Changing Opportunity

Sociological Mechanisms Underlying Growing Class Gaps and Shrinking Race Gaps in Economic Mobility

Raj Chetty, Harvard and Opportunity Insights
Will Dobbie, Harvard and Opportunity Insights
Benjamin Goldman, Cornell and Opportunity Insights
Sonya R. Porter, U.S. Census Bureau
Crystal Yang, Harvard and Opportunity Insights

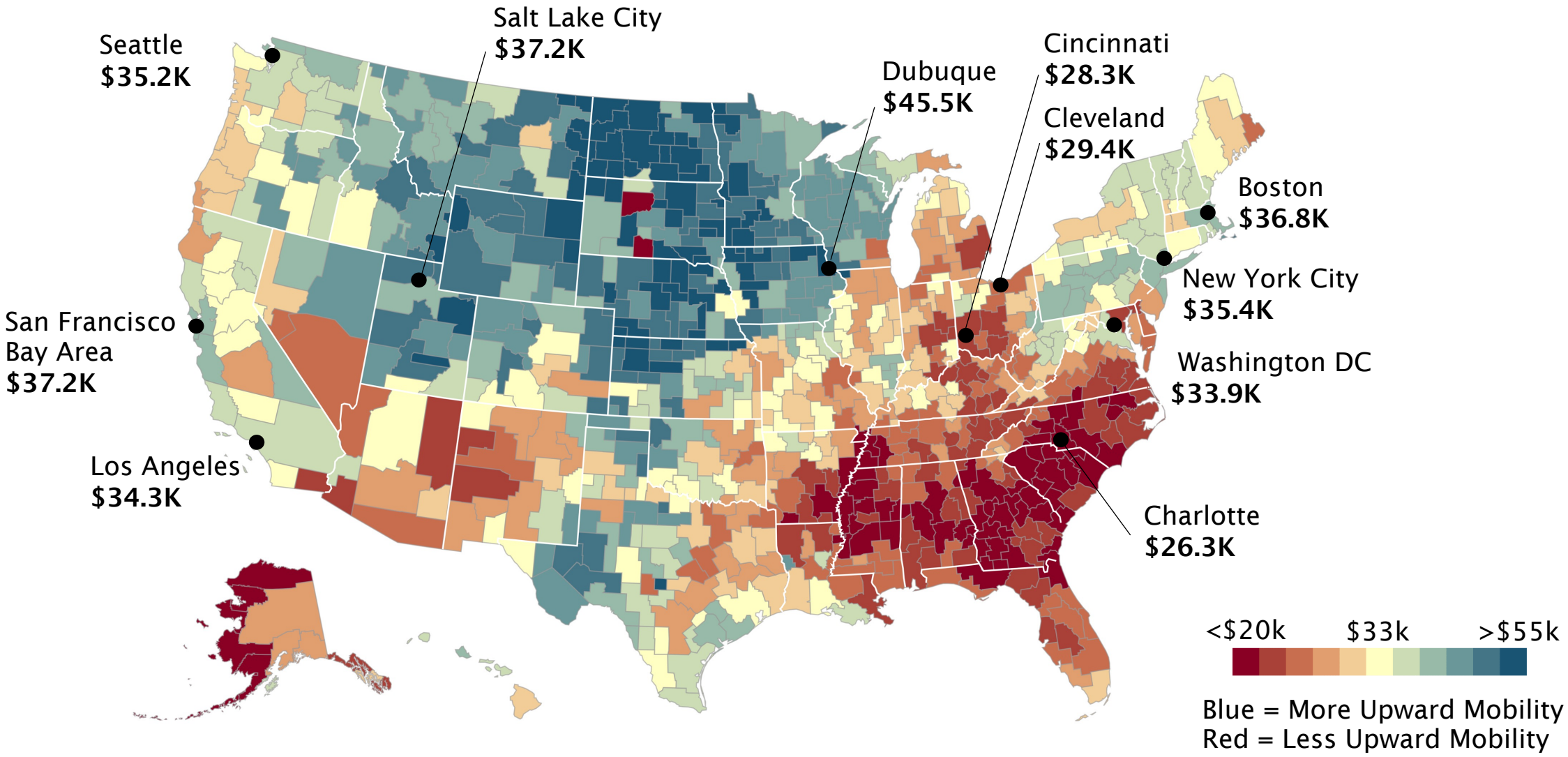
July 2024

We are very grateful to Dhruv Gaur, Shipra Karan, Nico Rotundo, Austin Zheng, and other Opportunity Insights predoctoral fellows for outstanding research assistance. Any opinions and conclusions expressed herein are those of the authors and do not represent the views of the U.S. Census Bureau. The Census Bureau has ensured appropriate access and use of confidential data and has reviewed these results for disclosure avoidance protection (Project 7519874:CBDRB-FY2022-CES010-004, CBDRB-FY2023-CES005-025, CBDRB-FY23-0375, CBDRB-FY24-0007, CBDRB-FY24-0143, CBDRB-FY24-0359). For simplicity, we use "race" to refer to race and ethnicity; "White" to refer to non-Hispanic white individuals, "Black" to refer to non-Hispanic Black individuals, and so on.

OPPORTUNITY INSIGHTS

The Geography of Upward Mobility in the United States

Average Household Income at Age 35 for Children born in 1980 whose Parents Earned $27K

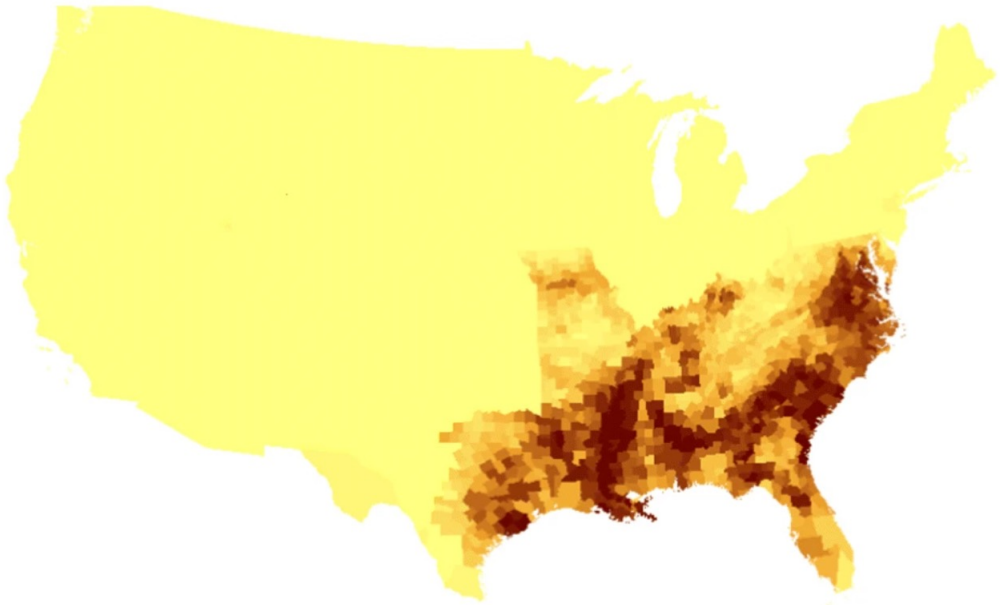


Source: Chetty, Hendren, Kline, Saez (QJE 2014)

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

Rates of Slavery (1860)

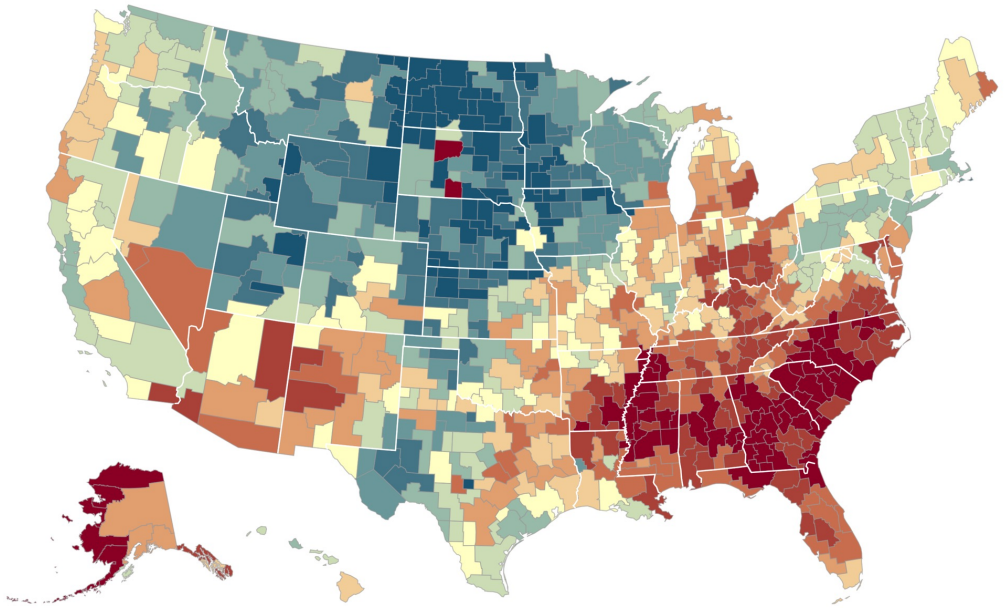
Share of the Population that Were Enumerated as Slaves in the 1860 Census



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

Upward Mobility

Average Household Income at Age 35 for Children whose Parents Earned $27k (25th percentile)



Blue = More Upward Mobility
Red = Less Upward Mobility

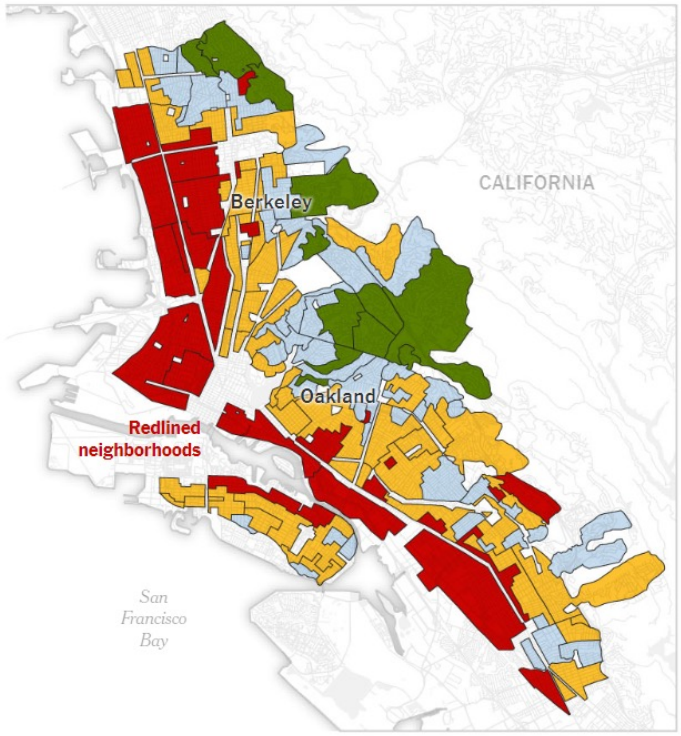
Source: Berger (2018); Chetty, Hendren, Kline, Saez (2014)

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

Oakland, CA

Redlining Boundaries (1930s)

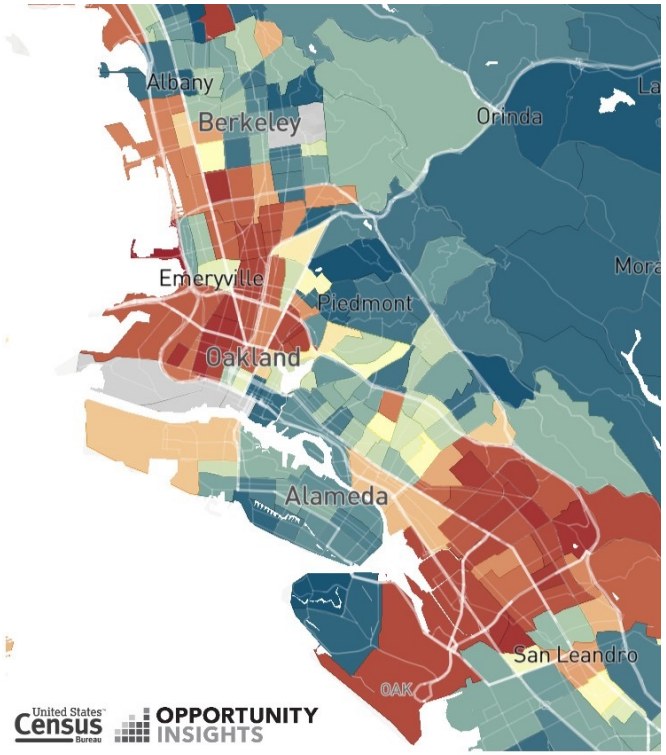
Neighborhood grade, 1930s



Green = “Best”
Blue = “Still Desirable”
Yellow = “Declining”
Red = “Hazardous”

Upward Mobility

Average Household Income at Age 35 for Children whose Parents Earned $27k (25th percentile)



Blue = More Upward Mobility
Red = Less Upward Mobility

Source: Lane, Morello-Frosch, Marshall, and Apte (2022); Chetty, Friedman, Hendren, Jones, Porter (2018)

Changing Opportunity

New Data Give us a Lens to Study Changes in Opportunity

- 2014 Opportunity Insights Land of Opportunity study focused on children born around 1980
- We use an additional decade of tax data to analyze changes in outcomes for children born in the **1978-1992 birth cohorts**
- First evidence on **changes** in economic mobility within places and mechanisms underlying changes in opportunity

Data

- Census data (2000, 2010, ACS) covering U.S. population linked to federal income tax returns from 1979-2019 [extending Chetty, Hendren, Jones, Porter 2020]

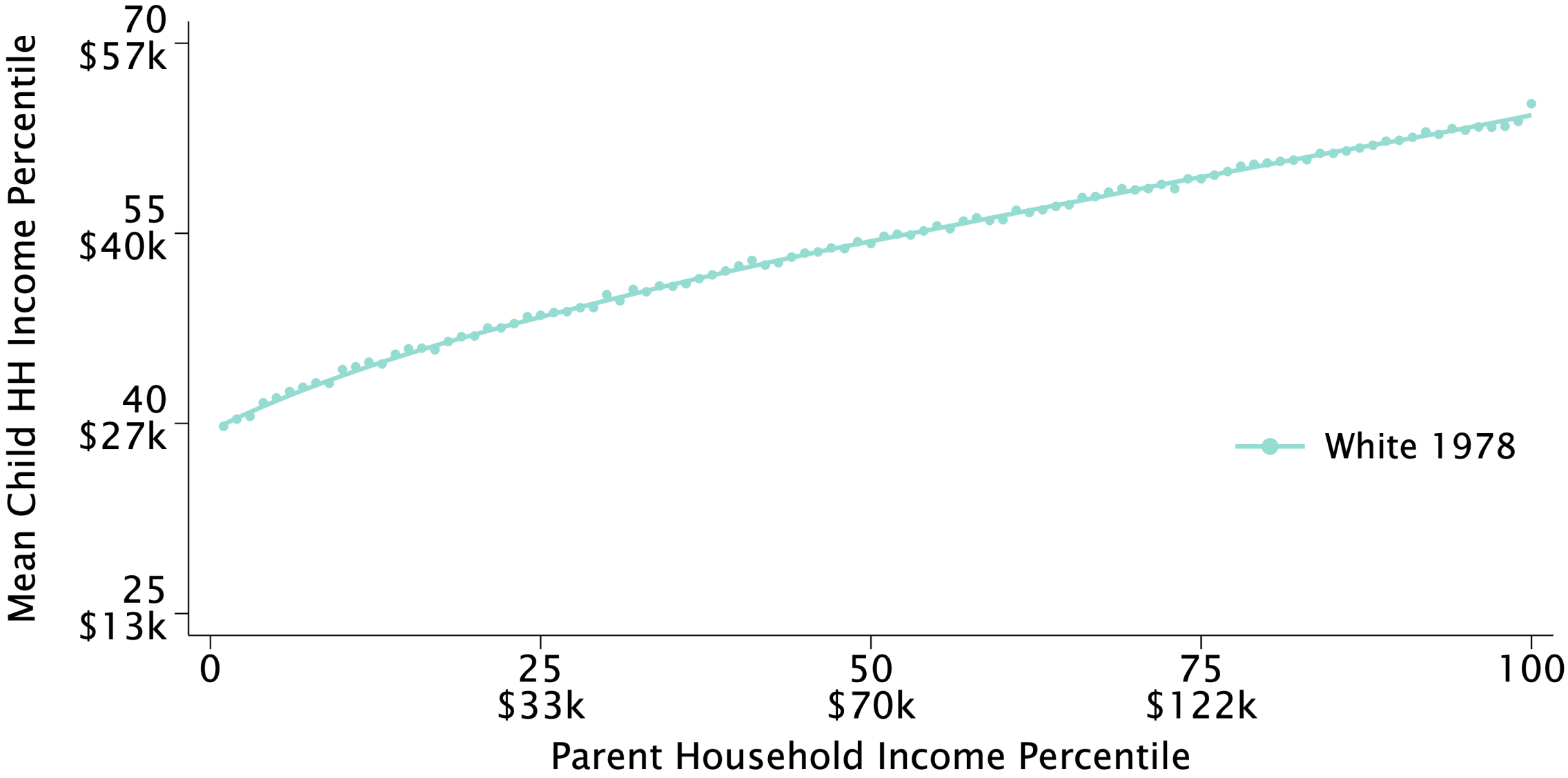
- Sample: children in 1978-92 birth cohorts, linked to parents via dependent claiming
  - 57.2 million children, 92% of those in 1978-92 birth cohorts in 2000 Census

Variable Definitions

- Parents' pre-tax household incomes: mean Adjusted Gross Income when child is 13-17, assigning zeros to non-filers
- Children's pre-tax household incomes measured at age 27 (from 2005-2019)
- Translate to percentile ranks: rank children relative to others in their birth cohort and parents relative to other parents with children in that birth cohort
- Self-reported information on child's race/ethnicity from 2000 Census

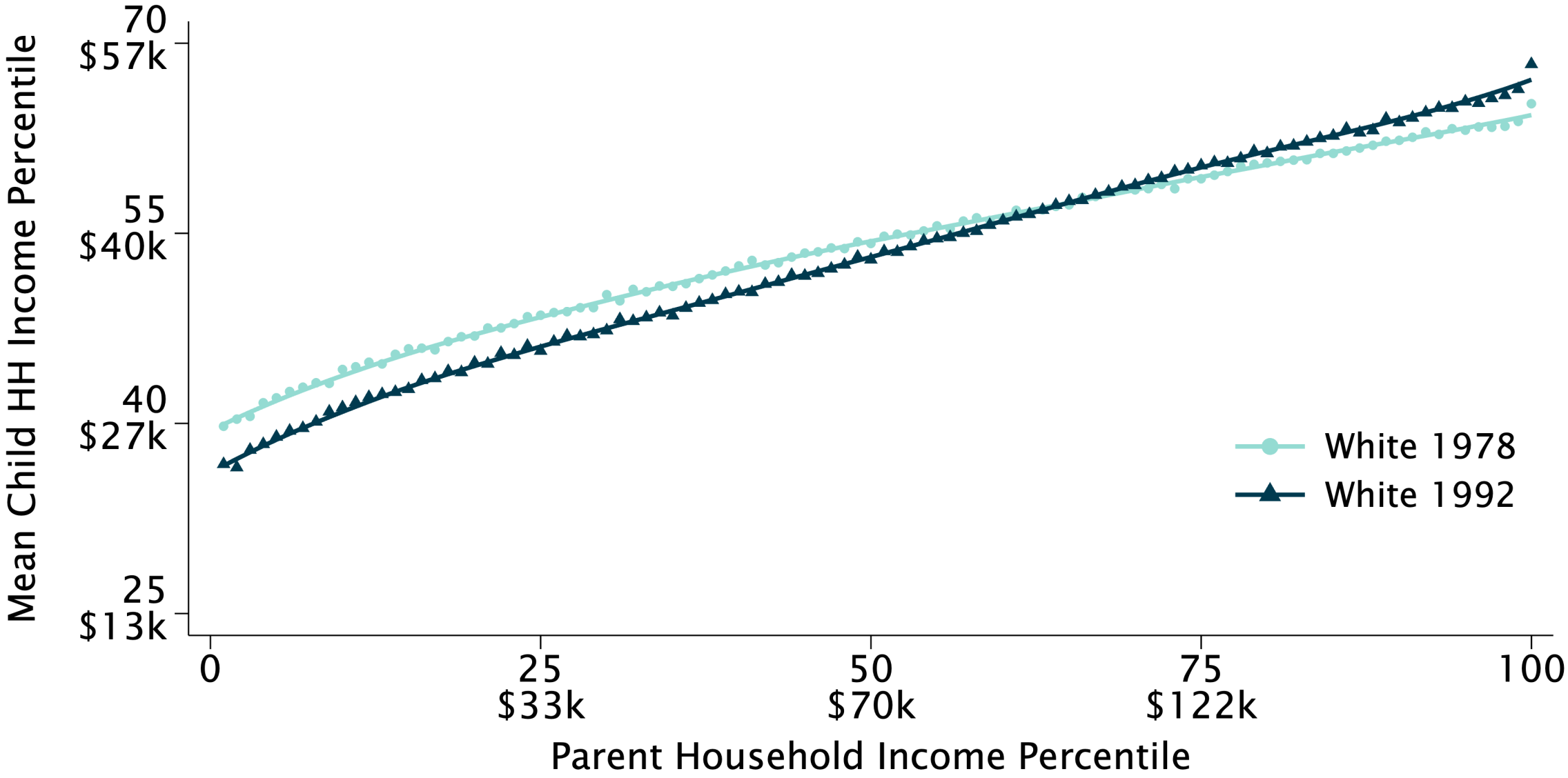
Intergenerational Mobility for the 1978 vs. 1992 Birth Cohorts, by Race and Class

Mean Child Household Income Percentile at Age 27 vs. Parent Household Income Percentile



