



EVROPSKÁ UNIE  
Evropské strukturální a investiční fondy  
Operační program Výzkum, vývoj a vzdělávání

**MŠMT**  
MINISTERSTVO ŠKOLSTVÍ,  
MLÁDEŽE A TĚLOVÝCHOVY

# Gender Gaps in Adulthood and Family Background

Economics and Gender

LECTURE 4

Klára Kalíšková

[klara.kaliskova@vse.cz](mailto:klara.kaliskova@vse.cz)

# Childhood Environment and Gender Gaps in Adulthood

- Chetty, R., & Hendren, N. (2013). THE ECONOMIC IMPACTS OF TAX EXPENDITURES: EVIDENCE FROM SPATIAL VARIATION ACROSS THE US 1.
- <http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.364.2184>
- Buchmann, C., & DiPrete, T. A. (2006). The growing female advantage in college completion: The role of family background and academic achievement. *American sociological review*, 71(4), 515-541.

# Motivation

- Differences between men and women in earnings, employment, and other outcomes in adulthood have been widely documented  
Explanations for these gender gaps focus on labor market factors: e.g., occupational choice, fertility patterns, wage discrimination
- Recent work has shown that effects of family background and environment on child development also vary by gender
- We connect these two literatures by examining the role of childhood environment on gender gaps in adulthood

# Main findings

- We document three facts using tax data for the 1980-82 birth cohorts
    1. Boys who grow up in poor families are *less* likely to work than girls
    2. Gender gaps vary substantially across areas where children grow up
      - Studying families who move reveals that this variation is primarily due to causal effects of childhood environment [Chetty and Hendren 2015]
    3. Spatial variation in gender gaps is highly correlated with proxies for neighborhood disadvantage
      - Low-income boys who grow up in high-poverty, high-minority areas work less than girls
- Gender gaps observed in adulthood have roots in childhood, perhaps  
because poverty during childhood is particularly harmful for boys

# Data sources

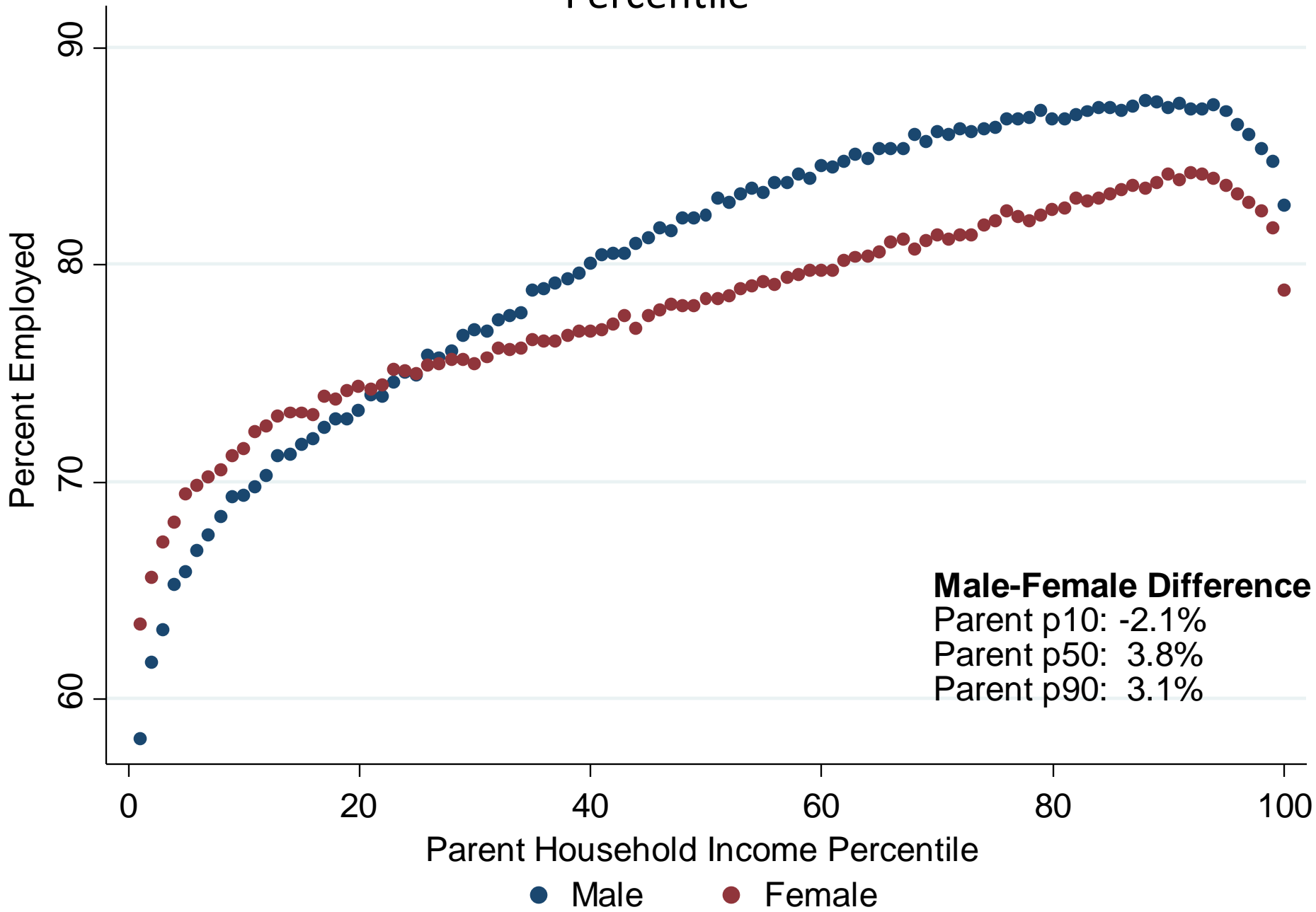
- De-identified data from 1996-2012 population tax returns  
[Chetty, Hendren, Kline, Saez 2014; Chetty and Hendren 2015]
- Children linked to parents based on dependent claiming
- Focus on children in 1980-1982 birth cohorts, who are age 30 when we examine outcomes in adulthood
  - Approximately 10 million children

