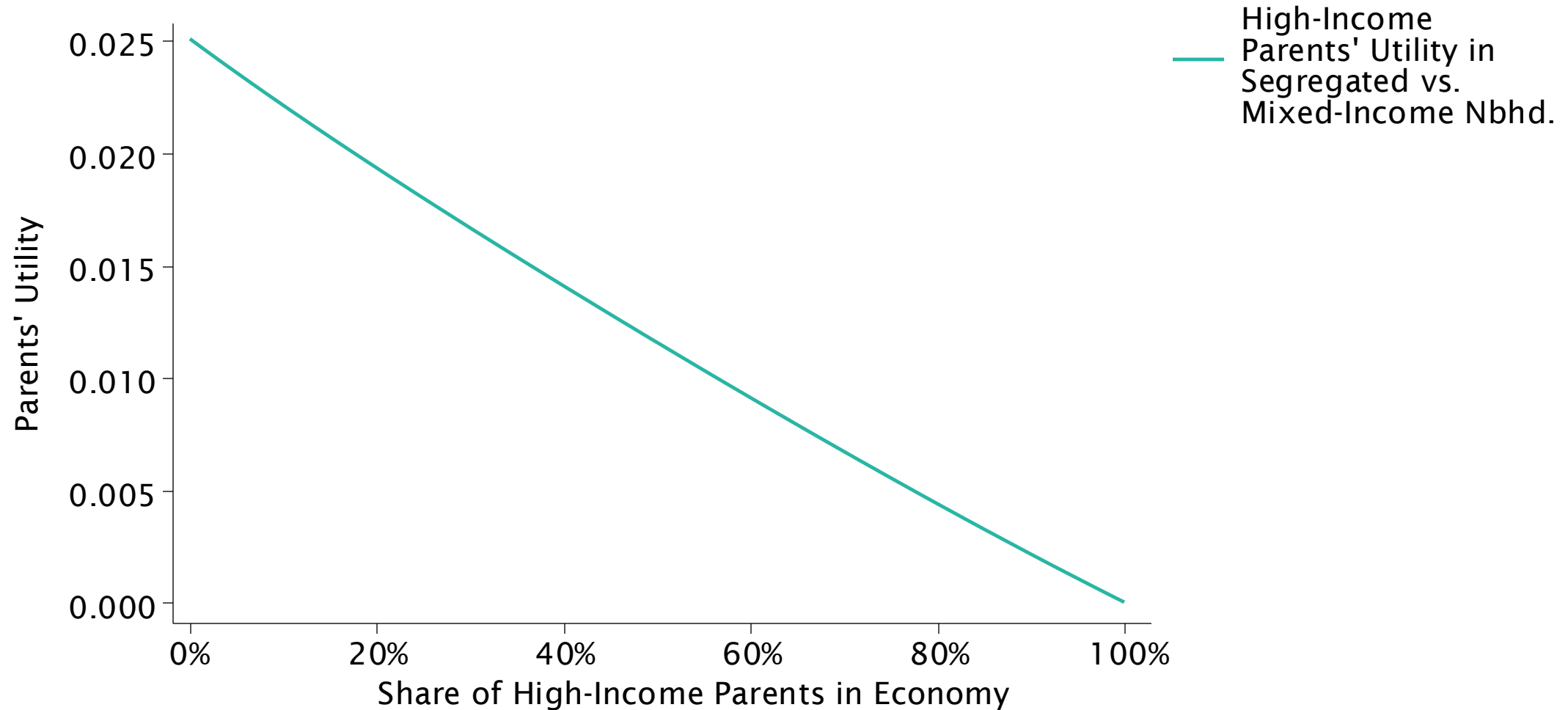
# Equilibrium Definition

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- An equilibrium is an allocation of families to neighborhoods and set of neighborhood costs  $c_N \geq 0$  such that
  1. No parent prefers to move:  $V(e_{p(i)}, N(i)) \geq V(e_{p(i)}, N')$  for all  $i, N'$
  2. No subgroup  $S$  can form a new neighborhood  $N$  at cost  $c_N$  where:  
[Alesina and Spoloare 1997]
    - (a) all parents in  $S$  strictly prefer new neighborhood and
    - (b) no family that is left behind strictly prefers to follow
- Equilibrium always exists and is unique

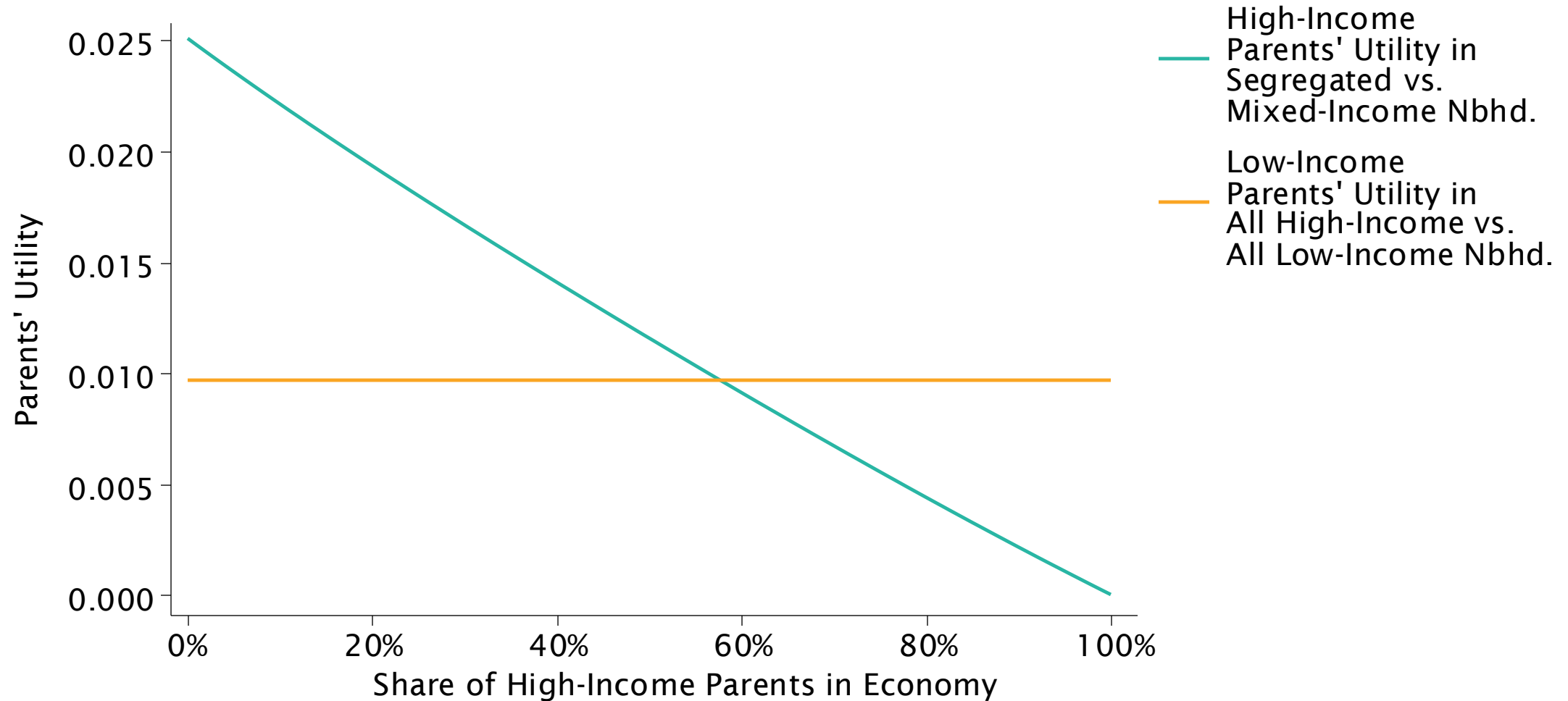
# Characterization of Equilibrium: Segregation vs. Integration

Parent Utility vs. Share of High-Income Parents in Economy



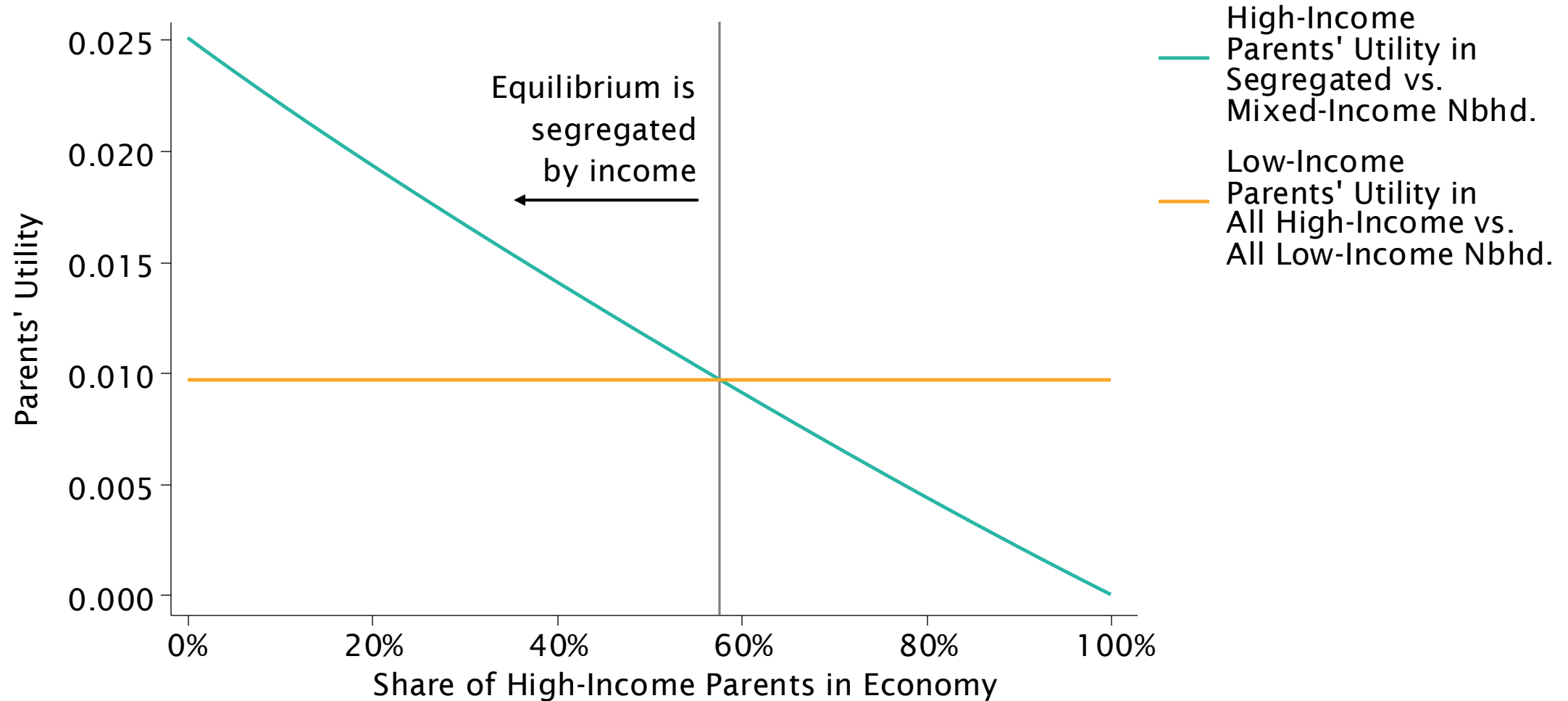
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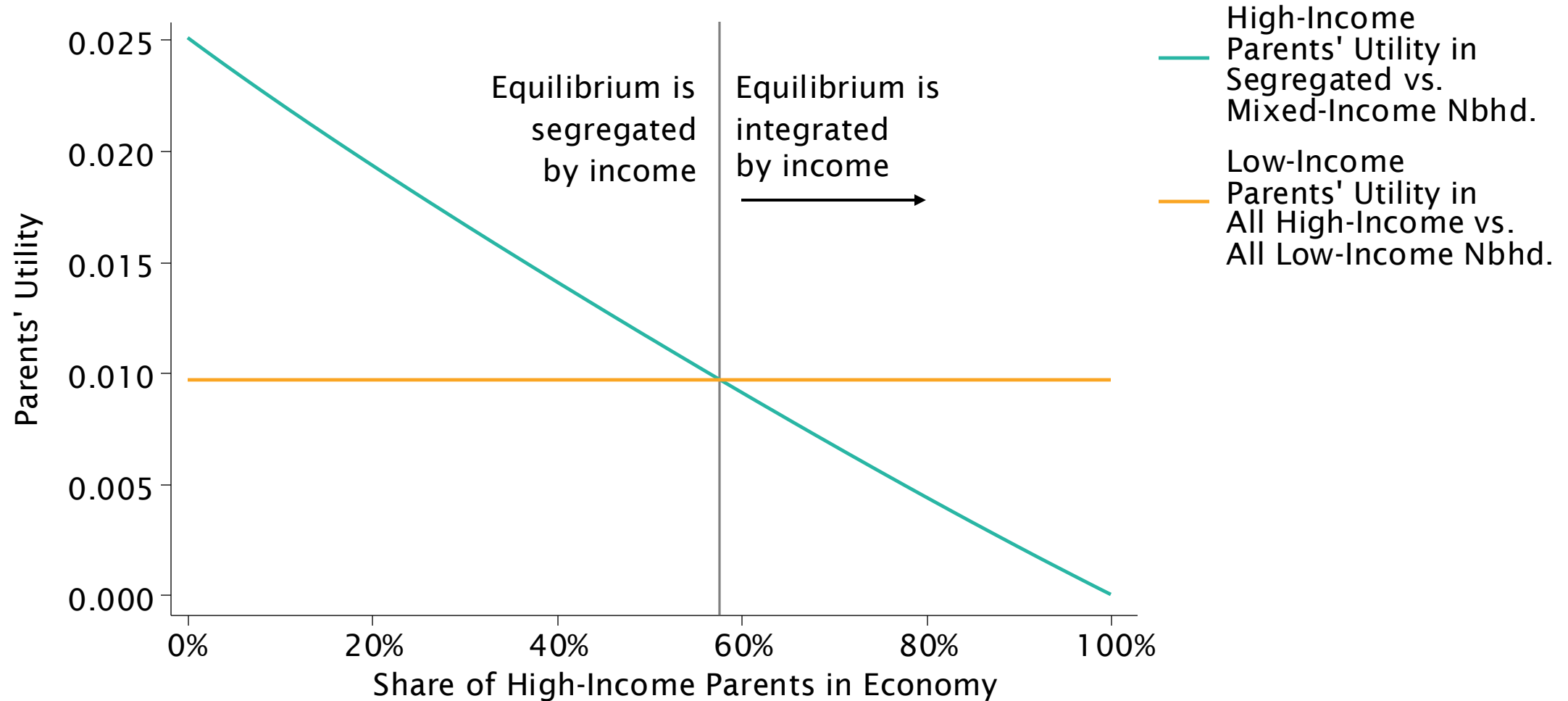
# Characterization of Equilibrium: Segregation vs. Integration

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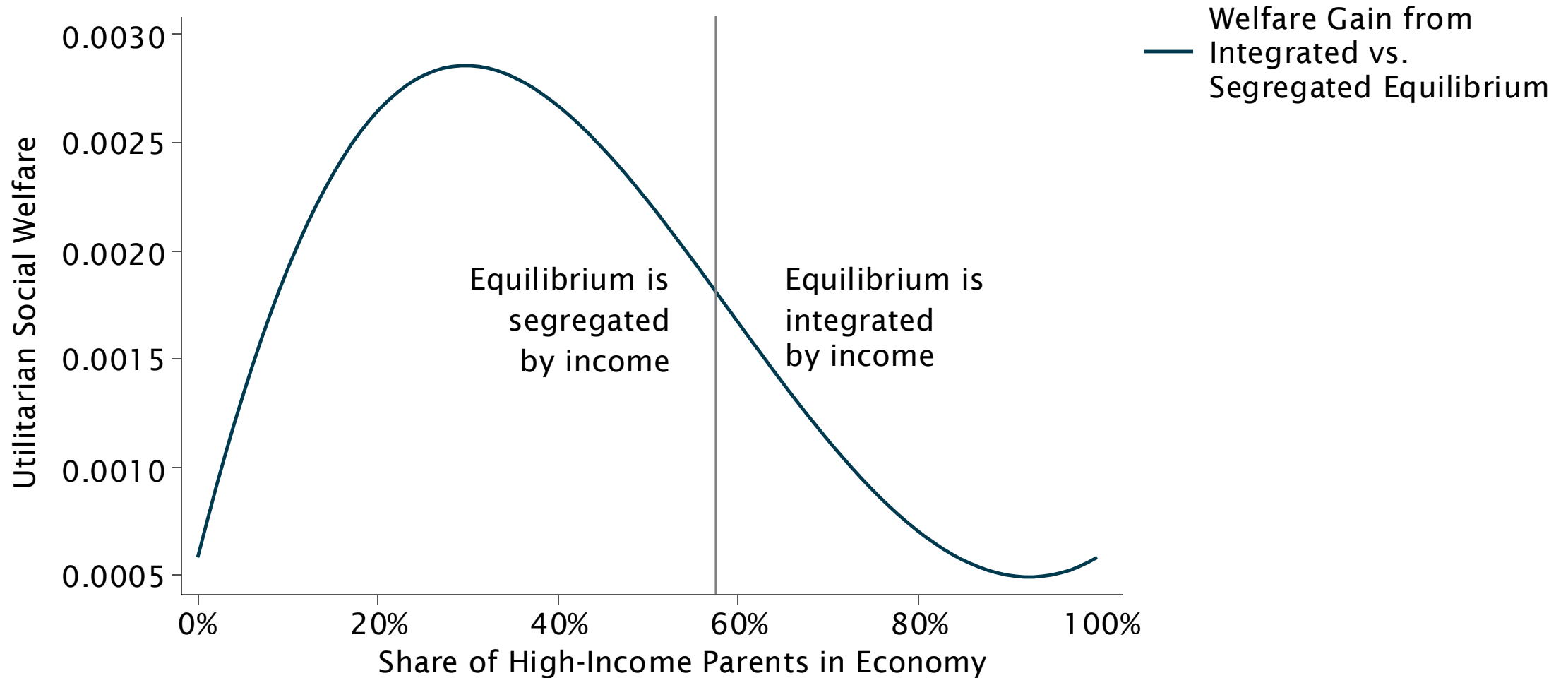


