

# Social and political preferences

Davide Cipullo

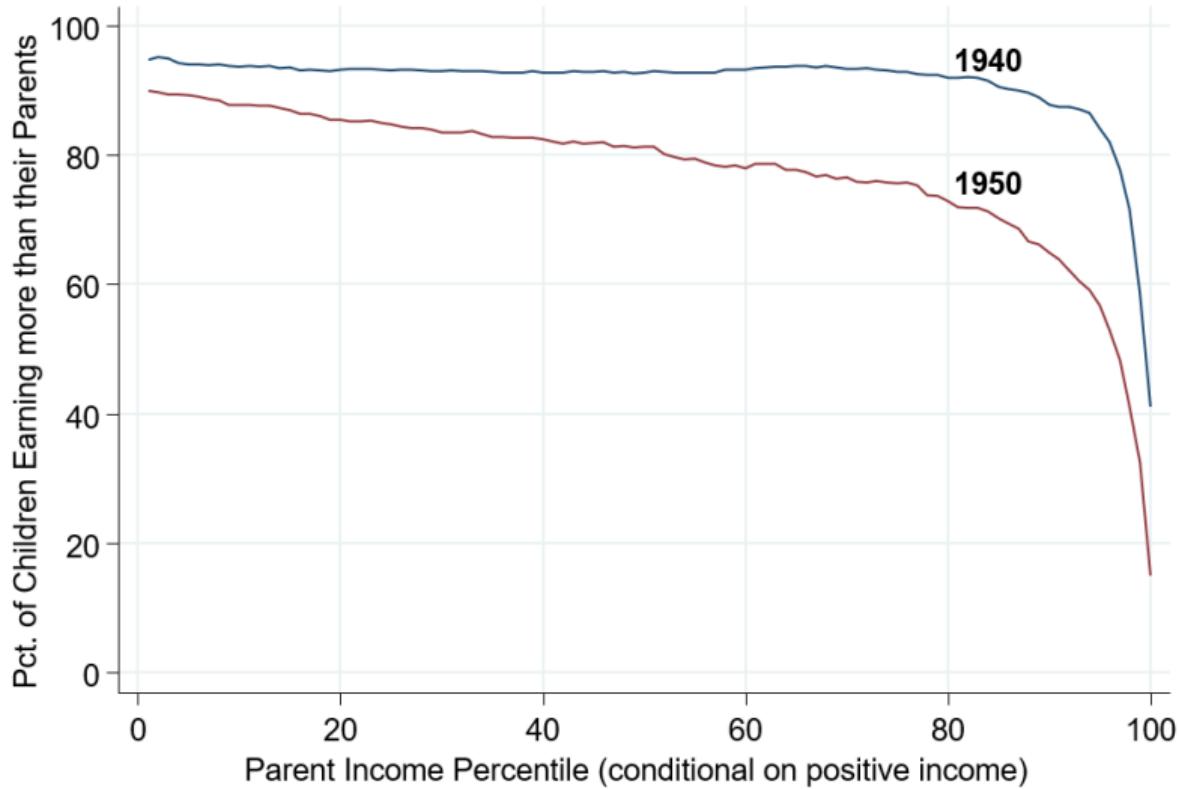
Master's course in Political and Public Economics

Università Cattolica del Sacro Cuore

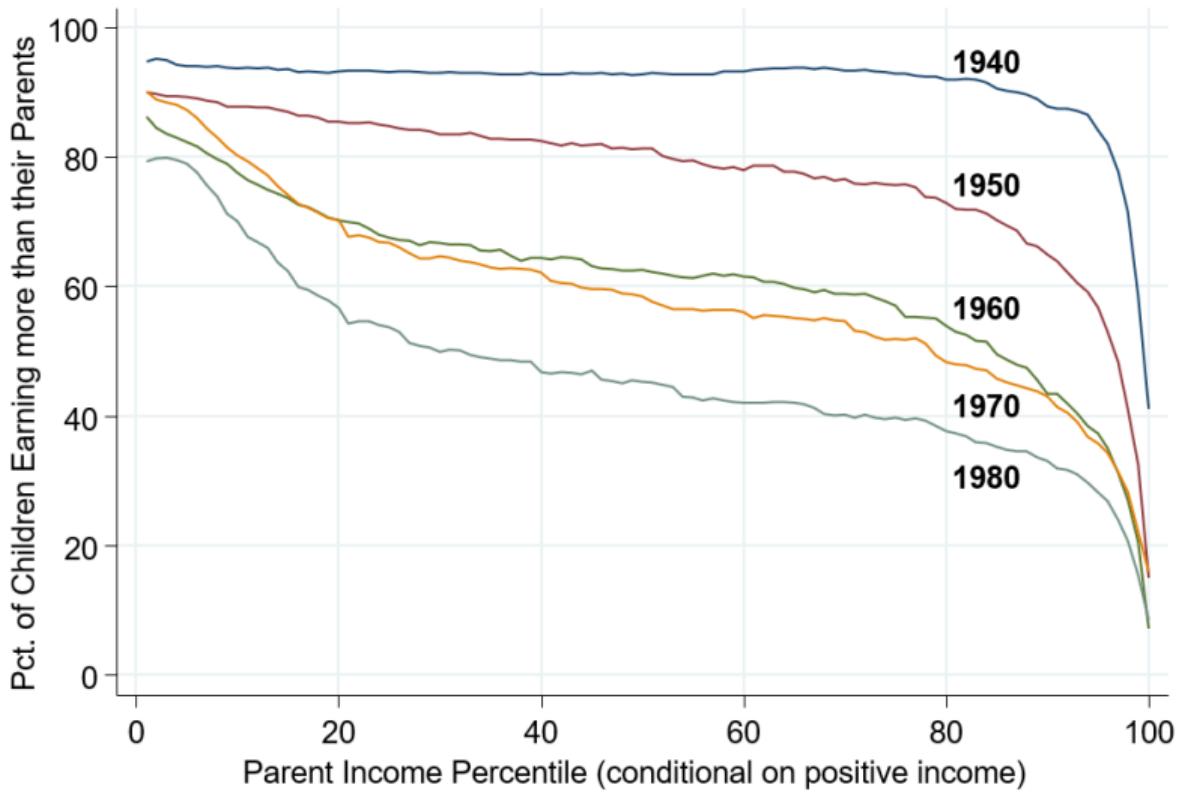
February 25, 2025

## Social mobility and the *American dream*

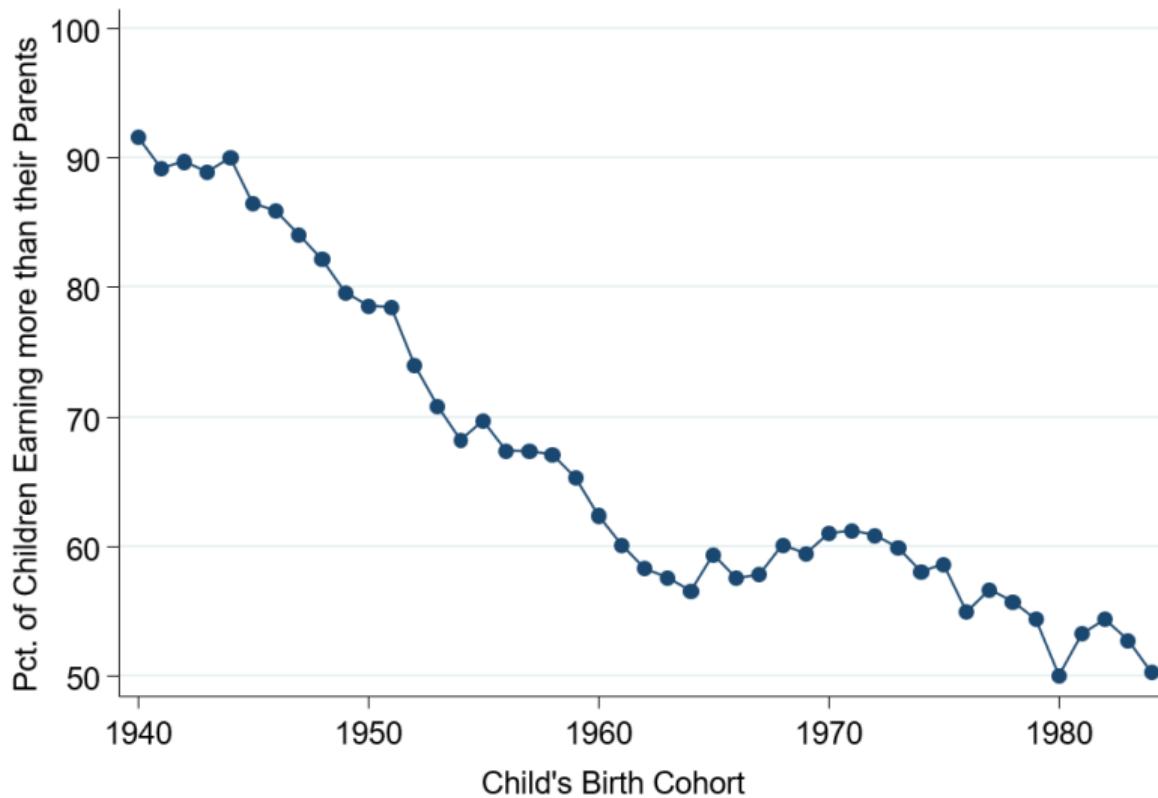
- ▶ Central feature of American Dream: aspiration that children have a higher standard of living than their parents (Samuel 2012)
  - ▶ When asked to assess economic progress, children often compare their earnings to their parents (Goldthorpe 1987, Hoschchild 2016)
  - ▶ Obama in 2014 stated that people's frustration is partly rooted "in the fear that their kids won't be better off than they were"
- ▶ Longstanding interest in measuring absolute mobility: fraction of children who have a higher standard of living than their parents



Source: Chetty et al. (2017)



Source: Chetty et al. (2017)

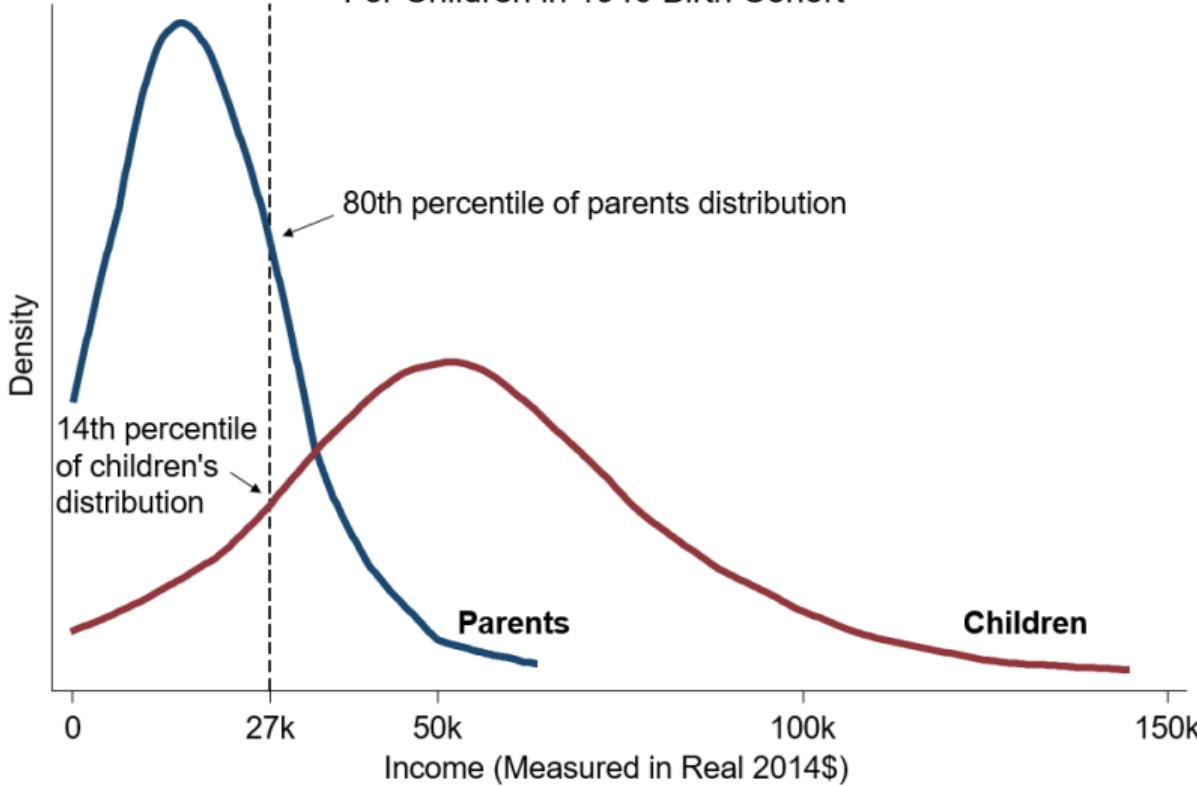


Source: Chetty et al. (2017)

- ▶ Mean number of children that earn more than their parents is steadily falling over time

## Household Income Distributions of Parents and Children at Age 30

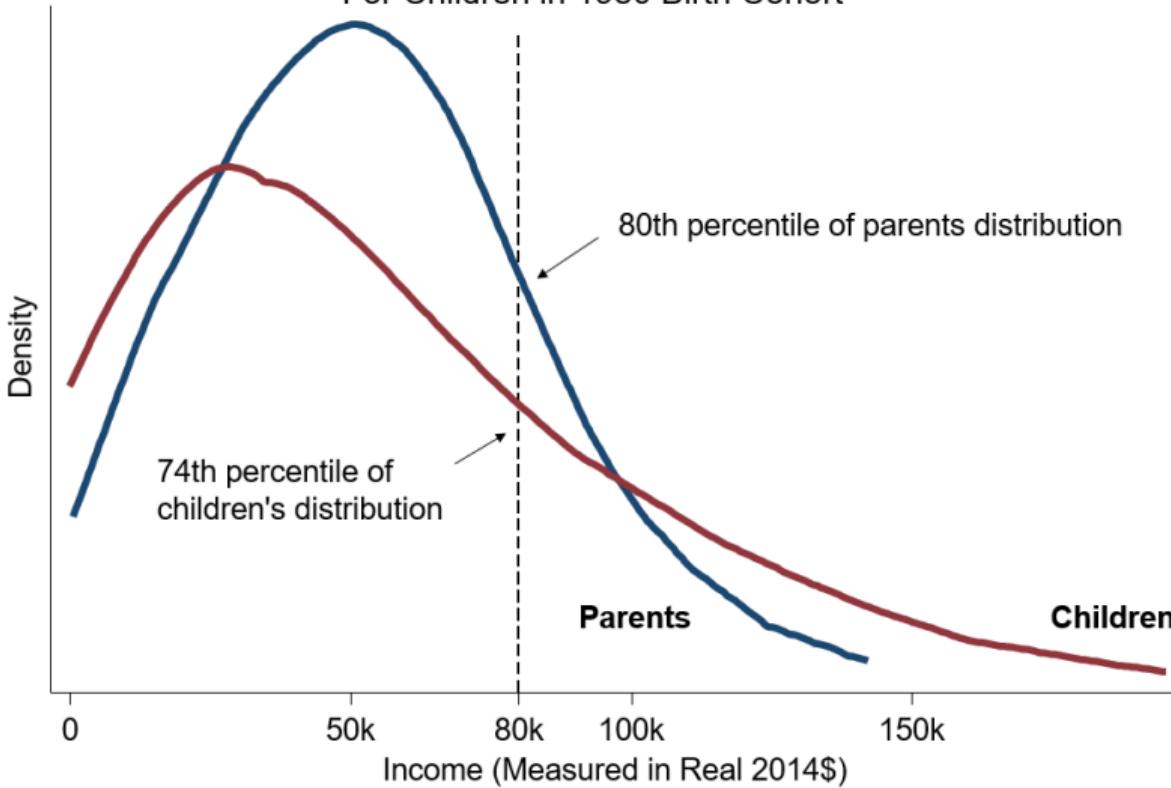
For Children in 1940 Birth Cohort



Source: Chetty et al. (2017)