# Outcome variables

- Parent income: mean pre-tax household income between 1996-2000
  - For non-filers, use W-2 wage earnings + SSDI + UI income
- Children's outcomes:
  - Employment: presence of a W-2 form
  - Earnings: total wage earnings reported on W-2's
    - Robustness check: measure self-employment income using data from Schedule C (noting that SE income often misreported)

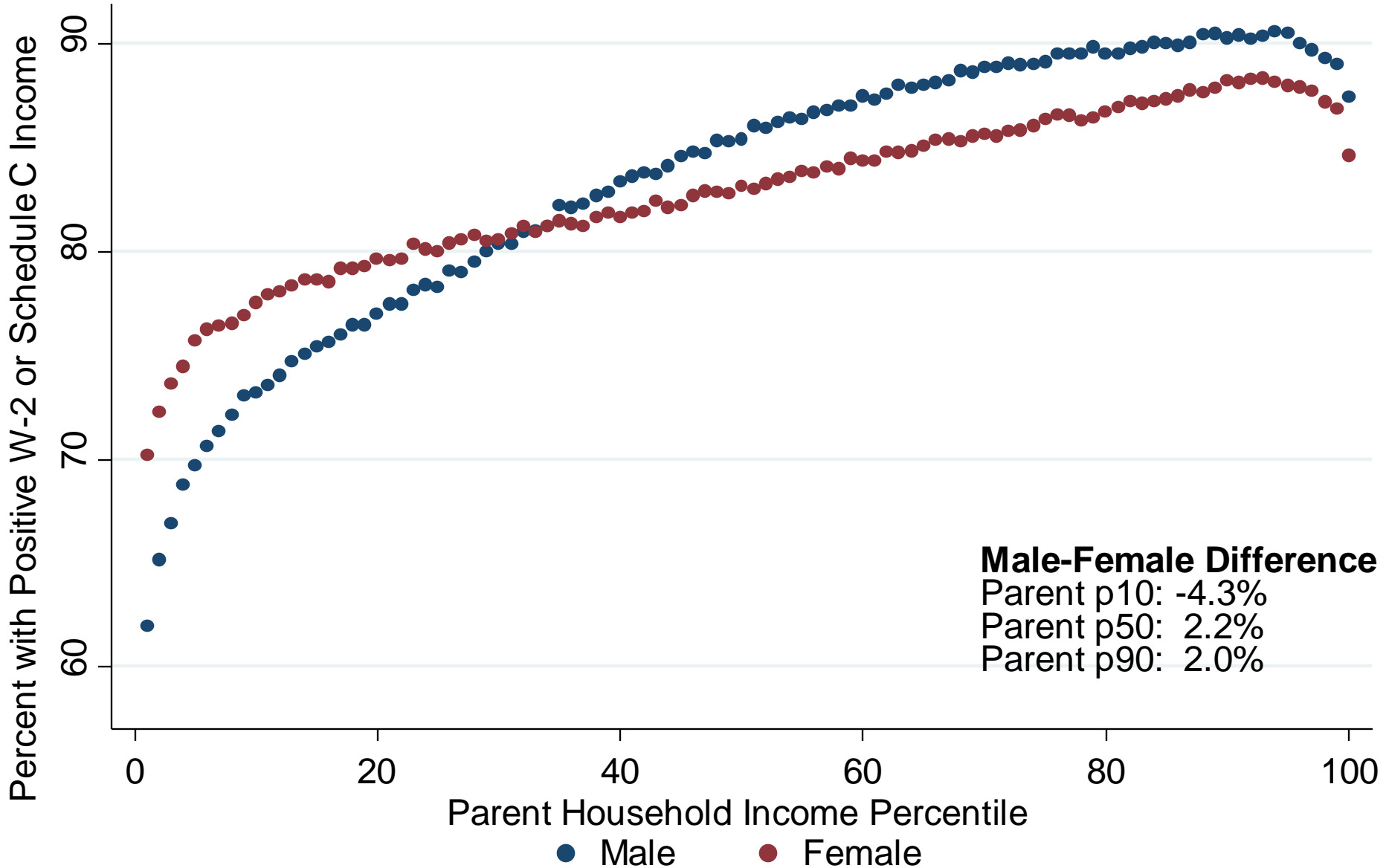
# Statistics on Gender Gaps by Parent Income