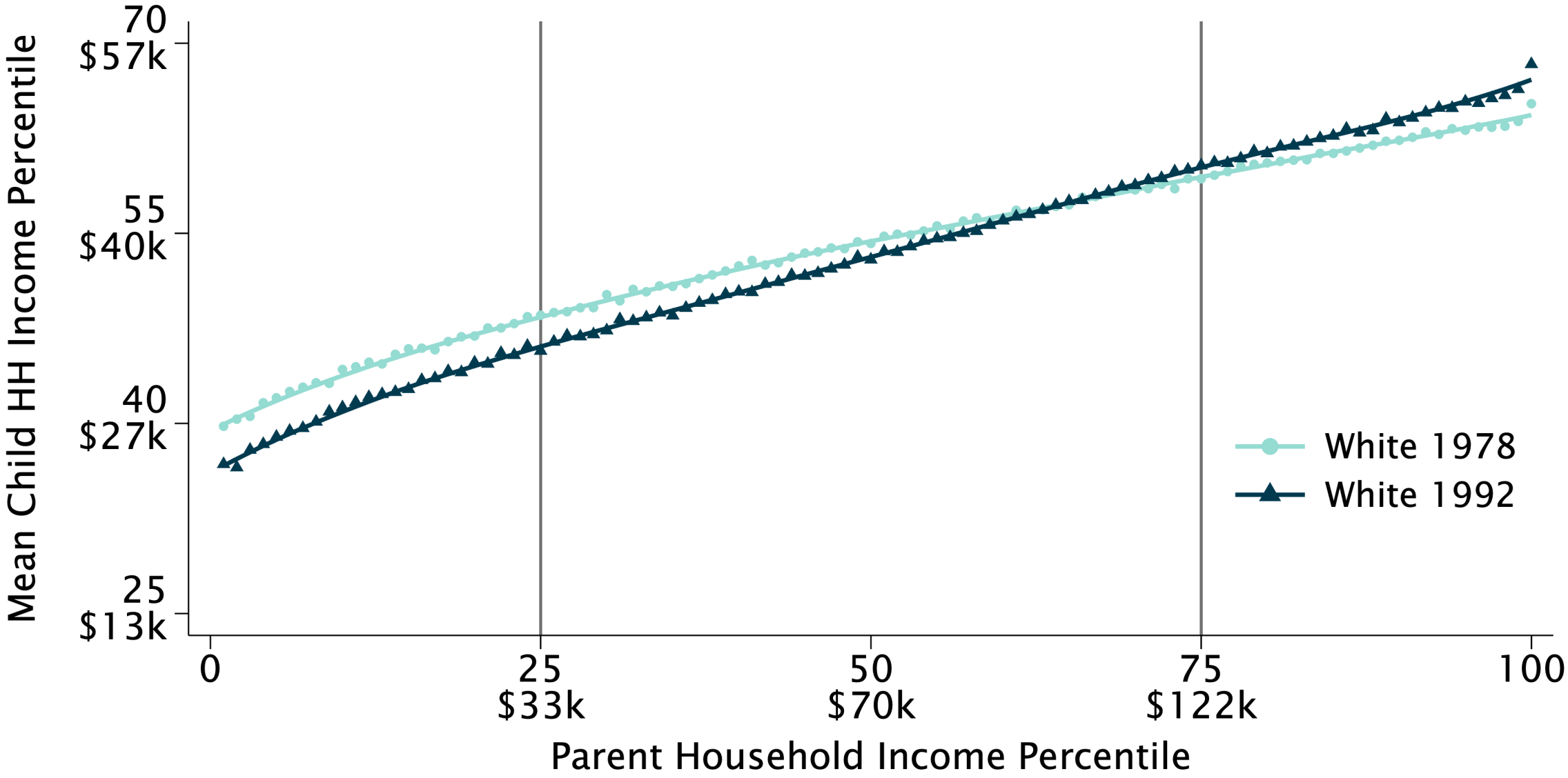
Intergenerational Mobility for the 1978 vs. 1992 Birth Cohorts, by Race and Class

Mean Child Household Income Percentile at Age 27 vs. Parent Household Income Percentile

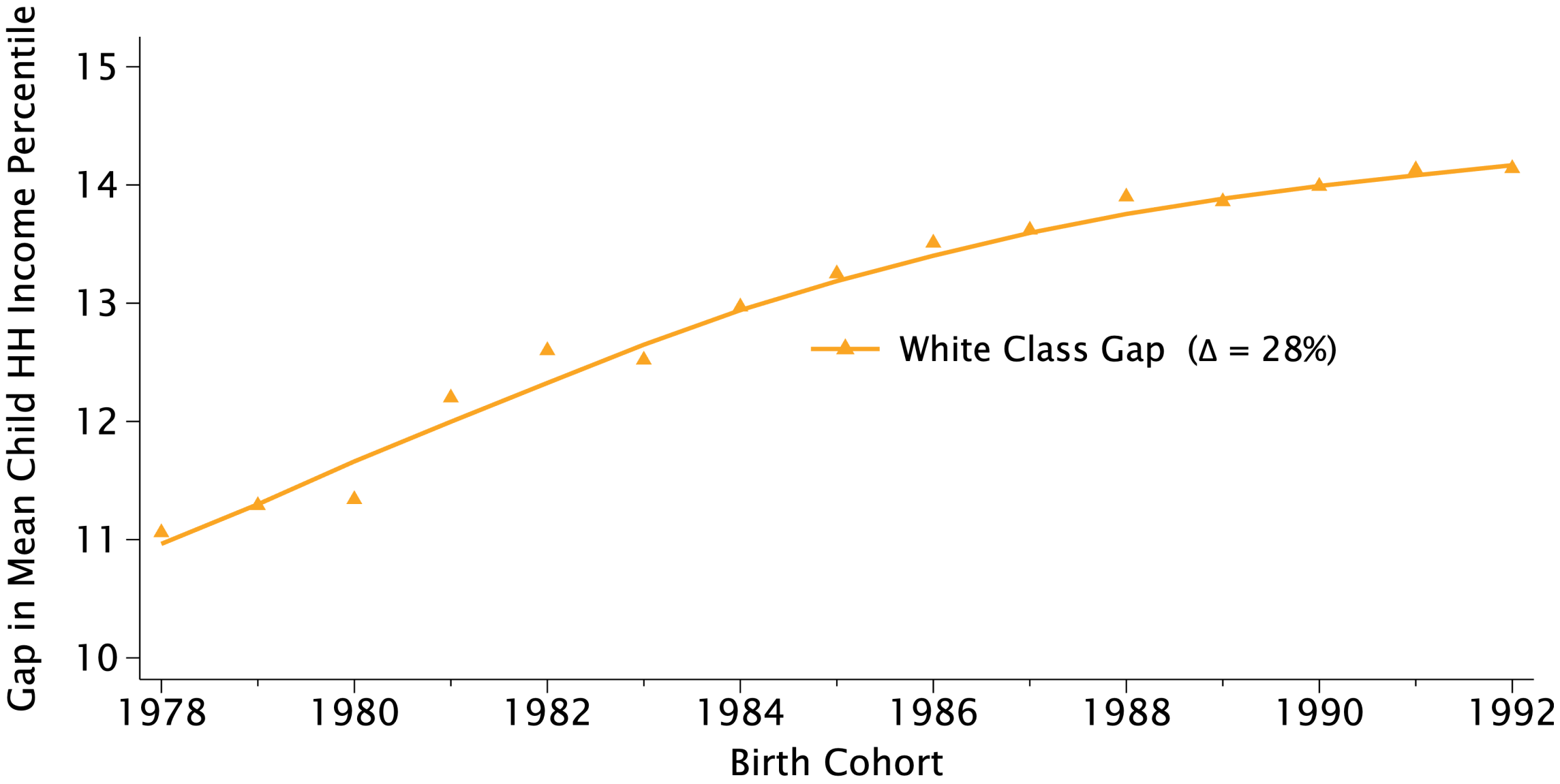


Intergenerational Mobility for the 1978 vs. 1992 Birth Cohorts, by Race and Class

Mean Child Household Income Percentile at Age 27 vs. Parent Household Income Percentile

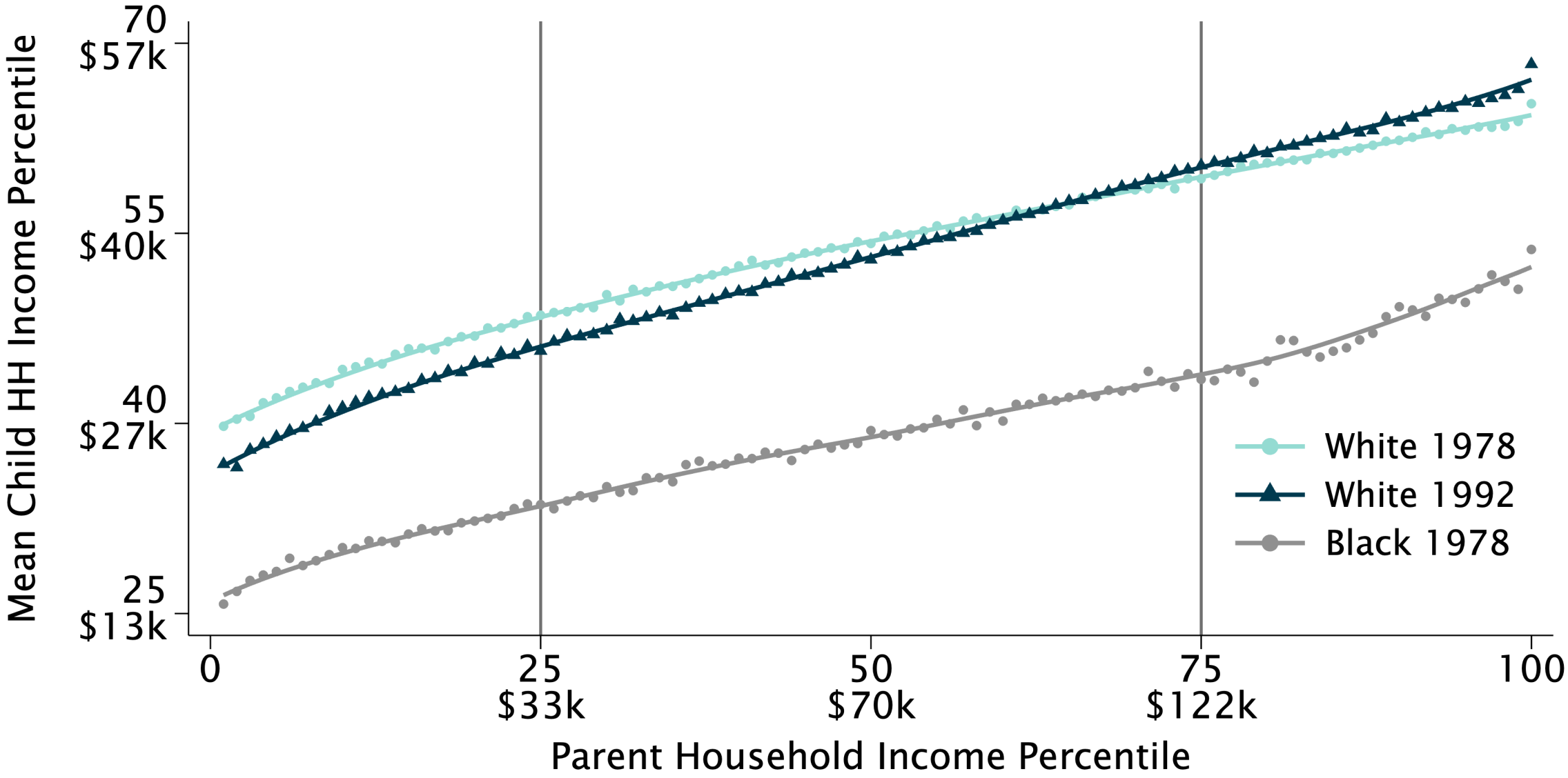


White Class Gap for Children with High vs. Low-Income Parents, by Birth Cohort



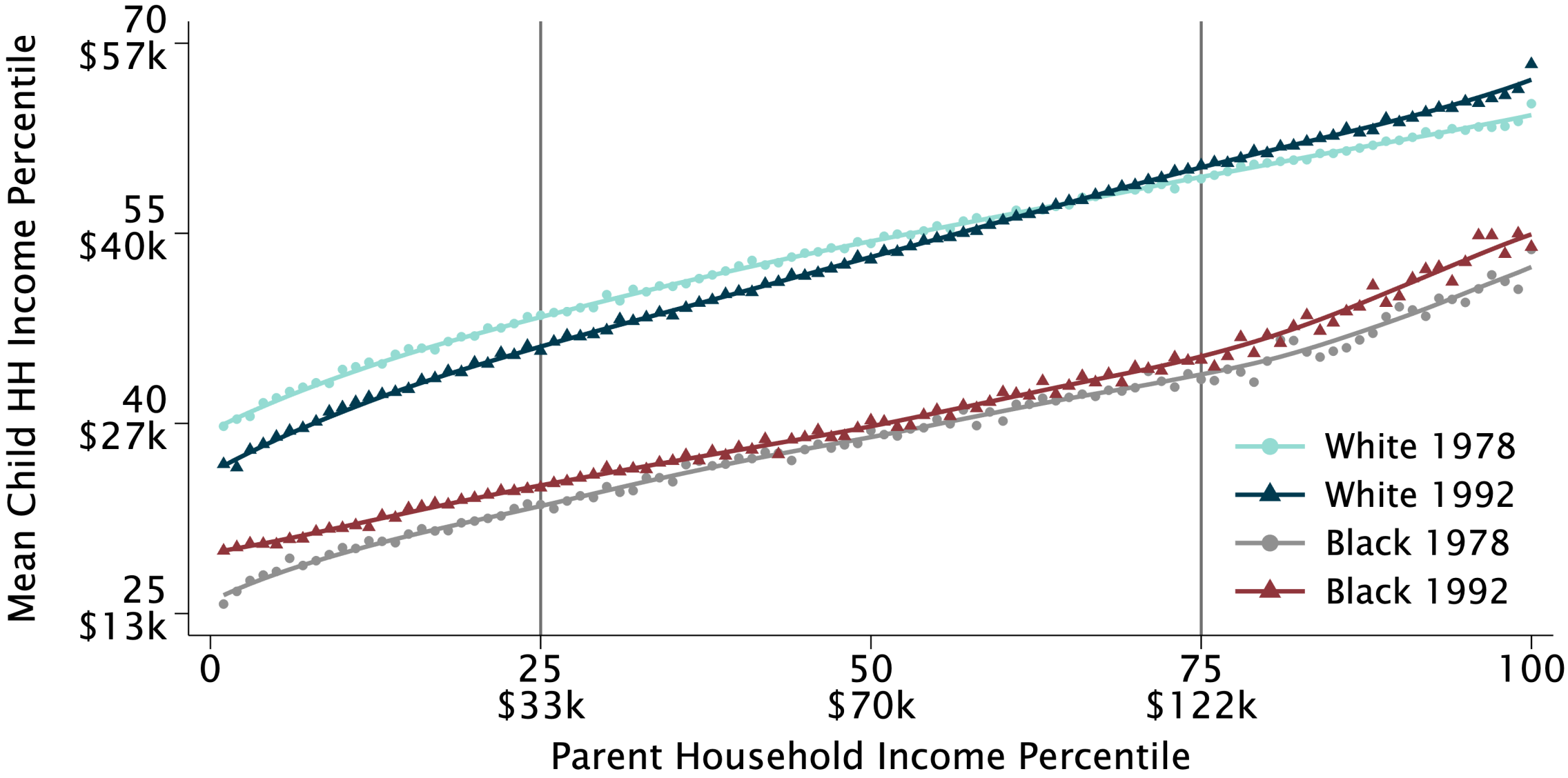
Intergenerational Mobility for the 1978 vs. 1992 Birth Cohorts, by Race and Class

Mean Child Household Income Percentile at Age 27 vs. Parent Household Income Percentile



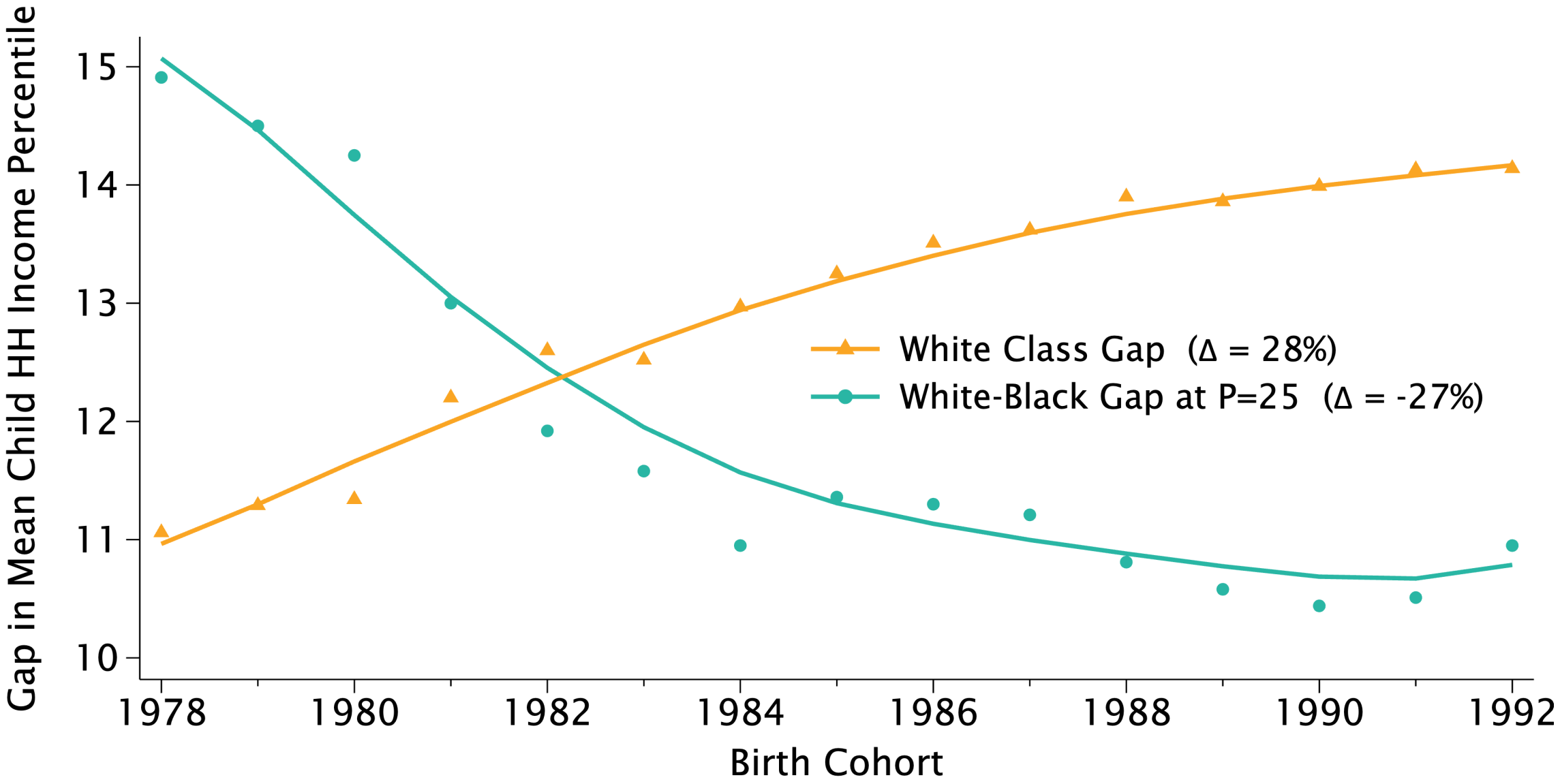
Intergenerational Mobility for the 1978 vs. 1992 Birth Cohorts, by Race and Class

Mean Child Household Income Percentile at Age 27 vs. Parent Household Income Percentile



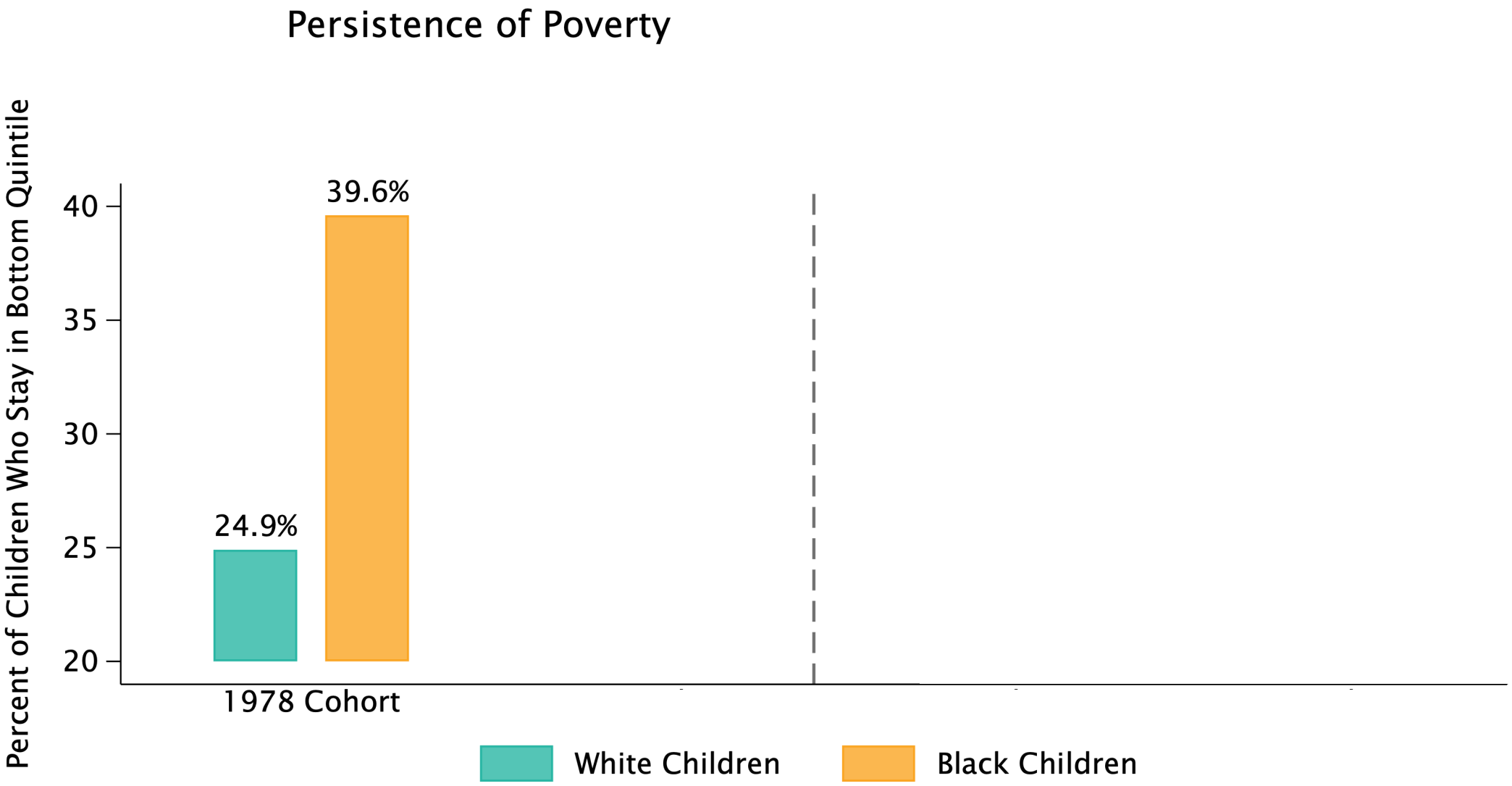
Growing Class Gaps, Shrinking Race Gaps

White-Black Gap for Children with Low-Income Parents vs. White Class Gap, by Birth Cohort