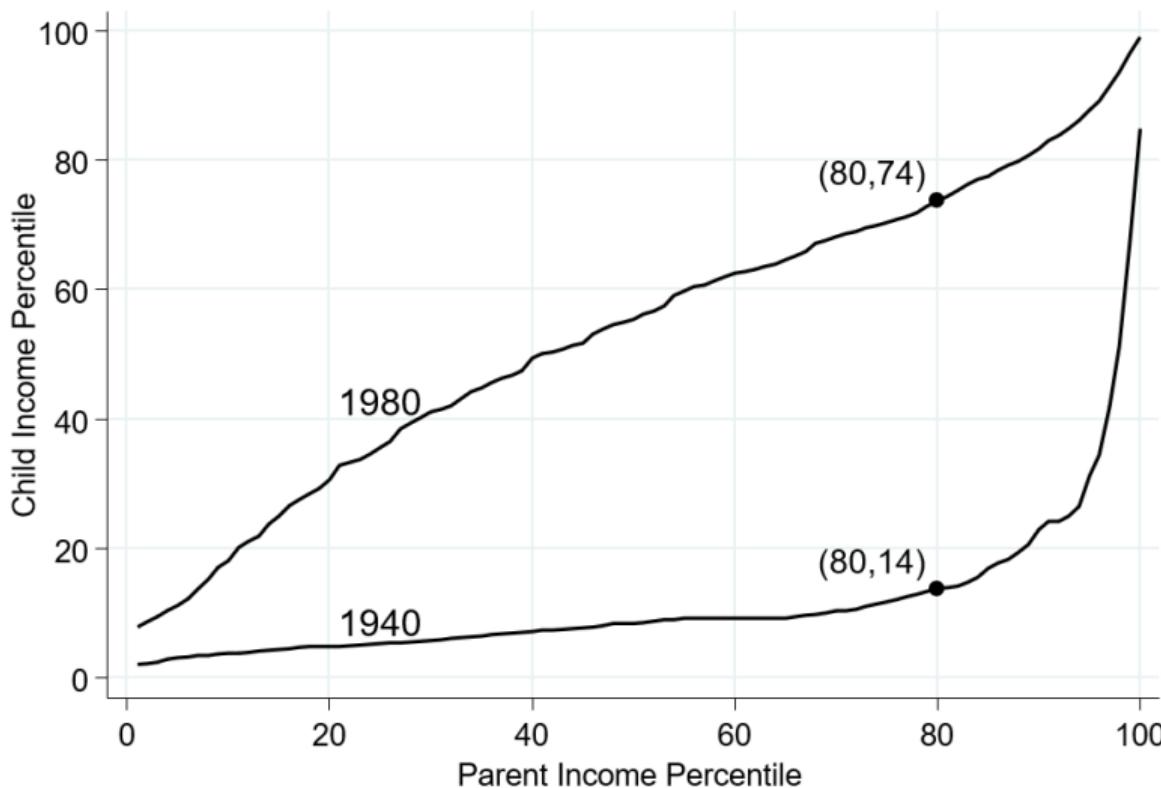
## Household Income Distributions of Parents and Children at Age 30

For Children in 1980 Birth Cohort



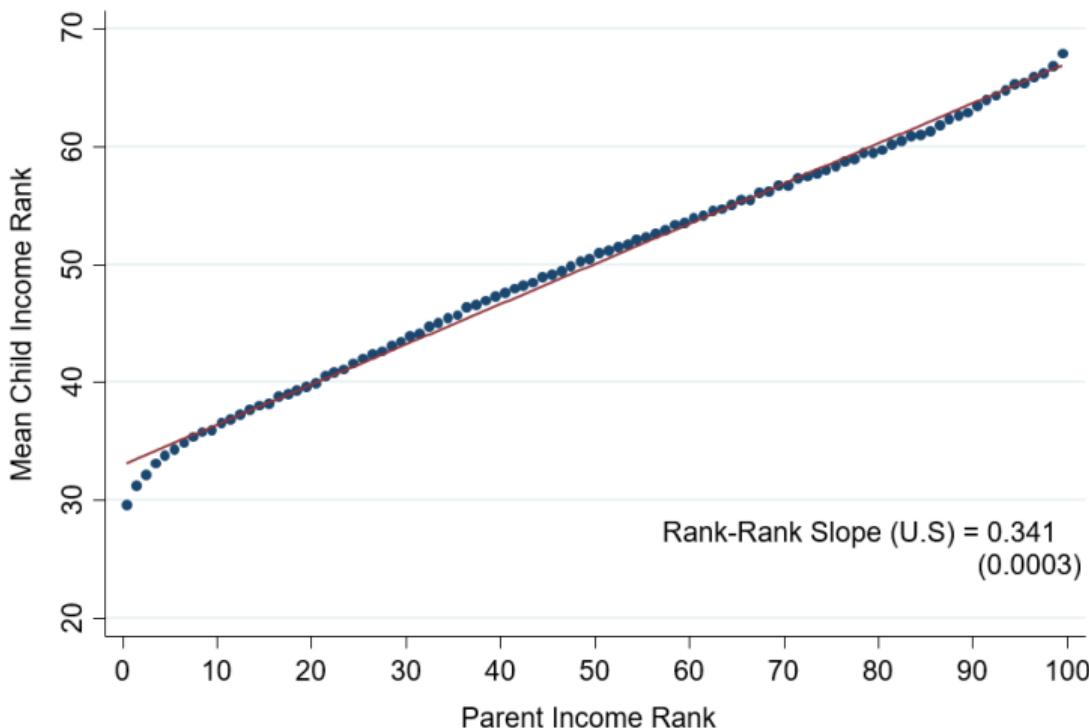
Source: Chetty et al. (2017)

## Child Rank Required to Earn More Than Parents



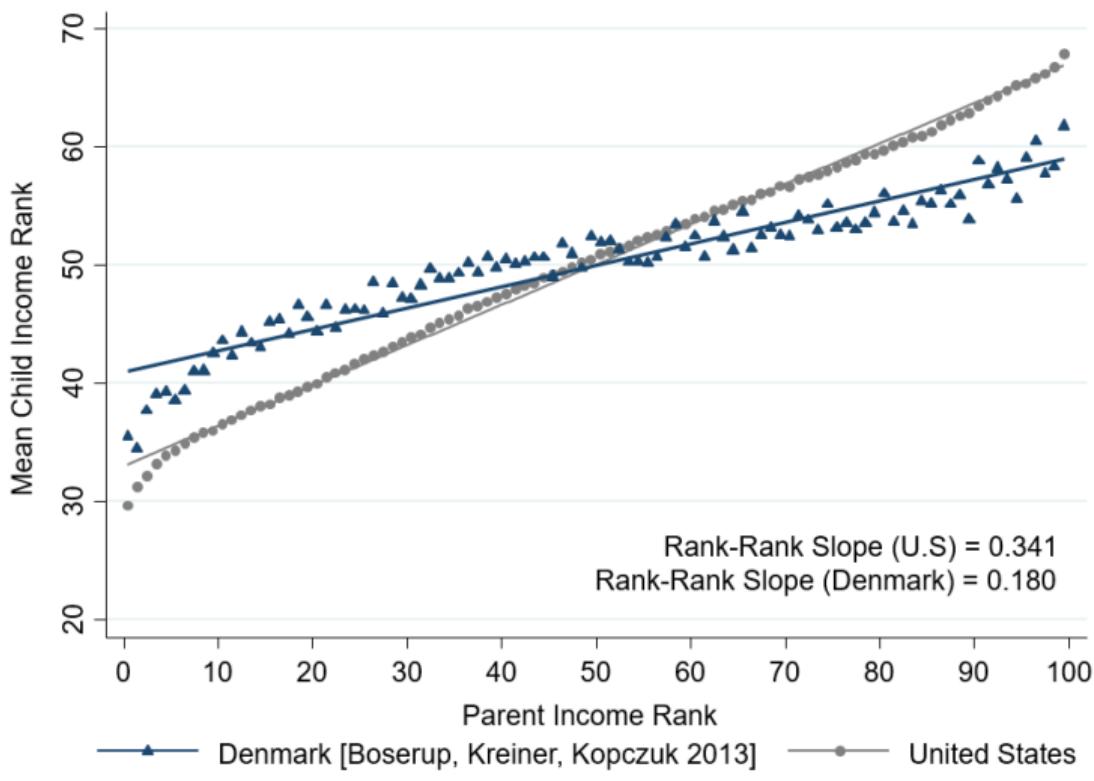
Source: Chetty et al. (2017)

### Mean Child Percentile Rank vs. Parent Percentile Rank



Source: Chetty et al. (2014)

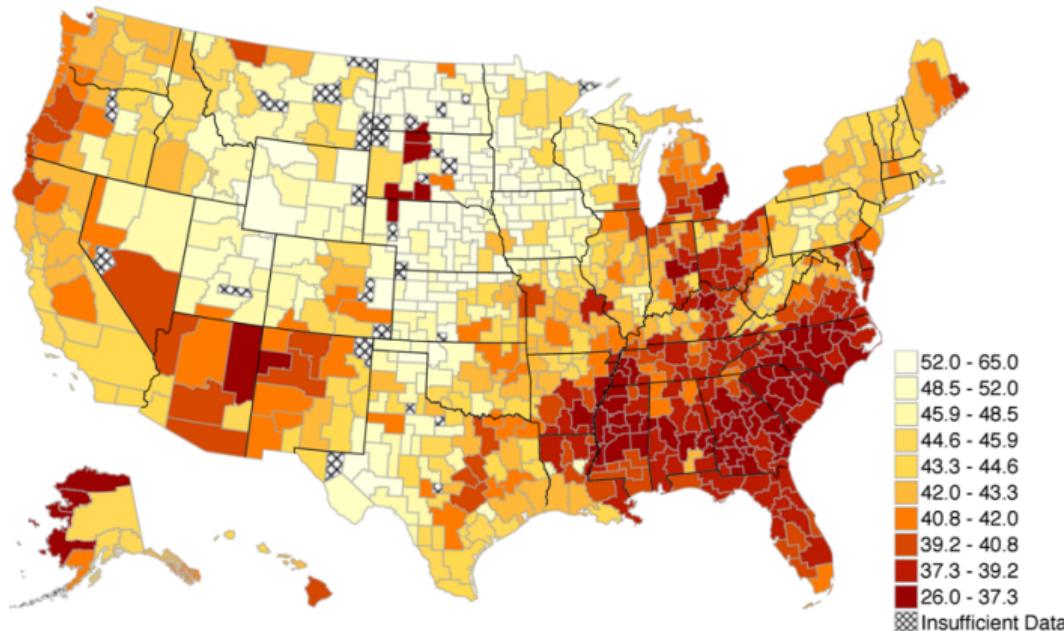
## Intergenerational Mobility in the United States vs. Denmark



Source: Chetty et al. (2014)

## The Geography of Upward Mobility in the United States

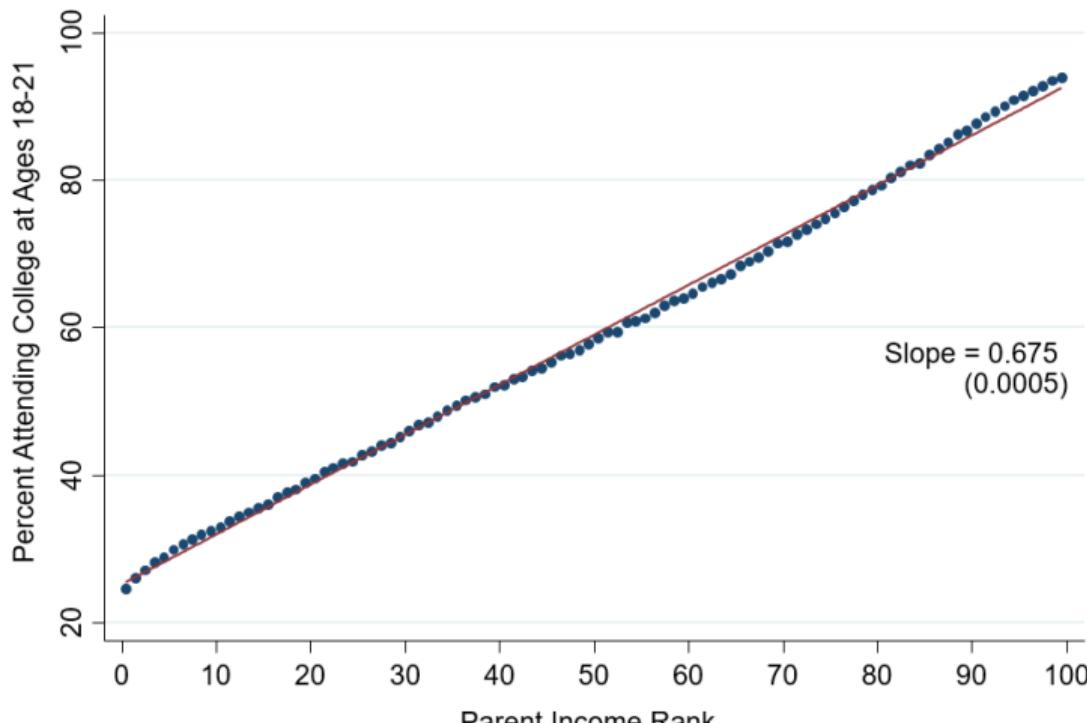
Mean Child Percentile Rank for Parents at 25<sup>th</sup> Percentile ( $Y_{25}$ )