# Characterization of Equilibrium: Segregation vs. Integration

Parent Utility vs. Share of High-Income Parents in Economy



# Social Welfare vs. Share of High-Income Parents in Economy



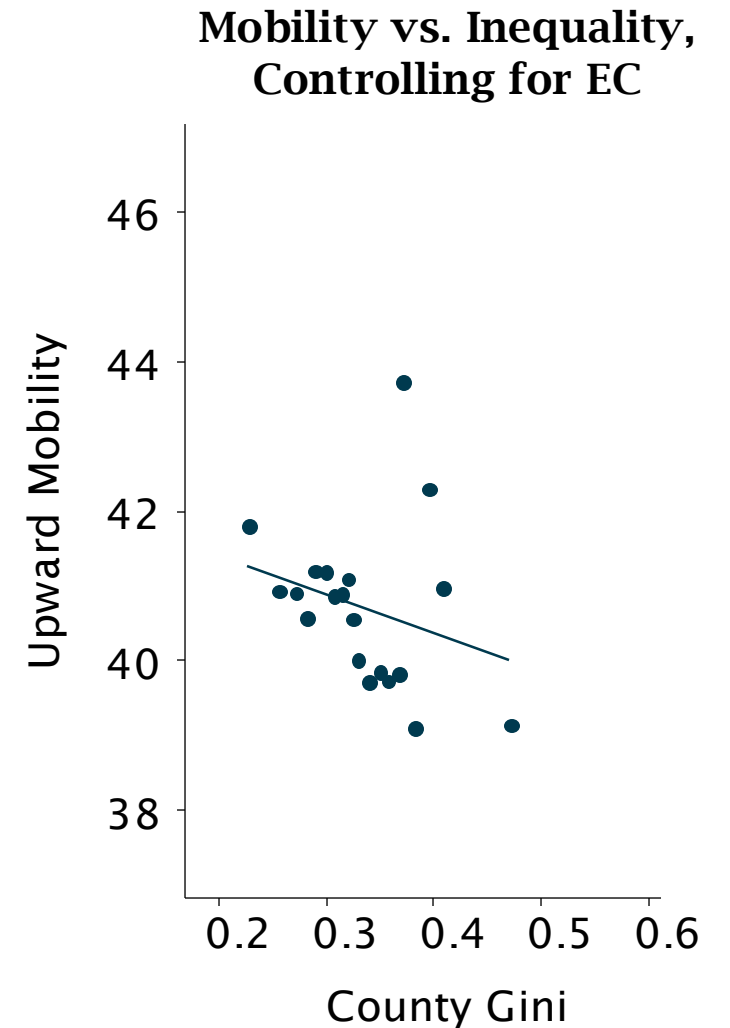
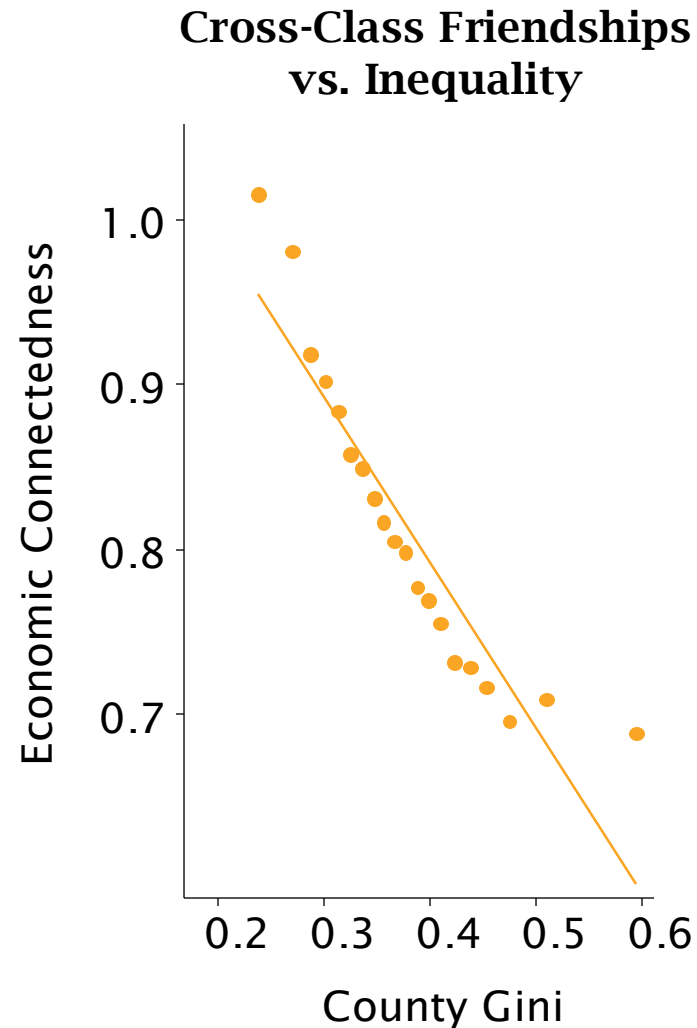
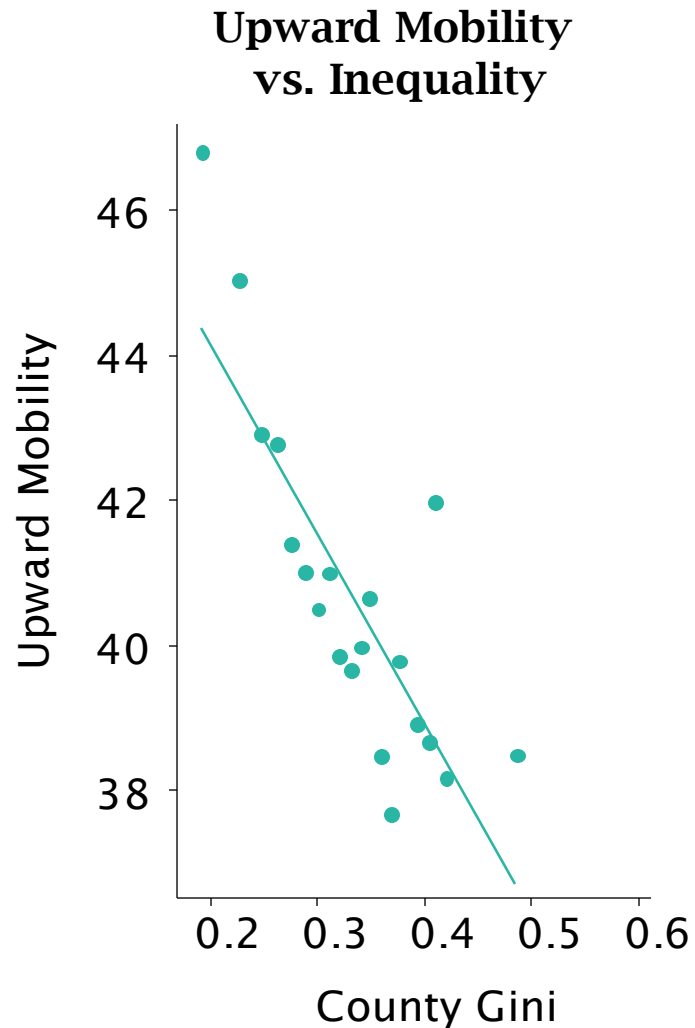
# Macroeconomic Predictions of Theory

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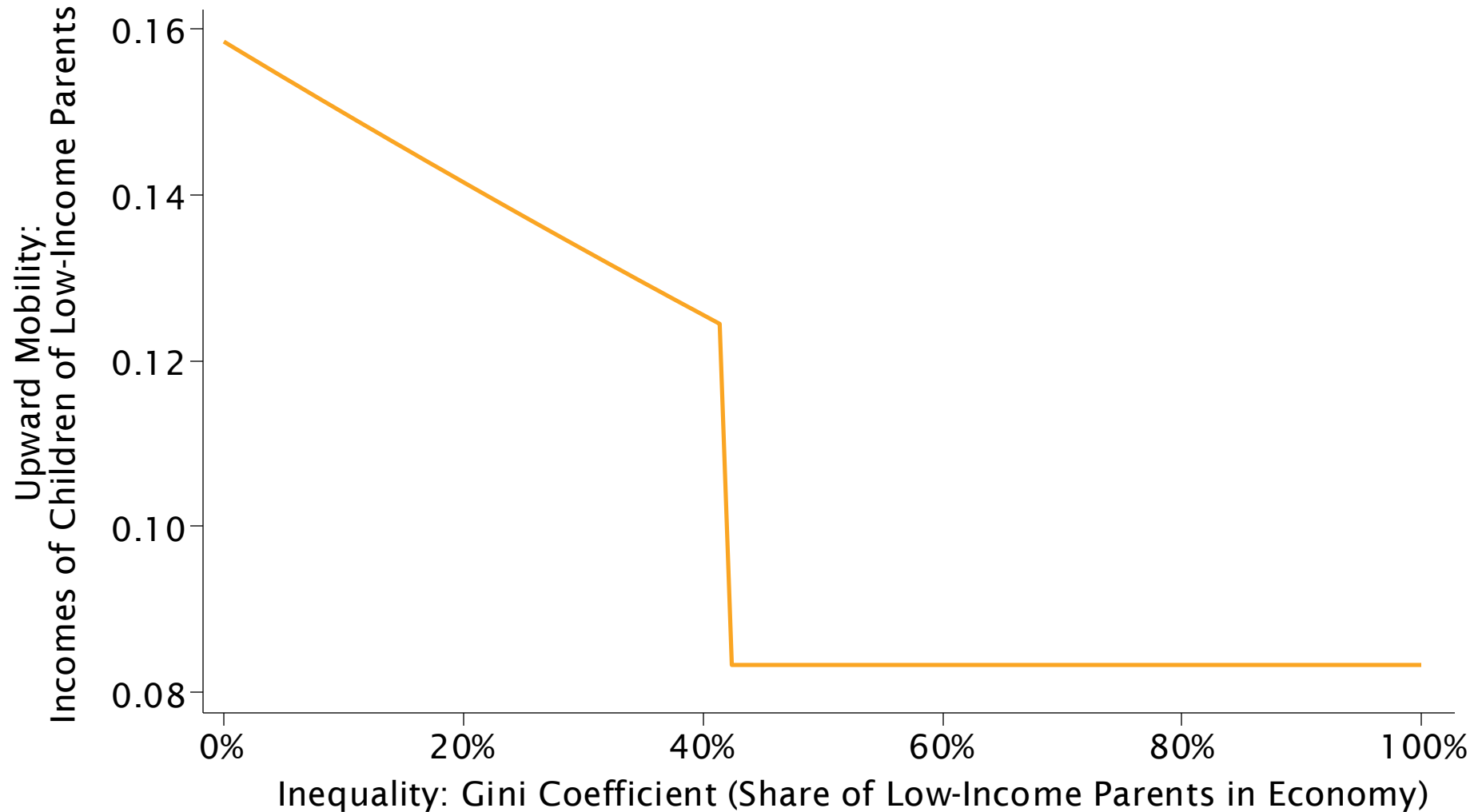
- Social capital theory can explain macroeconomic patterns in economic mobility that are challenging to explain with traditional economic models
  1. Great Gatsby curve: link between inequality and intergenerational mobility  
[Corak 2013, Durlauf 2022]



# Mobility vs. Inequality Across Areas within the United States

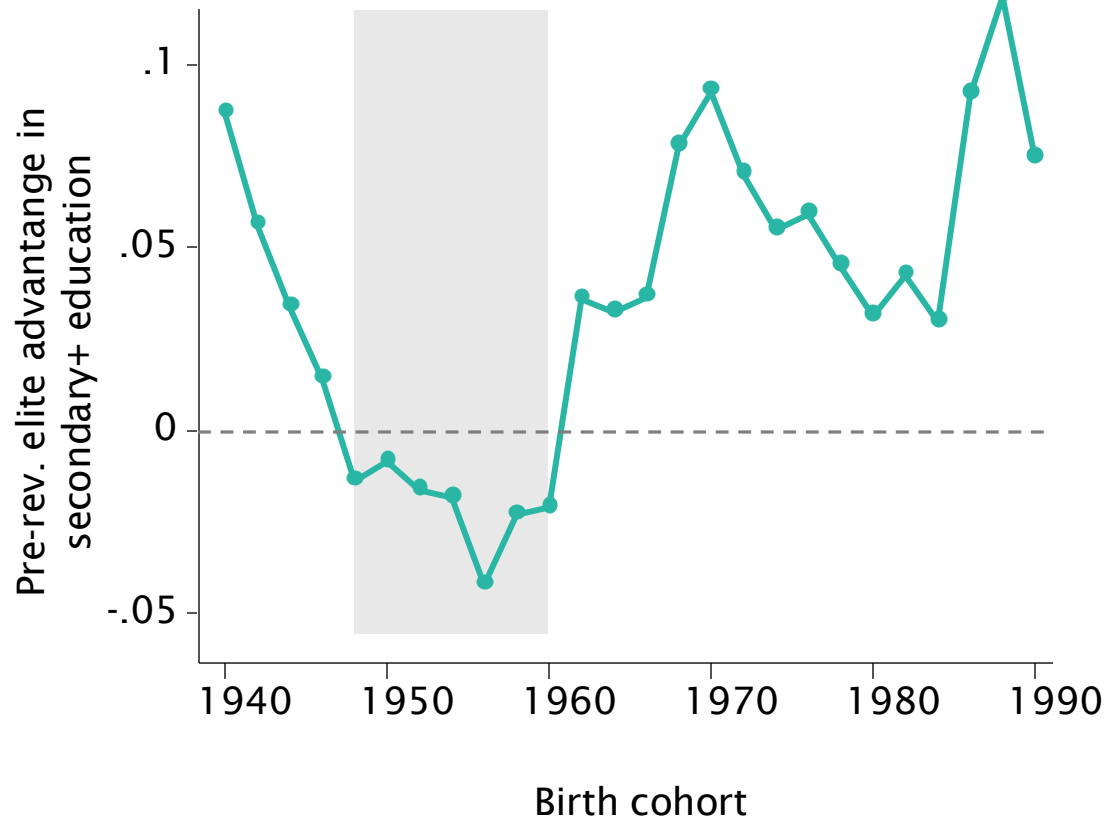


# Model Prediction: Upward Mobility vs. Inequality



# Effects of Wealth Redistribution on Economic Mobility

## Effects of Chinese Cultural Revolution on Educational Attainment of Elite



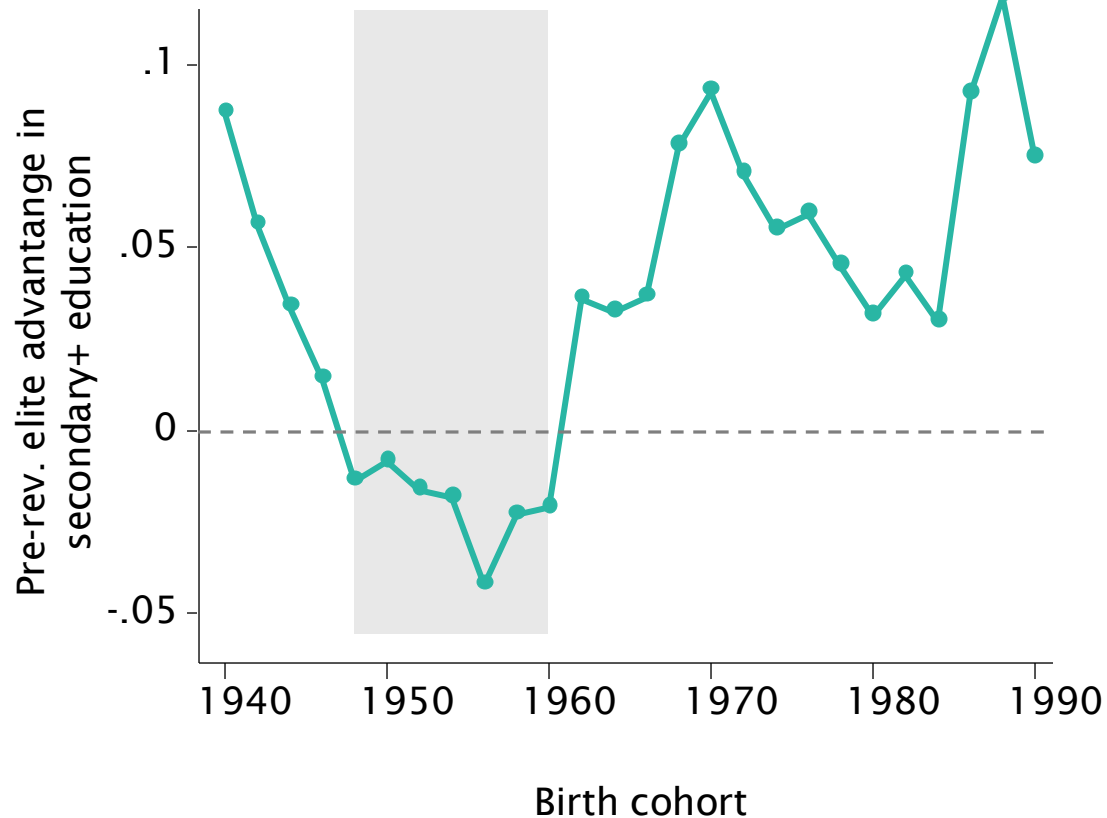
*“Individuals whose grandparents belonged to the pre-revolution elite earn 14 percent more income. Human capital was transmitted within the elite families, and social capital embodied in kinship networks survived the revolutions.”*