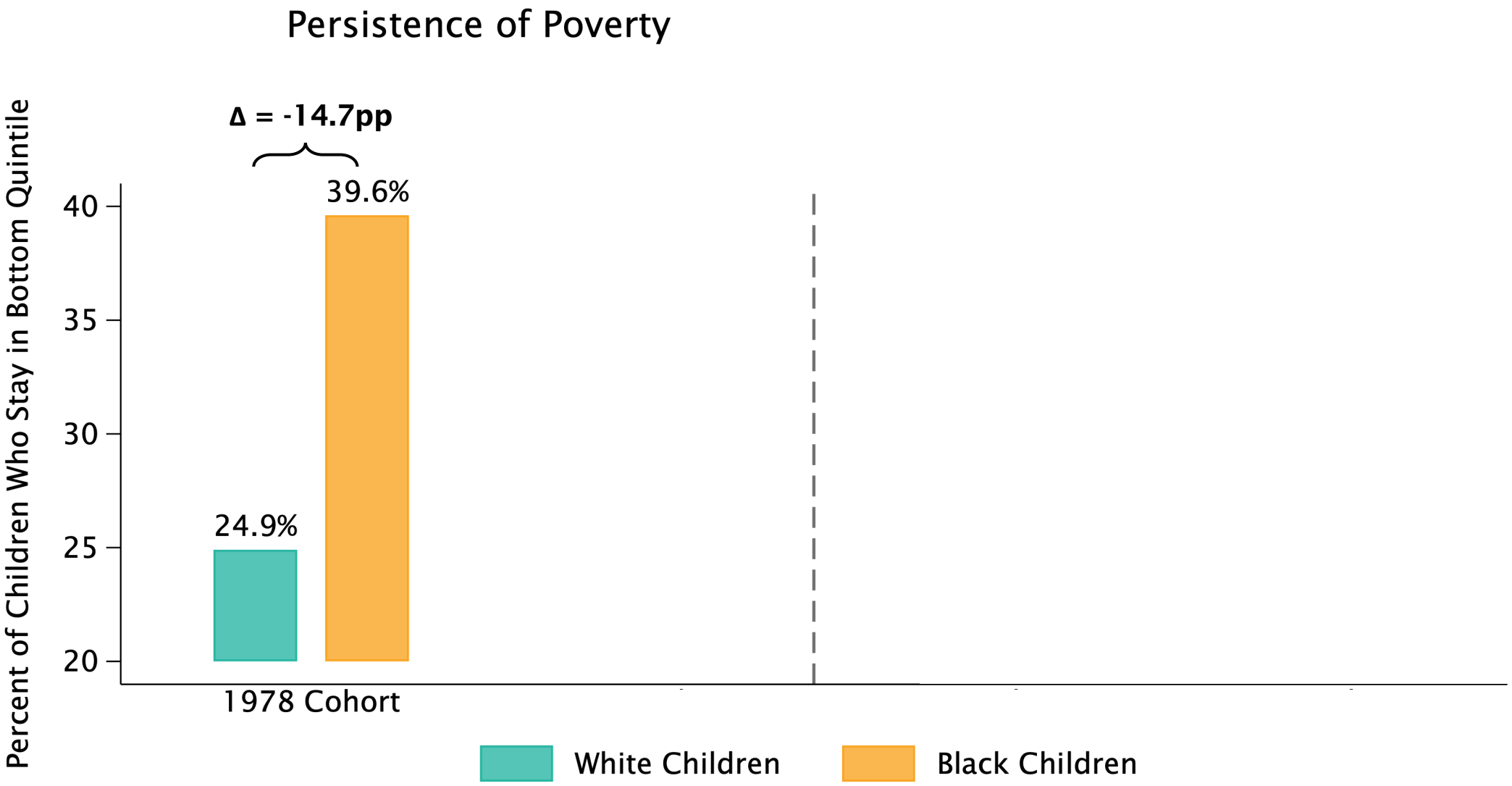
Race Gaps in Intergenerational Persistence of Poverty vs. Upper-Tail Mobility

Quintile Transition Probabilities for Children with Parents in Bottom Income Quintile



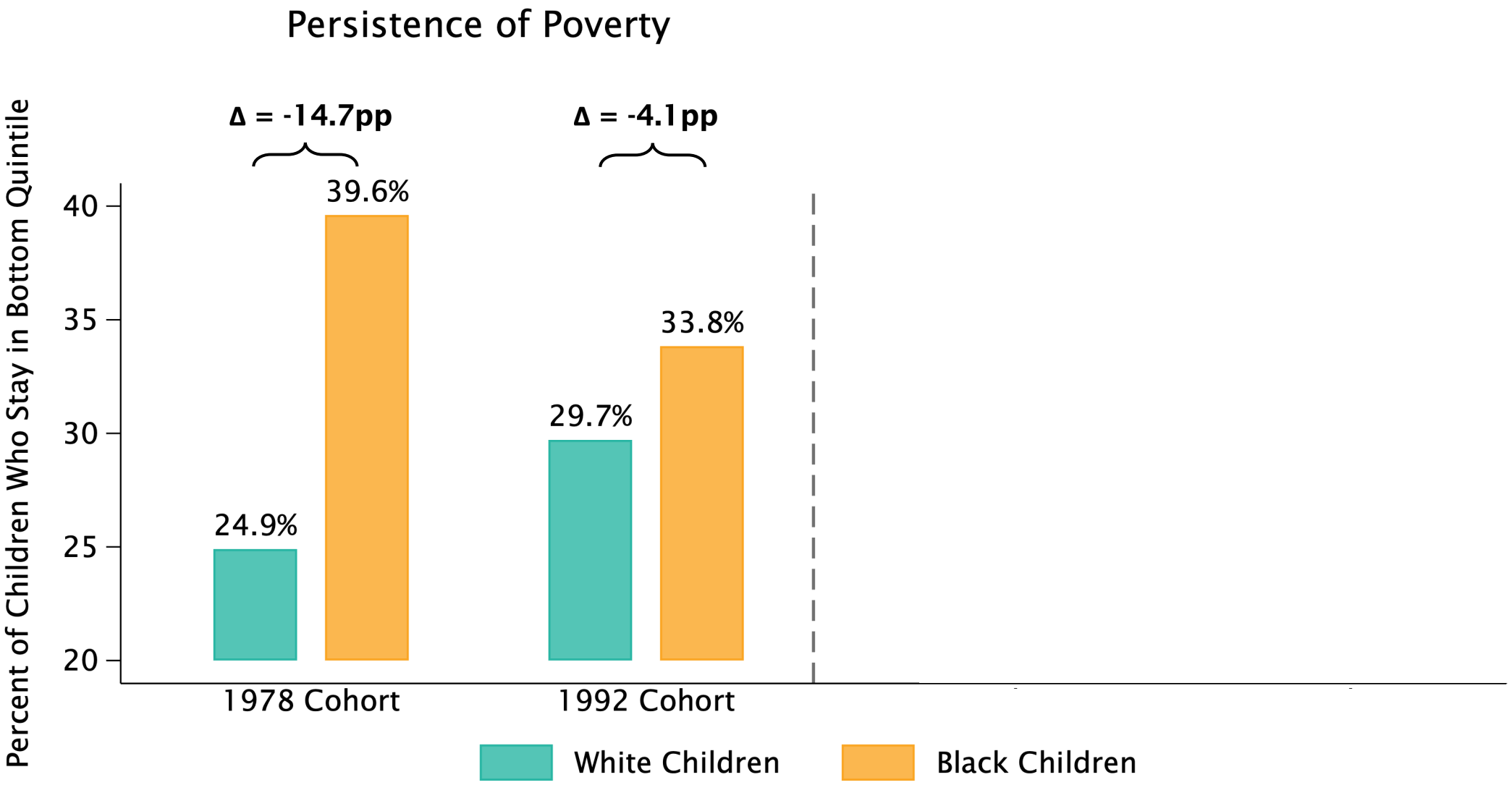
Race Gaps in Intergenerational Persistence of Poverty vs. Upper-Tail Mobility

Quintile Transition Probabilities for Children with Parents in Bottom Income Quintile



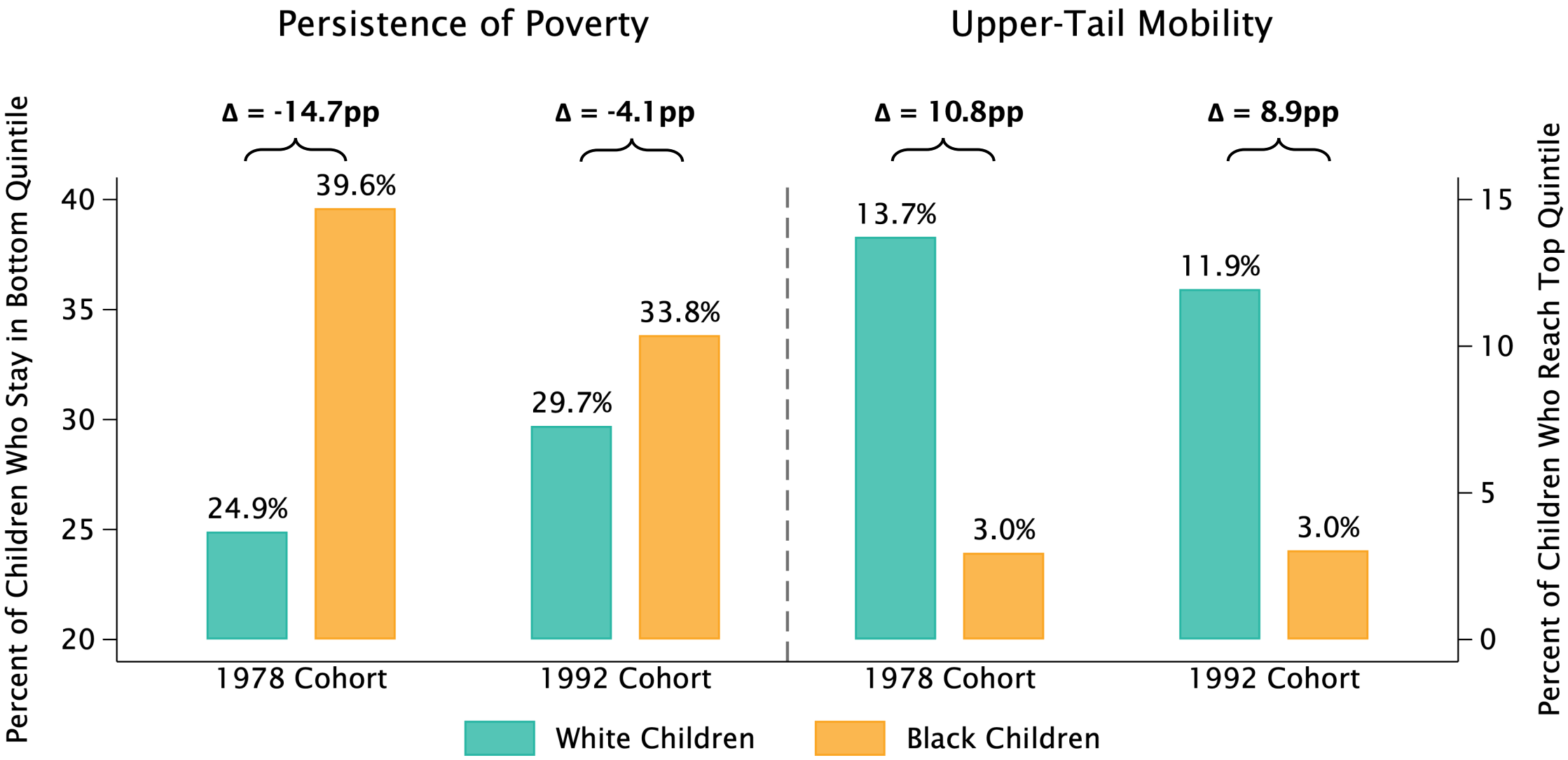
Race Gaps in Intergenerational Persistence of Poverty vs. Upper-Tail Mobility

Quintile Transition Probabilities for Children with Parents in Bottom Income Quintile



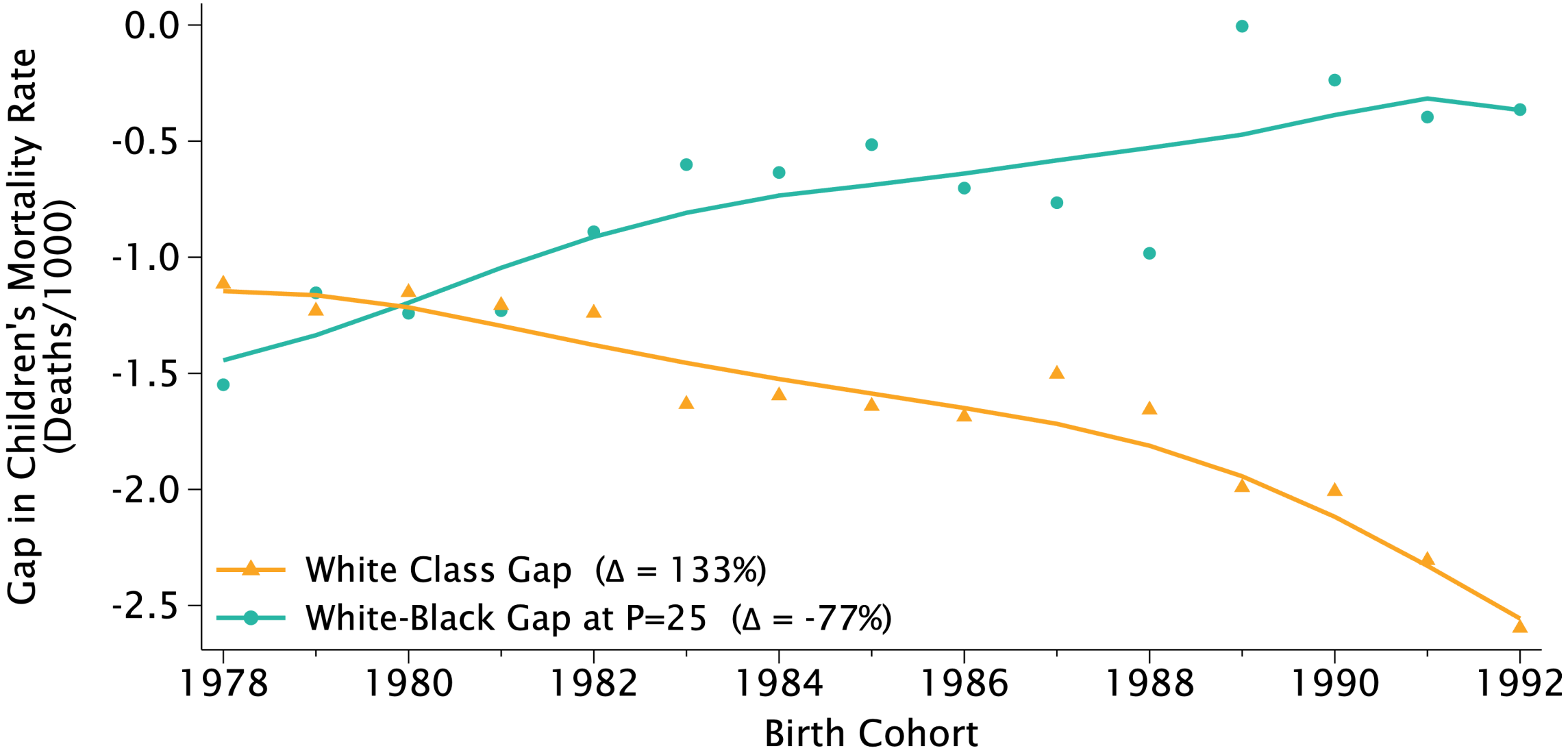
Race Gaps in Intergenerational Persistence of Poverty vs. Upper-Tail Mobility

Quintile Transition Probabilities for Children with Parents in Bottom Income Quintile



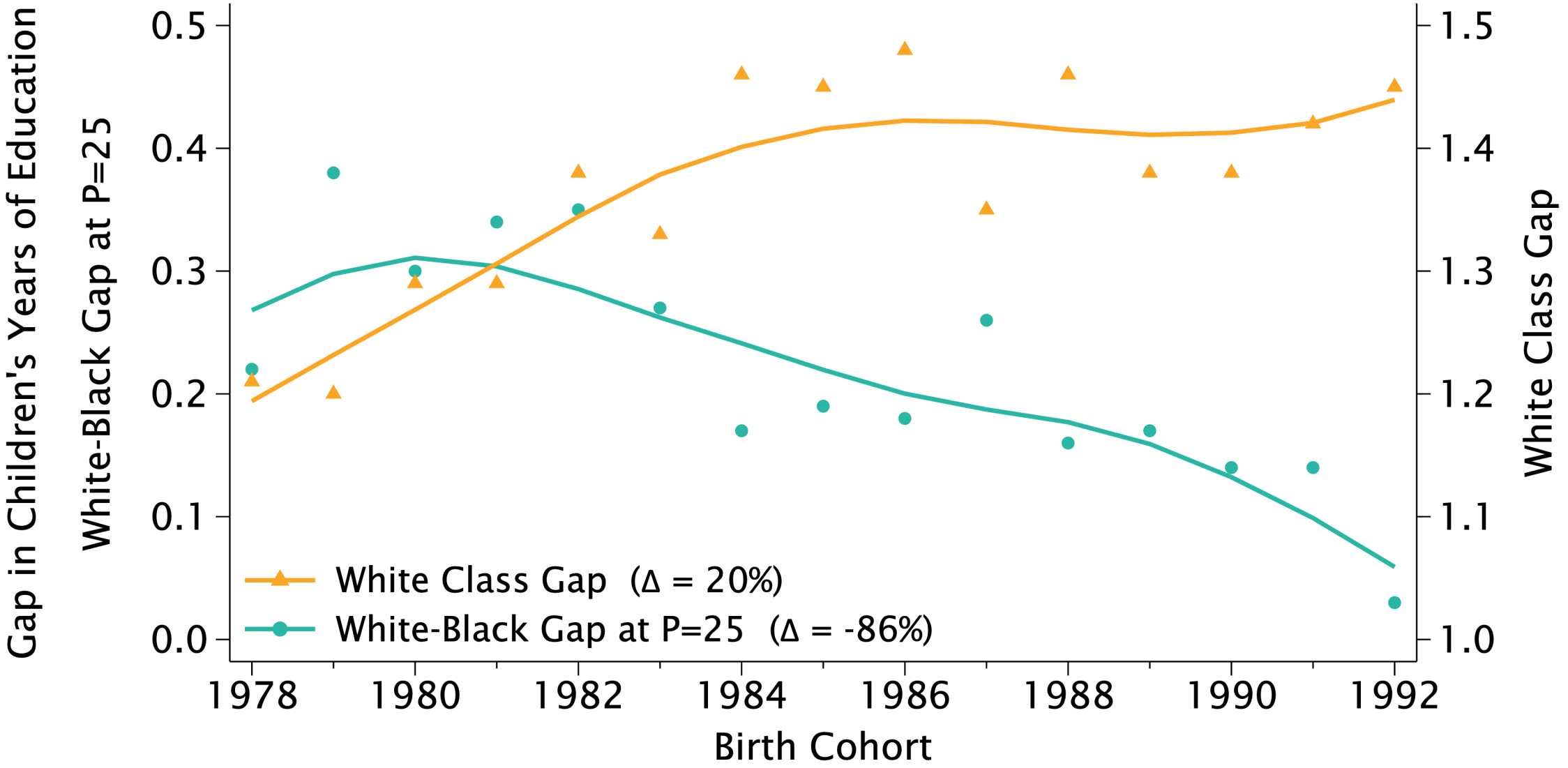
Growing Class Gaps, Shrinking Race Gaps in Mortality Rates between Ages 24-27

White-Black Gap for Children with Low-Income Parents vs. White Class Gap, by Birth Cohort