*Note: Lighter Color = More Absolute Upward Mobility*

Source: Chetty et al. (2014)

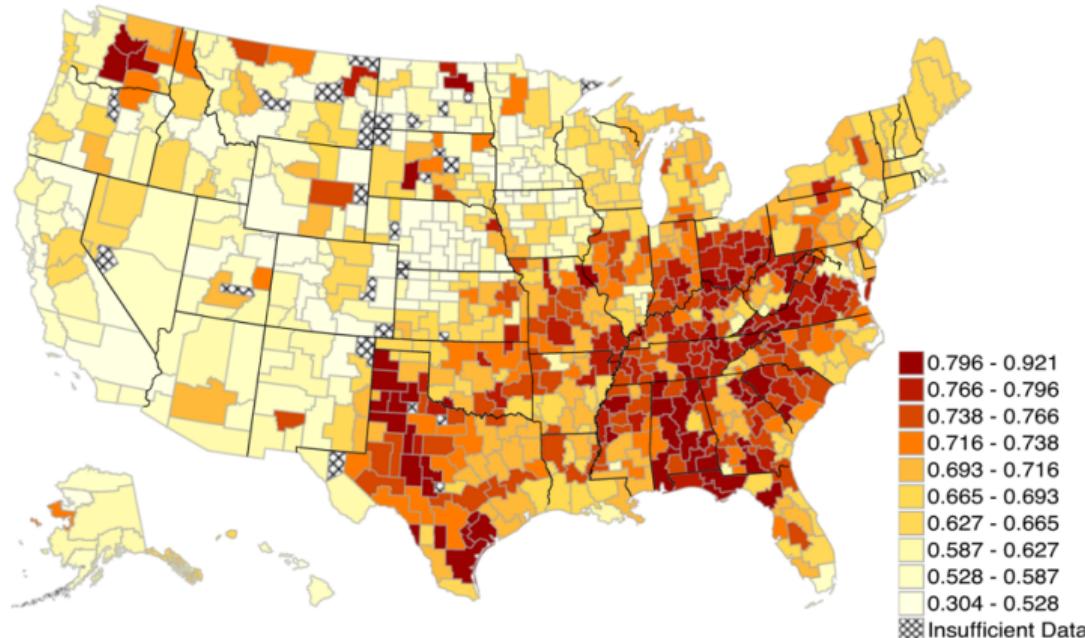
### College Attendance Rates vs. Parent Income Rank in the U.S.



Source: Chetty et al. (2014)

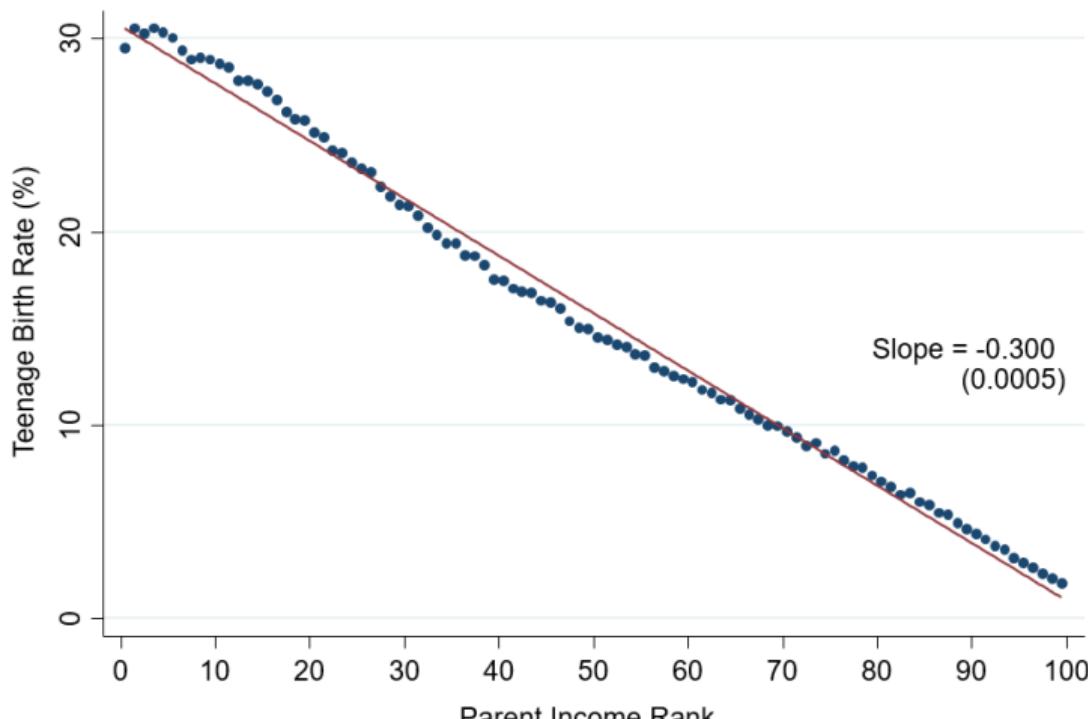
## College-Income Gradients by Area

Slopes from Regression of College Attendance (Age 18-21) on Parent Inc. Rank



Source: Chetty et al. (2014)

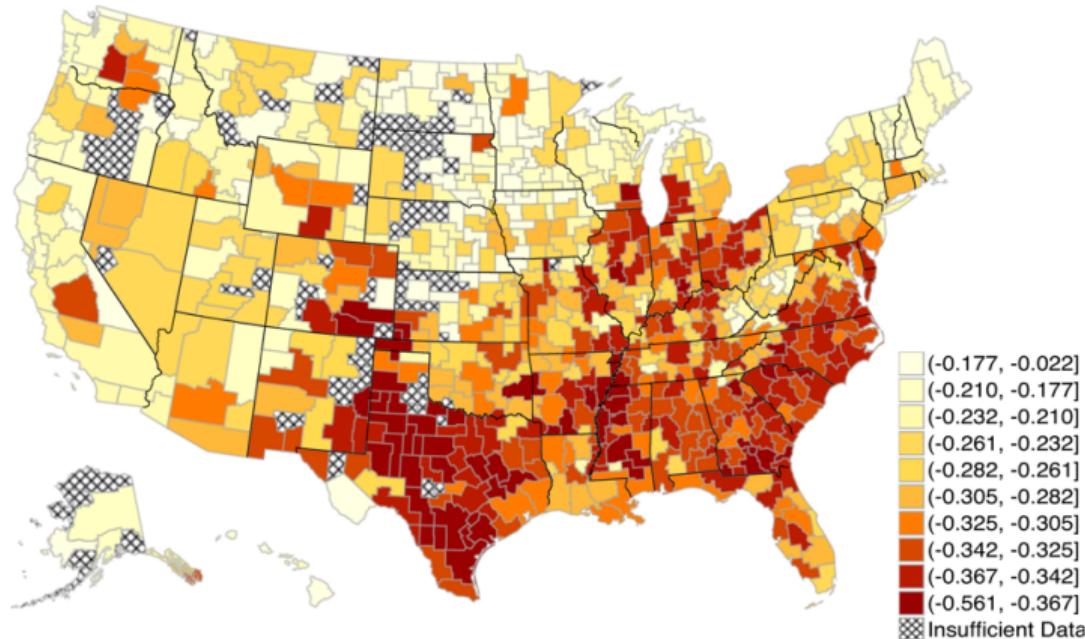
### Teenage Birth Rates for Females vs. Parent Income Rank in the U.S.



Source: Chetty et al. (2014)

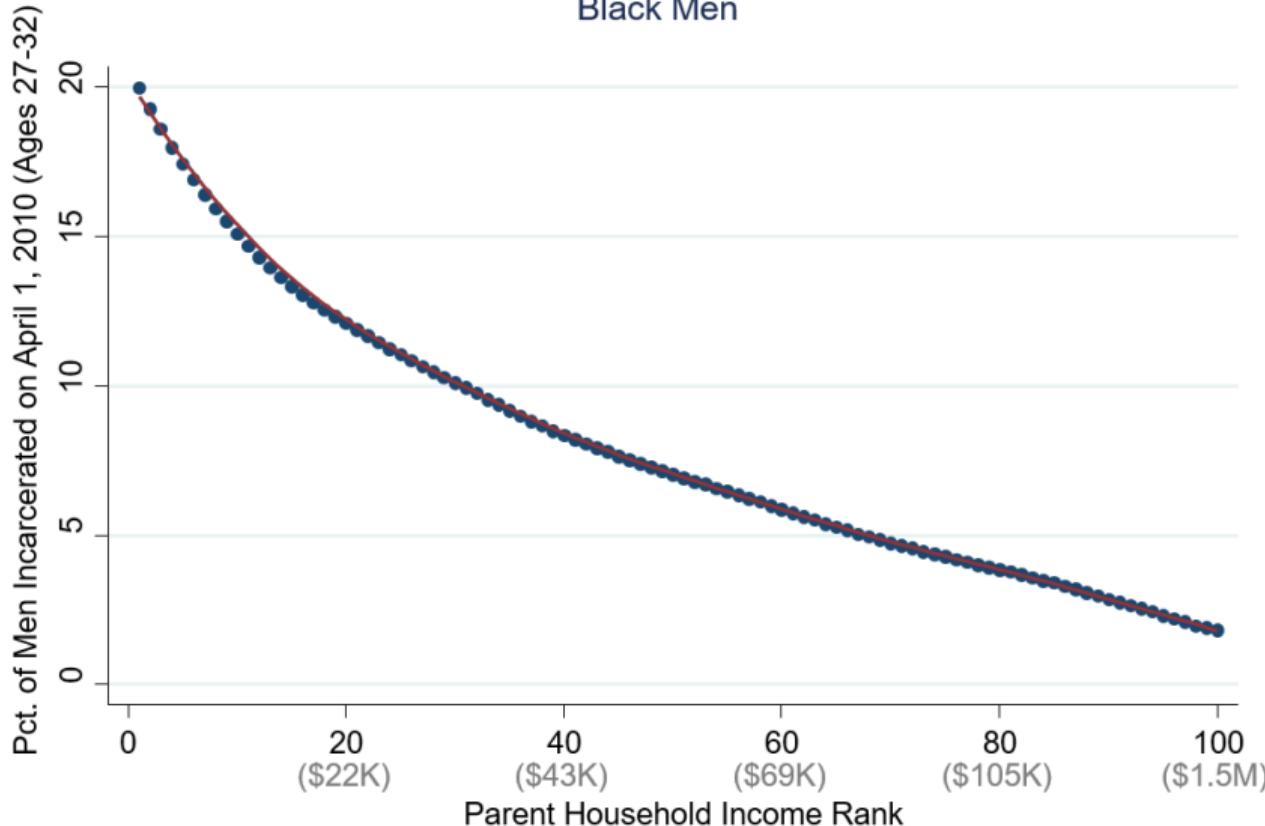
## Teenage Birth Gradients by Area

Slopes from Regression of Teenage Birth on Parent Inc. Rank



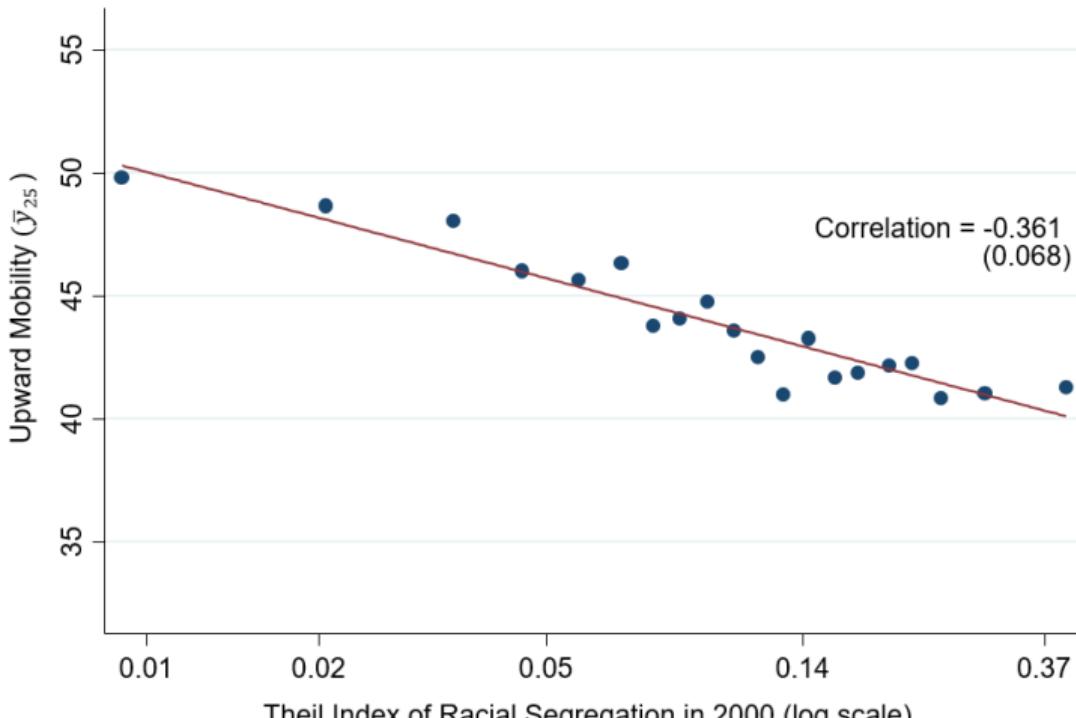
Source: Chetty et al. (2014)