**Alesina, Seror, Yahg, You, Zeng**, “Persistence Despite Revolutions” (NBER 2025)



# Effects of Wealth Redistribution on Economic Mobility

Effects of Chinese Cultural Revolution on Educational Attainment of Elite



*“The economic well-being of Kyrgyz households in the 2010s [after the fall of the Soviet regime] correlates with the early twentieth-century average wealth of their tribes [before the Soviet revolution]. Transmission of material wealth...cannot explain persistence.”*

**Guirkinger et. al**, “Economic Persistence Despite Adverse Policies: Evidence from Kyrgyzstan ” (Econ. J 2022)

*“The nullification of slave wealth after the US Civil War (1861–1865) was one of the largest episodes of wealth compression in history... Yet, [White Southern slave owners’] sons almost entirely recovered from this wealth shock .... Marriage networks and connections to other elite families may have aided in recovery.*

**Ager et. al**, “The Intergenerational Effects of a Large Wealth Shock: White Southerners after the Civil War” (AER 2021)



# Macroeconomic Predictions of Theory

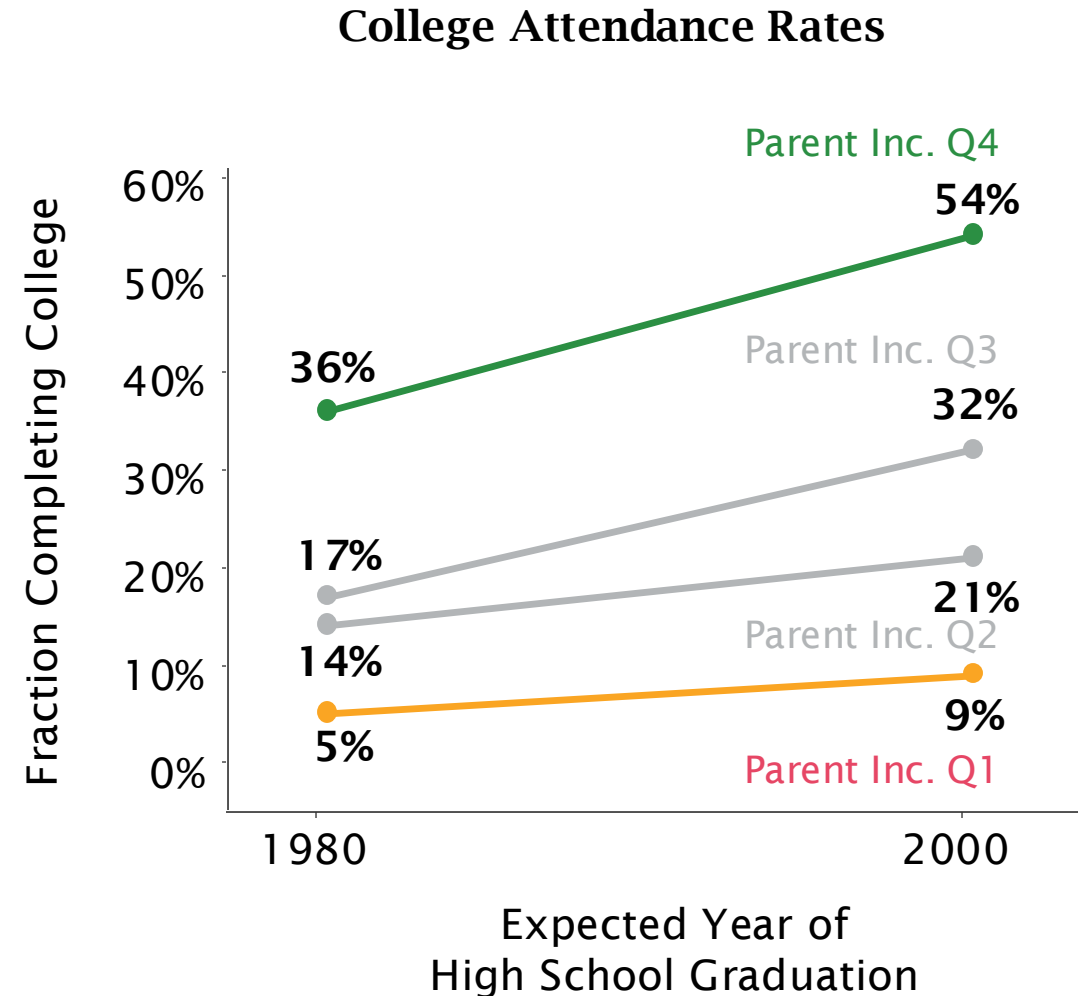
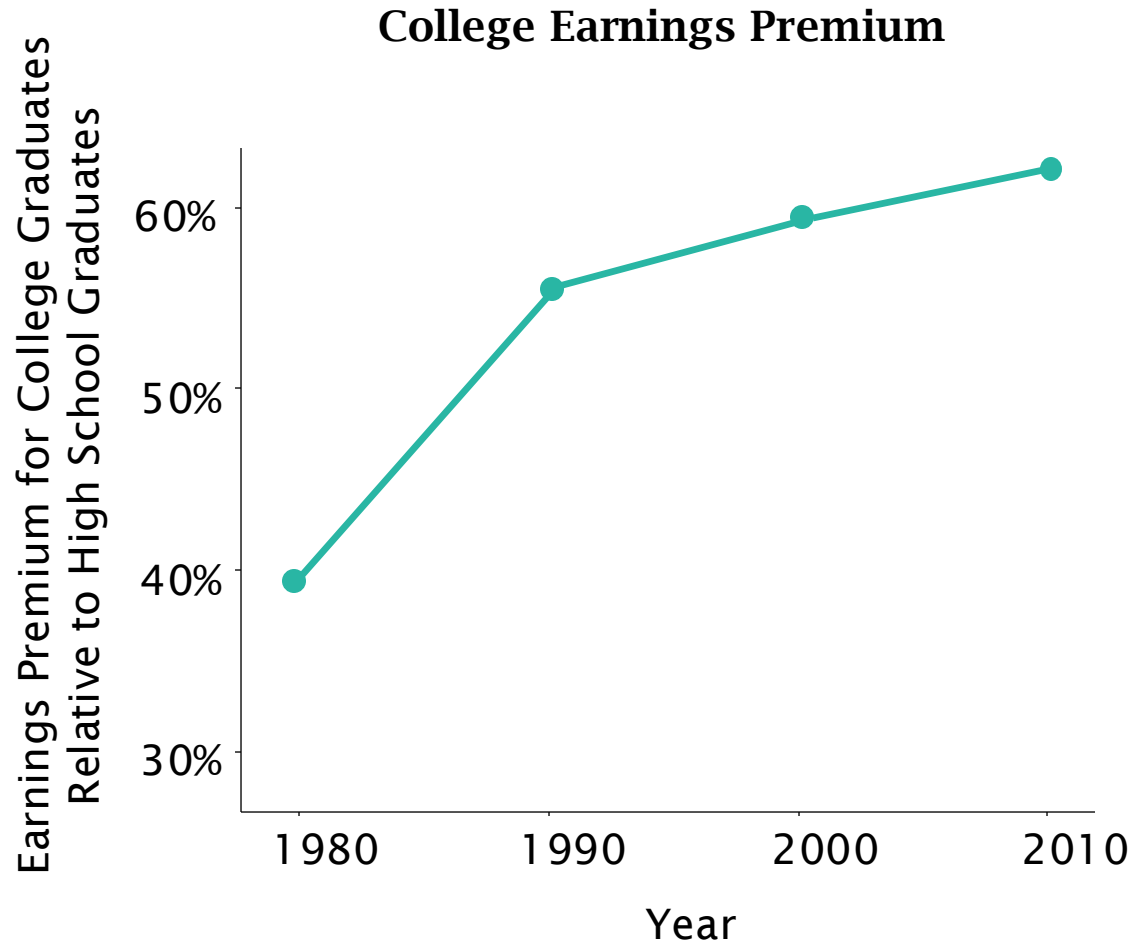
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- Social capital theory can explain macroeconomic patterns in economic mobility that are challenging to explain with traditional economic models
  1. Great Gatsby curve: link between inequality and intergenerational mobility  
[Corak 2013, Durlauf 2022]
  2. Race between education and technology: growing returns to education but little increase in educational attainment, especially among low-income families  
[Goldin and Katz 2008]

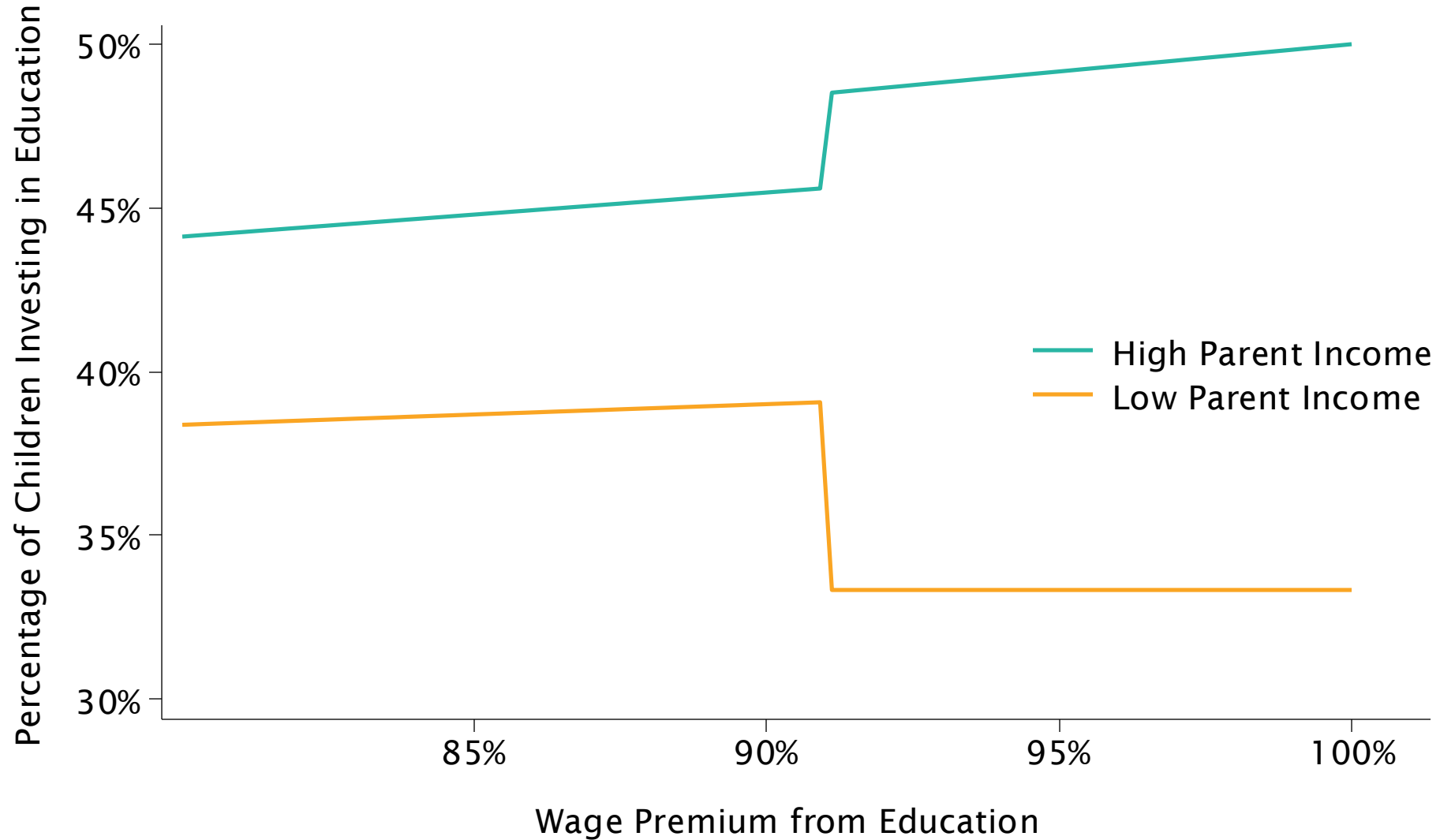


# Evolution of College Earnings Premium vs. College Attendance Rates

United States, 1980-2010

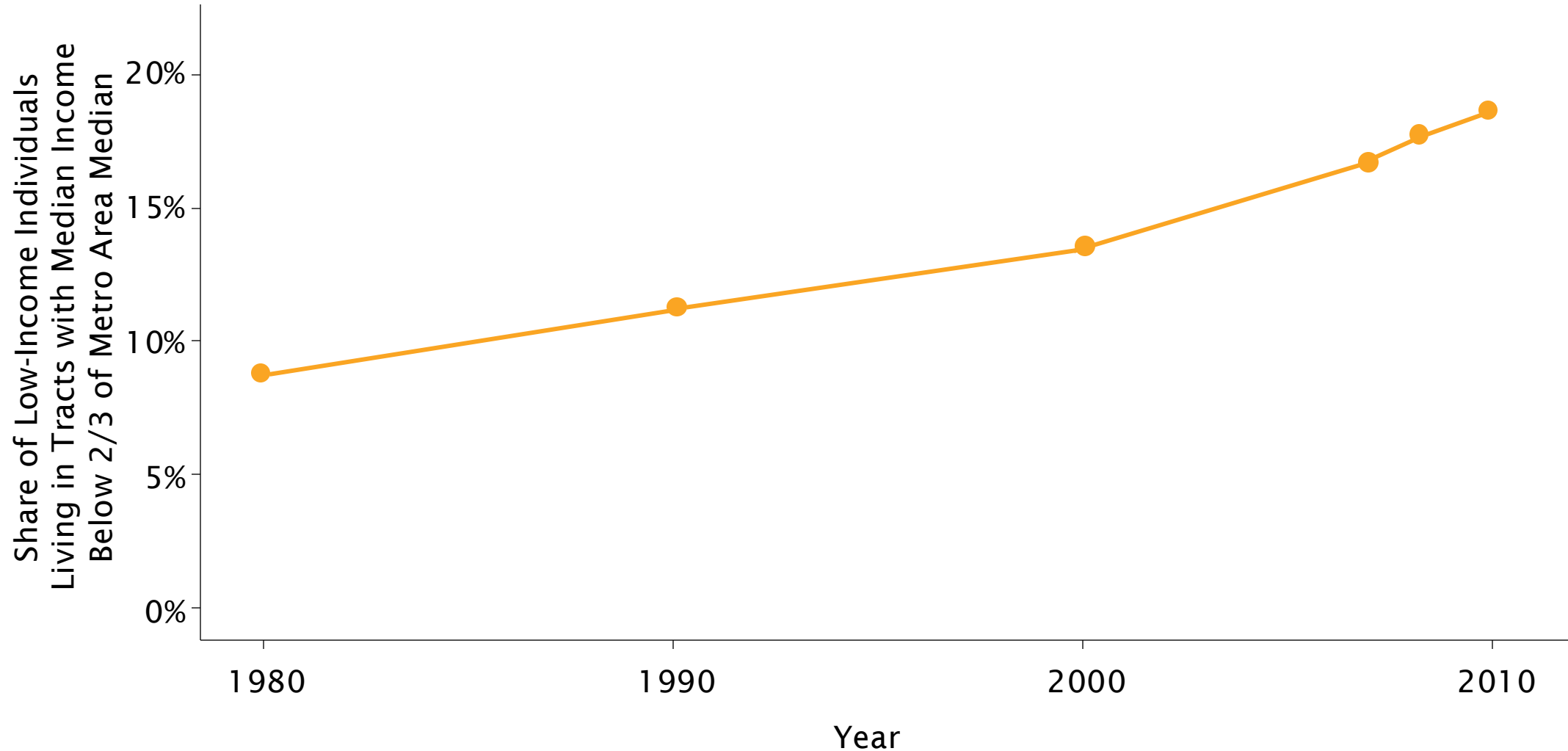


# Model Prediction: Education vs. Returns to Education, by Parent Income



# Income Segregation in the U.S., 1980-2010

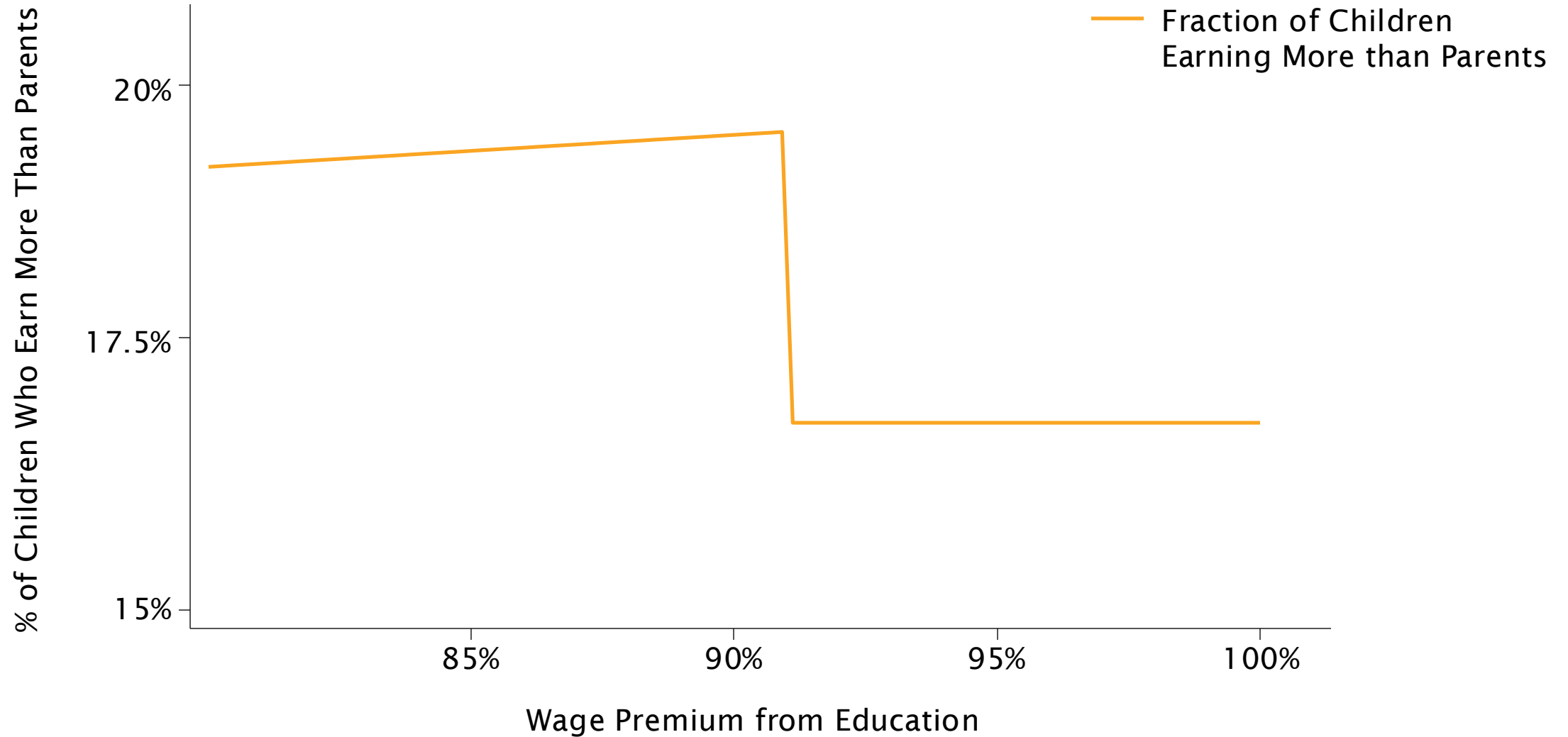
Metropolitan Areas with Population > 500K, 1970-2009