Growing Class Gaps, Shrinking Race Gaps in Educational Attainment at Age 27

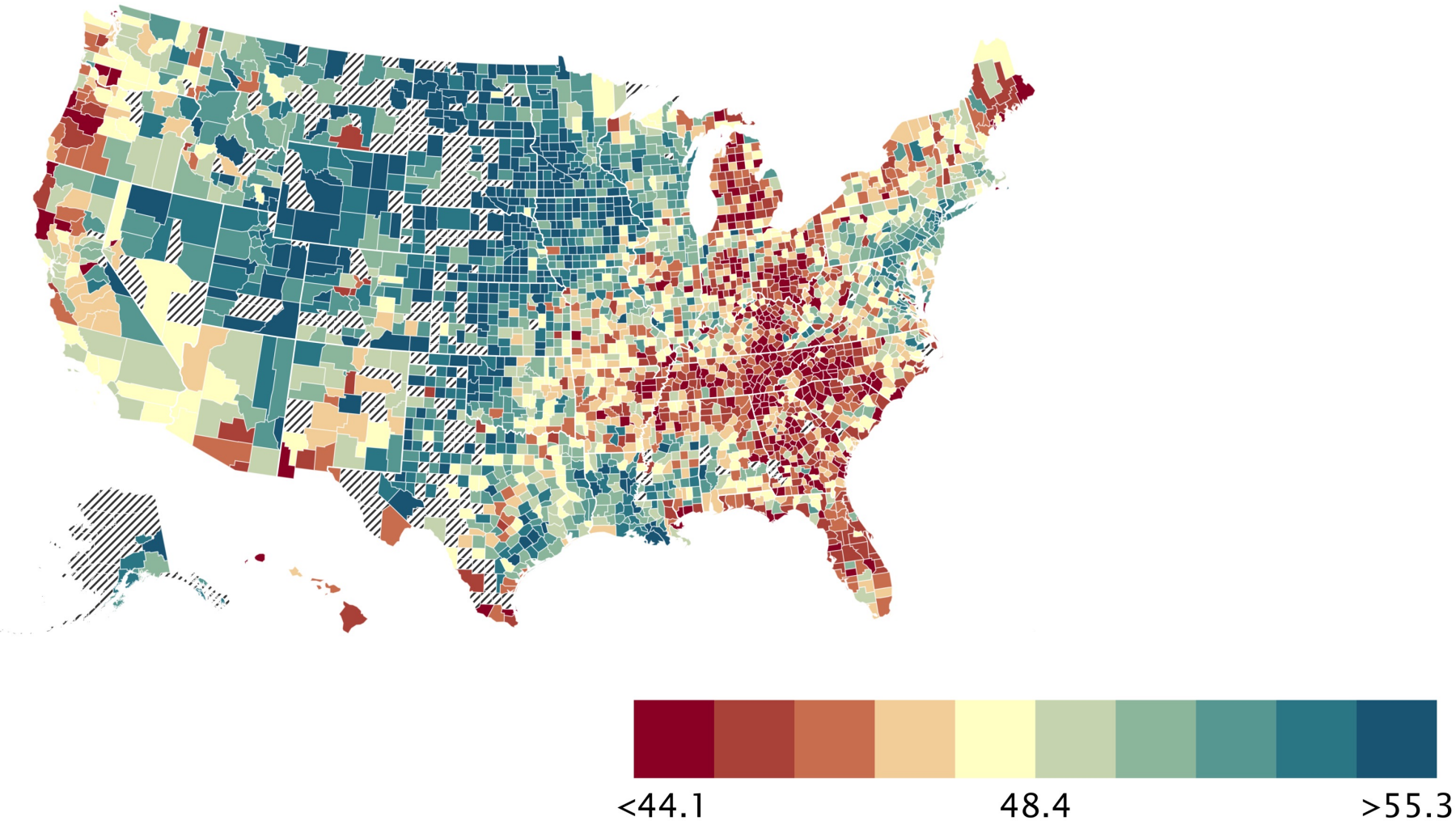
White-Black Gap for Children with Low-Income Parents vs. White Class Gap, by Birth Cohort



Changes in Economic Mobility for White Americans

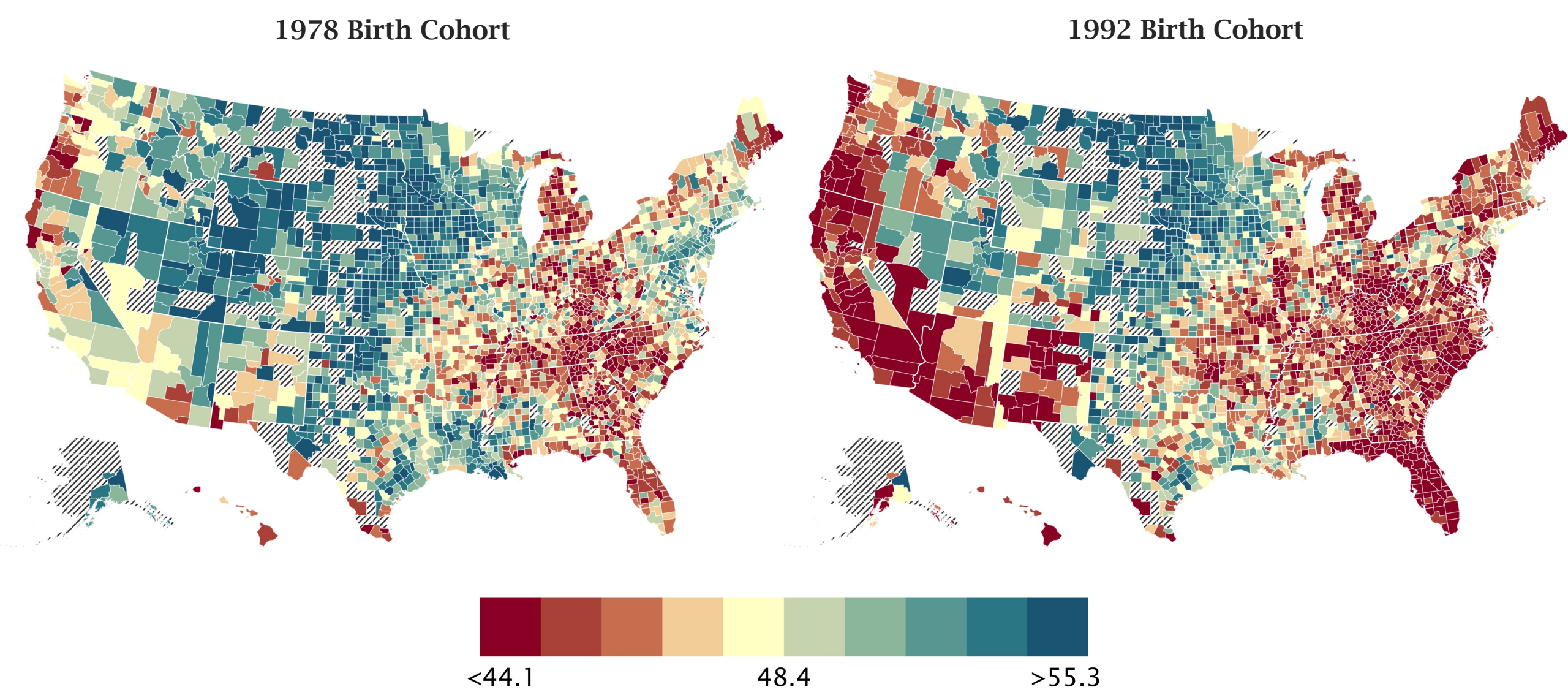
White Children with Low-Income Parents

1978 Birth Cohort



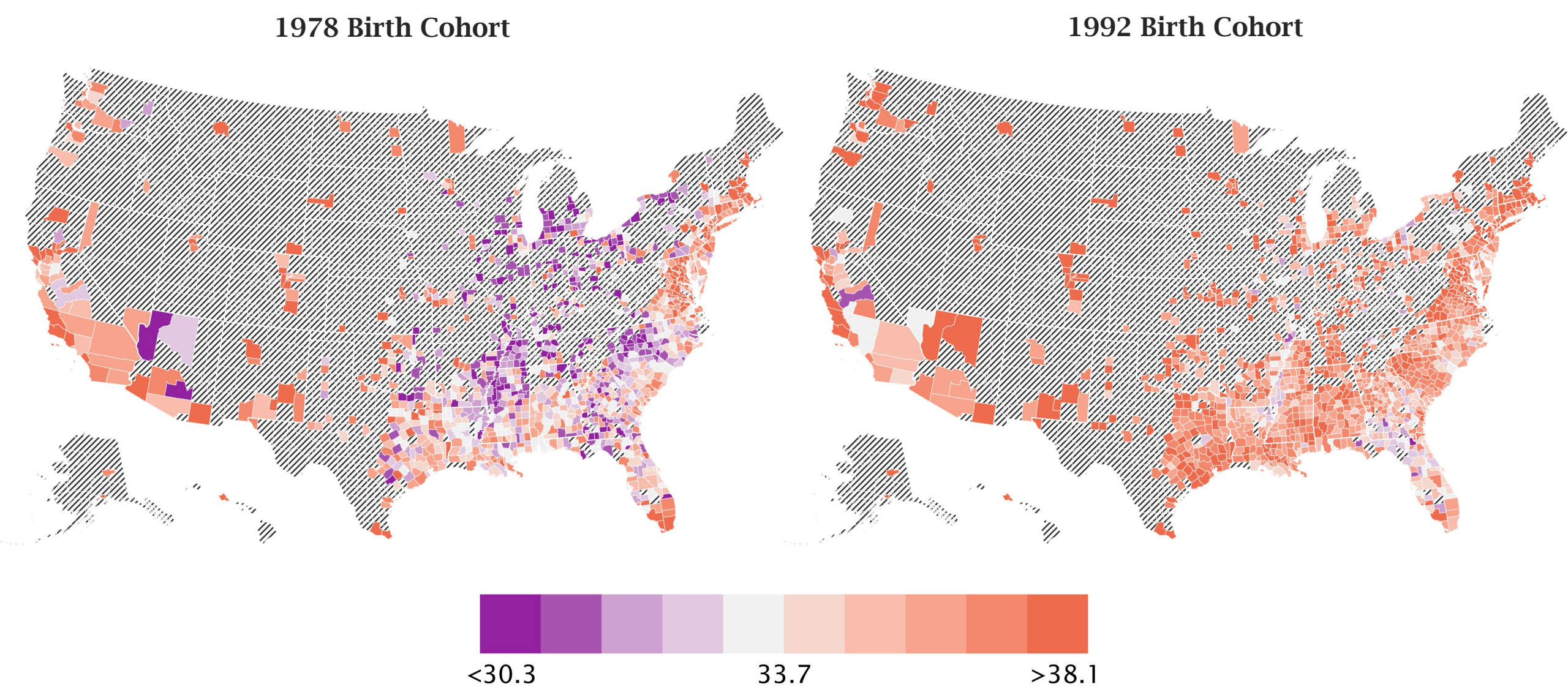
Changes in Economic Mobility for White Americans

White Children with Low-Income Parents



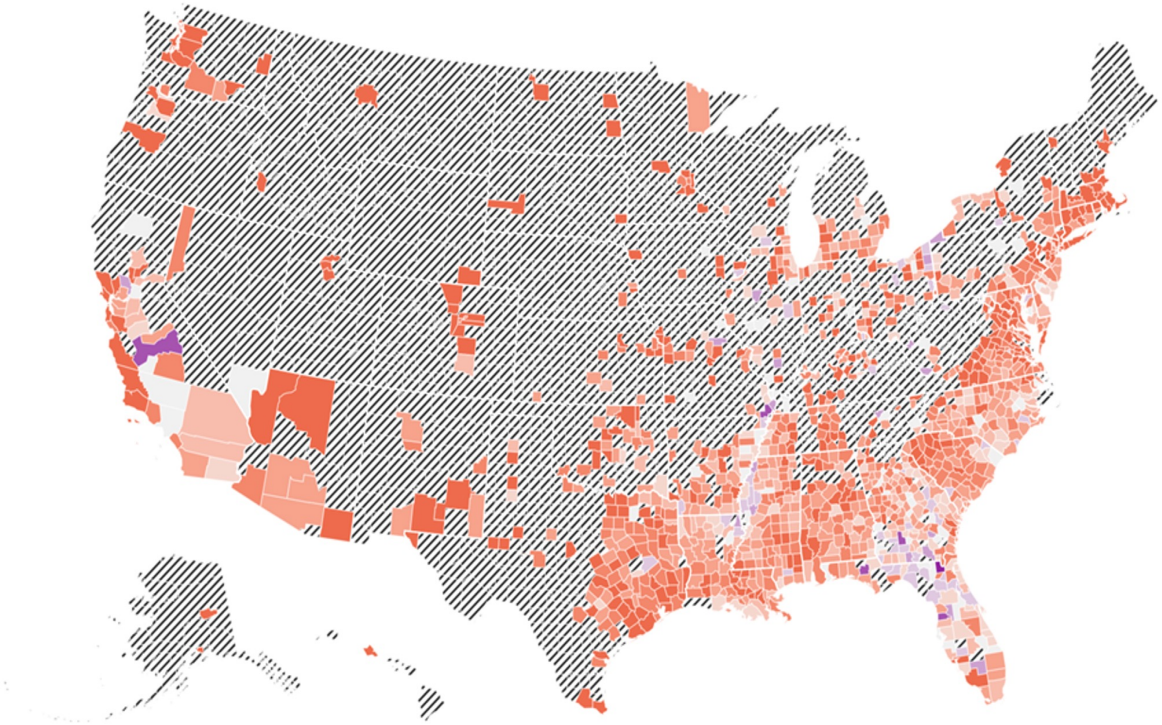
Changes in Economic Mobility for Black Americans

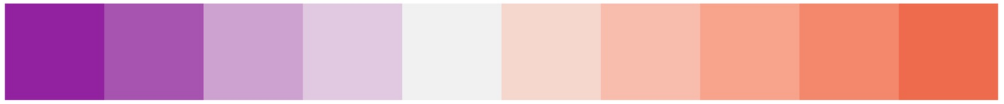
Black Children with Low-Income Parents



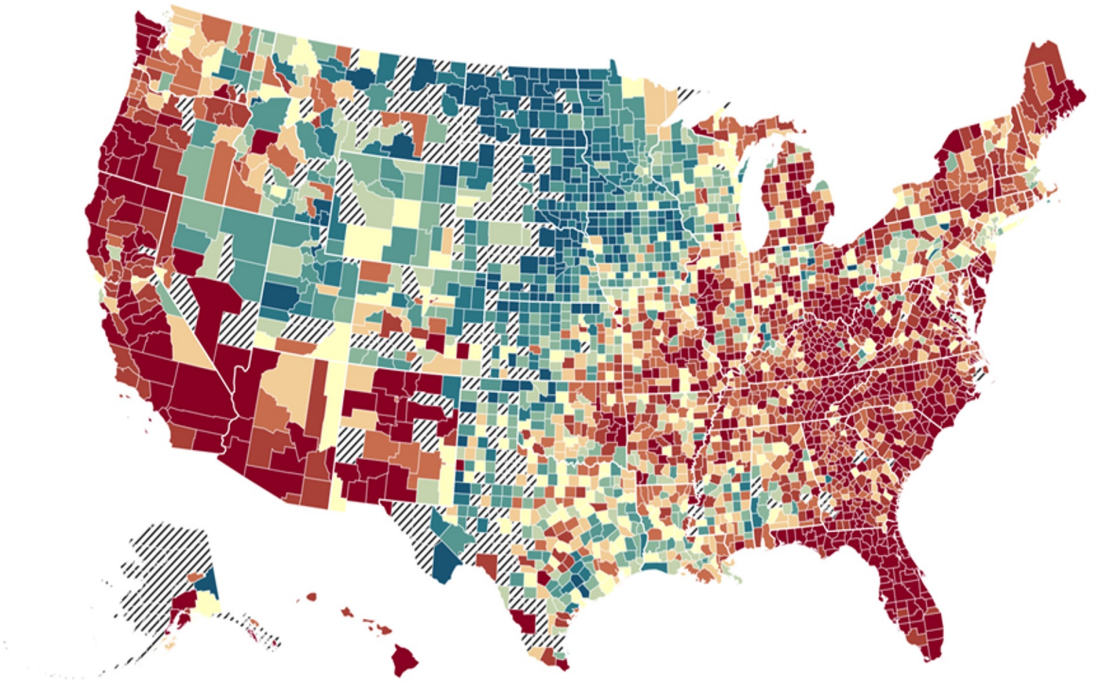
Economic Mobility for Black vs. White Children Born in 1992

Black Children



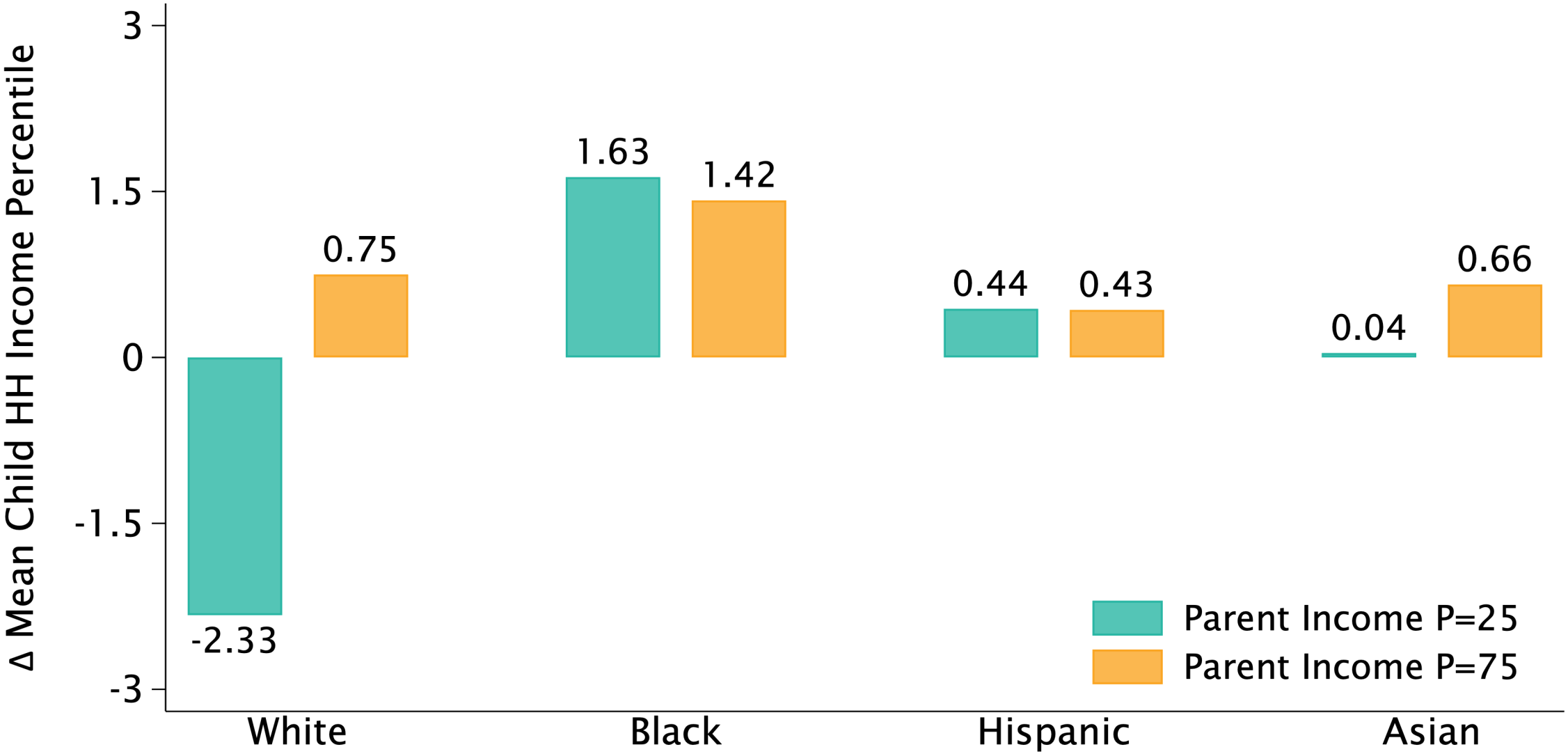


White Children



Change in Mean Child Household Income Percentile by Race and Class

Household Income Percentile at Age 27, 1992-1978 Cohort Difference



Mechanisms Underlying Trends in Mobility

Potential Explanations for Growing Class Gaps and Shrinking Race Gaps

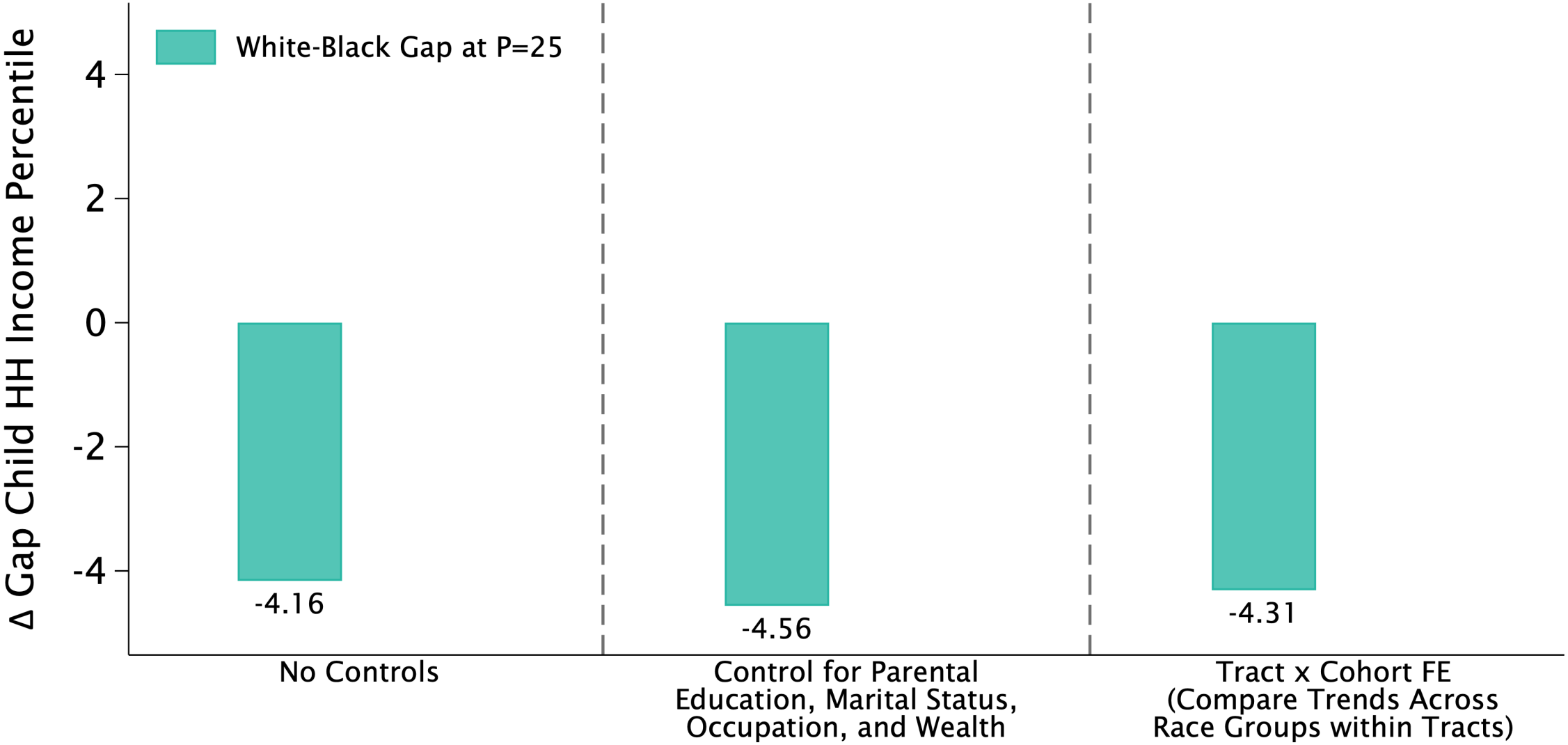
- Begin by considering two natural explanations for changes in intergenerational mobility by race and class:

1. Changes in family-level characteristics (e.g., education, marriage, wealth, occupation)

2. Differential shocks across areas (e.g., predominantly Black vs. White areas)

Can Family Characteristics or Neighborhoods Explain Changes in Gaps?