## Incarceration Rates vs. Parent Household Income Rank Black Men



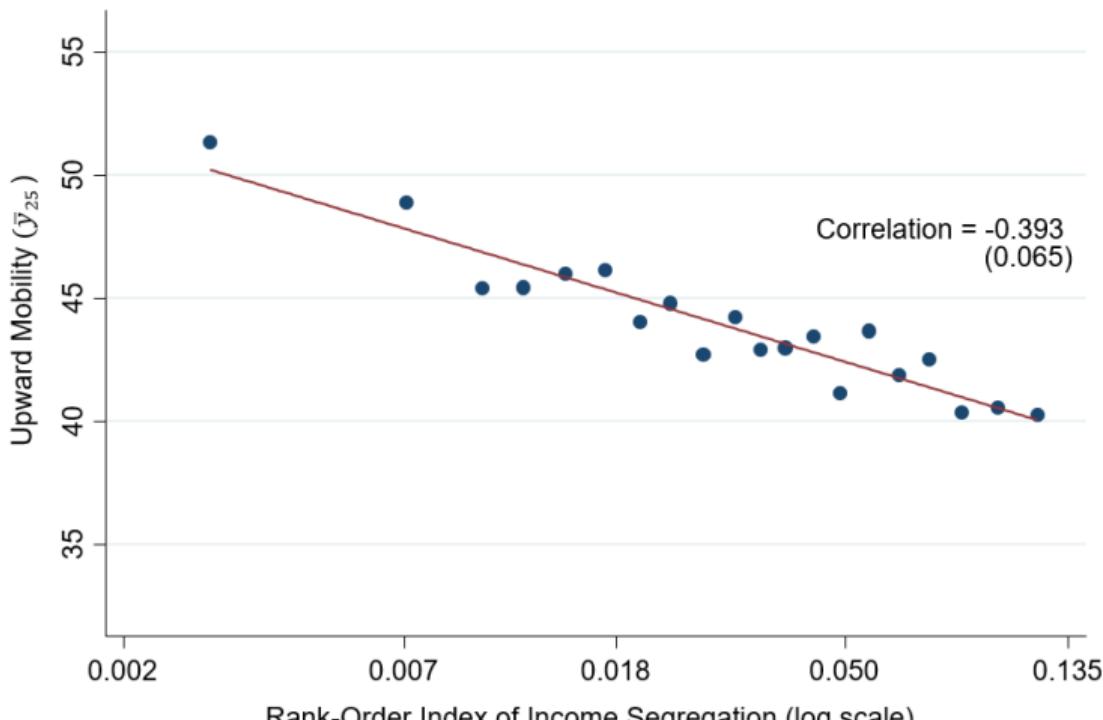
Source: Chetty et al. (2020)

### Absolute Upward Mobility vs. Racial Segregation



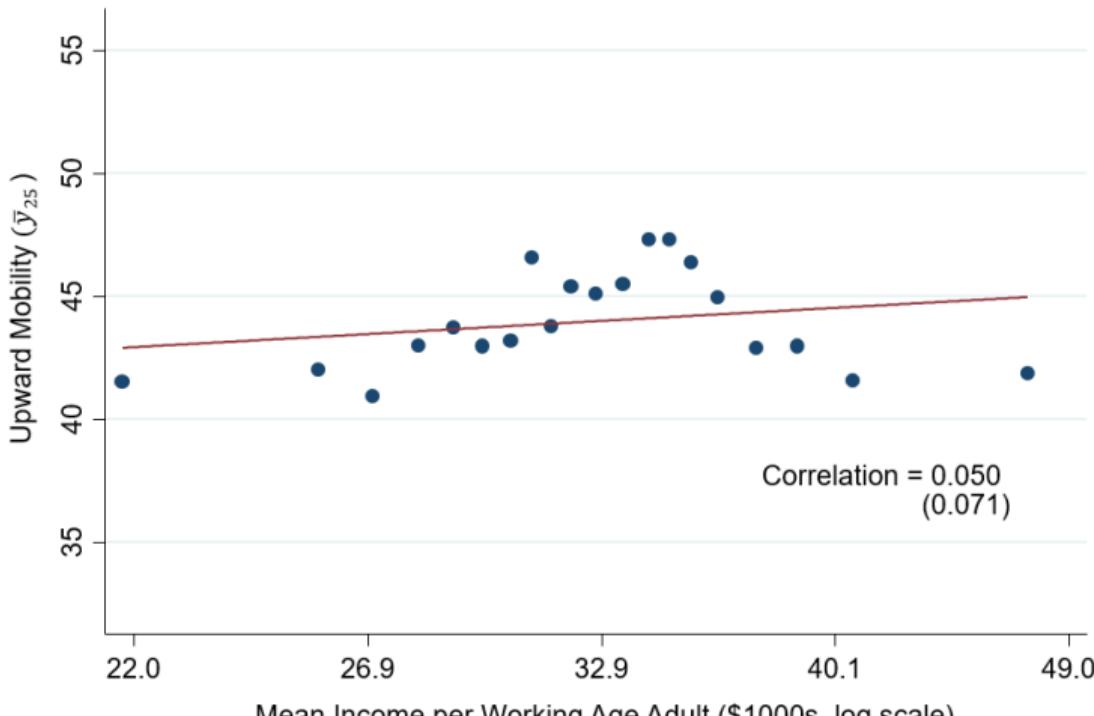
Source: Chetty et al. (2014)

### Absolute Upward Mobility vs. Income Segregation



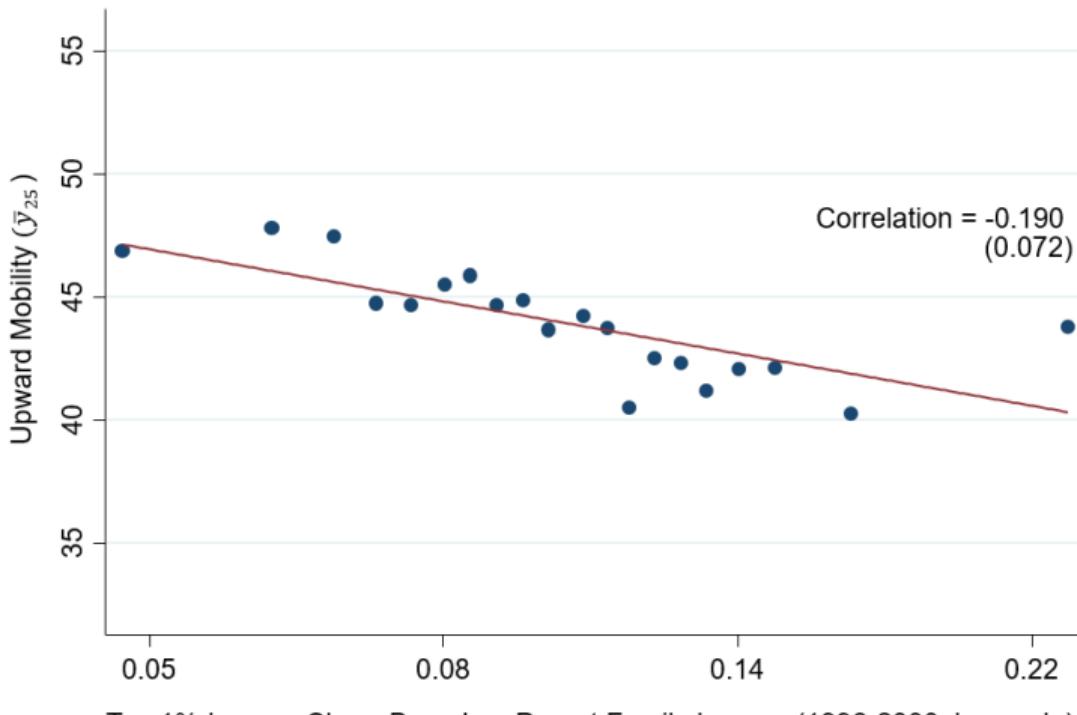
Source: Chetty et al. (2014)

### Absolute Upward Mobility vs. Mean Household Income in CZ



Source: Chetty et al. (2014)

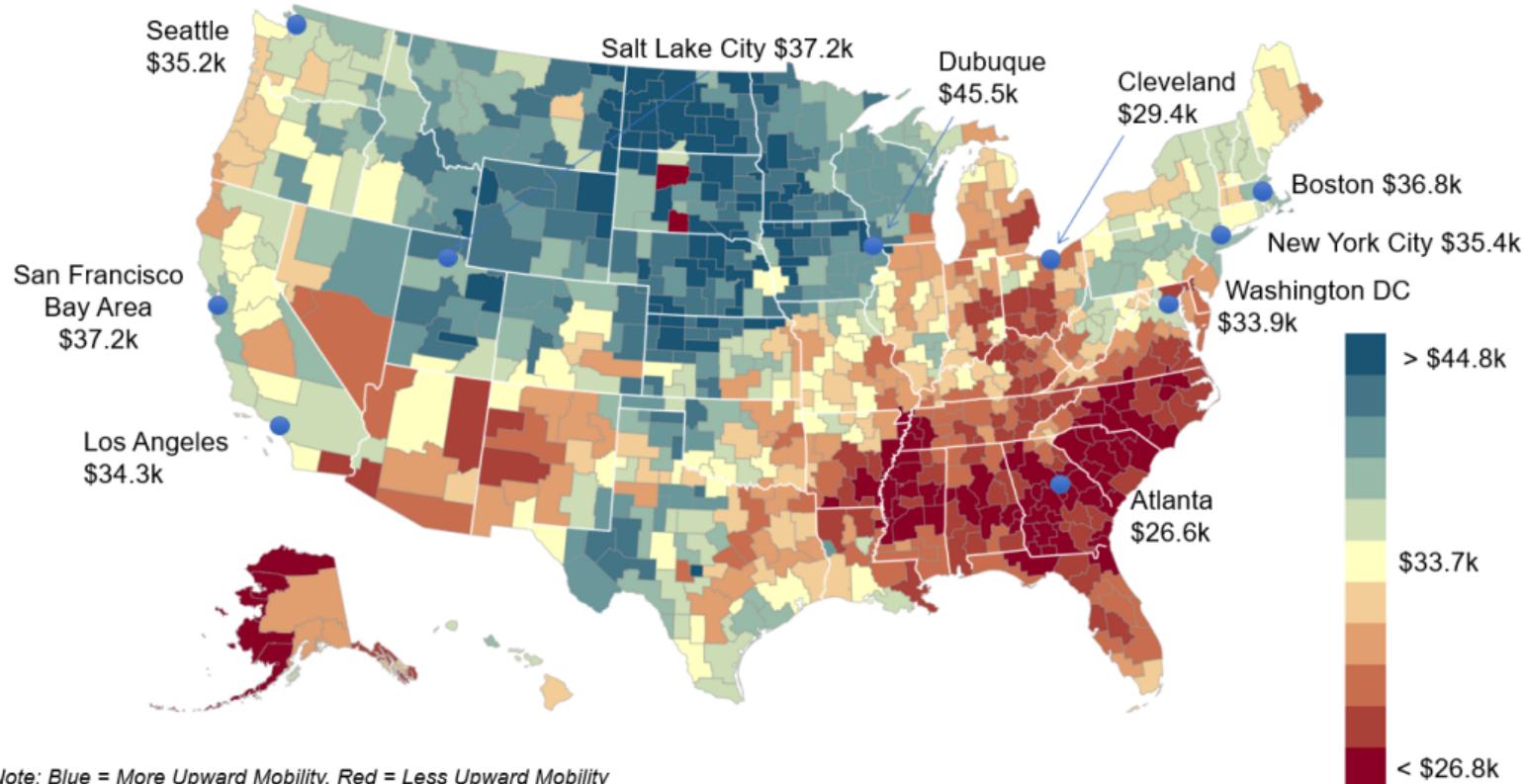
### Upward Mobility vs. Top 1% Income Share in CZ



Source: Chetty et al. (2014)

# The Geography of Upward Mobility in the United States

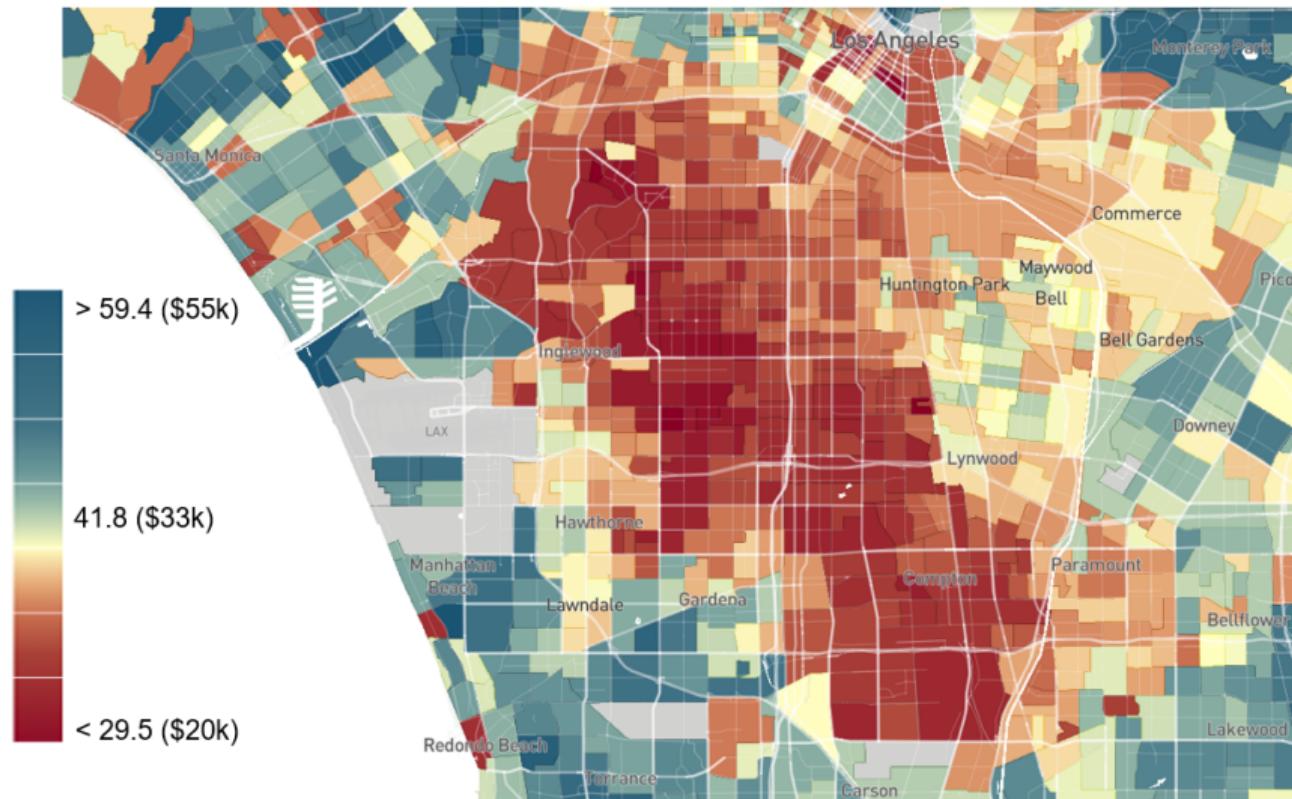
Average Household Income for Children with Parents Earning \$27,000 (25<sup>th</sup> percentile)