Source: Bischoff and Reardon (2014); see also Reardon and Bischoff (AJS 2011)

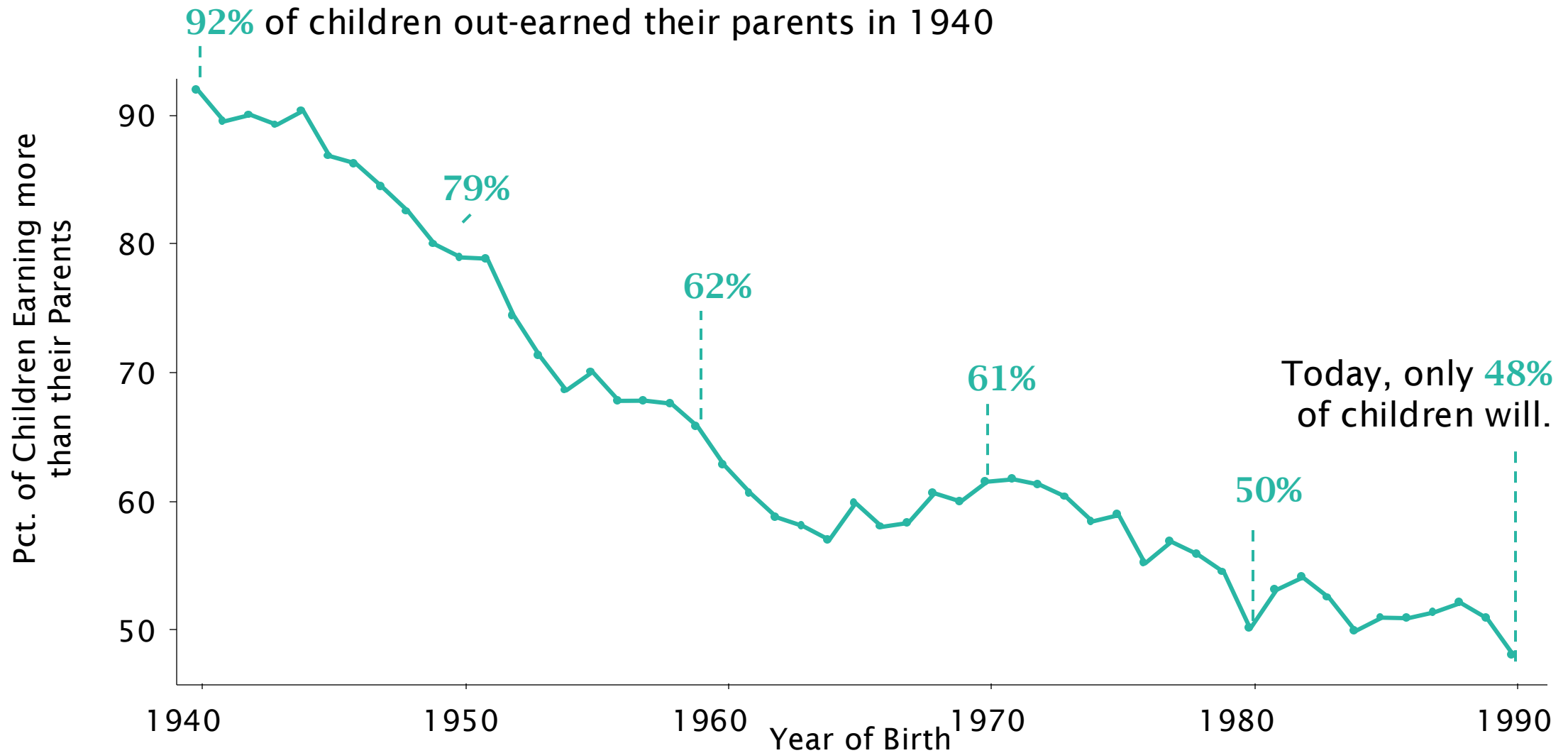


# Model Prediction: Upward Mobility vs. Returns to Education



# Fading Opportunity: Upward Mobility by Birth Cohort

Percent of Children Earning More than Their Parents, by Year of Birth, in the United States



Source: Chetty, Grusky, Hell, Hendren, Manduca, Narang (Science 2017)



# The Science of Economic Opportunity

What Have We Learned?



Opportunity is shaped by **childhood environment** at a **local level**



Social capital - **cross-class connections** - shape both outcomes and choice of peer groups



Technological progress can increase segregation and **reduce economic mobility** in market equilibrium



What policies can increase economic mobility?



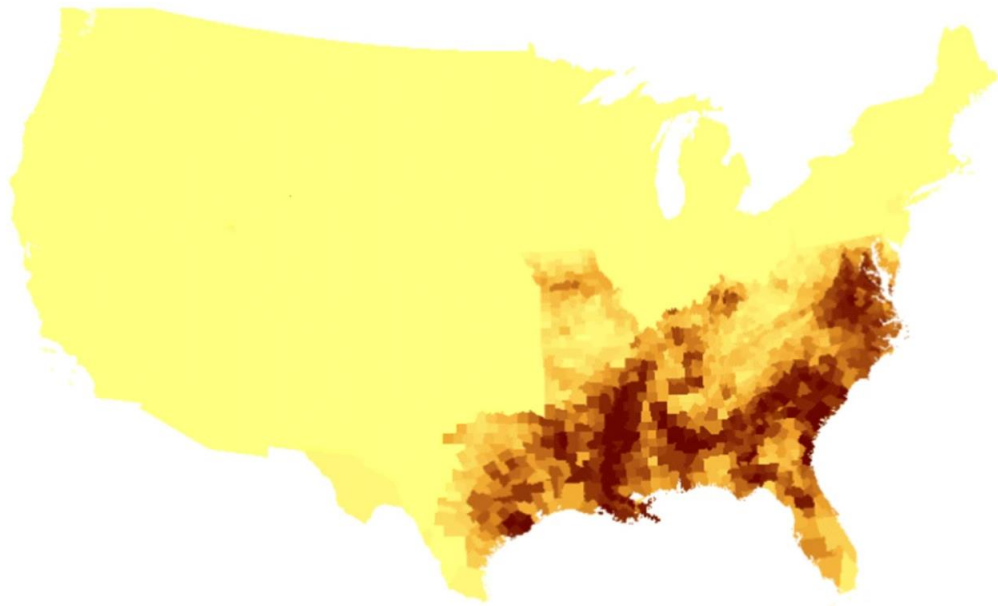
# Supplementary Slides



# Rates of Slavery in the 1860s vs. Present-Day Upward Mobility

## Rates of Slavery (1860)

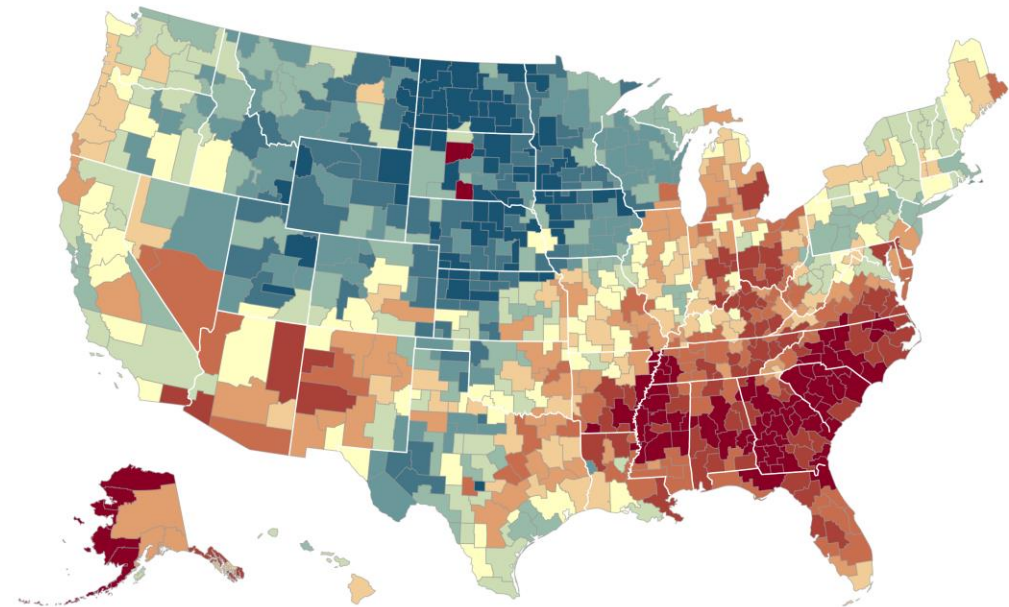
Share of the Population that Were Enumerated as Slaves in the 1860 Census



Yellow = Lower Share of Slaves  
Brown = Higher Share of Slaves

## Upward Mobility

Average Household Income at Age 35 for Children whose Parents Earned \$27k (25<sup>th</sup> percentile)



Blue = More Upward Mobility  
Red = Less Upward Mobility

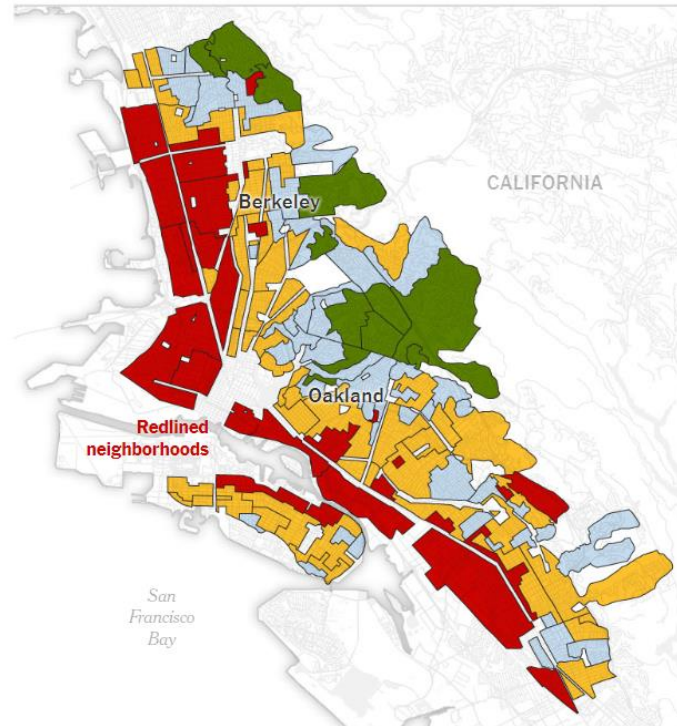


# Redlining in the 1930s vs. Present-Day Upward Mobility

Oakland, CA

## Redlining Boundaries (1930s)

Neighborhood grade, 1930s

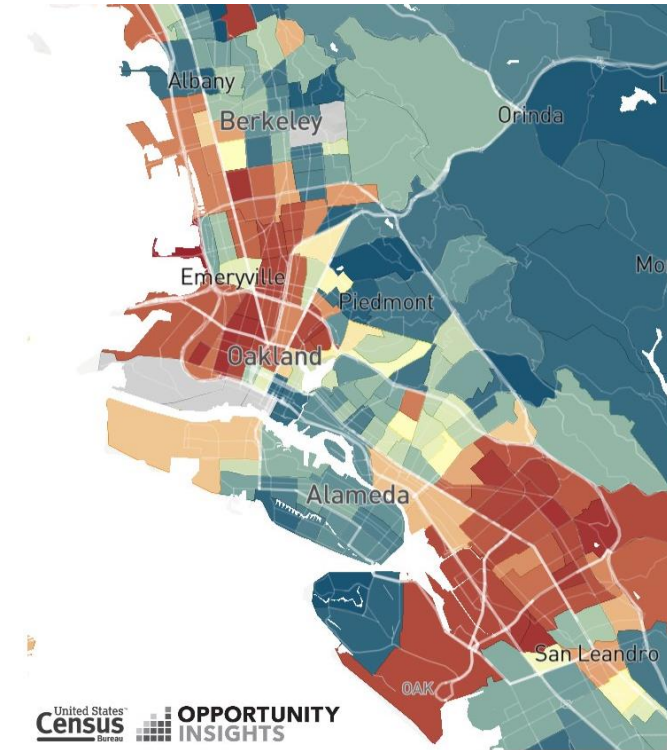


Green = "Best"  
Blue = "Still Desirable"

Yellow = "Declining"  
Red = "Hazardous"

## Upward Mobility

Average Household Income at Age 35 for Children whose Parents Earned \$27k (25<sup>th</sup> percentile)



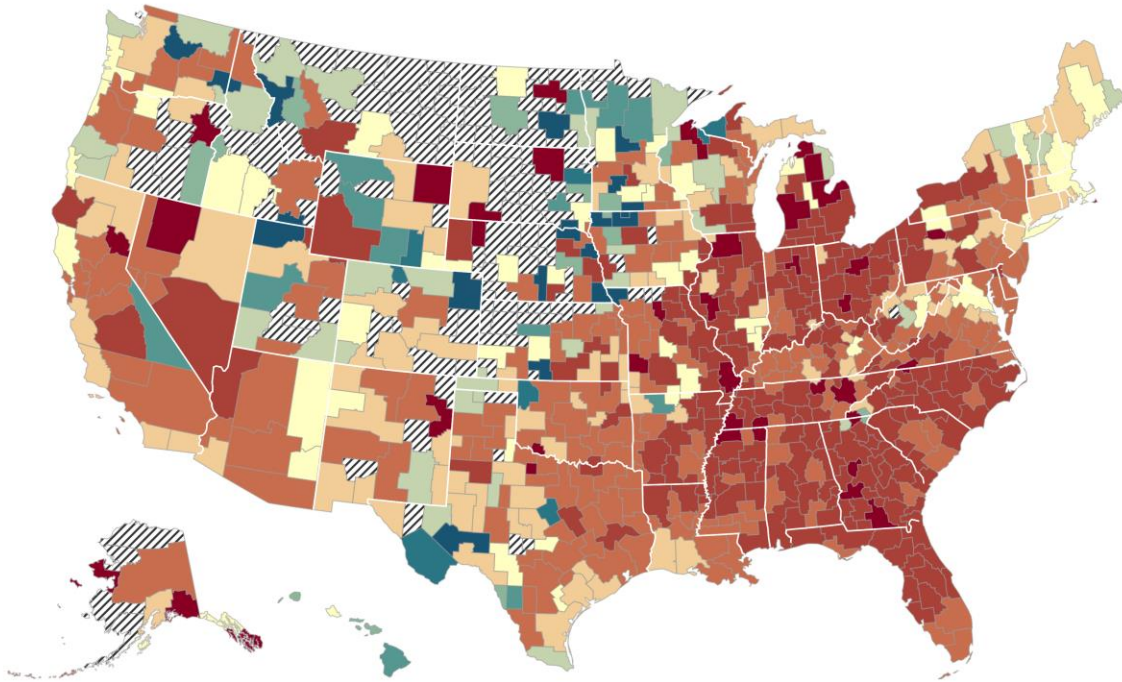
Blue = More Upward Mobility  
Red = Less Upward Mobility