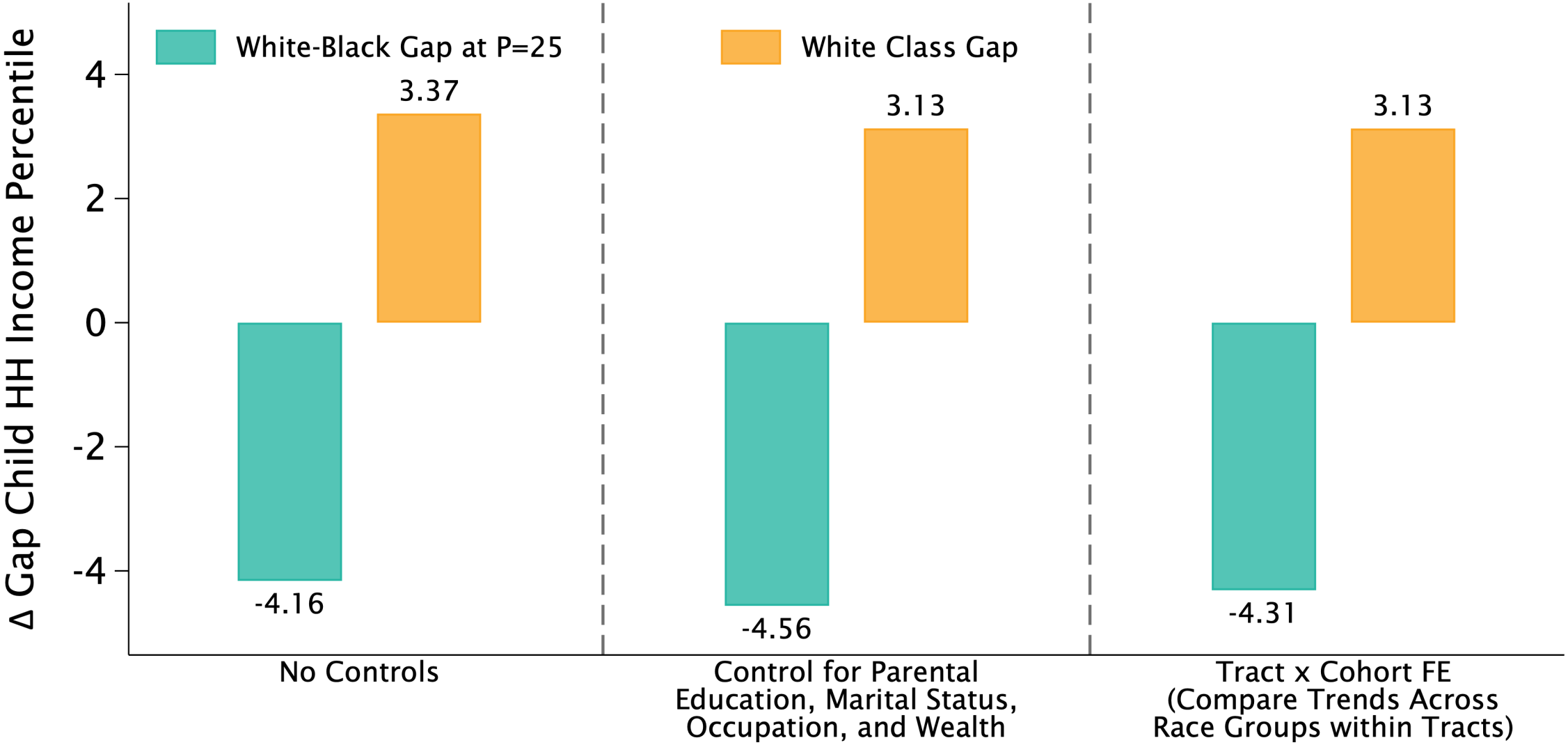
Household Income Percentile at Age 27, 1992-1978 Cohort Difference



$$Y = \beta_1 White + \beta_2 Cohort + \beta_3 White \times Cohort + \alpha_{nw} + \alpha_{nc} + \varepsilon$$

Can Family Characteristics or Neighborhoods Explain Changes in Gaps?

Household Income Percentile at Age 27, 1992-1978 Cohort Difference



What Drives the Divergence in Outcomes by Race and Class?

- Changes in intergenerational mobility by race and class must be driven by differential trends **within areas**
- One hypothesis for such changes emphasized in prior ethnographic work: changes in **employment rates**
- Can differential changes in parental employment by race and class explain within-area divergence?

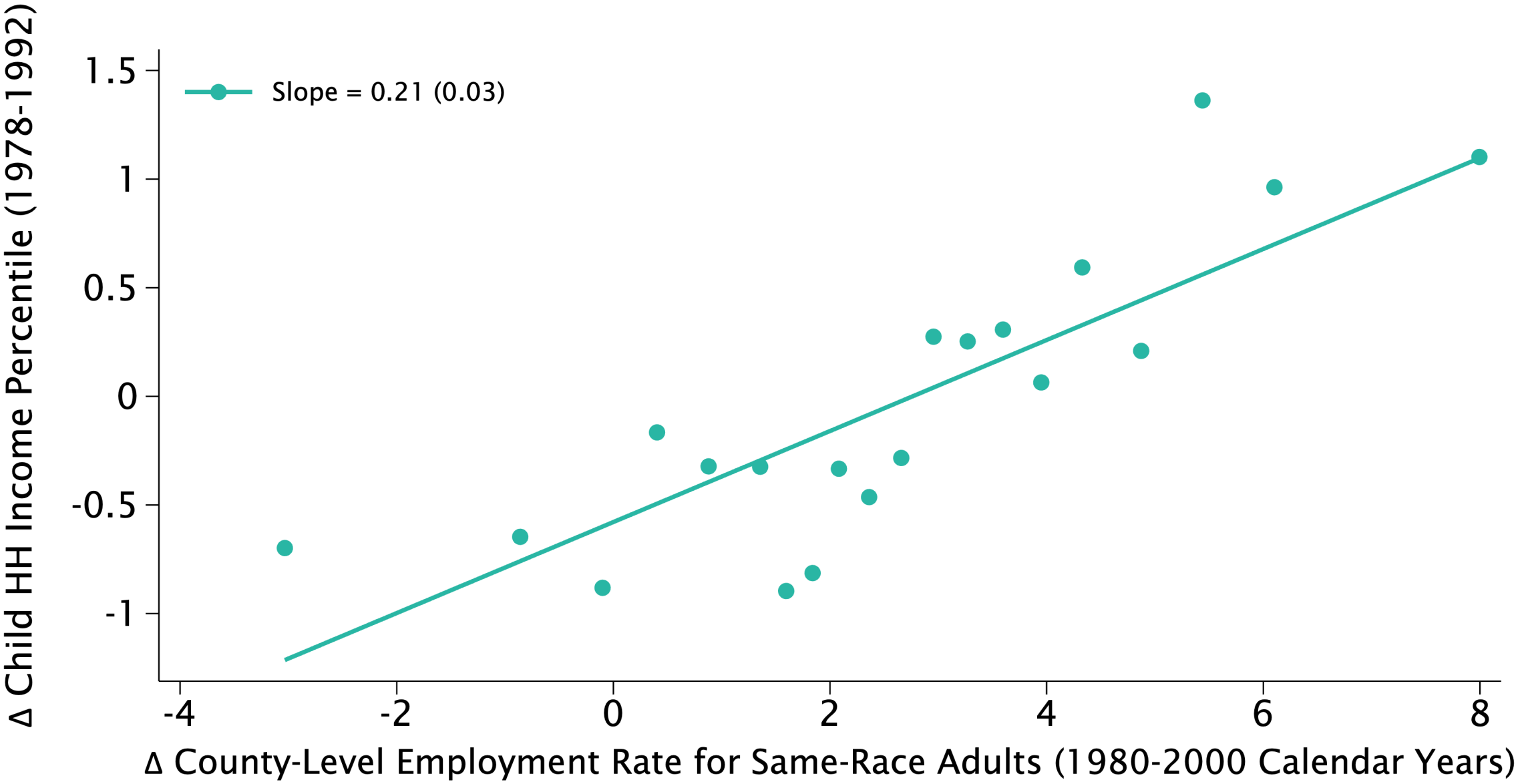
> *Many of today's problems…crime, family dissolution, welfare, low levels of social organization, and so on…are fundamentally a consequence of the disappearance of work.*
>
> - William Julius Wilson
> *When Work Disappears (1996)*

Changes in Economic Mobility vs. Changes in Employment Rates

- Examine link between changes in **employment rates** and economic mobility across areas
  - Measure race-specific change in parental employment rates across counties as change in adults' employment rates from 1980 to 2000 Census
  - Use employment rates as a proxy for community-level environmental conditions more broadly, as in Wilson (1996)

Changes in Children's Income Percentiles vs. Adult Employment Rates, 1978-92 Cohorts

By County and Race

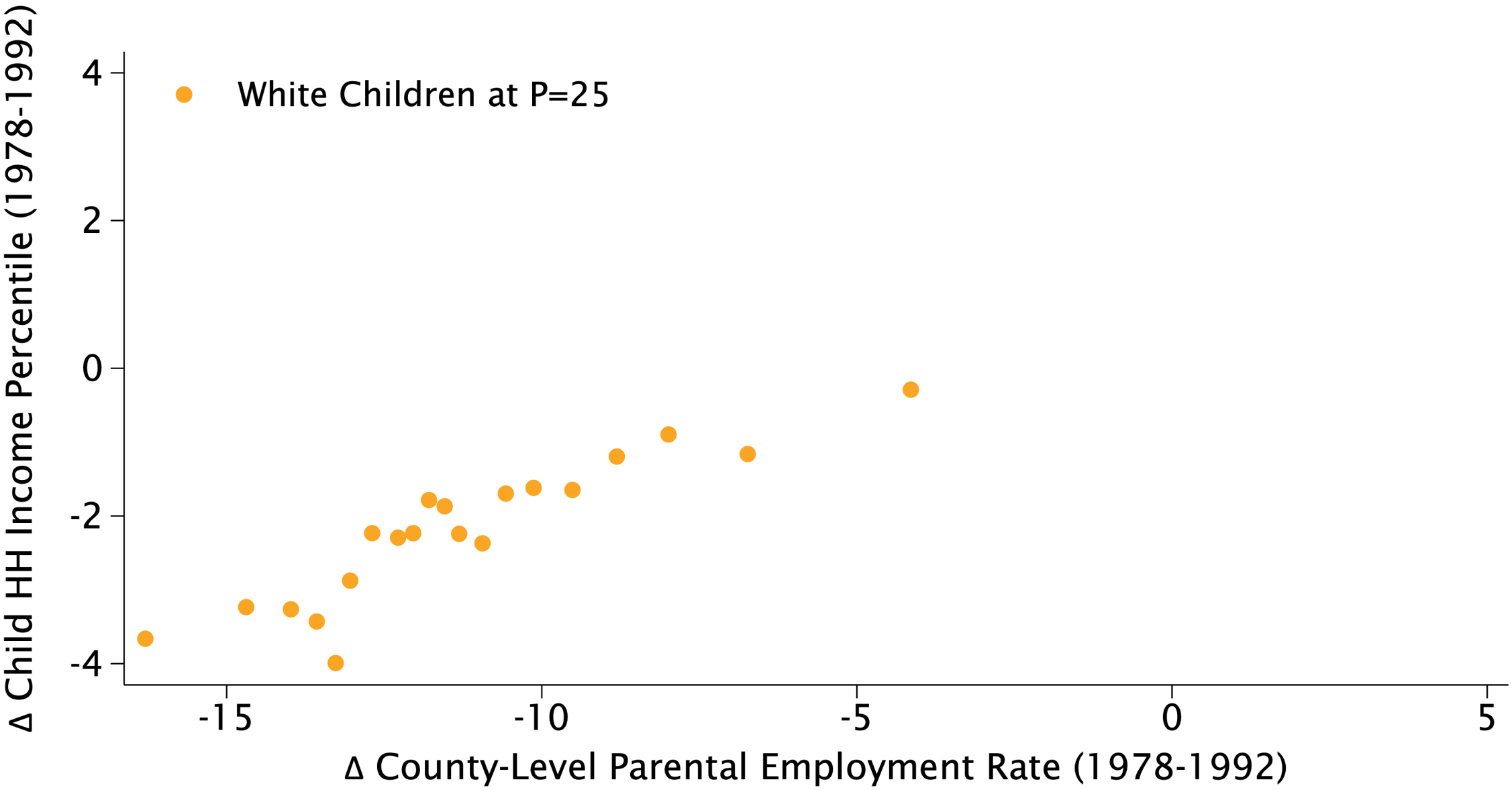


Explaining Divergence in Outcomes by Race and Class

- To explain divergence by race and class, need to measure employment rates not just by race and county but also by class
- Measure county-level changes in parental employment rates by race and class from 1978 to 1992 birth cohorts
- Because we define "class" as parent's income percentile during childhood (ages 13-17), need to measure employment after child is 18
  - In baseline analysis, measure parental employment rates when child is 27
  - Results insensitive to alternative points of measurement because variation in employment rates is primarily across cohorts rather than calendar years

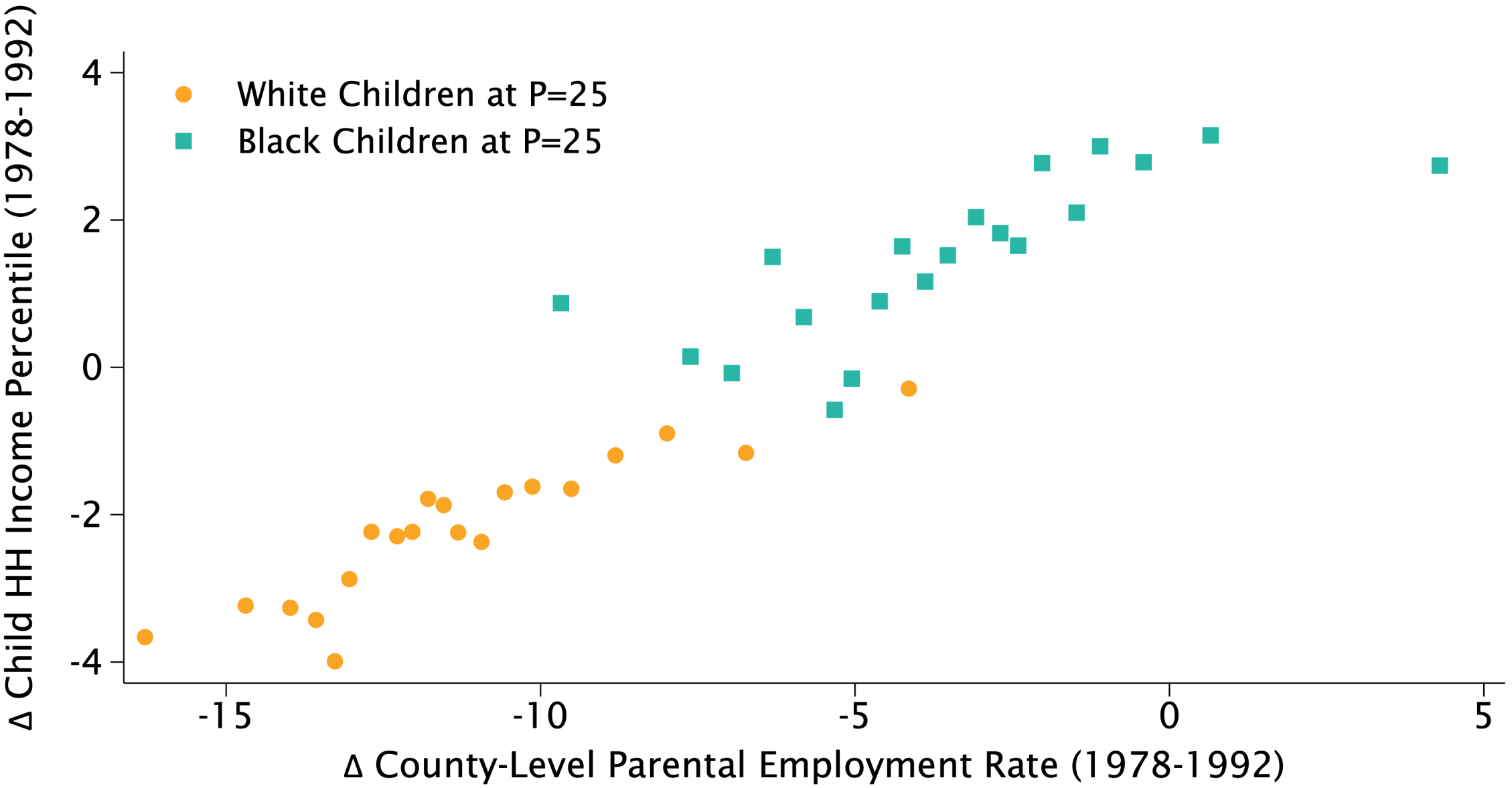
Changes in Children's Income Percentiles vs. Parent Employment Rates, 1978-92 Cohorts

By County, Race, and Class



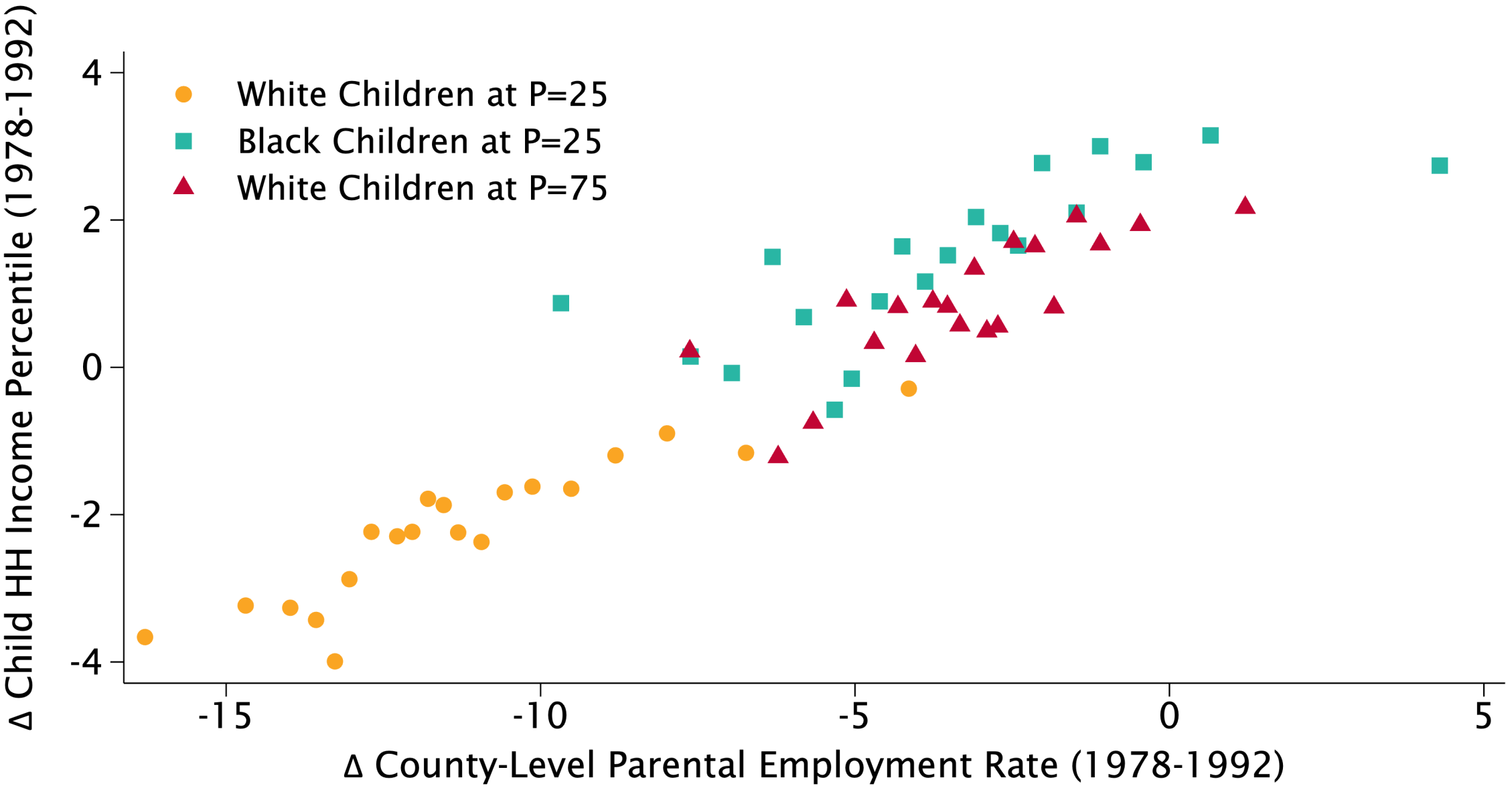
Changes in Children's Income Percentiles vs. Parent Employment Rates, 1978-92 Cohorts