Note: Blue = More Upward Mobility, Red = Less Upward Mobility

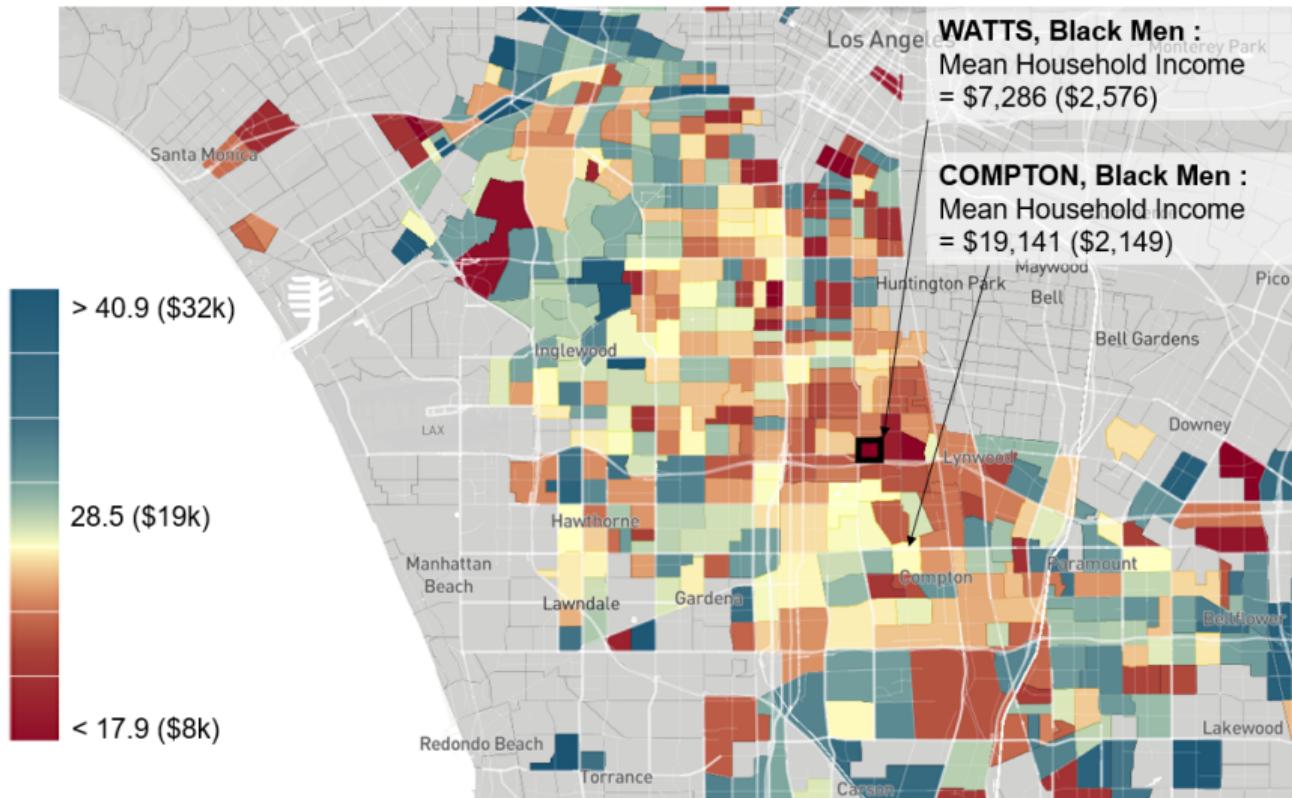
Source: Chetty et al. (2020)

## Mean Household Income for Children in Los Angeles with Parents Earning \$27,000 (25<sup>th</sup> percentile)



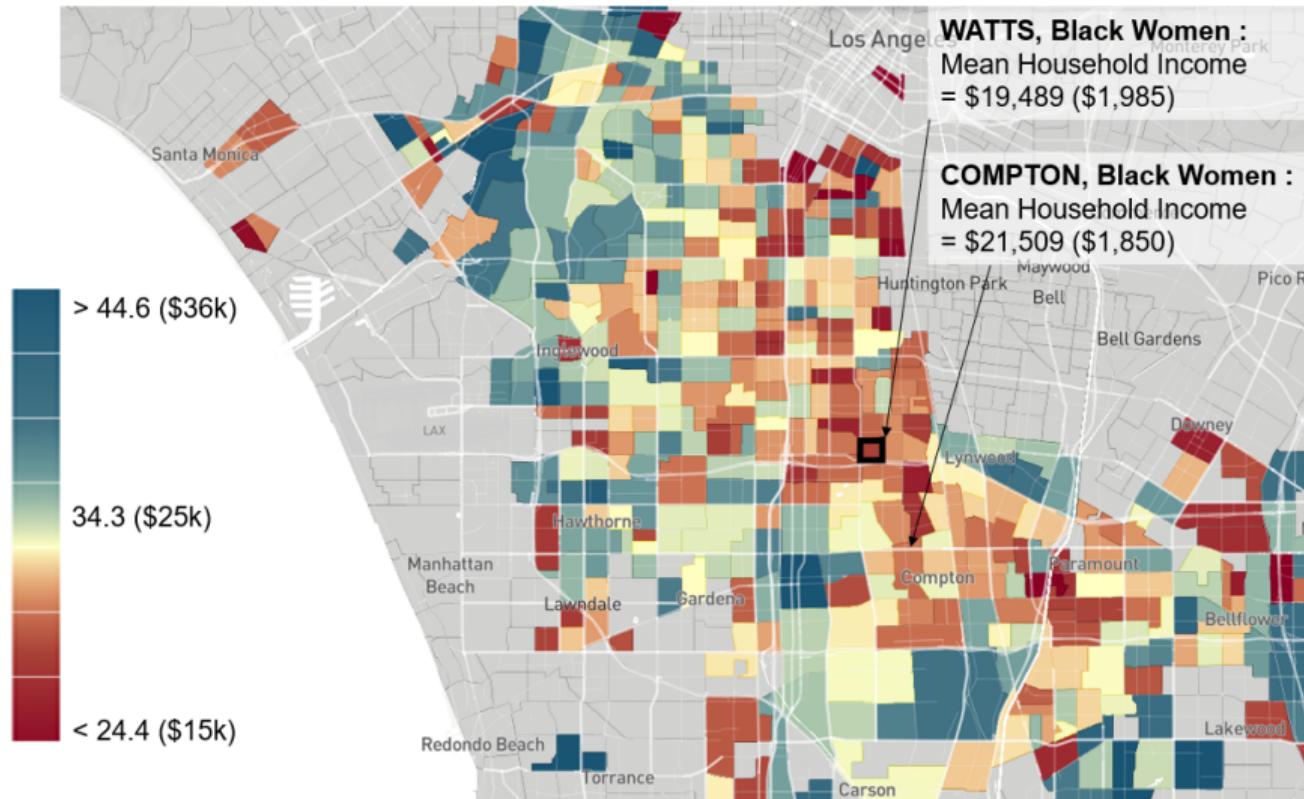
Source: Chetty et al. (2020)

## Mean Household Income for Black Men in Los Angeles with Parents Earning \$27,000 (25<sup>th</sup> percentile)



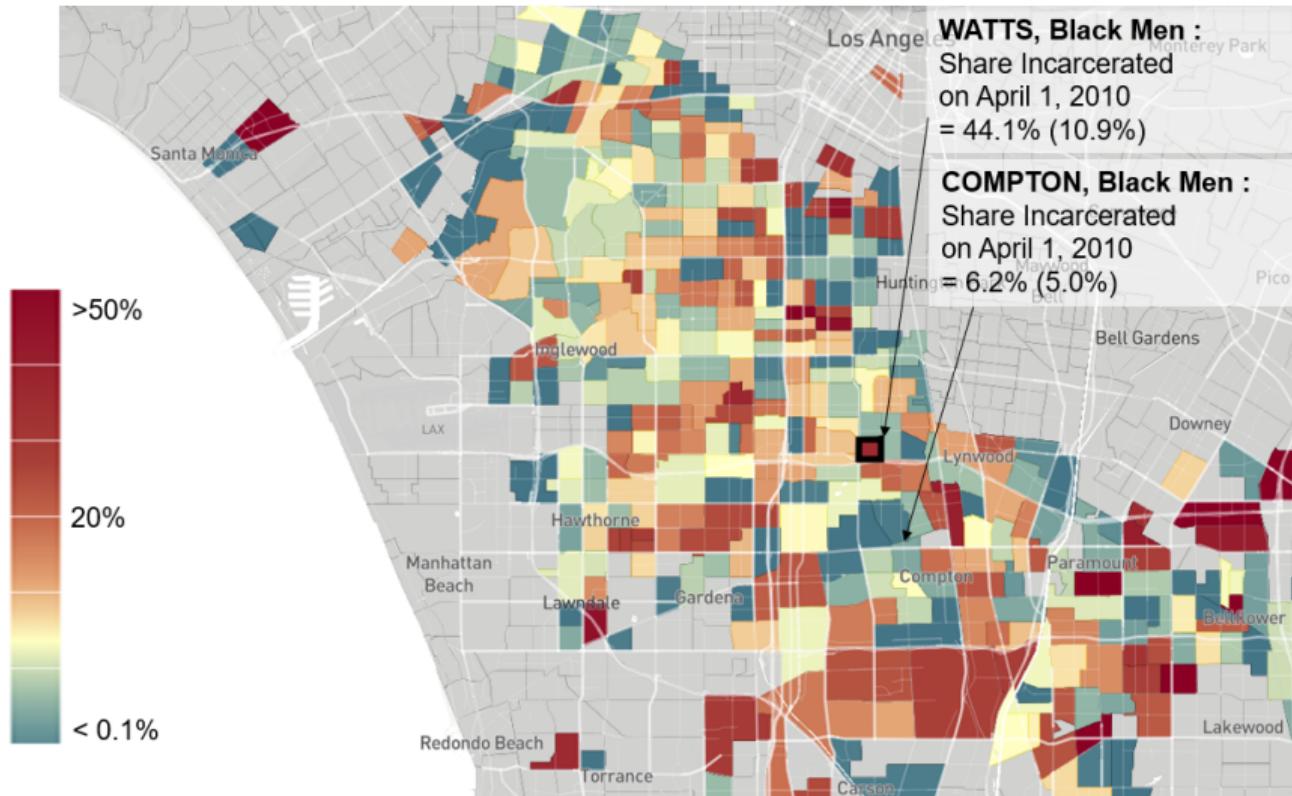
Source: Chetty et al. (2020)

## Mean Household Income for Black Women in Los Angeles with Parents Earning \$27,000 (25<sup>th</sup> percentile)



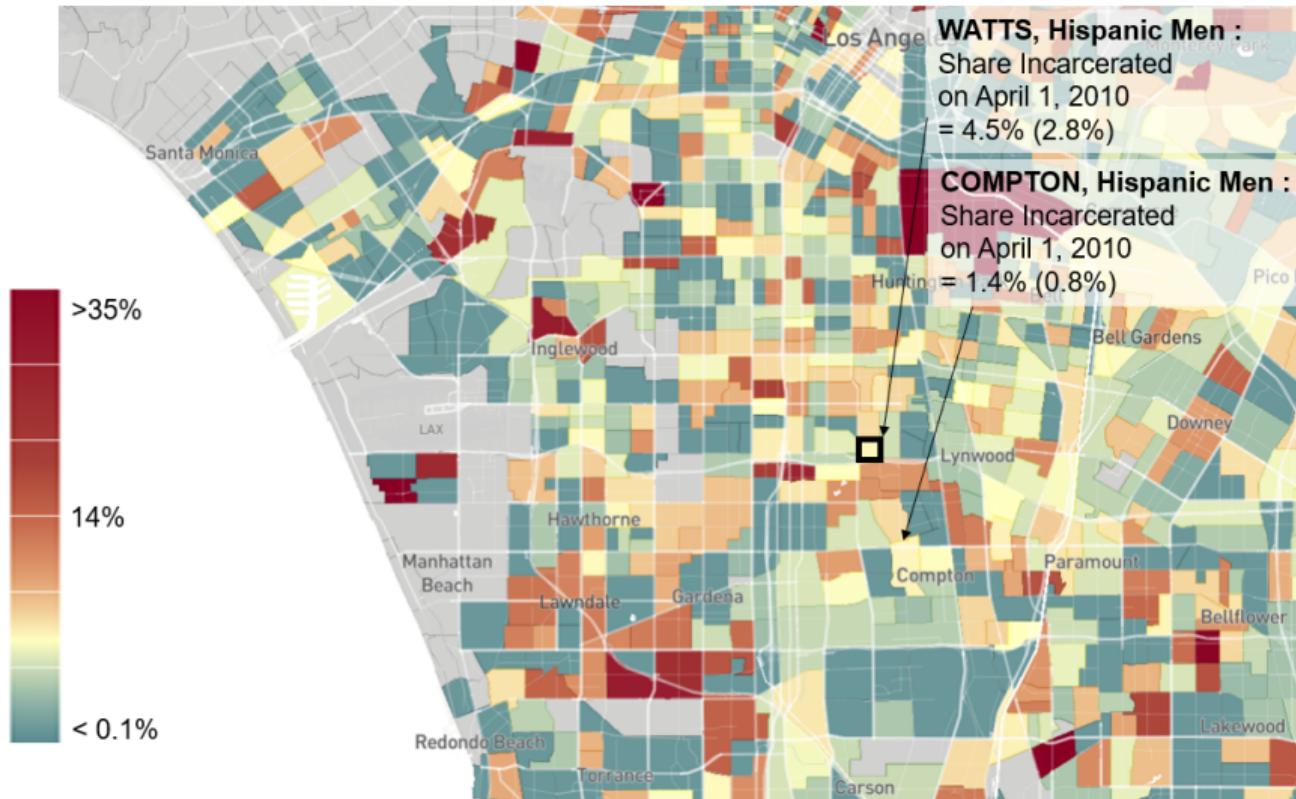
Source: Chetty et al. (2020)

## Incarceration Rates for Black Men in Los Angeles with Parents Earning < \$2,200 (1<sup>st</sup> percentile)



Source: Chetty et al. (2020)

## Incarceration Rates for Hispanic Men in Los Angeles with Parents Earning < \$2,200 (1<sup>st</sup> percentile)



Source: Chetty et al. (2020)

## Preferences for redistribution in individual utility functions

- ▶ Standard max. problem

$$\begin{aligned} & \max_{c_i, G} U(c_i, G) \\ & \text{s.t. } c_i = (1 - t)y_i \\ & \text{s.t. } G = t \sum_{i=1}^N y_i \end{aligned}$$