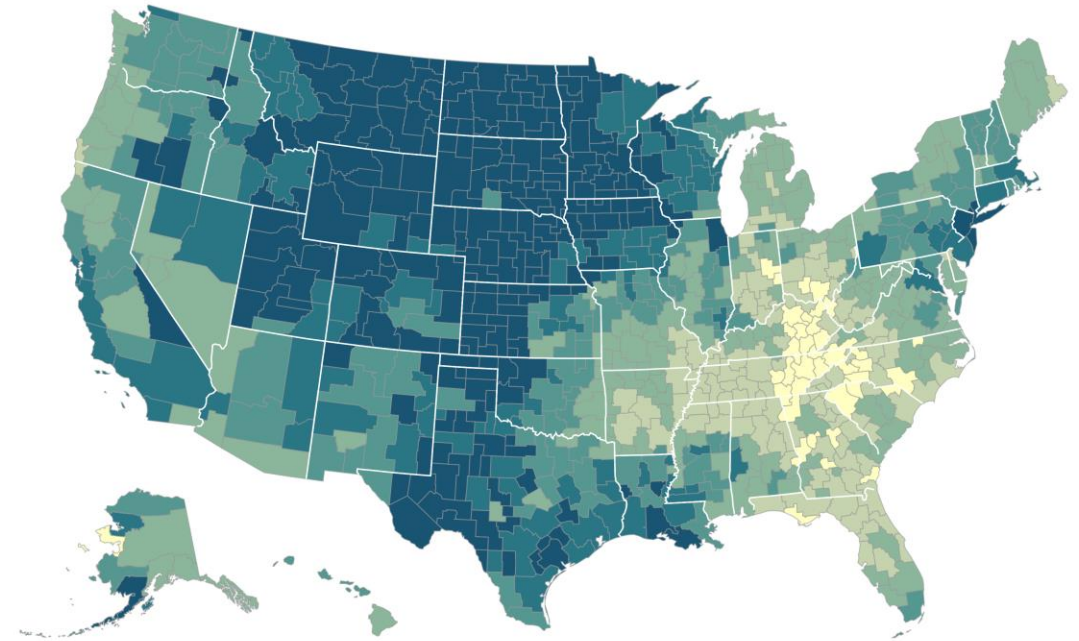
# The Geography of Upward Mobility For Black vs. White Children

Average Household Income at Age 35 For Children Whose Parents Earned \$41K (25th percentile)

## Black Children



## White Children



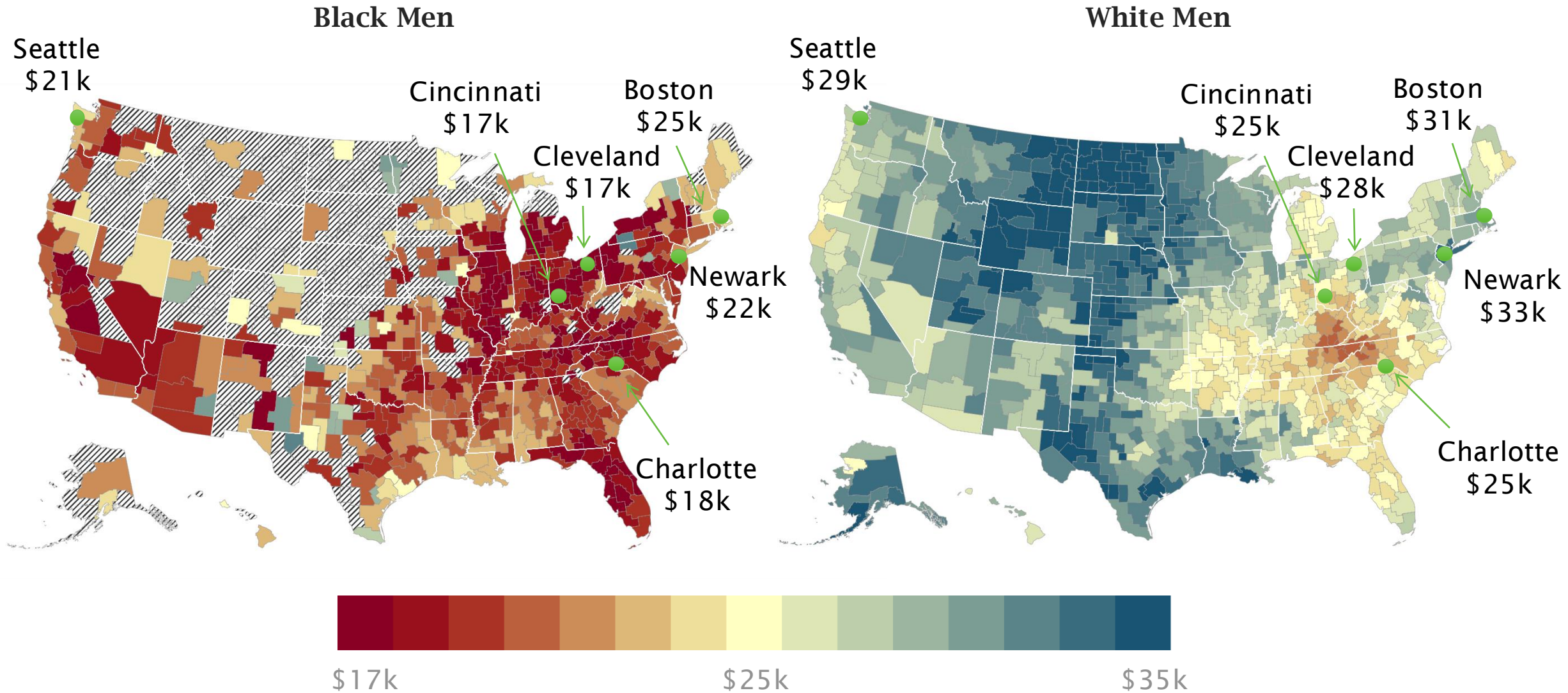
Household Income Percentile at Age 27 for  
Children with Parents at 25th Percentile

< \$30k      \$41k      > \$60k



# Two Americas: The Geography of Upward Mobility For Black vs. White Men

Average Income at Age 35 For Men Whose Parents Earned \$27,000 (25th percentile)

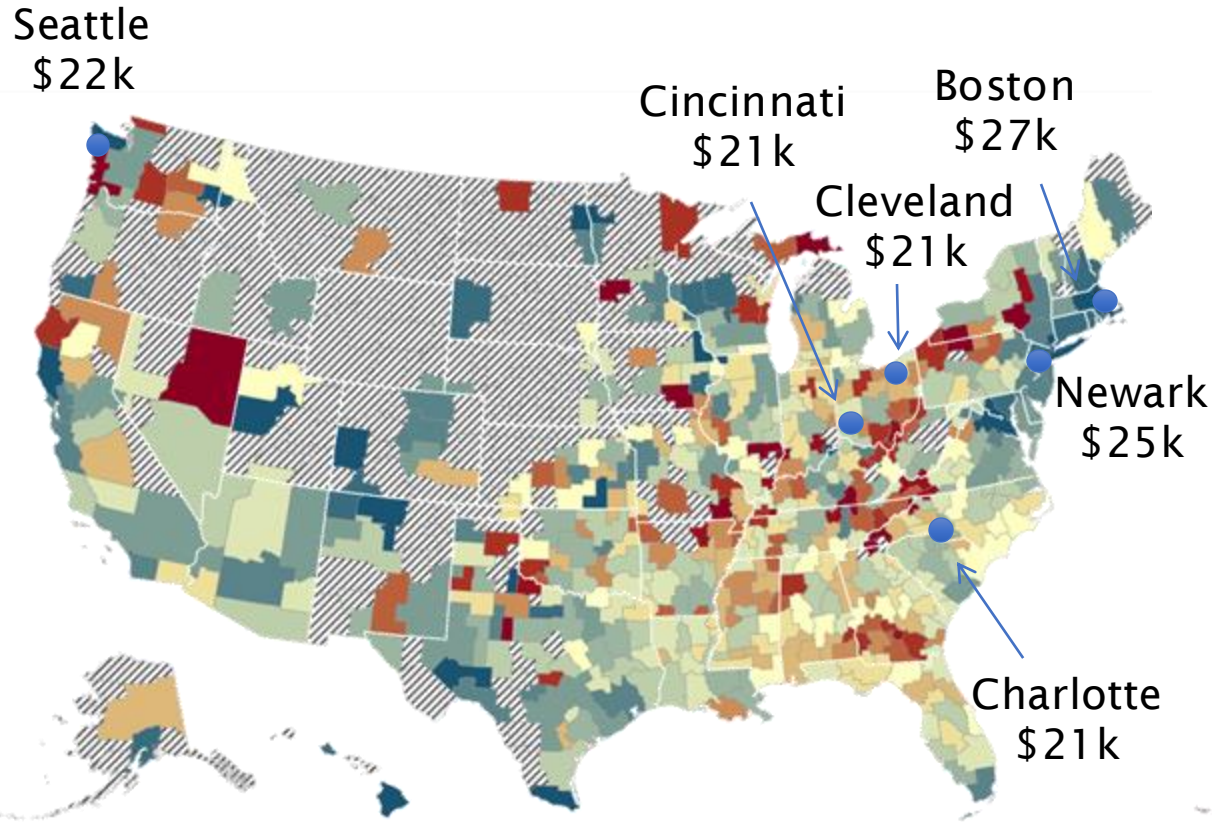


Source: Chetty, Hendren, Jones, Porter (QJE 2020)

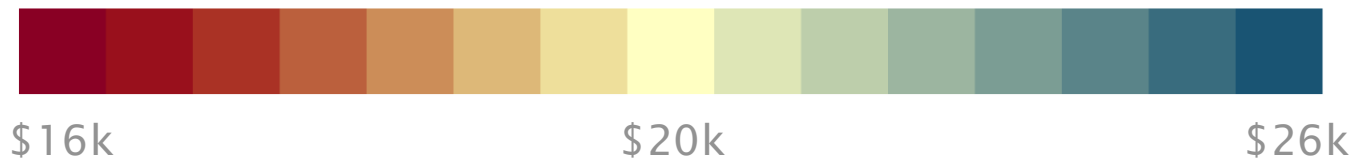
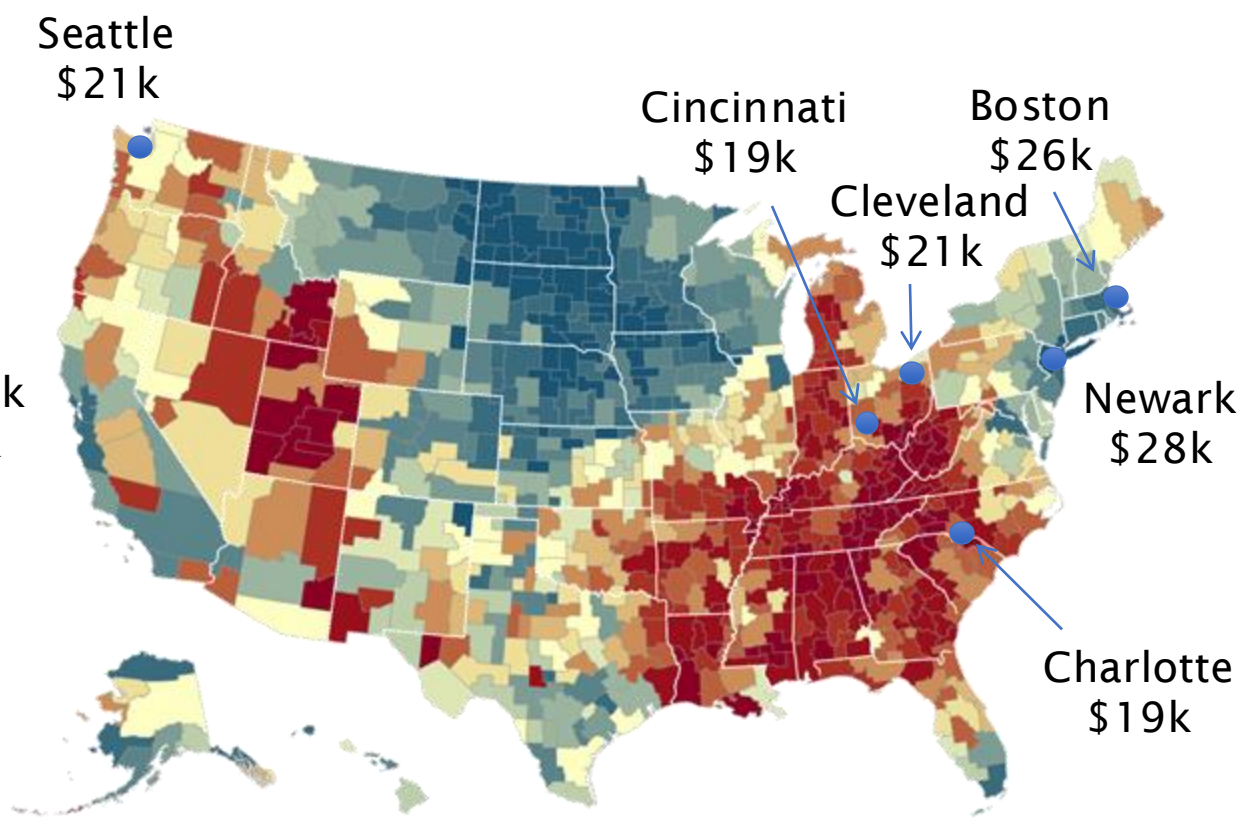
# The Geography of Upward Mobility For Black vs. White Women

Average Income at Age 35 For Women Whose Parents Earned \$27,000 (25th percentile)

### Black Women

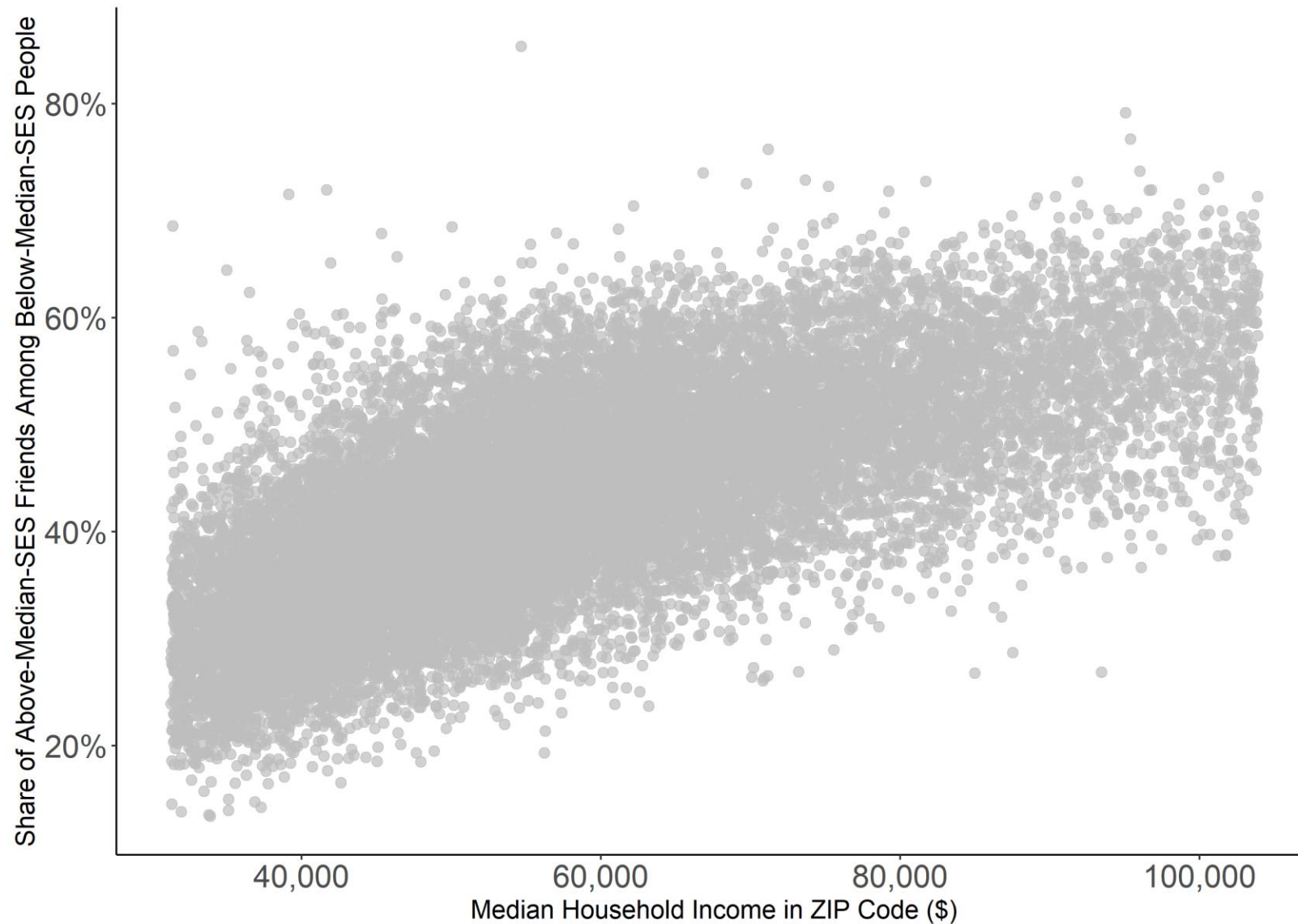


### White Women



Source: Chetty, Hendren, Jones, Porter (QJE 2020)