By County, Race, and Class



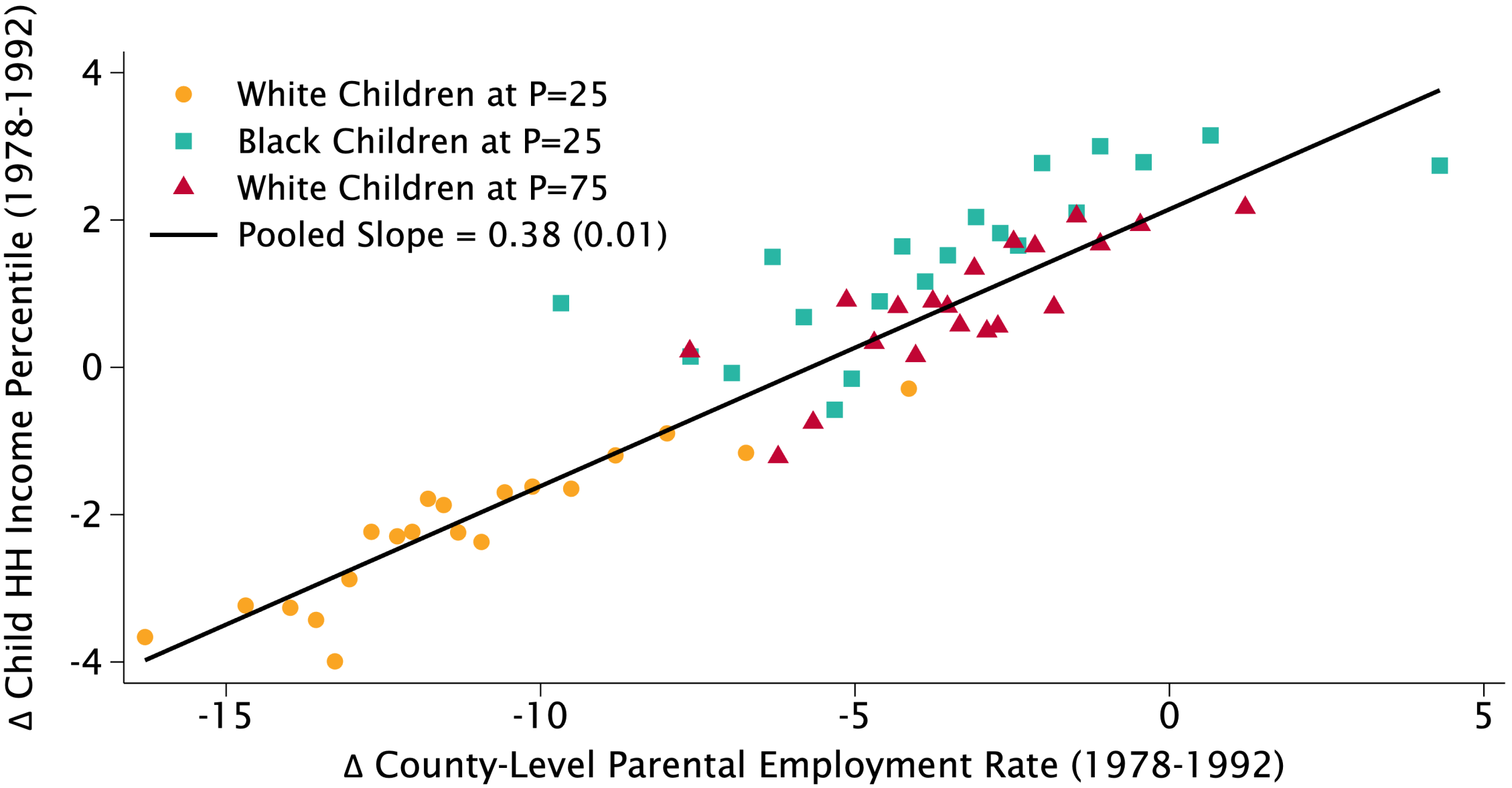
Changes in Children's Income Percentiles vs. Parent Employment Rates, 1978-92 Cohorts

By County, Race, and Class



Changes in Children's Income Percentiles vs. Parent Employment Rates, 1978-92 Cohorts

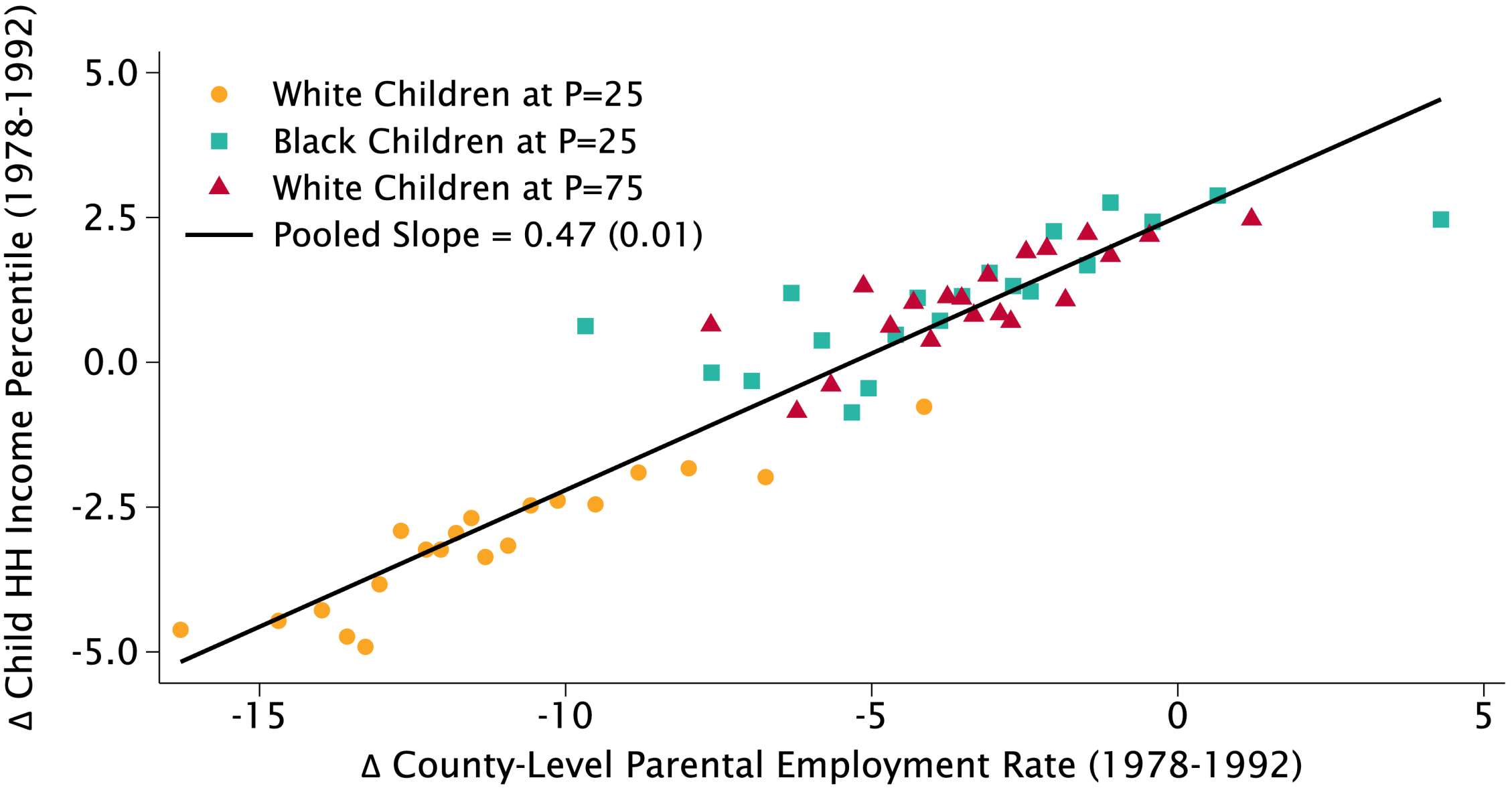
By County, Race, and Class



Explaining National Trends in Intergenerational Mobility Gaps by Race and Class

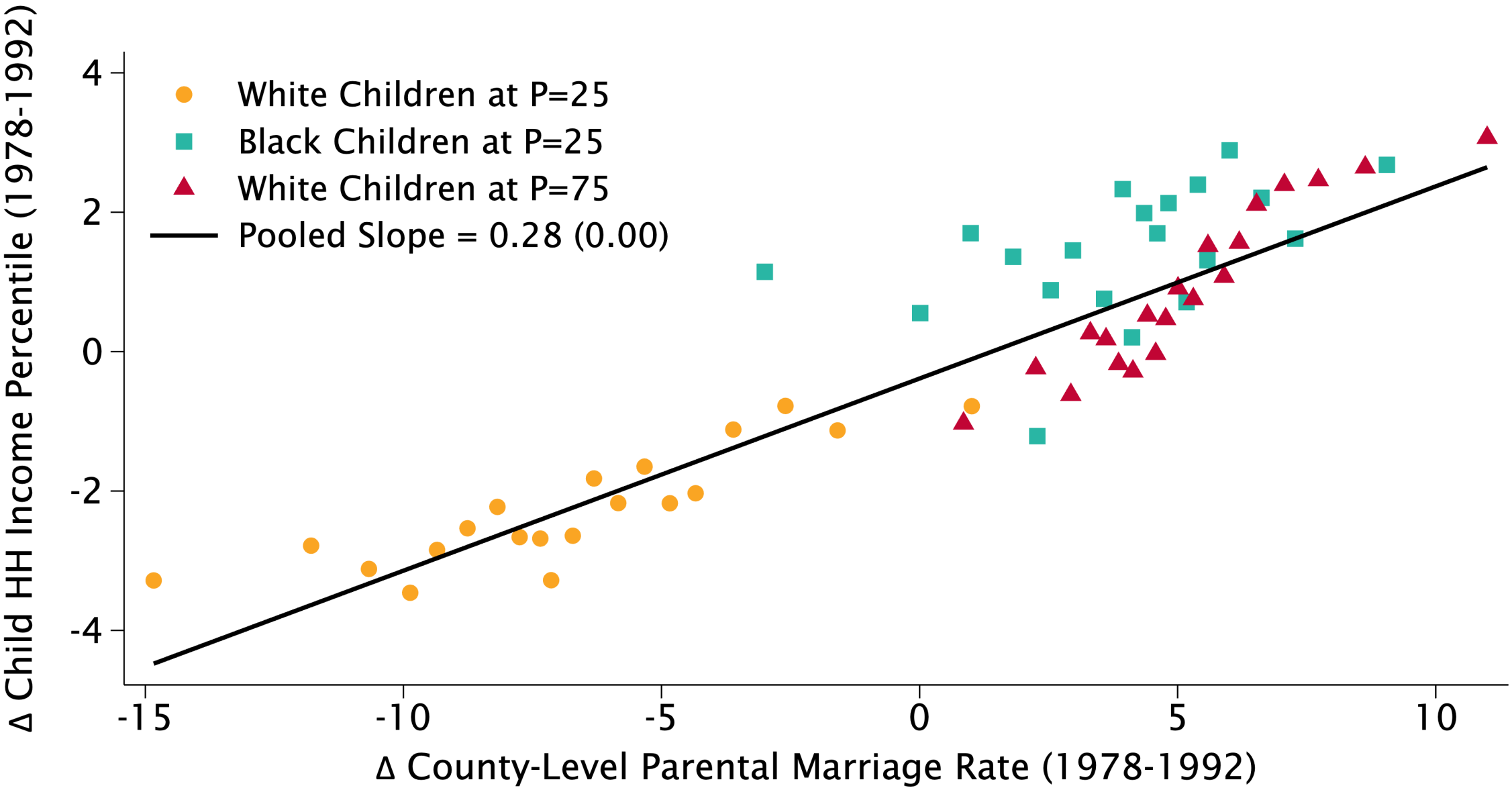
Changes in Children's Income Percentiles vs. Parent Employment Rates, 1978-92 Cohorts

By County, Race, and Class for Children whose Own Parents Remain Employed



Changes in Children's Income Percentiles vs. Mother's Marriage Rates, 1978-92 Cohorts

By County, Race, and Class



Why are Changes in Mobility Related to Changes in Parent Employment Rates?

Why Are Changes in Parental Outcomes Correlated with Children's Outcomes?

[Correlated Shocks]

Changes in labor demand affect both parents and children directly

[Environmental Exposure Effect]

Changes in childhood environment have a causal effect on children's outcomes

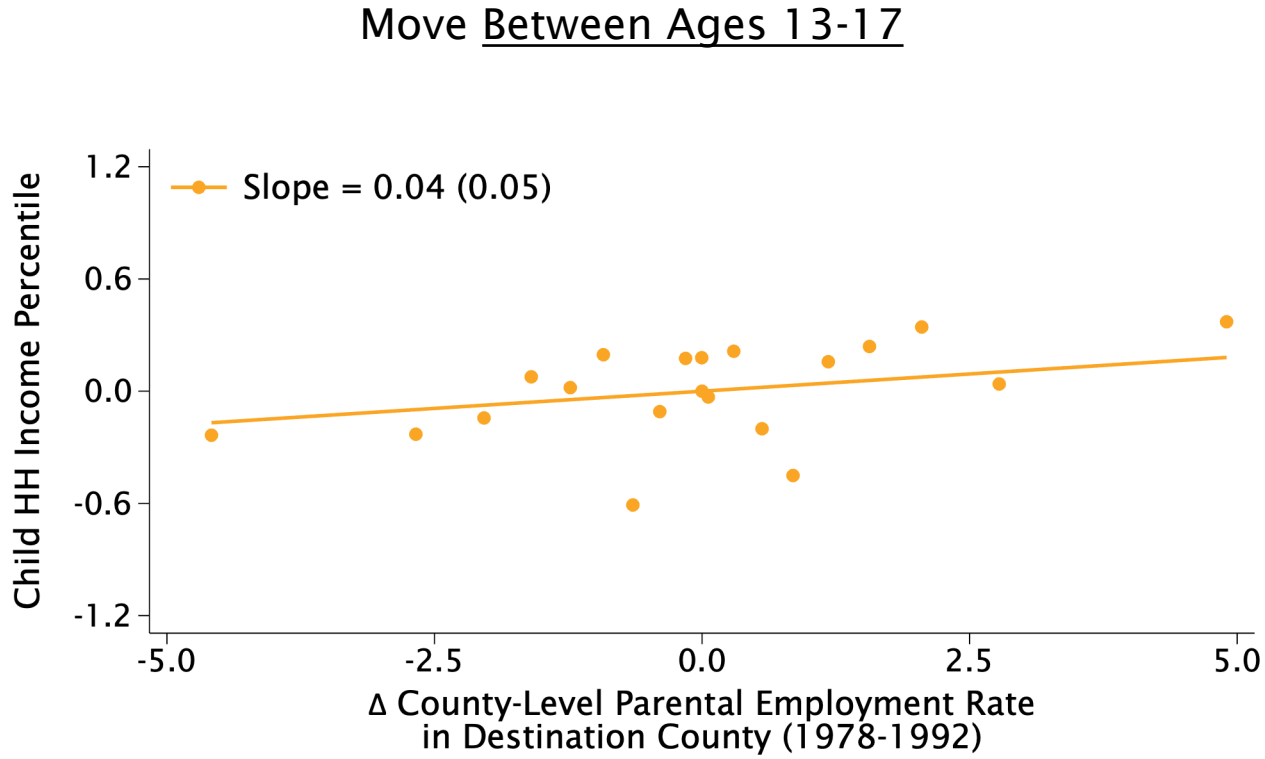
Test between these explanations by studying children who **moved** to improving vs. declining areas

Causal Effects of Childhood Environment Changes: Evidence from Movers

Children's Incomes vs. Trends in Parental Employment in Destination, 1992 Birth Cohort

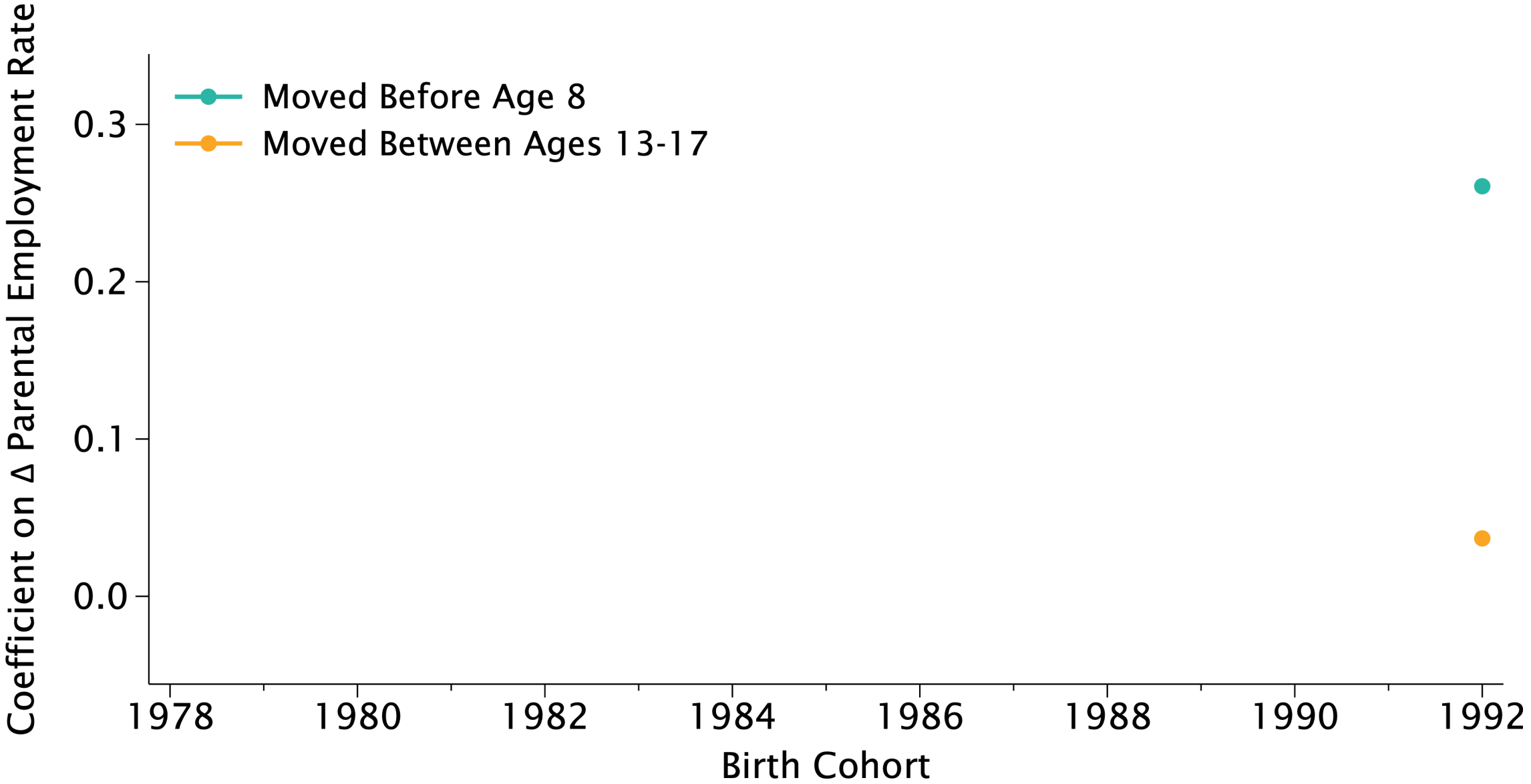
Causal Effects of Childhood Environment Changes: Evidence from Movers

Children's Incomes vs. Trends in Parental Employment in Destination, 1992 Birth Cohort



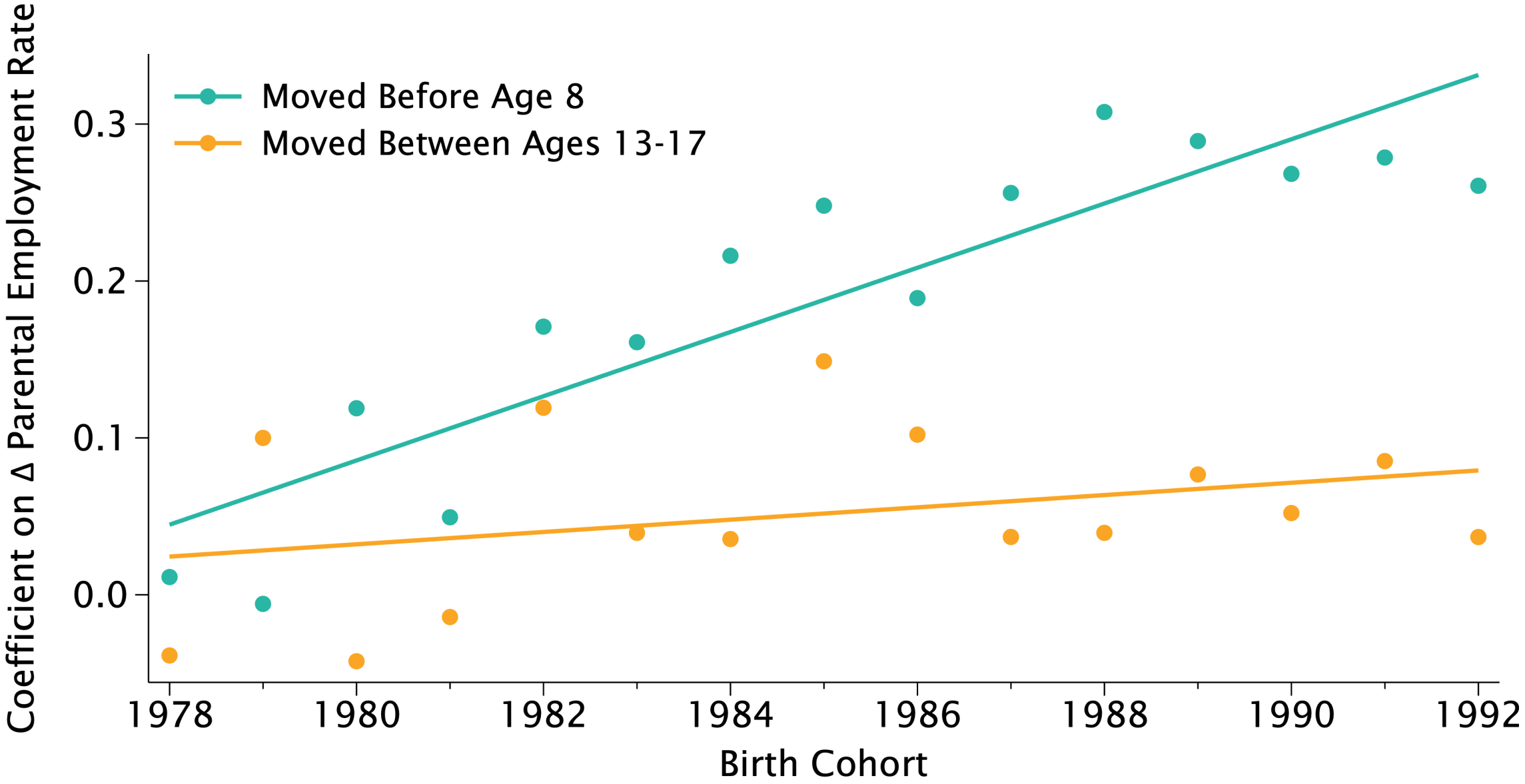
Effect of Trends in Parent Employment Rate in Destination