- ▶ Assume  $U(c_i, G) = c_i + \log(G)$

$$\max_t U(t) = (1 - t)y_i + \log(t \sum_{i=1}^N y_i) \quad (1)$$

- ▶ With FOC  $\frac{\partial U(t)}{\partial t} = -y_i + \frac{1}{t} = 0 \rightarrow t^* = \frac{1}{y_i}$

# Preferences for redistribution in individual utility functions

- ▶ Lessons:
  - ▶ Richer individuals desire lower tax rate than poorer individuals
  - ▶ Individuals with equal income always desire the same tax rate
- ▶ Limitations:
  - ▶ What if relative preference for public good vs. private consumption (i.e., curvature of  $U$ ) is individual-specific?
  - ▶ Possible that preferred tax rate is not a monotonically decreasing function of income

## Preferences for redistribution in individual utility functions

- ▶ For example, consider one individual with preferences  $U_1(c_1, G) = \frac{1}{2}c_1 + \log(G)$  and one individual with preferences  $U_2(c_2, G) = c_2 + \log(G)$ 
  - ▶ If  $y_1 = y_2$ , Individual 1 desires a tax rate which is double as large as the one desired by individual 2
  - ▶ If  $y_2 < y_1 < 2y_2$ , individual 2 desires a lower tax rate than individual 1 despite having lower income
- ▶ In turn, understanding how individuals form their preferences for redistribution is relevant both from a normative perspective (e.g., optimal taxation theory) and from a positive perspective (political economy)

# Intergenerational mobility and preferences for redistribution (Alesina, Stantcheva, Teso – 2018, AER)

(Stereo)typically documented views of Americans and Continental europeans

- ▶ Americans:
  - ▶ Econ system mostly "fair" (American dream)
  - ▶ Wealth is reward for ability and effort
  - ▶ Poverty due to inability to take adv. of opportunities
  - ▶ Effort pays off
- ▶ Continental europeans:
  - ▶ Econ system basically unfair
  - ▶ Wealth due to family history, connections, sticky classes
  - ▶ Poverty due to bad luck, society's inability to help the needy
  - ▶ Effort may payoff

# Intergenerational mobility and preferences for redistribution (Alesina, Stantcheva, Teso – 2018, AER)

## Introduction

- ▶ 70% of Americans versus 35% of Europeans believe you can climb social ladder if you work hard (WVS)
- ▶ However, intergenerational mobility not systematically higher in the US (Chetty et al. 2014)
- ▶ Alesina, Stantcheva, and Teso provide new evidence conducting online RCT on representative samples in the US, UK, France, Italy, and Sweden
  - ▶ Do people have realistic views about intergenerational mobility?
  - ▶ What are people views on fairness such as the role of effort vs. luck?
  - ▶ Link between perceived intergenerational mobility and preferred redistribution policies

# Intergenerational mobility and preferences for redistribution (Alesina, Stantcheva, Teso – 2018, AER)

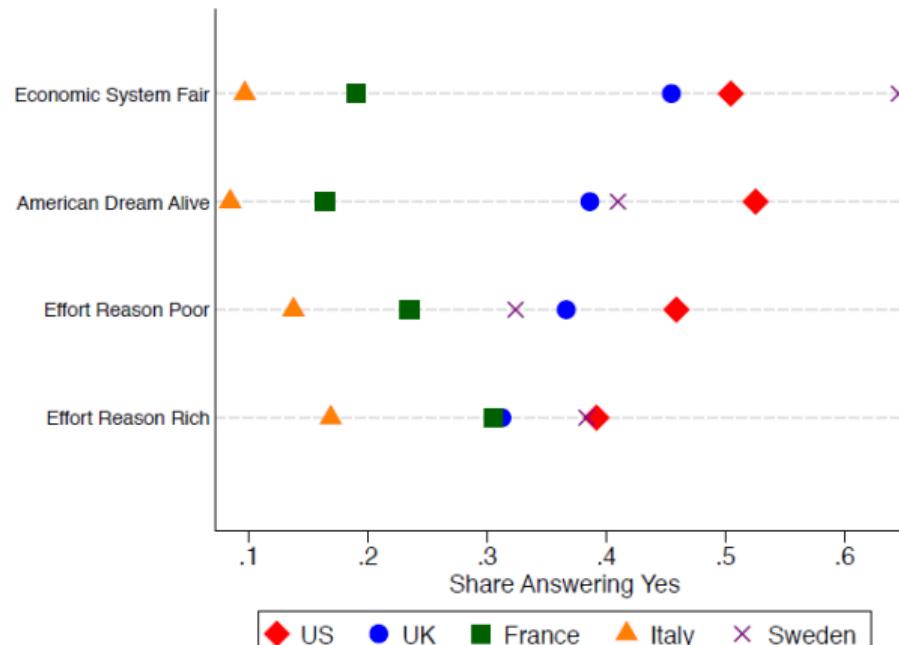
## Survey structure

- ▶ Background
  - ▶ Socio-economic questions, own social mobility experience, political experience
- ▶ Fairness of the economy
- ▶ Randomized information experiment (provide some individuals correct info on social mobility)
- ▶ Perceptions of intergenerational mobility in own county
- ▶ Policy preferences
  - ▶ Public intervention, support for equality of opportunity, income tax, estate tax, budget
- ▶ Role and capacity of government

# Intergenerational mobility and preferences for redistribution (Alesina, Stantcheva, Teso – 2018, AER)

Fairness of the economy

Fairness Perceptions by Country



# Intergenerational mobility and preferences for redistribution (Alesina, Stantcheva, Teso – 2018, AER)

## Eliciting beliefs on upward mobility

*For the following questions, we focus on 500 families that represent the U.S. population. We divide them into five groups on the basis of their income, with each group containing 100 families. These groups are: the poorest 100 families, the second poorest 100 families, the middle 100 families, the second richest 100 families, and the richest 100 families.*

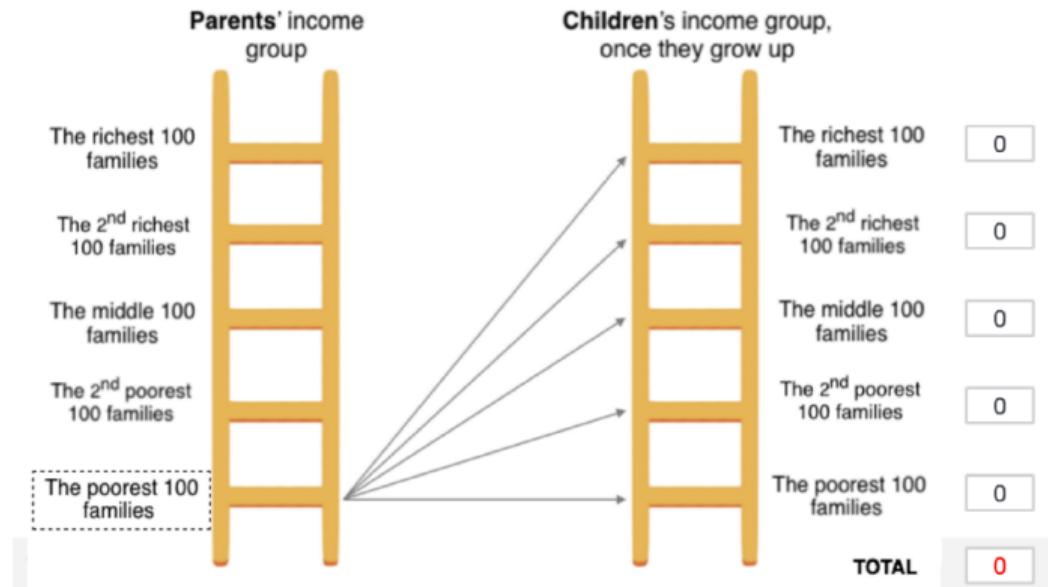
*In the following questions, we will ask you to evaluate the chances that children born in one of the poorest 100 families, once they grow up, will belong to any of these income groups.*

*Please fill out the entries to the right of the figure below to tell us, in your opinion, how many out of 100 children coming from the poorest 100 families will grow up to be in each income group.*

# Intergenerational mobility and preferences for redistribution (Alesina, Stantcheva, Teso – 2018, AER)

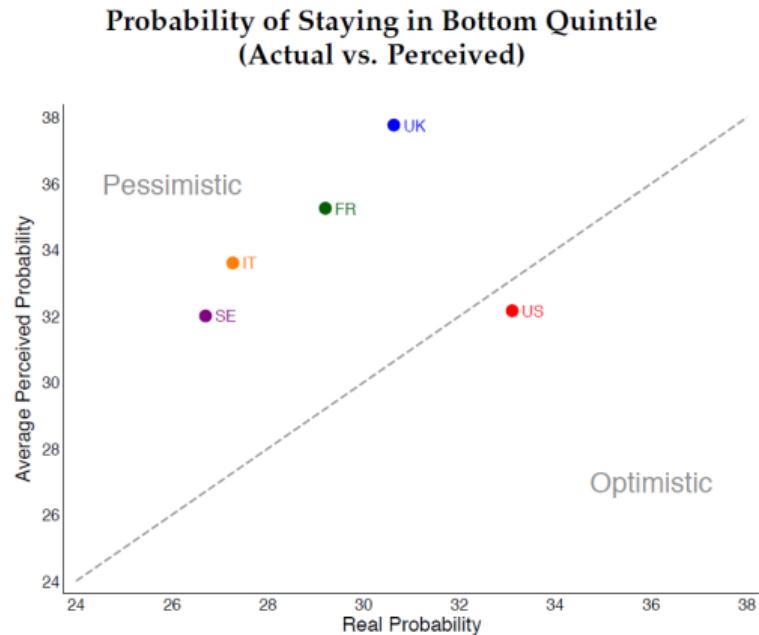
## Eliciting beliefs on upward mobility

Here are **500 families** that represent the US population:



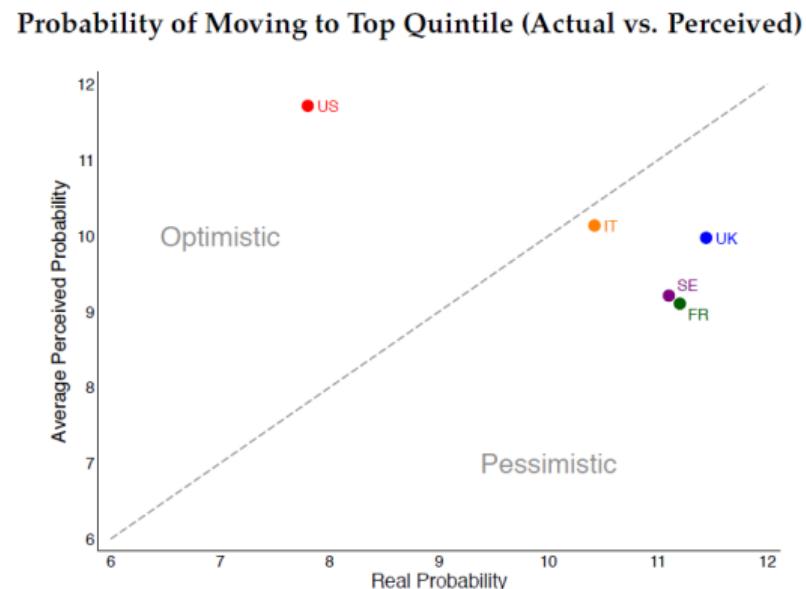
# Intergenerational mobility and preferences for redistribution (Alesina, Stantcheva, Teso – 2018, AER)

Beliefs on intergenerational mobility



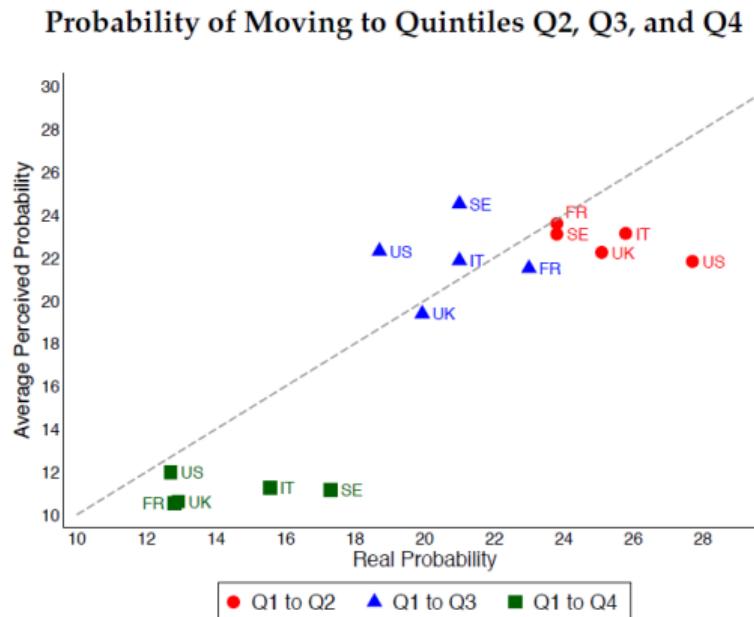
# Intergenerational mobility and preferences for redistribution (Alesina, Stantcheva, Teso – 2018, AER)

Beliefs on intergenerational mobility



# Intergenerational mobility and preferences for redistribution (Alesina, Stantcheva, Teso – 2018, AER)

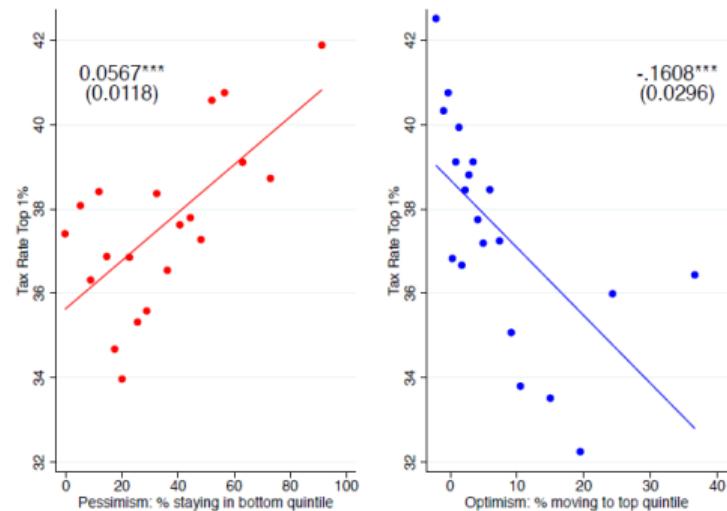
Beliefs on intergenerational mobility



# Intergenerational mobility and preferences for redistribution (Alesina, Stantcheva, Teso – 2018, AER)

Pessimism and tax rates

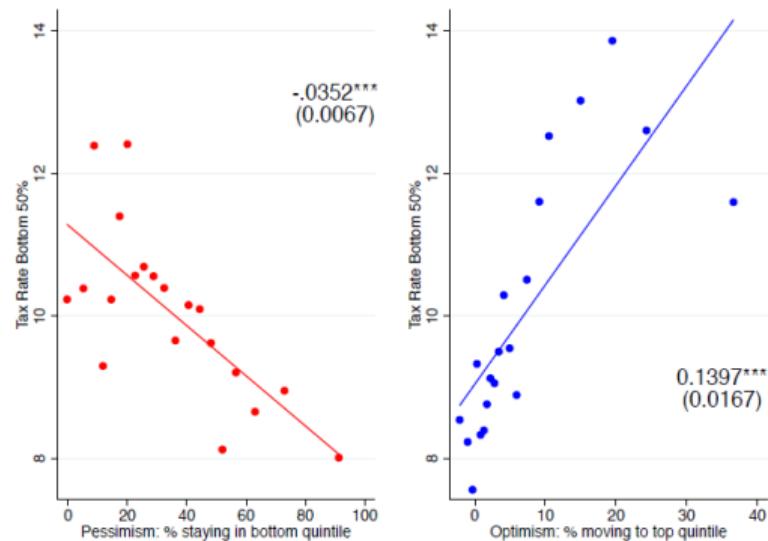
Pessimism, Optimism, and Top Tax Rate



# Intergenerational mobility and preferences for redistribution (Alesina, Stantcheva, Teso – 2018, AER)

Pessimism and tax rates

Pessimism, Optimism, and Bottom Tax Rate



# Intergenerational mobility and preferences for redistribution (Alesina, Stantcheva, Teso – 2018, AER)

Is the relationship between pessimism and tax preferences causal?