# Economic Connectedness vs. Household Median Income, by ZIP Code

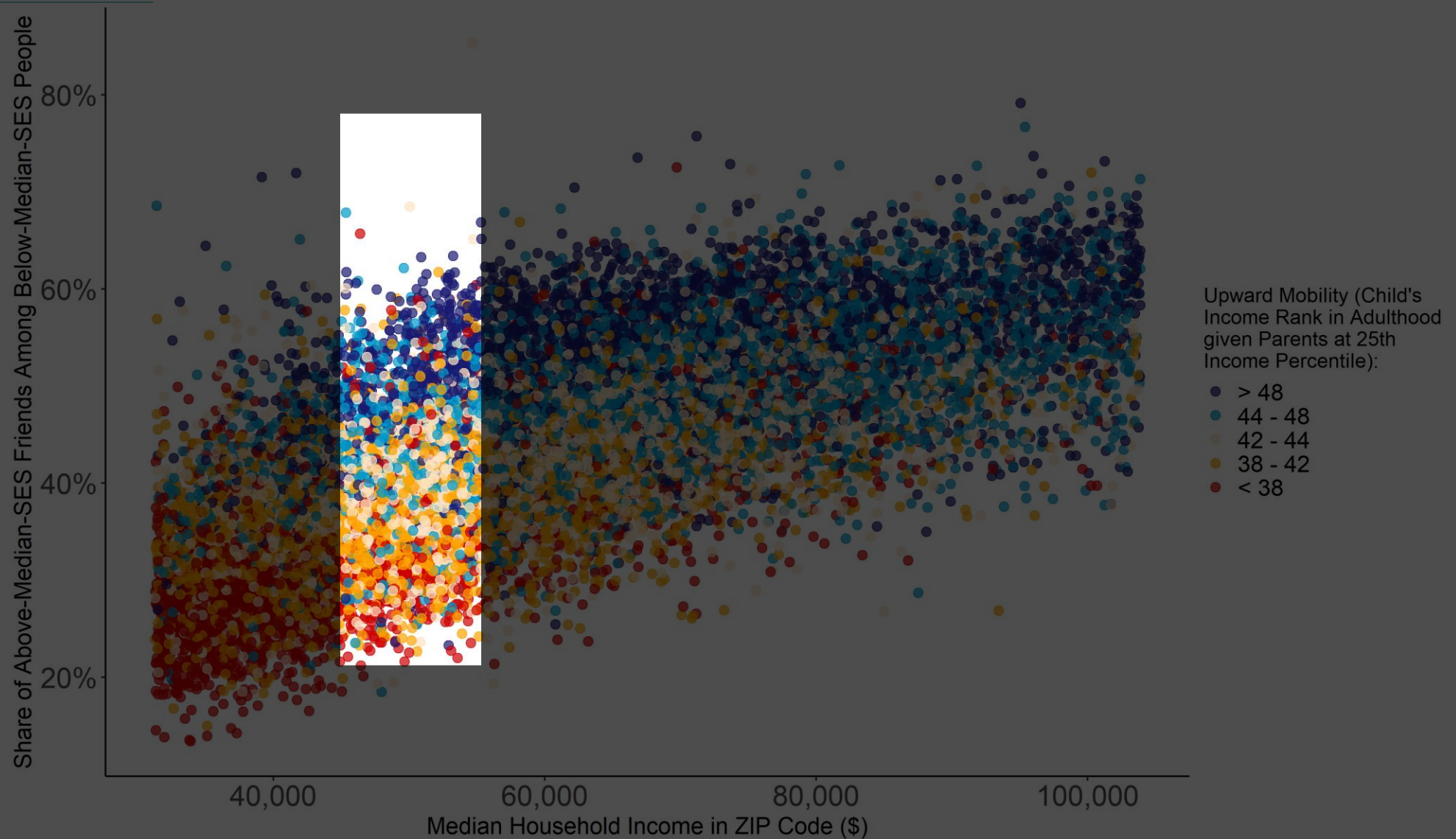


Source: Chetty, Friedman, Hendren, Jones, Porter (2026); Chetty, Jackson, Kuchler, Stroebel et al. (Nature 2022)



# Economic Connectedness vs. Household Median Income, by ZIP Code

Colored by Rate of Economic Mobility

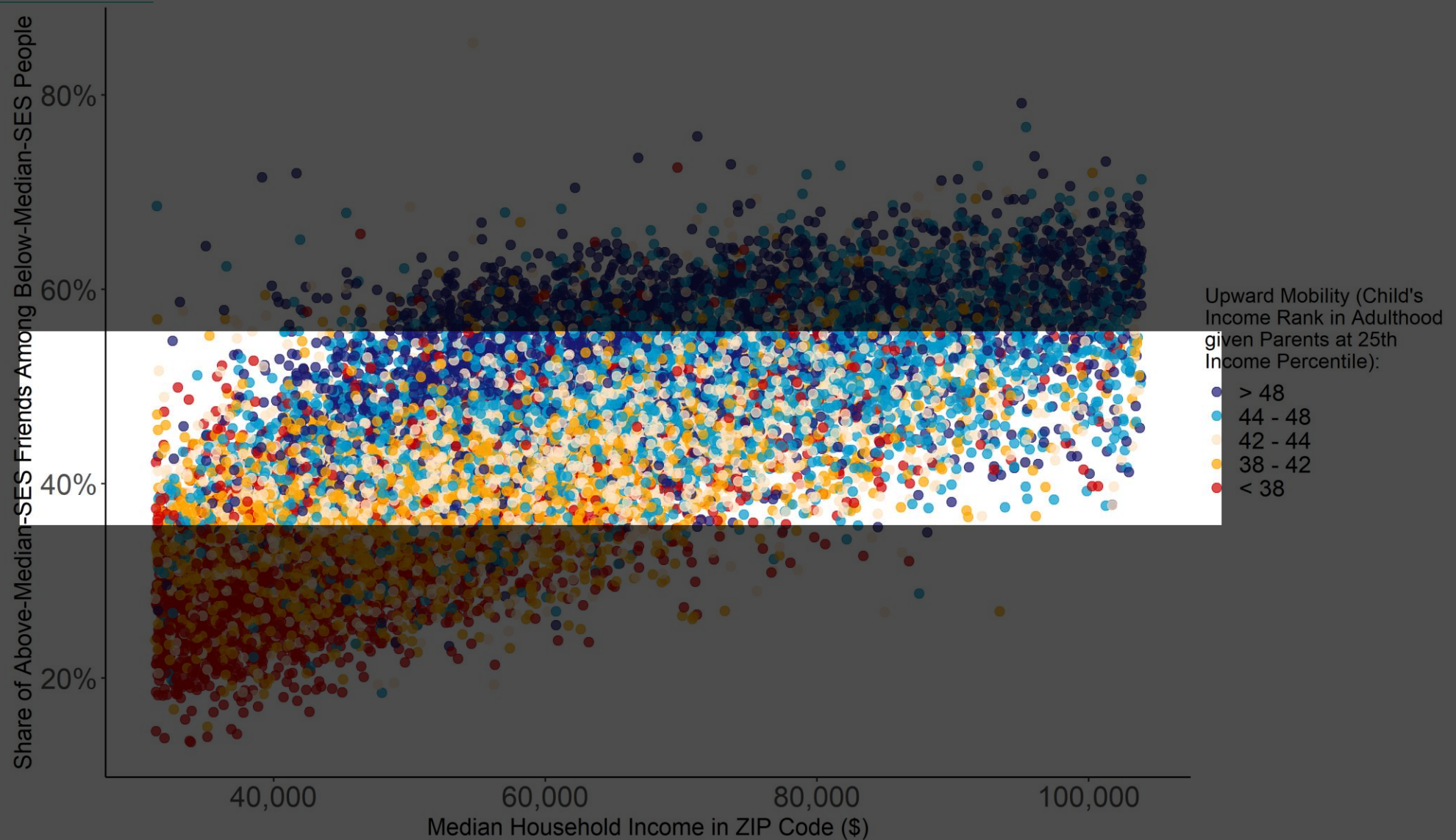


Source: Chetty, Friedman, Hendren, Jones, Porter (2026); Chetty, Jackson, Kuchler, Stroebel et al. (Nature 2022)



# Economic Connectedness vs. Household Median Income, by ZIP Code

Colored by Rate of Economic Mobility

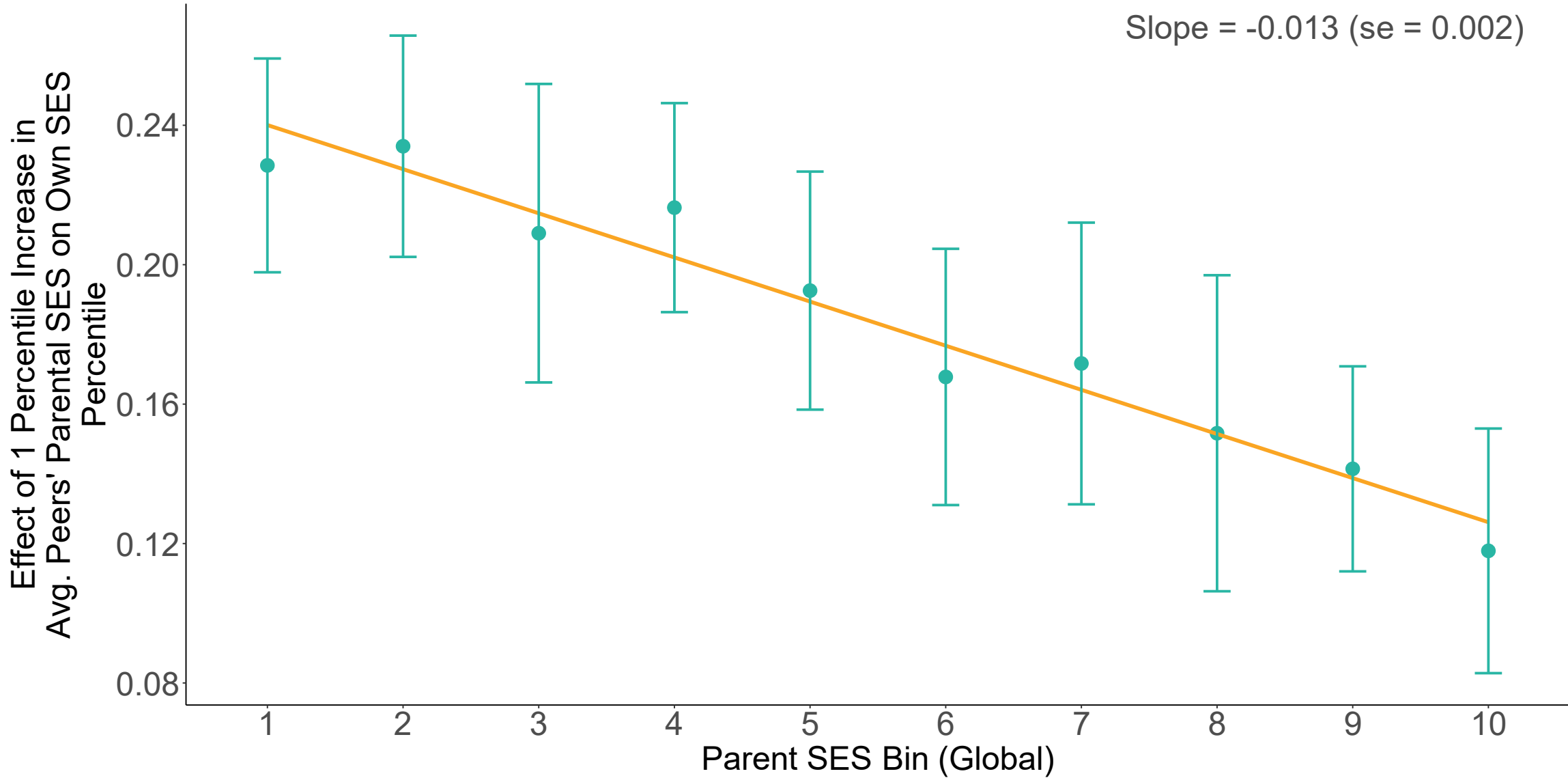


Source: Chetty, Friedman, Hendren, Jones, Porter (2026); Chetty, Jackson, Kuchler, Stroebel et al. (Nature 2022)



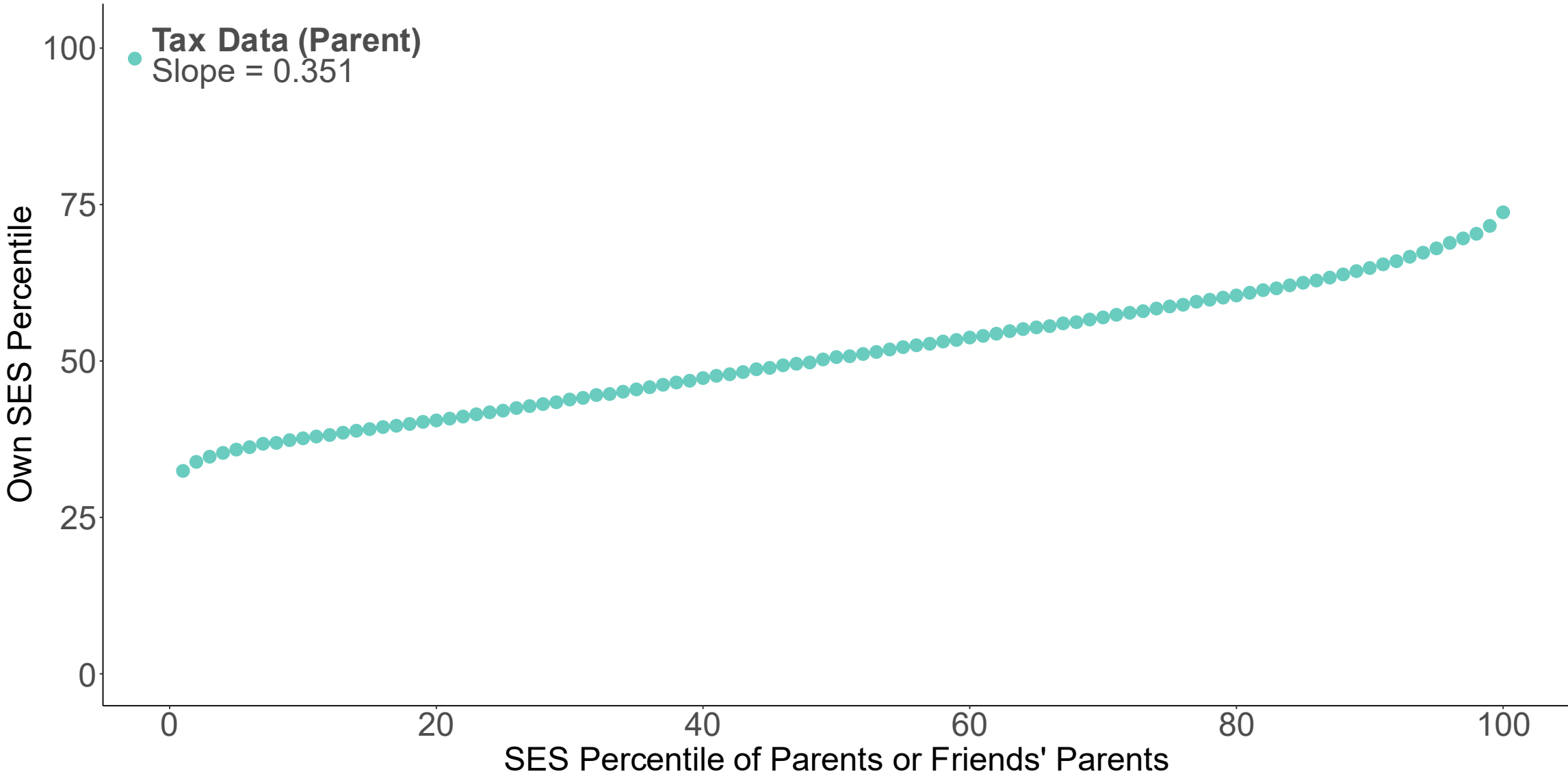
# Heterogeneity of Peer Effects by Parent SES

Own SES Rank in Adulthood



# Own SES Rank at Age 34 vs. Parents' SES Rank

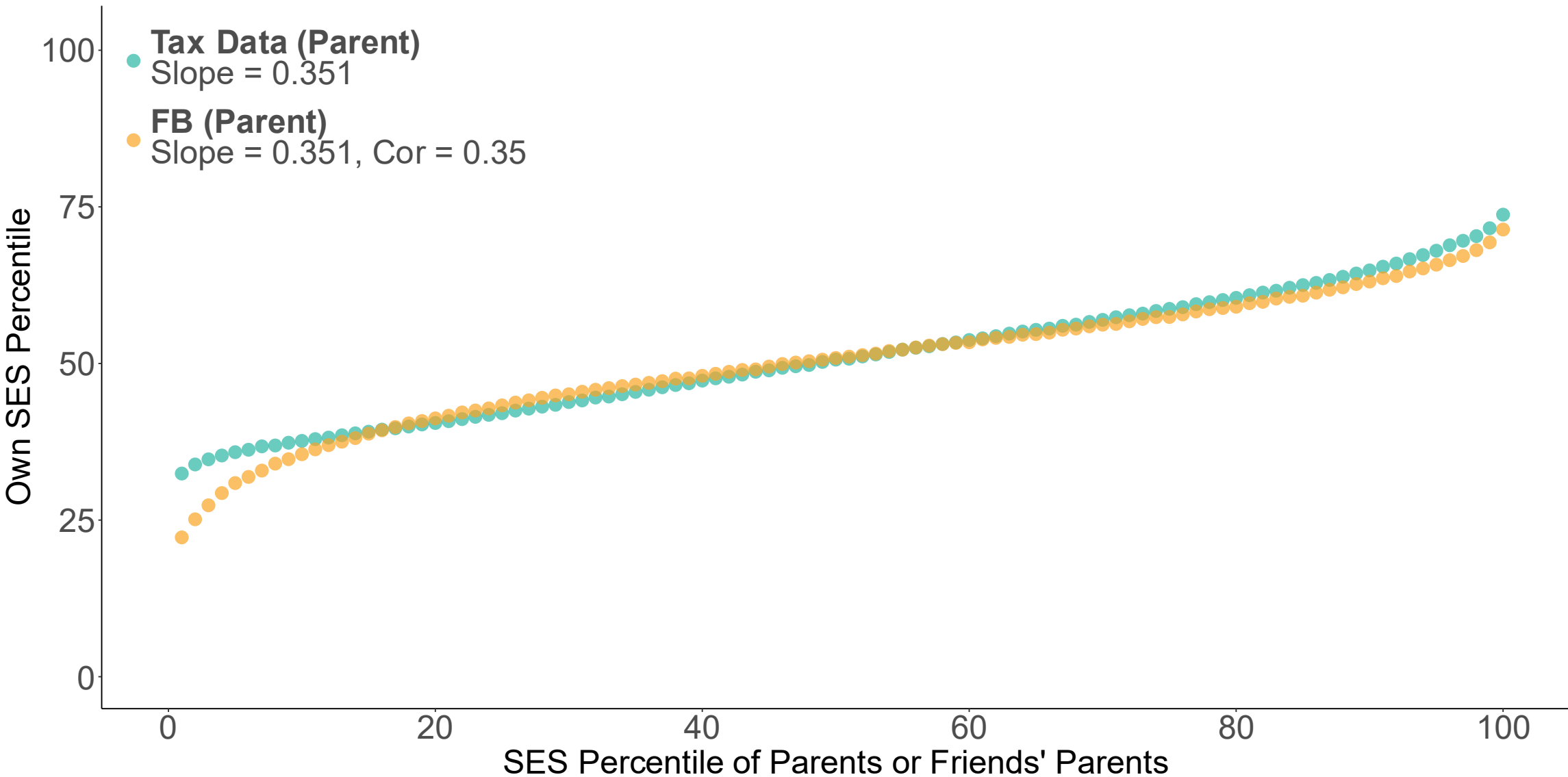
Tax Data



Source: Chetty et al. (2020)