By Move Age and Cohort

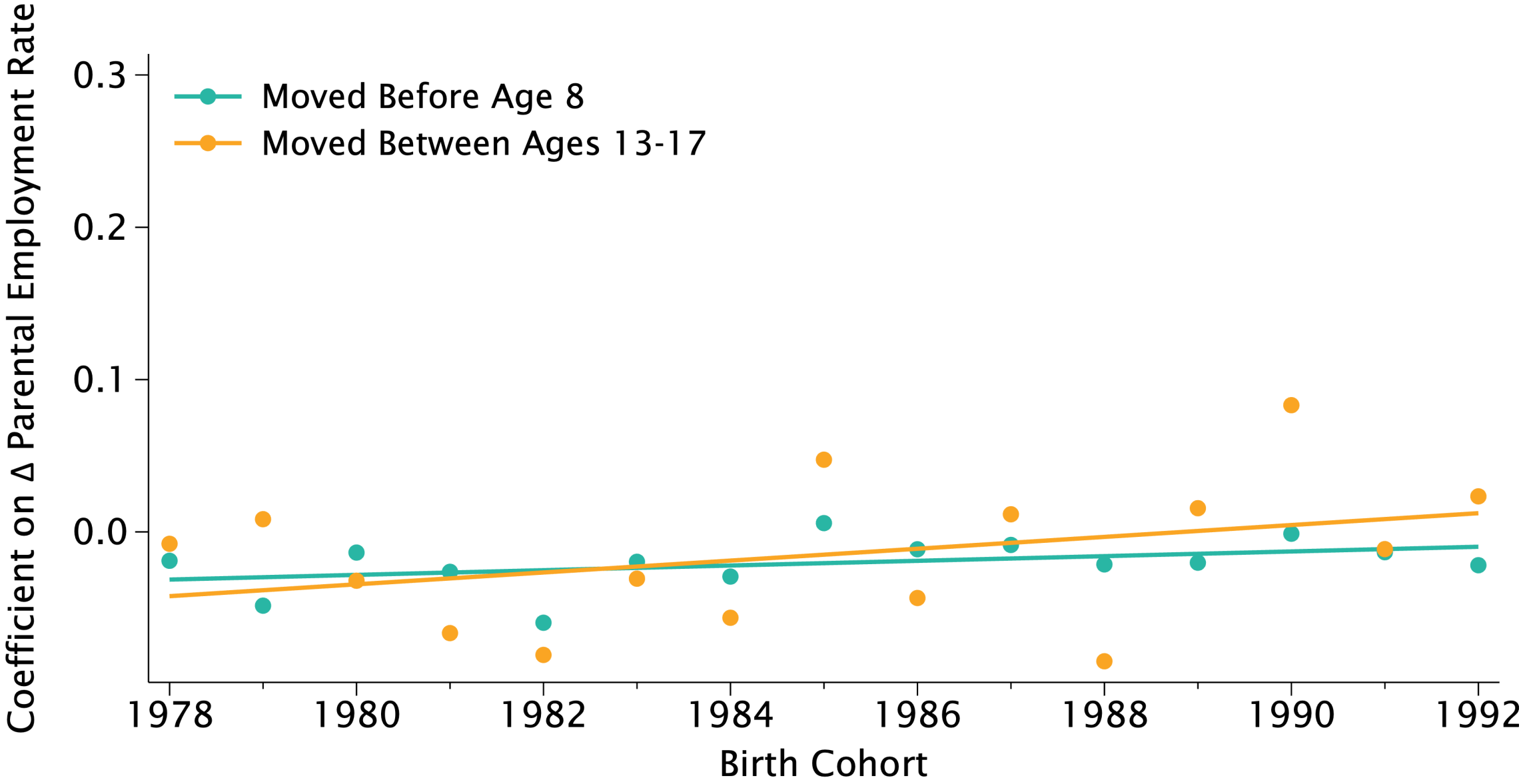


Effect of Trends in Parent Employment Rate in Destination

By Move Age and Cohort

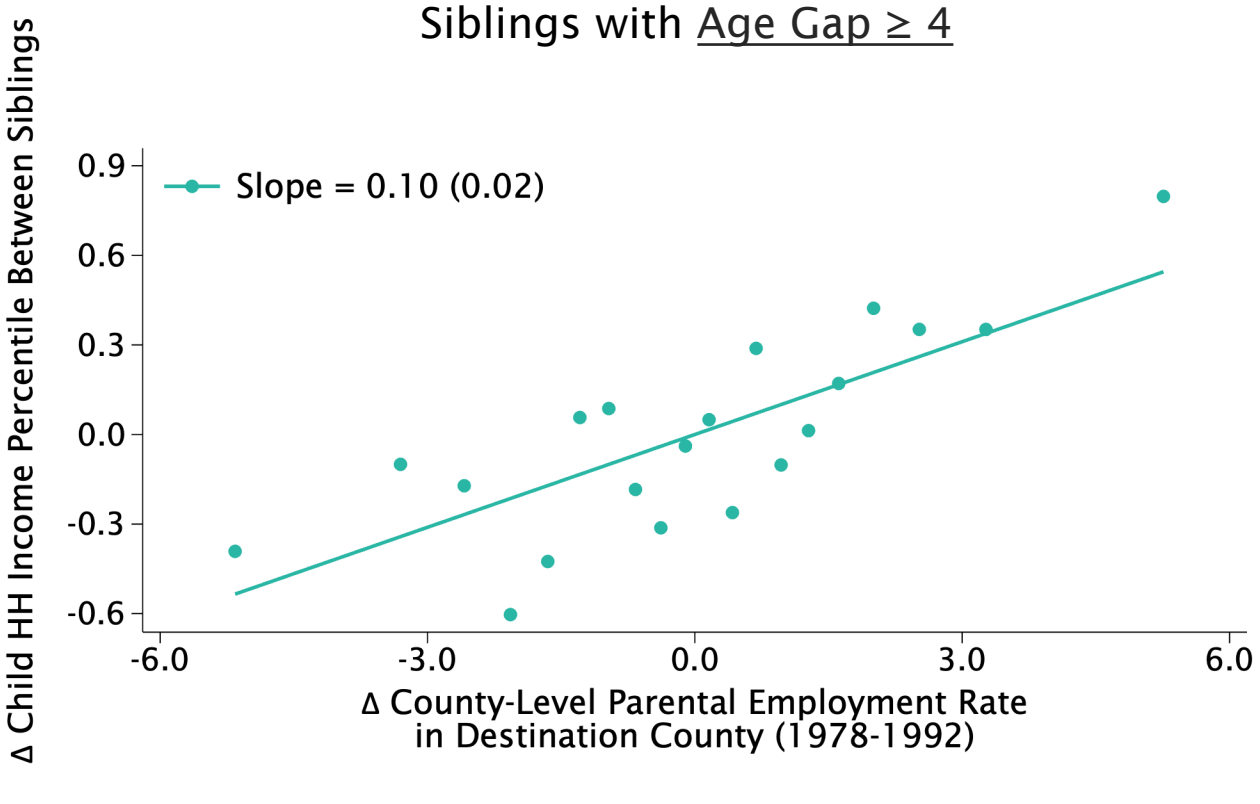


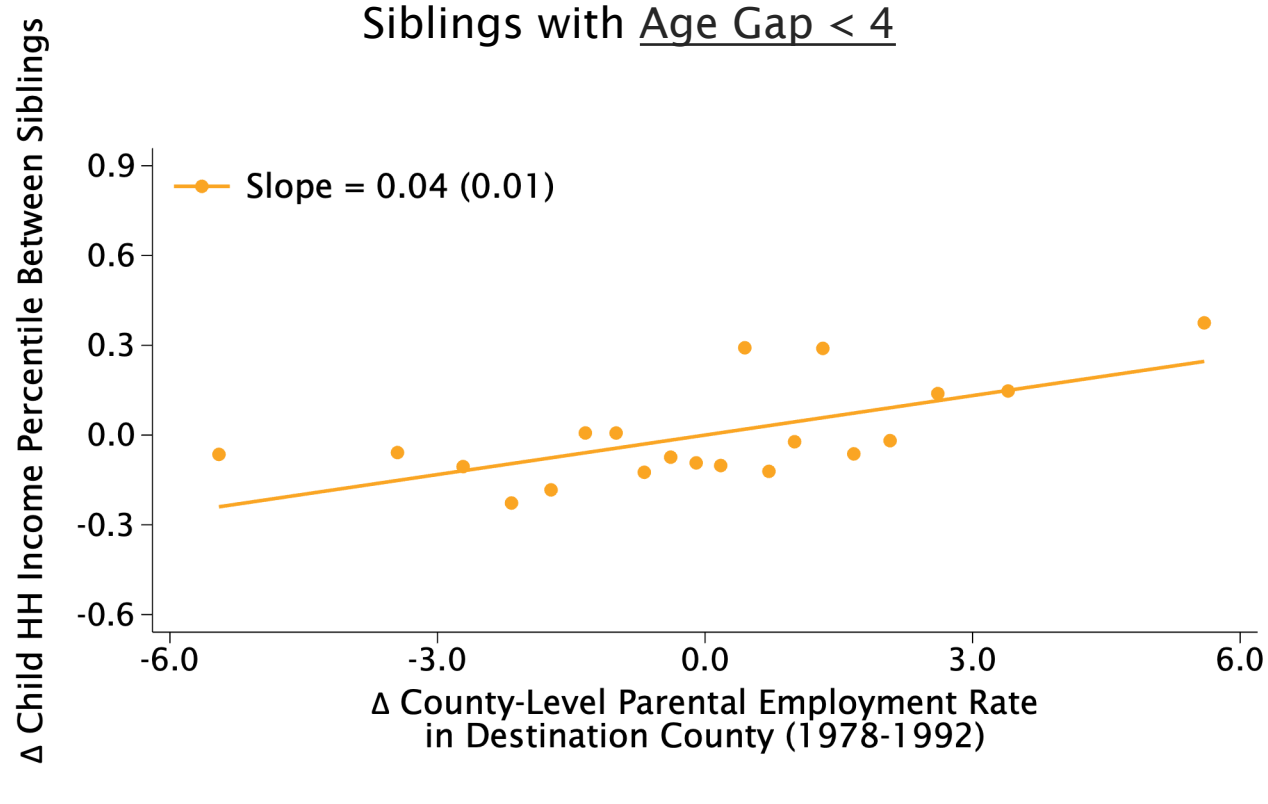
Balance Test Using Predicted Outcomes Based on Parent Characteristics



Differences in Siblings' Outcomes vs. Trend in Parent Employment Rates

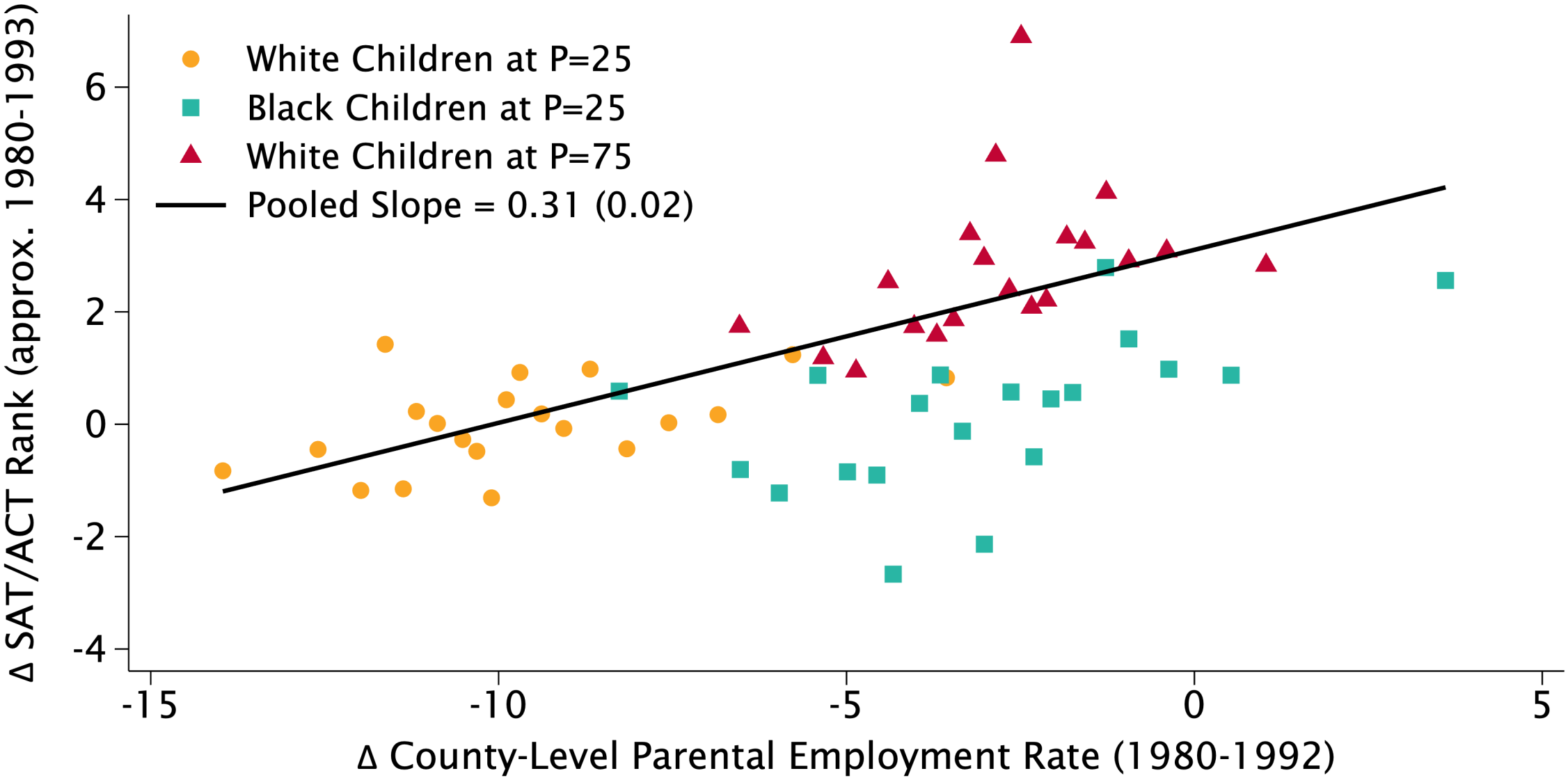
Younger Sibling's Minus Older Sibling's Income Percentile in Destination County





Changes in Children's SAT/ACT Scores vs. Parent Employment Rates

By County, Race, and Class



Why Does Childhood Exposure to Higher Parent Employment Improve Outcomes?

Why Does Growing Up in a Community With Higher Parent Employment Rates Improve Children's Outcomes?

[Social Interaction]

Higher parental employment improves children's outcomes via social interactions (job referrals, aspirations)

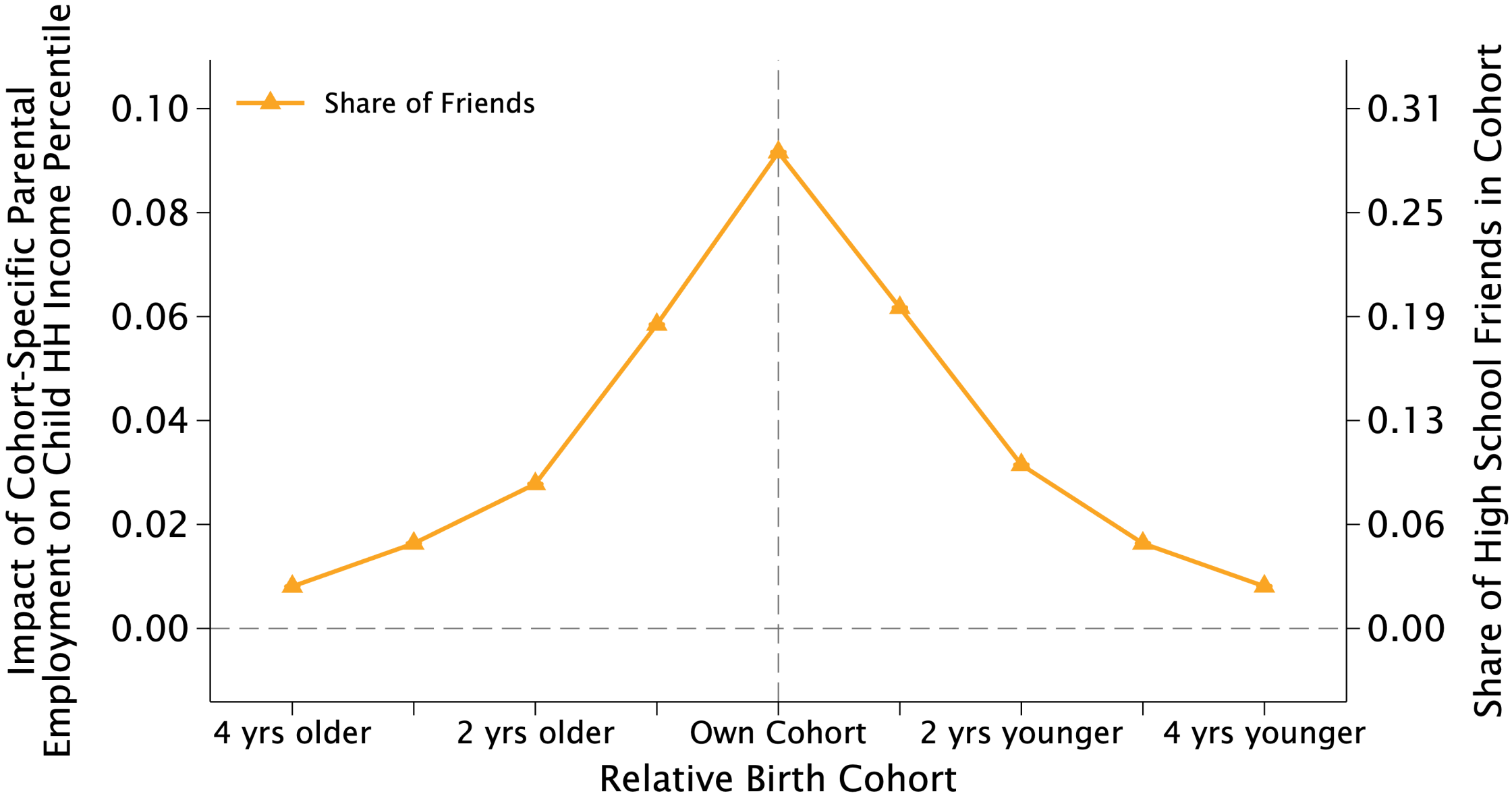
[Economic Resources]

Higher parental employment expands financial resources at community level (schools, local programs)

Test between these explanations by exploiting differences in **friendship patterns** across groups

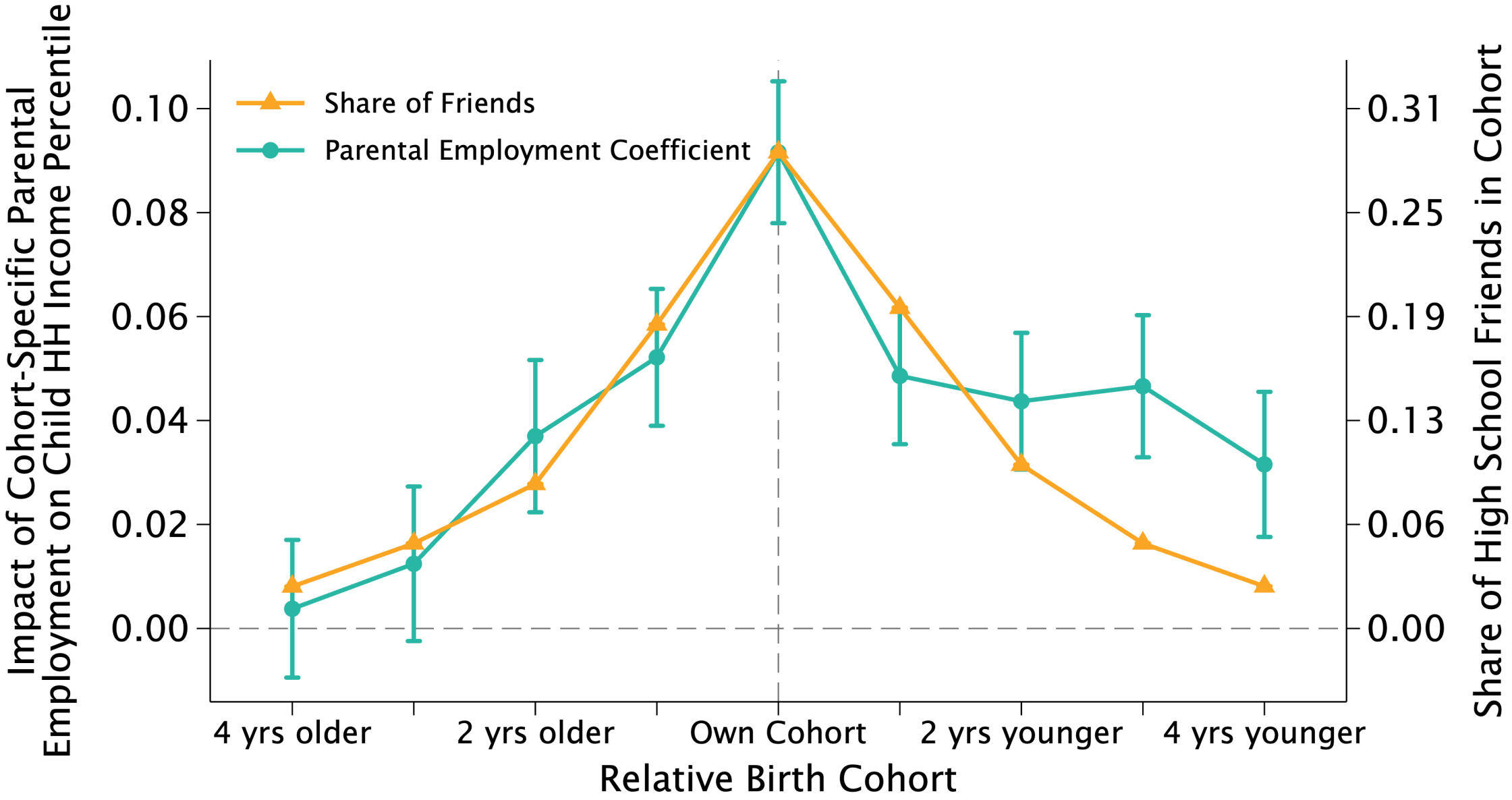
Effect of Changes in Parental Employment Rates Across Cohorts