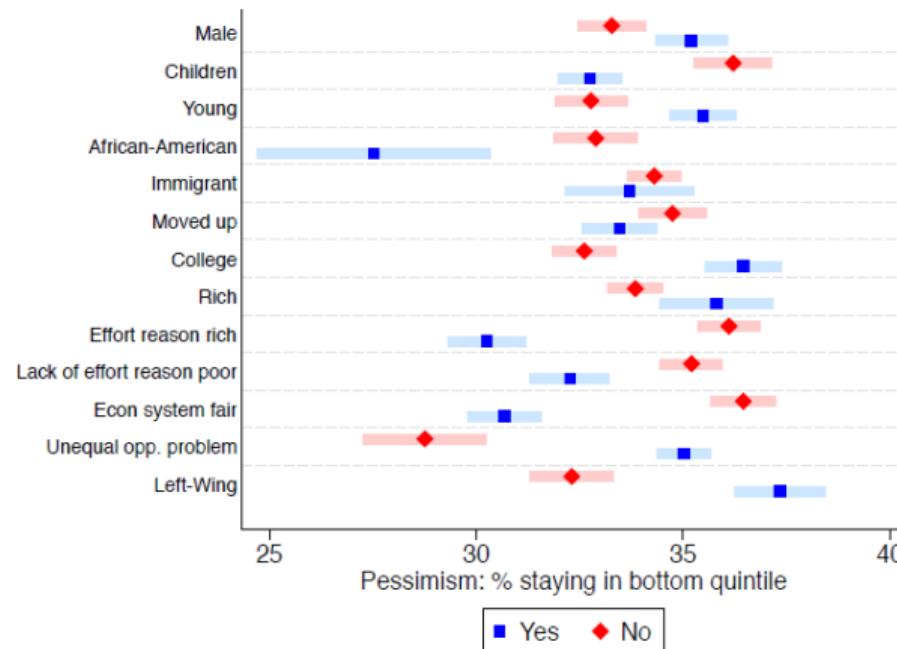
- ▶ Aim to estimate

$$TaxPreferences_i = \alpha + \beta Pessimism_i + u_i$$

- ▶ Empirical challenge:  $E(u_i | Pessimism_i) \neq 0$

# Intergenerational mobility and preferences for redistribution (Alesina, Stantcheva, Teso – 2018, AER)

Pessimism by background characteristics (US)



# Intergenerational mobility and preferences for redistribution (Alesina, Stantcheva, Teso – 2018, AER)

Randomized experiment

- ▶ Solution: randomized controlled trial. **Affect the perception about social mobility for a randomly selected group of respondents**
- ▶ Treatment must satisfy:
  - ▶ Monotonicity (increase pessimism of all treated individuals. Their starting degree of pessimism should not matter)
  - ▶ Need to be the same across country
  - ▶ Do not allude to any policy or government at all
  - ▶ Accurate

Notice: providing the exact probability of staying in bottom quintile/moving to the top quintile would violate these conditions

# Intergenerational mobility and preferences for redistribution (Alesina, Stantcheva, Teso – 2018, AER)

Randomized treatment



Recent academic research has been exploring the link between one's family background and one's chances of making it in life. These **recent academic studies** have leveraged new large-scale datasets to explore the opportunities available to children from different family backgrounds and their chances of making it in life.

We will now show you **two short animations** that summarize the two key findings of these studies. Please proceed to the next page when you are ready.

>>

# Intergenerational mobility and preferences for redistribution (Alesina, Stantcheva, Teso – 2018, AER)

Randomized treatment

Children from  
poor families



Children from  
wealthy families



Only very few kids from poor families will ever make it and become rich.

What does recent research tell us about how children from poor families will do when they grow up?

The Poor



The Wealthy



# Intergenerational mobility and preferences for redistribution (Alesina, Stantcheva, Teso – 2018, AER)

Randomized treatment

Children from  
poor families



Children from  
wealthy families

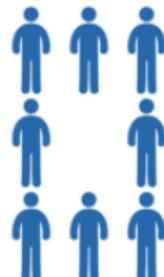


It is extremely rare for a child  
from a rich family to become  
poor later in life.

The Poor



The Wealthy



What does recent research  
tell us about how children  
from rich families will do  
when they grow up?

# Intergenerational mobility and preferences for redistribution (Alesina, Stantcheva, Teso – 2018, AER)

Results (First stage)

- ▶ Does the treatment succeeds in increasing pessimism?

TABLE 4: FIRST STAGE TREATMENT EFFECTS ON MOBILITY PERCEPTIONS

	Q1 to Q1 (1)	Q1 to Q2 (2)	Q1 to Q3 (3)	Q1 to Q4 (4)	Q1 to Q5 (5)	Q1 to Q4 (Qual.) (6)	Q1 to Q5 (Qual.) (7)	American Dream Alive (8)
<b>A. Unconditional Beliefs</b>								
Treated × Left-Wing	10.209*** (0.980)	-2.126*** (0.488)	-6.093*** (0.532)	-2.053*** (0.353)	0.063 (0.603)	-0.189*** (0.032)	-0.180*** (0.035)	-0.010 (0.016)
Treated × Right-Wing	11.145*** (0.979)	-2.181*** (0.487)	-6.139*** (0.531)	-2.236*** (0.352)	-0.589 (0.602)	-0.225*** (0.032)	-0.236*** (0.035)	-0.045*** (0.016)
p-value diff.	0.499	0.937	0.951	0.713	0.445	0.422	0.248	0.140
Dep. Var. Mean (Left-wing)	37.476	23.005	20.713	9.700	9.105	2.183	1.747	0.238
Dep. Var. Mean (Right-wing)	32.387	22.843	23.374	11.156	10.240	2.409	1.999	0.459
Observations	8585	8585	8585	8585	8585	8585	8585	8585

# Intergenerational mobility and preferences for redistribution (Alesina, Stantcheva, Teso – 2018, AER)

Main results (Treatment effect)

- ▶ Pessimistic perceptions on social mobility affect preferences for redistribution (only for left-wing voters)

TABLE 6: TREATMENT EFFECTS ON POLICY PREFERENCES

	Budget Opp. (1)	Support Estate Tax (2)	Support Equality Opp. Policies (3)	Government Interv. (4)	Unequal Opp. Very Serious Problem (5)	Budget Safety Net (6)	Tax Rate Top 1 (7)	Tax Rate Bottom 50 (8)	Govt. Tools (9)
Dep. Var. Mean (Left-wing)	39.1	0.4	4.1	5.8	0.3	15.2	40.6	8.9	0.8
Dep. Var. Mean (Right-wing)	35.8	0.2	3.4	4.8	0.2	12.7	36.3	11.9	0.7
<b>A. Treatment Effects</b>									
Treated X Left-Wing	0.823** (0.398)	0.032* (0.017)	0.078** (0.039)	0.124** (0.053)	0.103*** (0.022)	0.111 (0.281)	0.551 (0.686)	0.257 (0.389)	-0.008 (0.023)
Treated X Right-Wing	0.031 (0.397)	-0.001 (0.017)	-0.025 (0.039)	-0.020 (0.053)	0.018 (0.022)	0.200 (0.281)	0.661 (0.691)	-0.386 (0.392)	-0.049** (0.023)
p-value diff.	0.159	0.164	0.061	0.056	0.007	0.823	0.910	0.245	0.211
Observations	8585	8584	8585	8585	4281	8585	6851	6851	4281

# Immigration and Redistribution (Alesina, Miano, Stantcheva – 2023, RESTUD)

## Introduction

- ▶ Research questions
  - (1) To what extent people misperceive immigration?
  - (2) What is the link between immigration and redistribution?
- ▶ Methodology
  - ▶ Online survey in France, Germany, Italy, Sweden, UK, and US
  - ▶ Four randomized treatments

# Immigration and Redistribution (Alesina, Miano, Stantcheva – 2023, RESTUD)

## Survey structure

- ▶ Background
- ▶ Treatments about immigration
  - ▶ T1: Number of migrants
  - ▶ T2: Origin of migrants
  - ▶ T3: Anecdotes about hard work of migrants
- ▶ Perceptions about migration and preferences on immigration policy
- ▶ Preferences on redistribution and role of government
- ▶ T4: Order in which questions on migration and questions on redistribution are asked

# Immigration and Redistribution (Alesina, Miano, Stantcheva – 2022, RESTUD)

## Treatments

- ▶ Treatment 1: [Link](#)
- ▶ Treatment 2: [Link](#)
- ▶ Treatment 3: [Link](#)

# Immigration and Redistribution (Alesina, Miano, Stantcheva – 2022, RESTUD)

Results – Treatment effects on support for redistribution

TABLE 4: TREATMENT EFFECTS ON SUPPORT FOR REDISTRIBUTION

	Tax Top 1 (1)	Tax Bottom 50 (2)	Social Budget (3)	Education Budget (4)	Inequality Serious Problem (5)	Donation Above Median (6)
Order/Salience T	-1.948*** (0.416)	0.914*** (0.276)	-0.543** (0.238)	0.439** (0.175)	-0.0280** (0.0132)	-0.0479*** (0.0138)
T: Share of Immigrants	-0.627 (0.419)	0.0449 (0.278)	-0.479** (0.233)	0.188 (0.172)	-0.00590 (0.0133)	-0.0165 (0.0140)
T: Origin of Immigrants	-0.0662 (0.425)	0.0322 (0.284)	-0.465* (0.239)	0.164 (0.173)	0.00626 (0.0132)	0.00208 (0.0140)
T: Hard Work	0.0772 (0.422)	-0.212 (0.279)	-0.0944 (0.235)	0.333** (0.170)	0.0158 (0.0132)	0.00910 (0.0139)
Observations	19765	19765	19765	19765	19763	19765
Control mean	37.12	10.94	29.53	16.00	0.59	0.47

# Immigration and Redistribution (Alesina, Miano, Stantcheva – 2022, RESTUD)

Results – Treatment effects on perceptions about migration

TABLE 5: FIRST-STAGE TREATMENT EFFECTS ON PERCEPTIONS

	All Immigrants (misp.) (1)	Accurate Perception All Immigrants (2)	M. East and N. Africa (misp.) (3)	N. America, W. and E. Europe (misp.) (4)	Muslim (misp.) (5)	Christian (misp.) (6)	Lack of Effort Reason Poor (7)
T: Share of Immigrants	-4.864*** (0.411)	0.227*** (0.00691)	-0.248 (0.313)	0.173 (0.357)	0.00857 (0.419)	0.144 (0.397)	0.000297 (0.00921)
T: Origin of Immigrants	2.315*** (0.426)	0.00251 (0.00411)	-4.794*** (0.295)	1.827*** (0.356)	-1.829*** (0.405)	2.456*** (0.397)	-0.000234 (0.00925)
T: Hard Work	0.709* (0.409)	-0.00420 (0.00396)	-0.385 (0.308)	0.378 (0.352)	-0.869** (0.404)	0.796** (0.393)	-0.0535*** (0.00899)
Observations	19735	19735	19747	19728	19761	19757	19721
Control mean	17.02	0.04	12.60	-5.56	11.30	-23.98	0.36