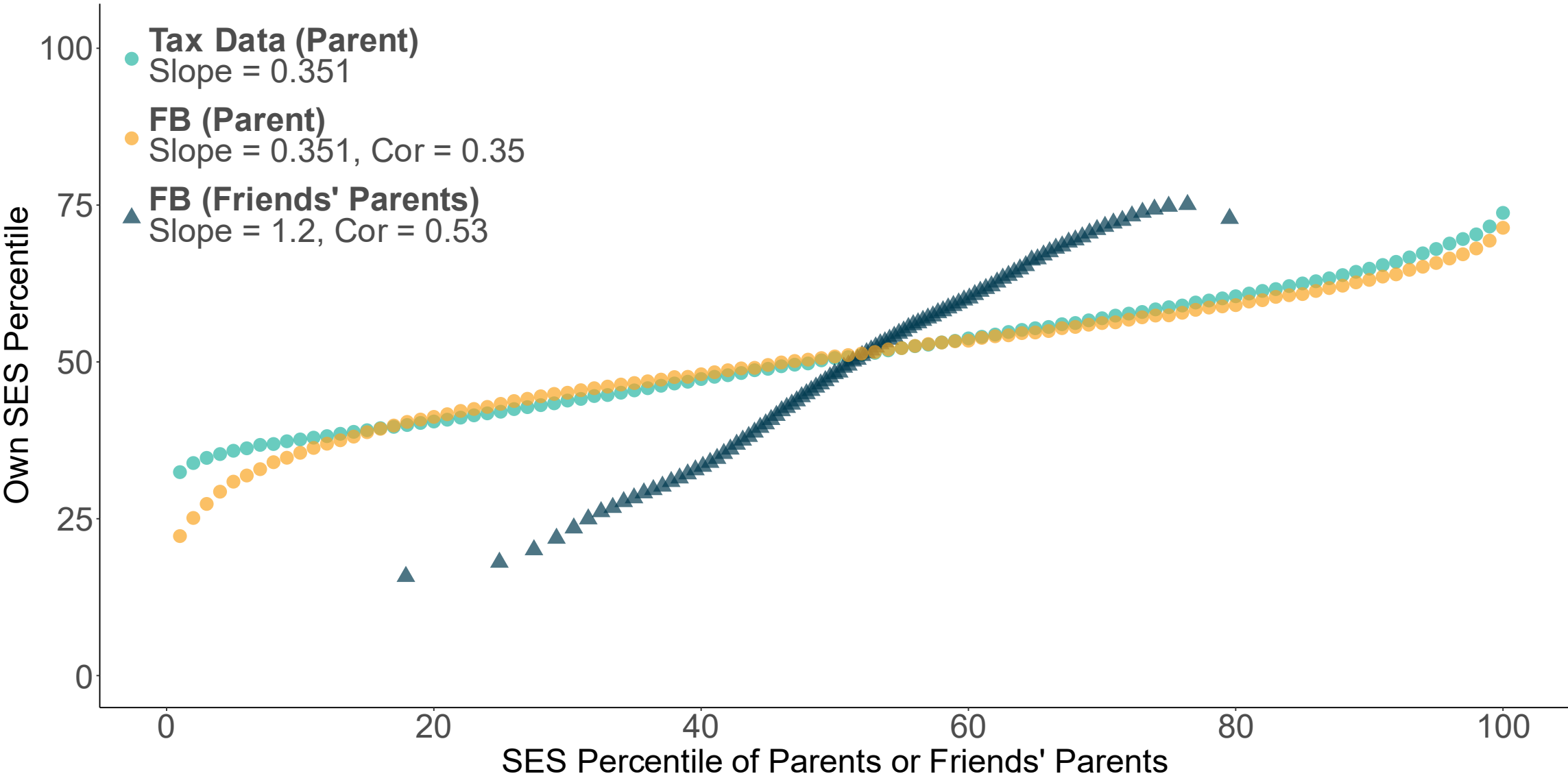
# Own SES Rank at Age 34 vs. Parents' SES Rank

Tax Data vs. Facebook Data



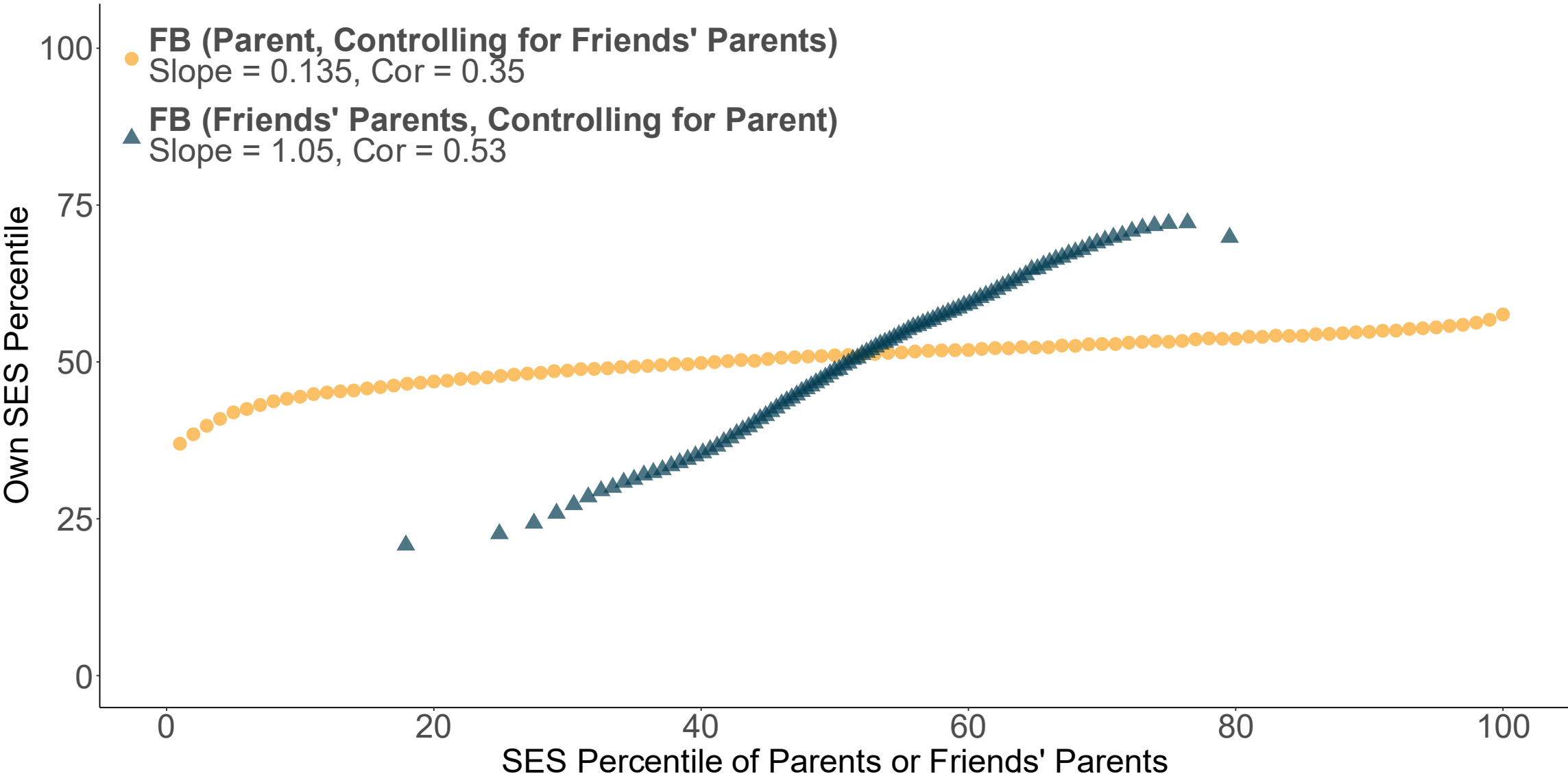
# Own SES Rank vs. Own Parent SES Rank and Friends' Parents' Rank

Tax Data vs. Facebook Data



# Own SES Rank vs. Own Parent SES Rank and Friend Parent SES Rank

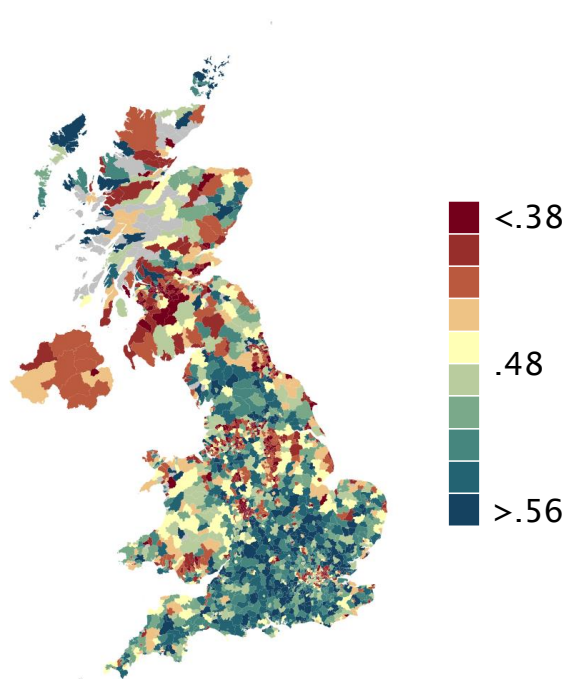
Multivariable Regression Estimates



# Economic Opportunity and Social Capital

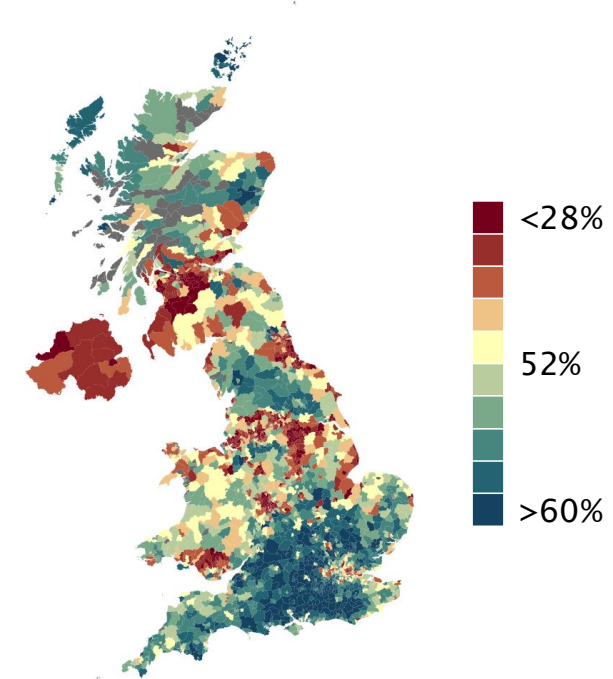
United Kingdom

## Upward Mobility Based on Facebook Data



Predicted adult income percentile of a child with parents at the 25th percentile of the national income distribution

## Economic Connectedness Based on Facebook Data

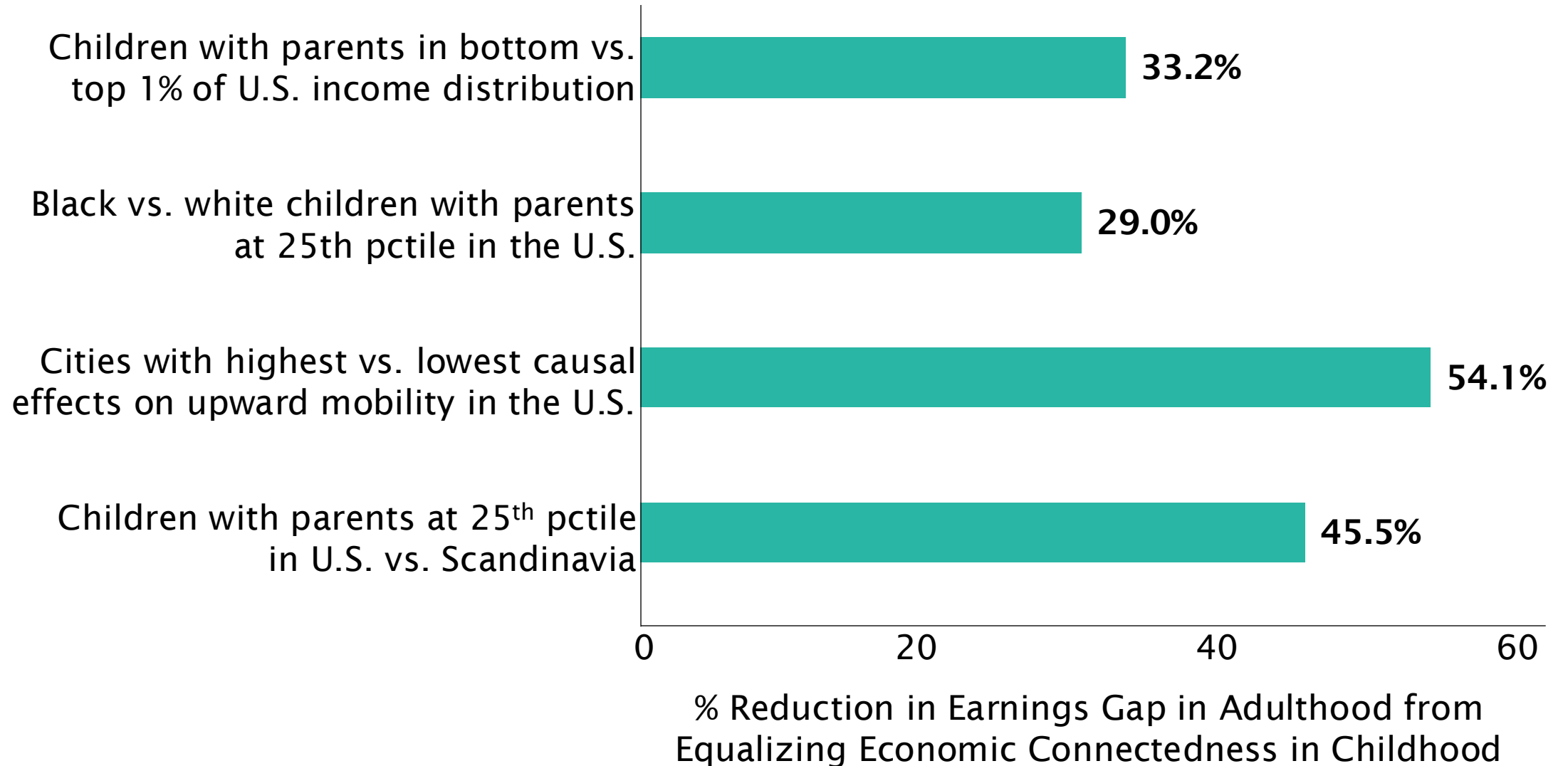


Share of Above-Median-Income Friends among Below-Median-Income People

*Shading indicates levels of upward mobility and economic connectedness, with **red** representing lower levels and **blue** representing higher levels.*