Friendship Rates and Parent Employment Effects in Own Cohort vs. Adjacent Cohorts

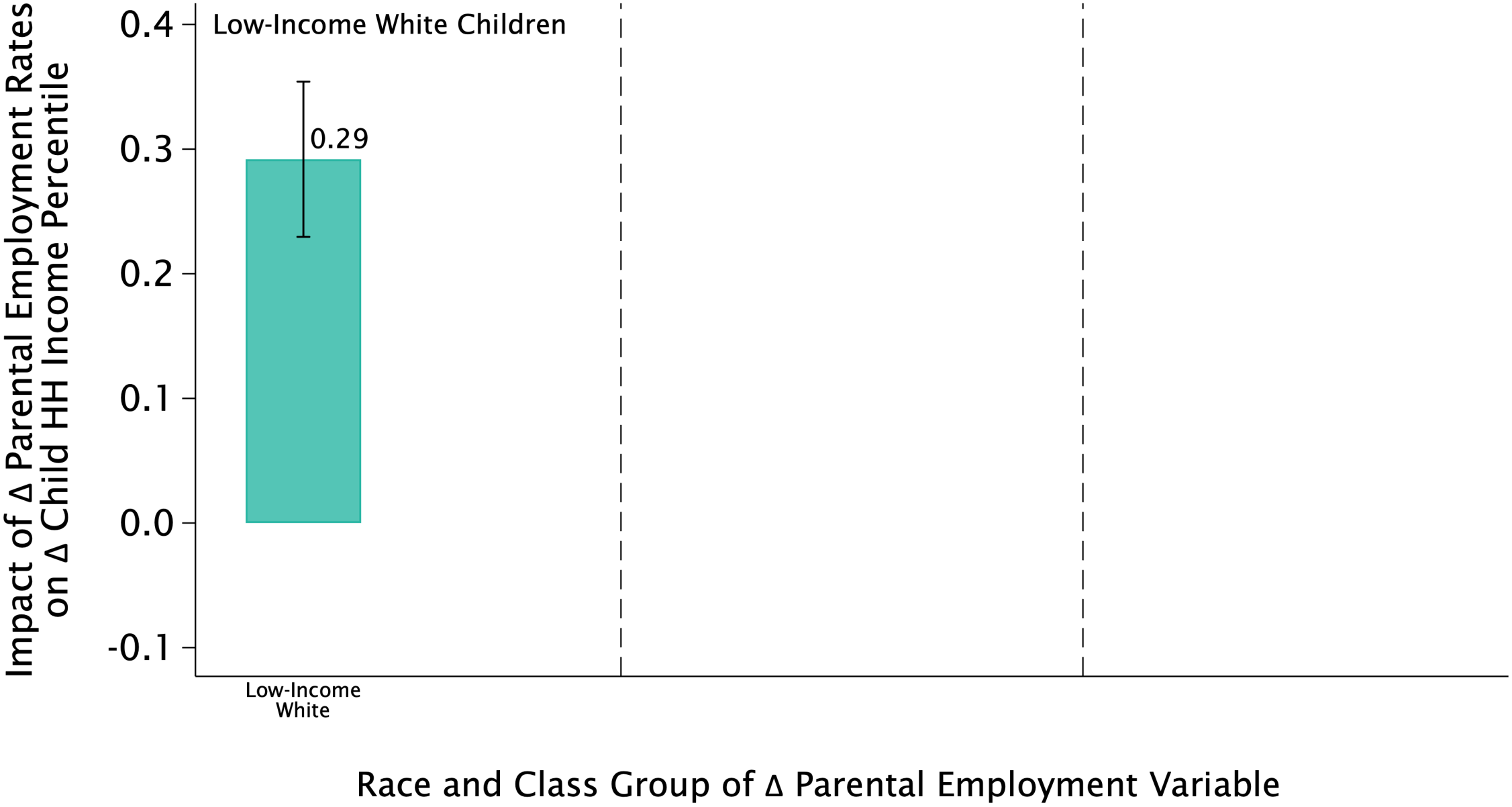


Effect of Changes in Parental Employment Rates Across Cohorts

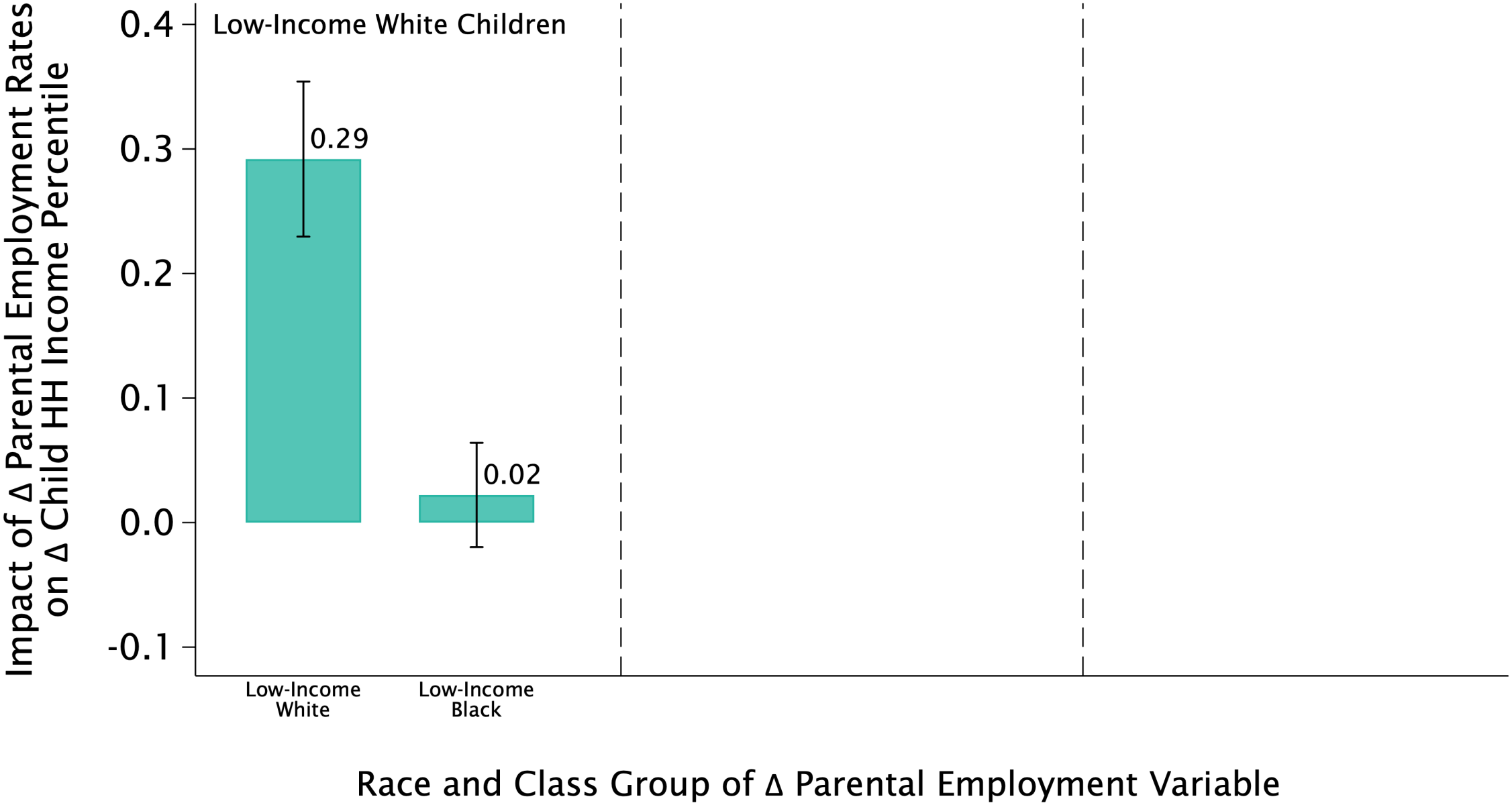
Friendship Rates and Parent Employment Effects in Own Cohort vs. Adjacent Cohorts



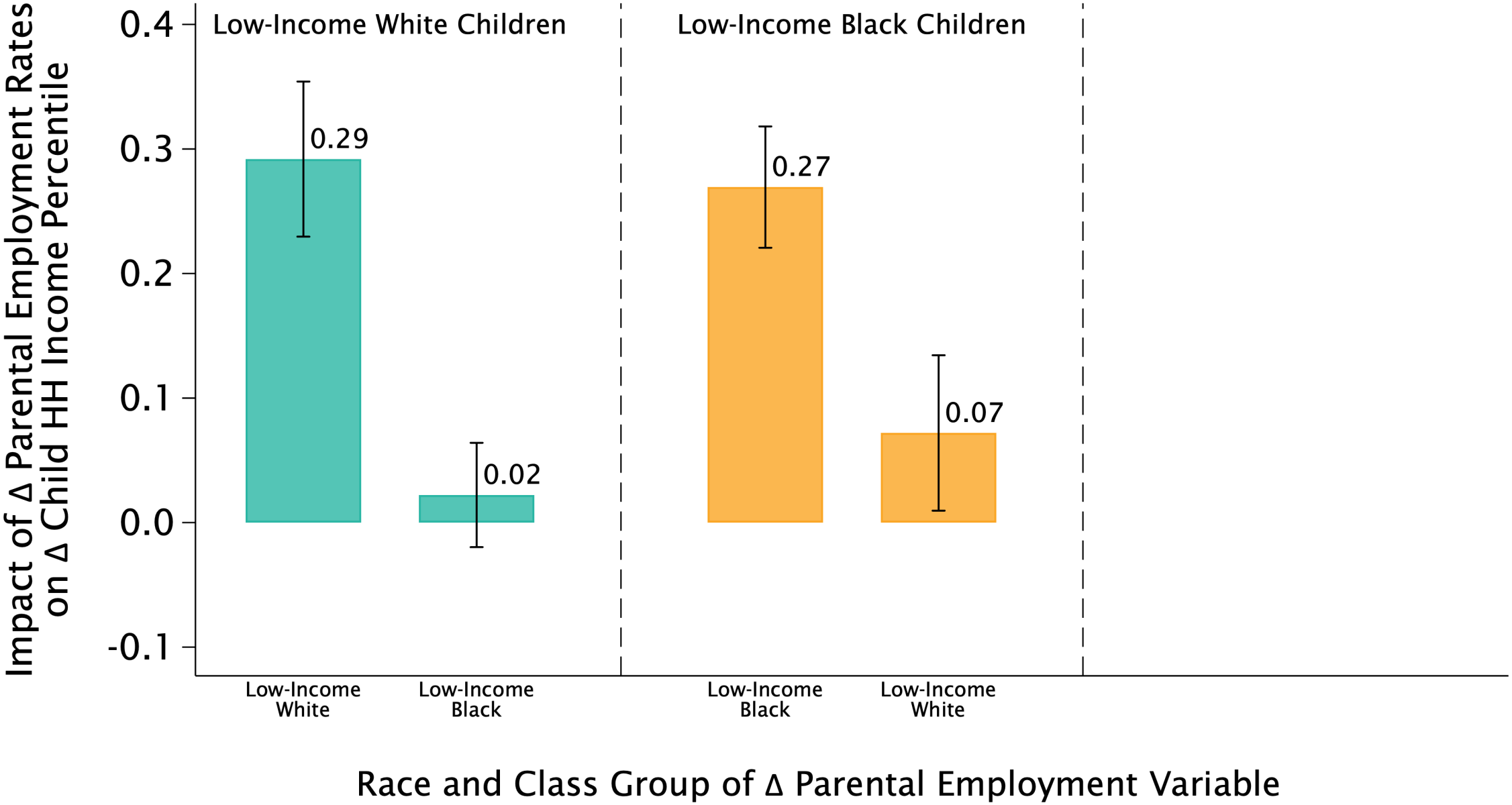
Effect of Group-Specific Changes in Parent Employment Rates



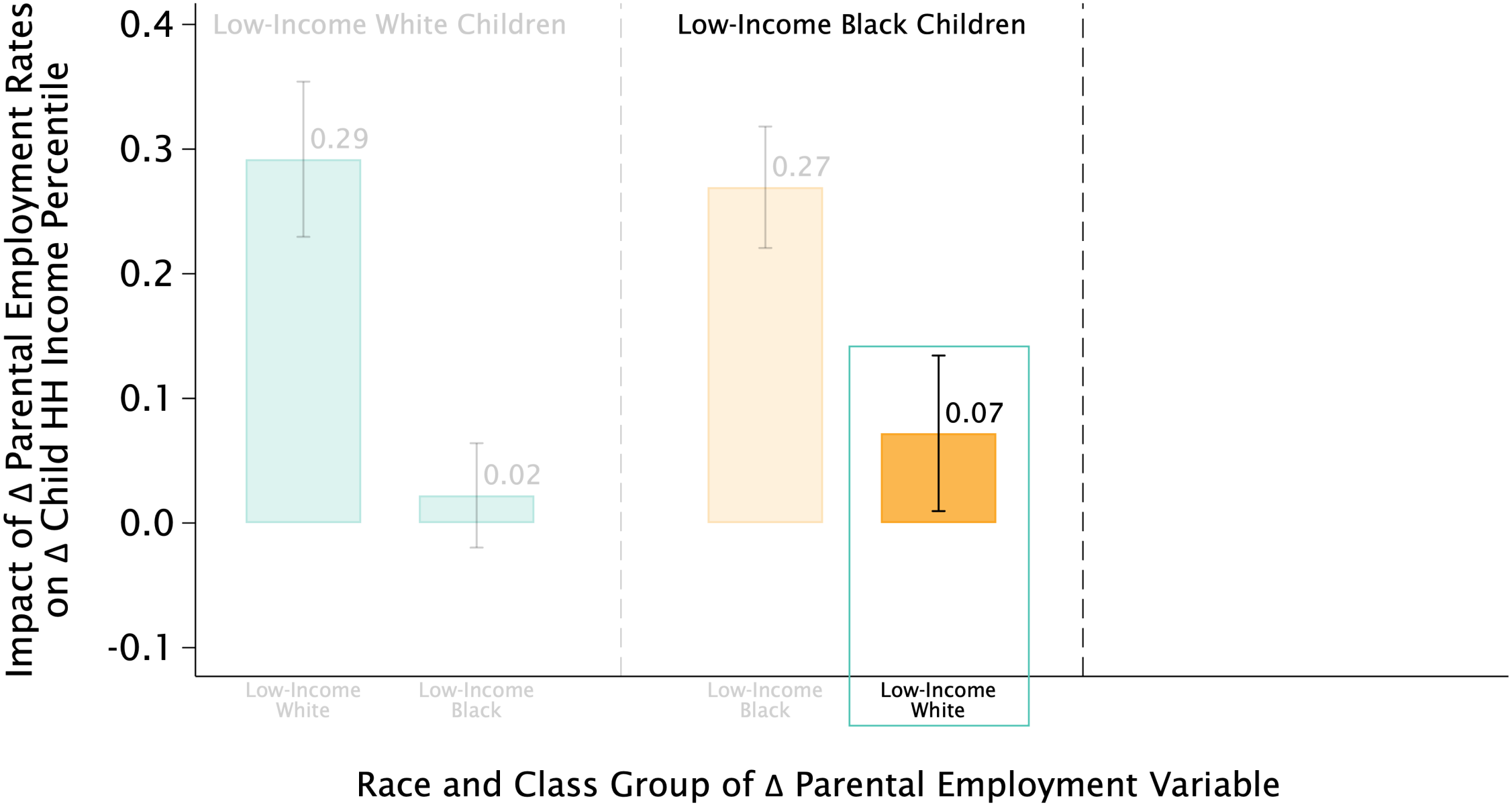
Effect of Group-Specific Changes in Parent Employment Rates



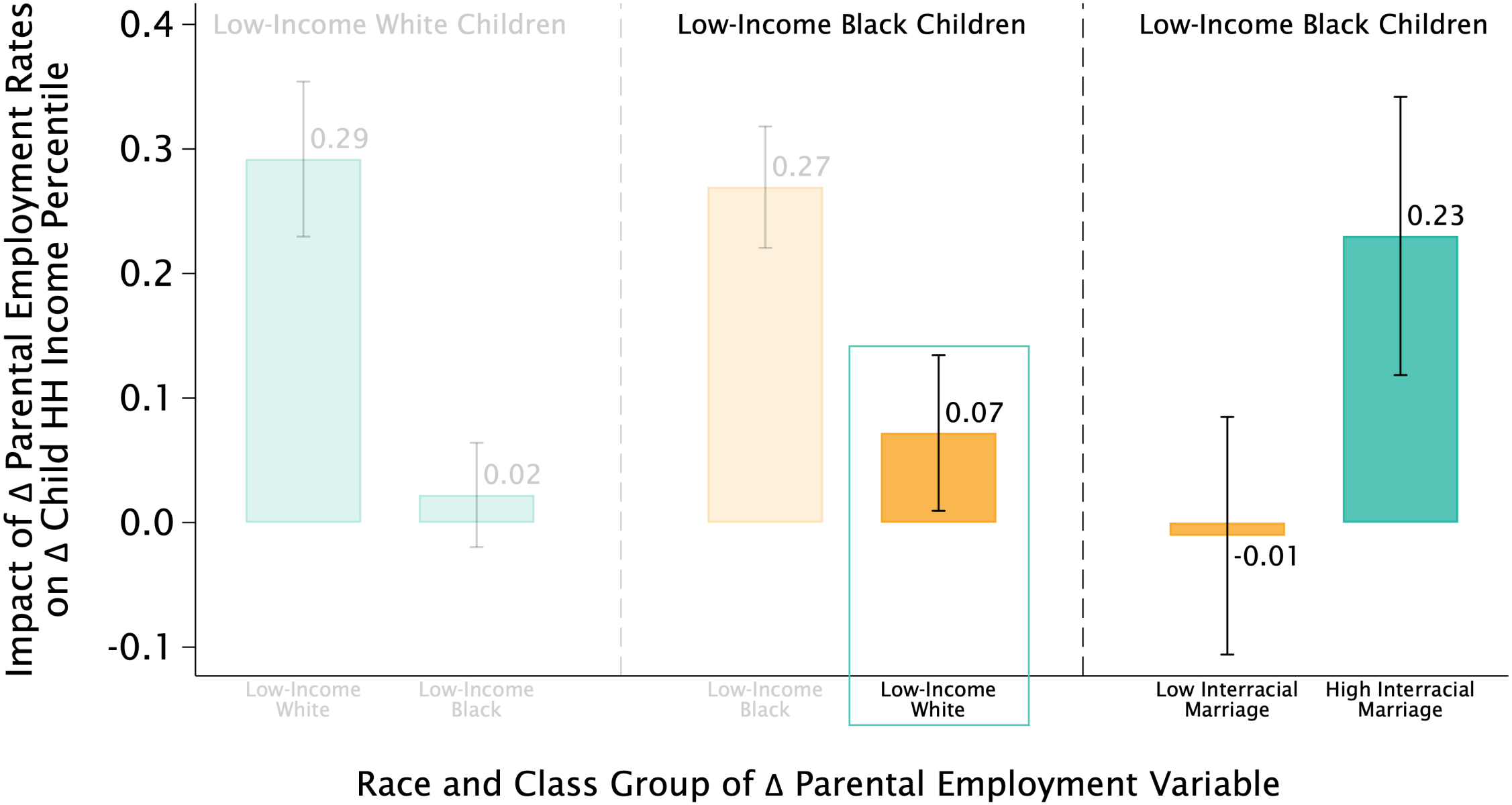
Effect of Group-Specific Changes in Parent Employment Rates



Effect of Group-Specific Changes in Parent Employment Rates



Effect of Group-Specific Changes in Parent Employment Rates



Implications for Increasing Mobility

Policy Implications

- Most important takeaway: **opportunity can change** in short timeframes

- What do these findings imply for efforts to increase mobility going forward?

  1. Support **next generation** in communities where parents' employment rates are currently falling (not just current generation)

  2. Focus on **social communities** within neighborhoods – not just neighborhoods as a whole – as unit of change

  3. Provide **social capital** in addition to financial and human capital

New Data on Changes in Opportunity

- Key open question: what interventions can create changes in social communities that increase mobility?
- To support the field in making progress on answering this question, we have released **new data on changes in economic mobility**
- Visit the Opportunity Atlas (www.opportunityatlas.org) to see data for your own county and download data by race, parental income, gender, cohort, and county

Changes in Economic Mobility Across Areas

50 Largest Metro Areas (Commuting Zones)

Top 5 Most Improved

	LOCATION	INCOME AT AGE 27 1978 BIRTH YEAR	INCOME AT AGE 27 1992 BIRTH YEAR	% CHANGE
1	Brownsville, TX	$31.4K	$33.5K	6.7%
2	Austin, TX	$29.6K	$31.6K	6.4%
3	Charlotte, NC	$26.7K	$28.1K	5.0%
4	Nashville, TN	$28.7K	$30.1K	4.7%
5	Grand Rapids, MI	$30.1K	$31.4K	4.3%

Bottom 5: Least Improved

	LOCATION	INCOME AT AGE 27 1978 BIRTH YEAR	INCOME AT AGE 27 1992 BIRTH YEAR	% CHANGE
46	Tampa, FL	$29.8K	$27.1K	-9.1%
47	Washington, DC	$33.2K	$30.2K	-9.1%
48	San Diego, CA	$33.8K	$30.7K	-9.2%
49	Las Vegas, NV	$32.3K	$28.8K	-10.6%
50	Philadelphia, PA	$31.2K	$27.2K	-12.7%