# Immigration and Redistribution (Alesina, Miano, Stantcheva – 2022, RESTUD)

Treatment effects on support for immigration

TABLE 6: TREATMENT EFFECTS ON SUPPORT FOR IMMIGRATION

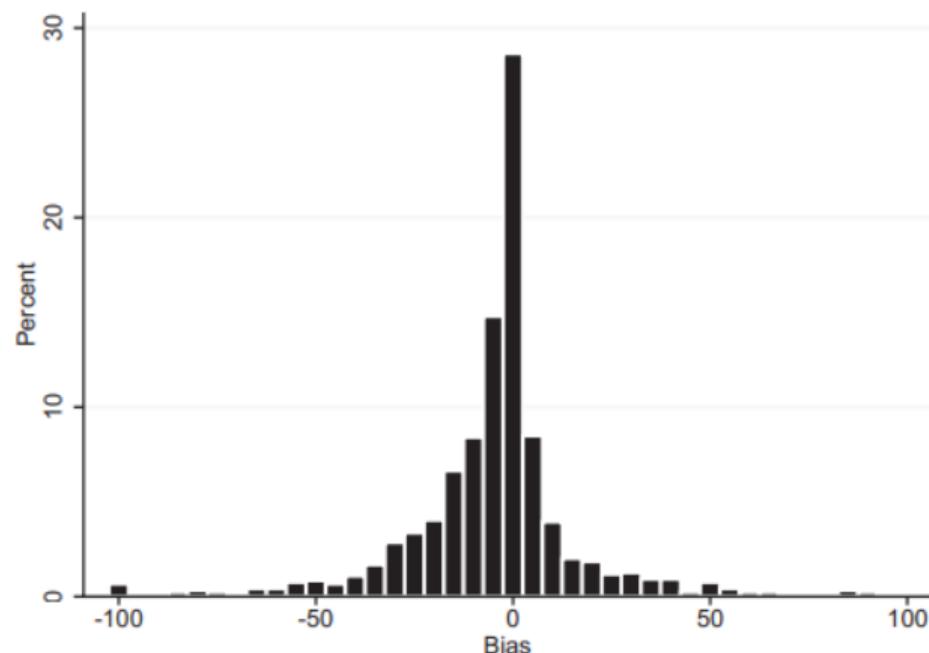
	Imm. Not A Problem (1)	Imm. Benefits Soon (2)	Imm. Citizenship Soon (3)	American Upon Citizenship/Before (4)	Govt. Should care About Everyone (5)	Imm Support Index (6)
T: Share of Immigrants	0.0242*** (0.00825)	0.00991 (0.00959)	0.0158* (0.00857)	0.00508 (0.00936)	-0.00395 (0.0359)	0.0364** (0.0181)
T: Origin of Immigrants	0.00527 (0.00822)	0.00360 (0.00961)	0.000649 (0.00863)	0.00448 (0.00937)	-0.00222 (0.0361)	0.00877 (0.0182)
T: Hard Work	0.0252*** (0.00829)	0.0202** (0.00957)	0.0133 (0.00857)	0.0171* (0.00934)	0.131*** (0.0359)	0.0708*** (0.0181)
Observations	19727	19749	19745	19742	19754	19765
Control mean	0.25	0.49	0.71	0.62	4.53	0.00

## Richer (and holier) than thou? The effect of relative income improvements on demand for redistribution (Karadja, Mollerstrom, Seim – 2017, RESTAT)

- ▶ Karadja, Mollerstrom, Seim (2017) study whether individuals are well informed about their rank in the income distribution and whether receiving an information treatment that gives exact information about the ranking affects individual preferences for redistribution
- ▶ Survey conducted on a sample of  $\approx 1,000$  individuals representative of the SE population

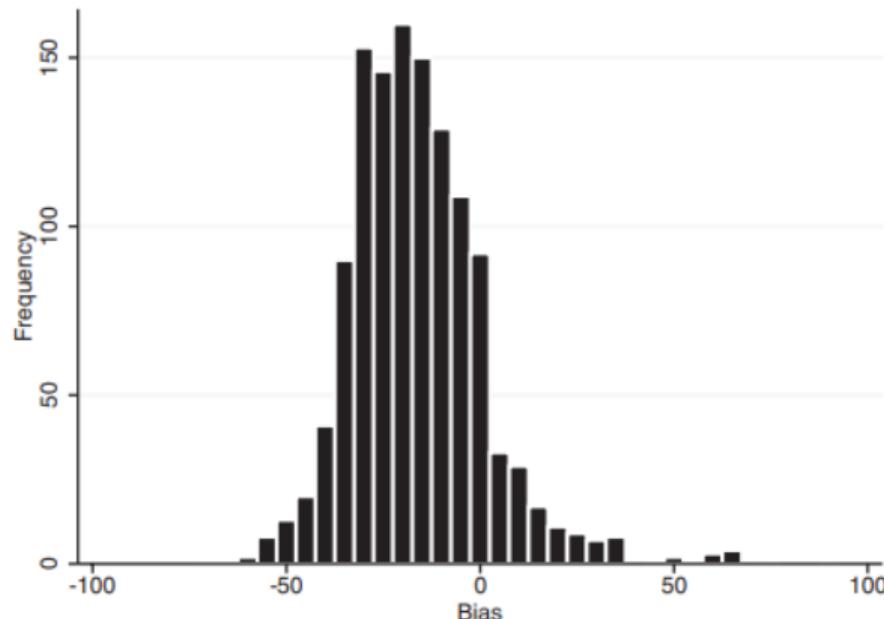
# Richer (and holier) than thou? The effect of relative income improvements on demand for redistribution (Karadja, Mollerstrom, Seim – 2017, RESTAT)

FIGURE 1.—DEVIATION BETWEEN ACTUAL AND STATED INCOME



# Richer (and holier) than thou? The effect of relative income improvements on demand for redistribution (Karadja, Mollerstrom, Seim – 2017, RESTAT)

FIGURE 3.—DISTRIBUTION OF BIAS IN THE SAMPLE

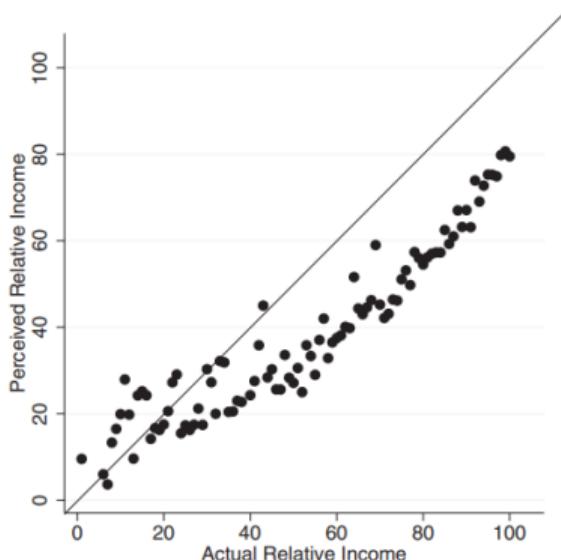


## Richer (and holier) than thou? The effect of relative income improvements on demand for redistribution (Karadja, Mollerstrom, Seim – 2017, RESTAT)

- ▶ Some individuals believe that they earn more than they do; other individuals believe to earn less than they do. On average, respondents are correct about their (absolute) income
- ▶ Many individuals believe that they are relatively poorer than they actually are; very few individuals believe to be relatively richer than they actually are. On average, respondents are pessimistic about their (relative) income

# Richer (and holier) than thou? The effect of relative income improvements on demand for redistribution (Karadja, Mollerstrom, Seim – 2017, RESTAT)

FIGURE 4.—ACTUAL AND PERCEIVED RELATIVE INCOME OVER THE INCOME DISTRIBUTION



# Richer (and holier) than thou? The effect of relative income improvements on demand for redistribution (Karadja, Mollerstrom, Seim – 2017, RESTAT)

TABLE 1.—DETERMINANTS OF BIAS

Dependent Variable	Bias		Absolute Value of Bias	
	(1)	(2)	(3)	(4)
College	2.569*** (0.920)	2.847*** (0.976)	-2.377*** (0.784)	-2.746*** (0.842)
IQ	3.716* (2.078)		-4.006** (1.880)	
Informed	1.862** (0.892)	1.808** (0.903)	-1.160 (0.757)	-1.587** (0.777)
Urban	-0.953 (0.905)	-1.292 (0.916)	0.592 (0.790)	0.539 (0.812)
Right	0.161 (0.942)	-0.526 (0.924)	0.780 (0.795)	1.067 (0.800)
Age	-0.106*** (0.029)	-0.033 (0.046)	0.095*** (0.023)	0.057 (0.037)
Male	1.240 (0.892)	1.941** (0.945)	-0.852 (0.771)	-1.695** (0.814)
Married	-2.004** (0.858)	-0.256 (0.967)	1.648** (0.718)	0.102 (0.817)
Log Total Taxable Income	0.530 (0.399)	0.247 (0.525)	0.490 (0.326)	0.528 (0.471)
Log Net Wealth	-0.059 (0.040)	0.022 (0.041)	0.040 (0.034)	-0.007 (0.036)
Relative Income Growth	2.462** (1.042)	-0.958 (1.319)	-2.318** (0.981)	0.189 (1.205)
Subjective Rel. Inc. Growth	2.896*** (1.000)	1.389 (1.031)	-2.213** (0.863)	-1.689* (0.906)
Subjective Future Rel. Inc. Growth	4.273*** (0.856)	2.557** (1.108)	-2.011*** (0.726)	0.224 (0.978)
Income Mobility Belief	0.603*** (0.155)	0.494*** (0.167)	-0.311** (0.131)	-0.199 (0.142)
Maximum observations	1,242	1,099	1,242	1,099

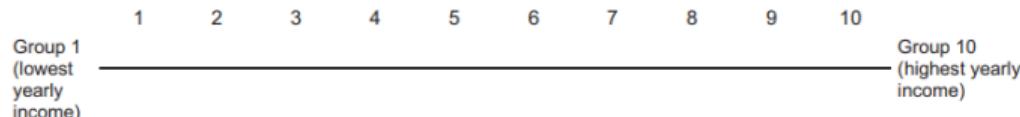
# Richer (and holier) than thou? The effect of relative income improvements on demand for redistribution (Karadja, Mollerstrom, Seim – 2017, RESTAT)

## Before you answer the questions we want to inform you about the following:

Imagine that we group all Swedes into 10 groups of equal size such that those in group 1 had the lowest yearly income in 2010 and those in group 10 had the highest yearly income. In the figure below, the numbers 1-10 indicate the groups on the scale. Below the numbers, we have reported the yearly income of the person who was in the middle of that group.

In the previous survey you reported a yearly income for 2010 of X SEK.

In the figure below we have indicated where your income is located on the scale.



*By income we mean total yearly income, defined as wage and capital income before taxes. Pensions before taxes are also included. Student stipends and other transfers such as unemployment transfers from the government are not included in total yearly income. The income statistics come from Statistics Sweden and are based on the whole Swedish population above age 18.*

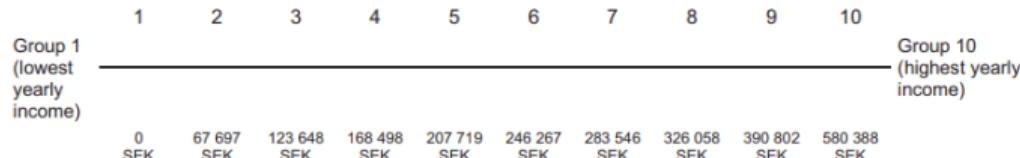
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# Richer (and holier) than thou? The effect of relative income improvements on demand for redistribution (Karadja, Mollerstrom, Seim – 2017, RESTAT)

TABLE 2.—AVERAGE EFFECTS

	(1) Outcome Index	(2) Against- Redist	(3) Cons. Party	(4) Decrease Tax
Treated × Neg. Bias	0.134** (0.058)	0.081** (0.038)	0.081** (0.037)	0.040 (0.038)
No bias	-0.010 (0.073)	-0.004 (0.049)	-0.018 (0.050)	0.024 (0.051)
Treated × No Bias	-0.067 (0.085)	-0.052 (0.059)	-0.013 (0.056)	-0.023 (0.062)
Pos. bias	-0.032 (0.162)	-0.112 (0.092)	0.117 (0.114)	0.013 (0.104)
Treated × Pos. Bias	0.112 (0.202)	0.179 (0.129)	-0.068 (0.139)	-0.003 (0.136)
Constant	0.008 (0.040)	0.362*** (0.026)	0.251*** (0.027)	0.404*** (0.027)
Observations	1,001	991	872	985

# Richer (and holier) than thou? The effect of relative income improvements on demand for redistribution (Karadja, Mollerstrom, Seim – 2017, RESTAT)

TABLE 3.—HETEROGENEOUS EFFECTS BY PRIOR PARTY PREFERENCES

	(1) Outcome Index	(2) Against- Redist	(3) Cons. Party	(4) Decrease Tax	(5) Effort
Treated	0.020 (0.055)	0.029 (0.045)	0.012 (0.024)	0.026 (0.047)	-0.080 (0.187)
Treated × Right	0.274*** (0.103)	0.117 (0.073)	0.147** (0.066)	0.046 (0.075)	0.588** (0.268)
Right	0.710*** (0.075)	0.270*** (0.052)	0.517*** (0.051)	0.266*** (0.053)	0.585*** (0.198)
Constant	-0.286*** (0.039)	0.251*** (0.031)	0.045*** (0.017)	0.291*** (0.033)	6.095*** (0.131)
Observations	678	672	589	671	674

OLS regressions. Robust standard errors in parentheses. \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . The table shows estimated heterogeneous treatment effects with respect to prior party preferences. The sample consists of those who underestimated their relative income by more than 10 percentage points. *Right* is a binary indicator for supporting one of the four right-of-center political parties in Sweden in the first survey (i.e., before treatment). *Outcome Index* is a composite measure of the outcome variables in columns 2–4; a higher value indicates more right-leaning and more antide redistribution preferences. *Against Redist* is a

# Richer (and holier) than thou? The effect of relative income improvements on demand for redistribution (Karadja, Mollerstrom, Seim – 2017, RESTAT)

TABLE 4.—HETEROGENEOUS EFFECTS BY PRIOR PARTY PREFERENCES

	Dependent variable: Outcome Index					
	(1)	(2)	(3)	(4)	(5)	(6)
Treated	0.138** (0.055)	0.223** (0.090)	0.221*** (0.070)	0.137*** (0.048)	0.280*** (0.091)	0.052 (0.058)
Treated × Redist-Distort	-0.159** (0.073)			-0.131** (0.062)	-0.034 (0.120)	-0.130* (0.073)
Redist-Distort	-0.194*** (0.053)			-0.065 (0.047)	-0.105 (0.086)	-0.067 (0.054)
Treated × No Dist.		-0.160 (0.114)				
No Dist.		-0.317*** (0.079)				
Treated × Luck			-0.268** (0.119)			
Luck			-0.121 (0.083)			
Right				0.786*** (0.054)		
Constant	0.008 (0.039)	0.182*** (0.064)	0.046 (0.048)	-0.318*** (0.037)	0.401*** (0.066)	-0.276*** (0.040)
Observations	687	687	687	678	281	397

OLS regressions. Robust standard errors in parentheses. \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . The table shows estimated heterogeneous treatment effects on the outcome index by prior beliefs about how the economy works. The sample consists of those who underestimated their relative income by more than 10 percentage points. Column 5 estimates the same model as column 1 but restricts the sample to those who expressed right-of-center preferences in survey 1 (i.e., before treatment), while column 6 uses only the sample of those who did not express such preferences. *Outcome Index* is a composite measure of the variables, *Against-Redist*, *Cons. Party*, and *Decrease Tax*; a higher value indicates more right-leaning and more antiredistribution preferences. *Redist-Distort* is a composite measure of the variables *No Dist.* and *Luck*; a higher value indicates beliefs about redistribution not being distorting. *No. Dist* is a binary indicator for believing that income taxes do not distort labor supply. *Luck* is a binary indicator for believing that luck determines economic success in life. See the more detailed definitions in section II.