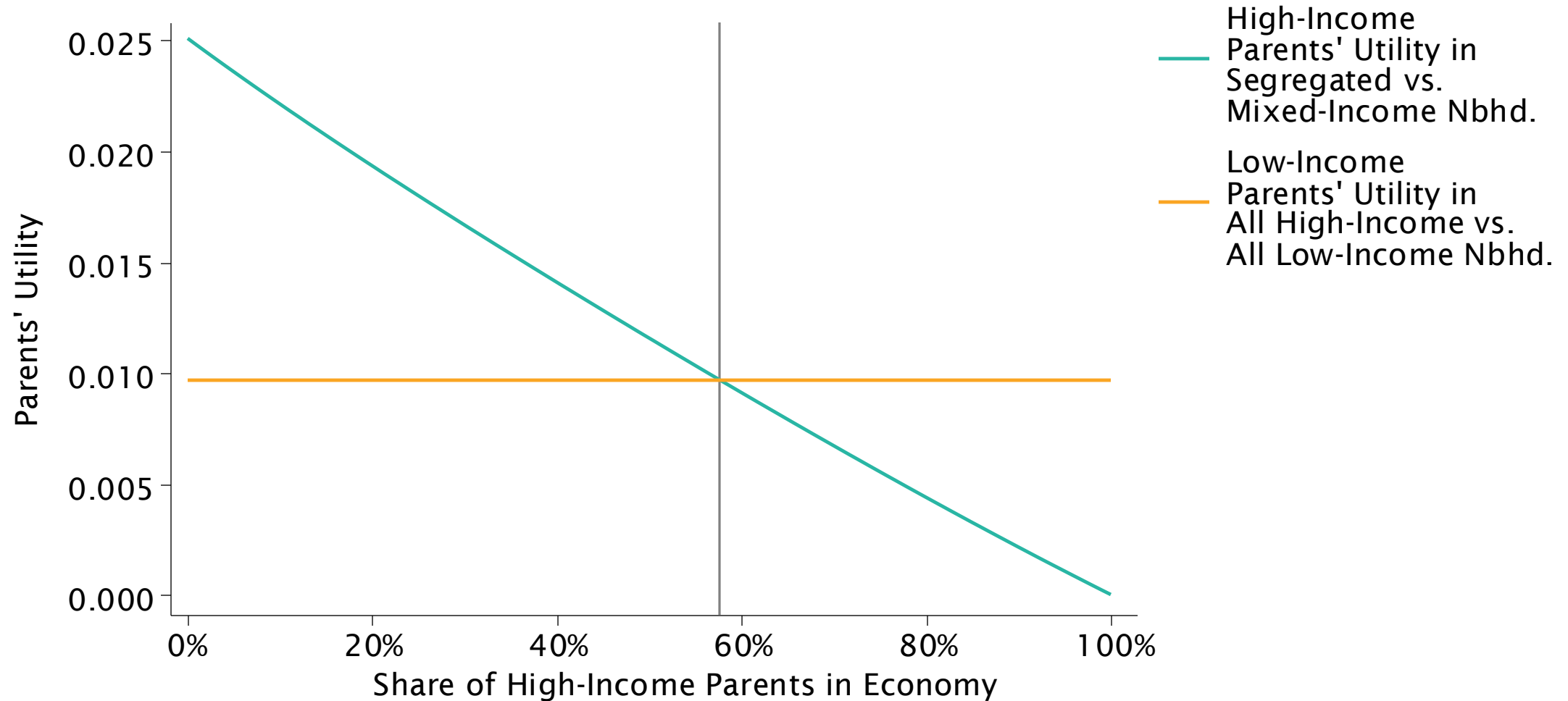


# Gap in Outcomes Explained by Causal Effect of Economic Connectedness



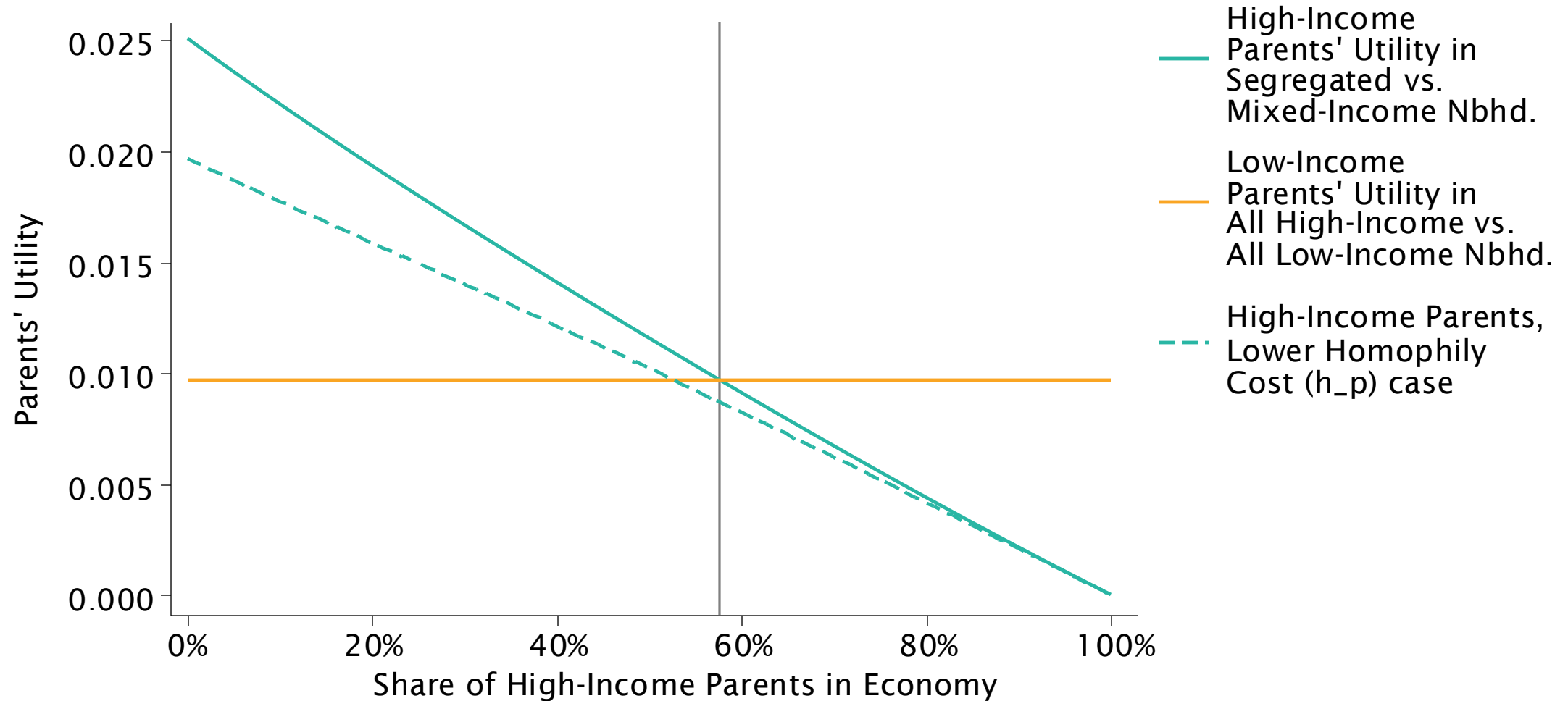
# Characterization of Equilibrium Sorting Across Neighborhoods

$\beta = 2.5$



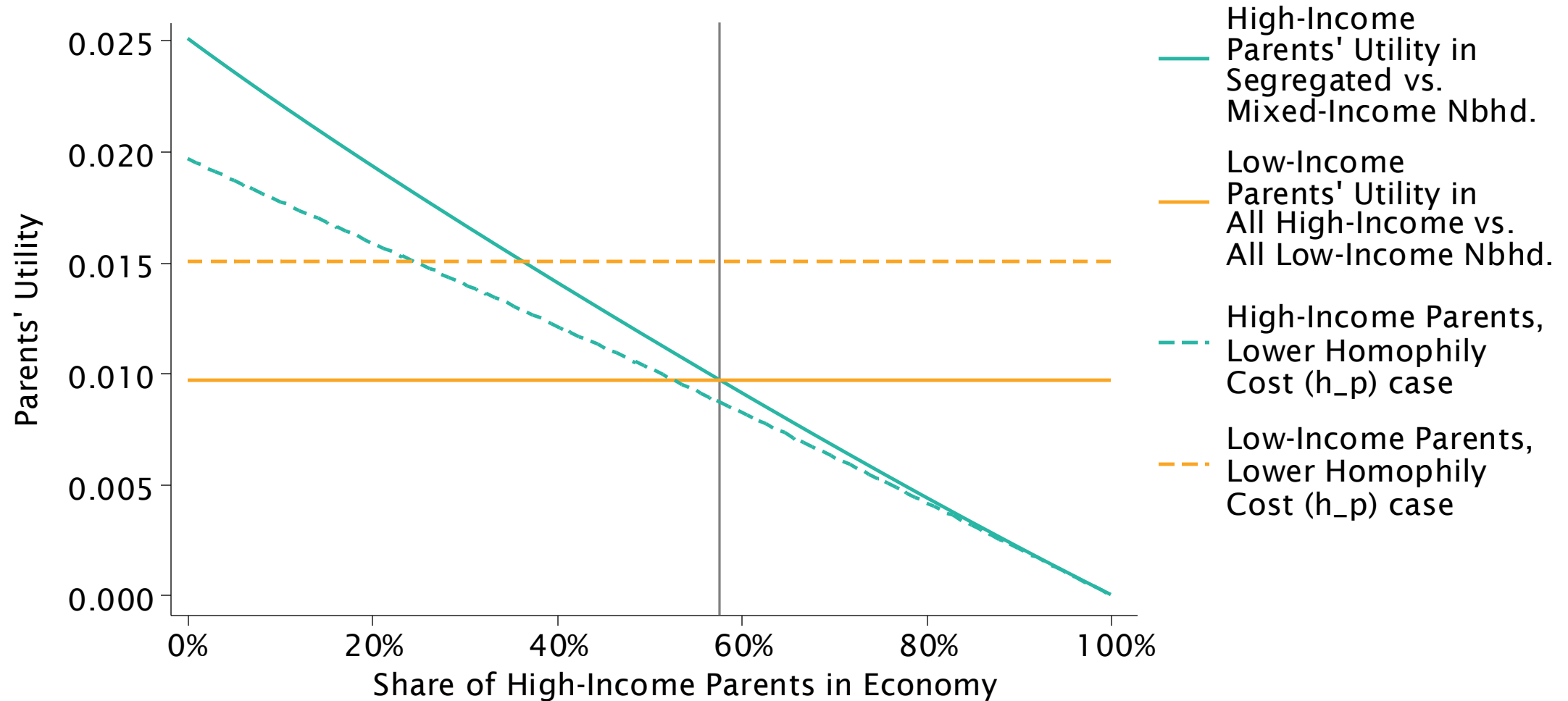
# Characterization of Equilibrium Sorting Across Neighborhoods

$\beta = 2.5$



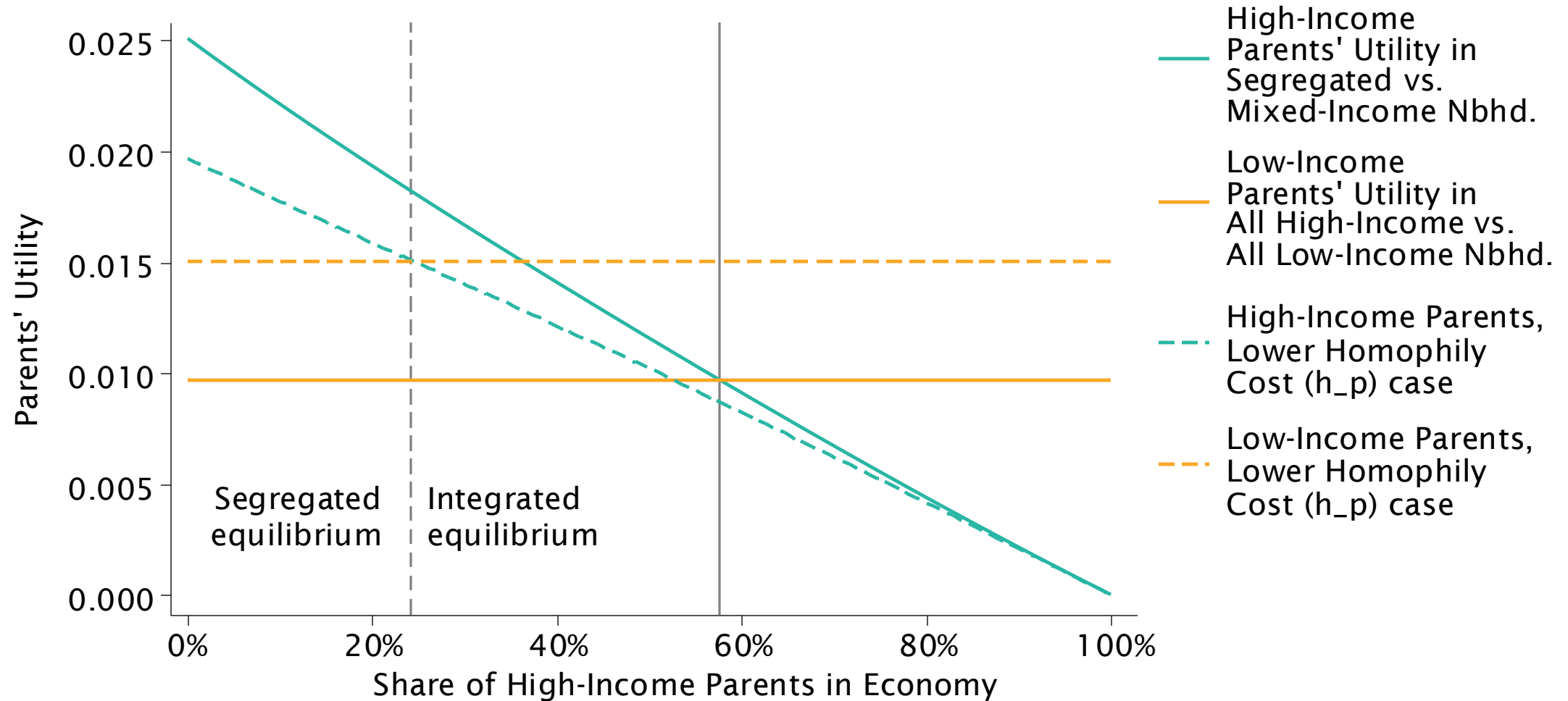
# Characterization of Equilibrium Sorting Across Neighborhoods

$\beta = 2.5$



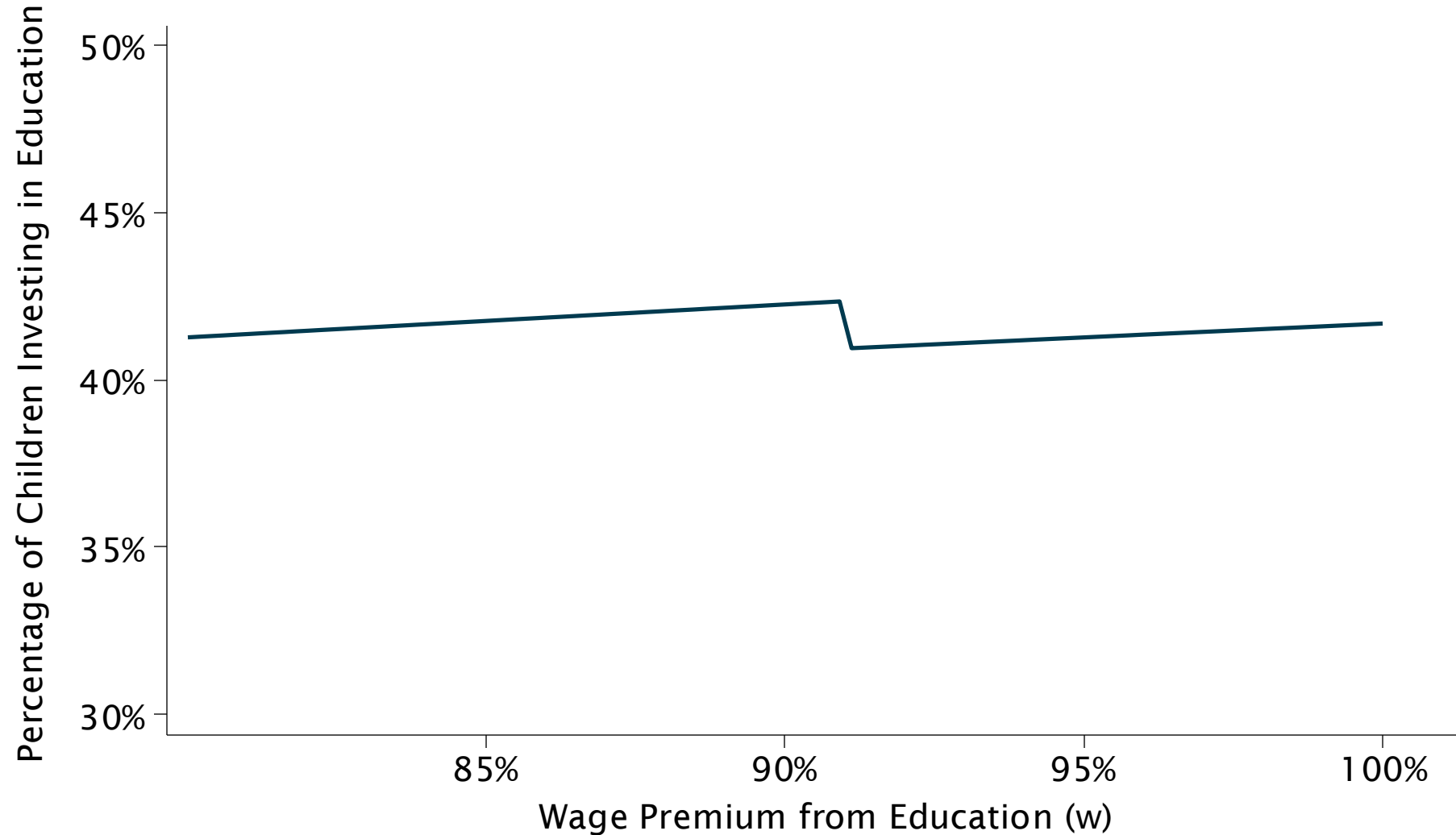
# Characterization of Equilibrium Sorting Across Neighborhoods

$\beta = 2.5$



# Investment in Education vs. Returns to Education

$\beta = 2.5$



# The Great Gatsby Curve Across Countries

Correlation Between Intergenerational Persistence of Income and Inequality