# Children's Employment Rates at Age 30 by Gender and Parent Income Percentile

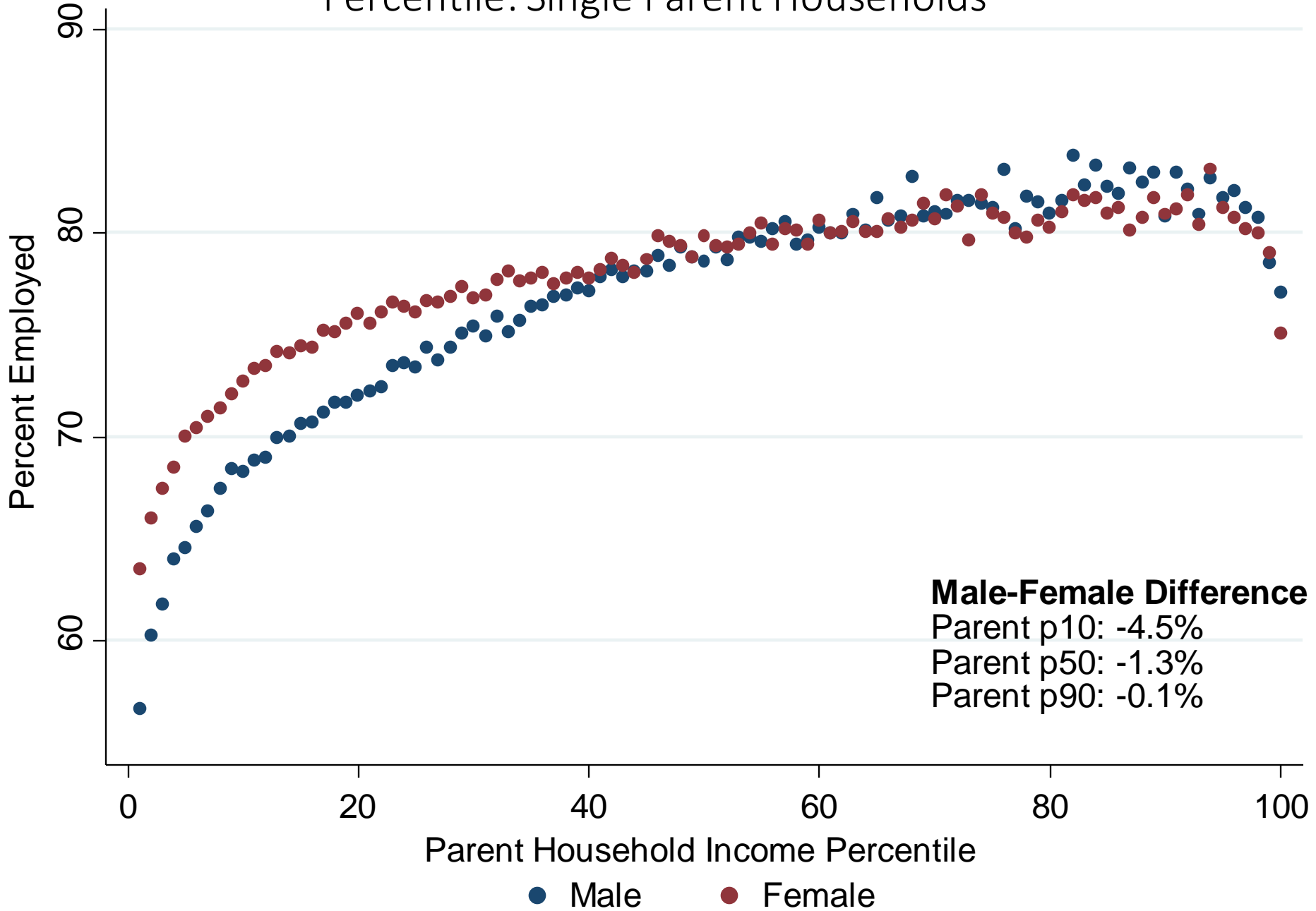




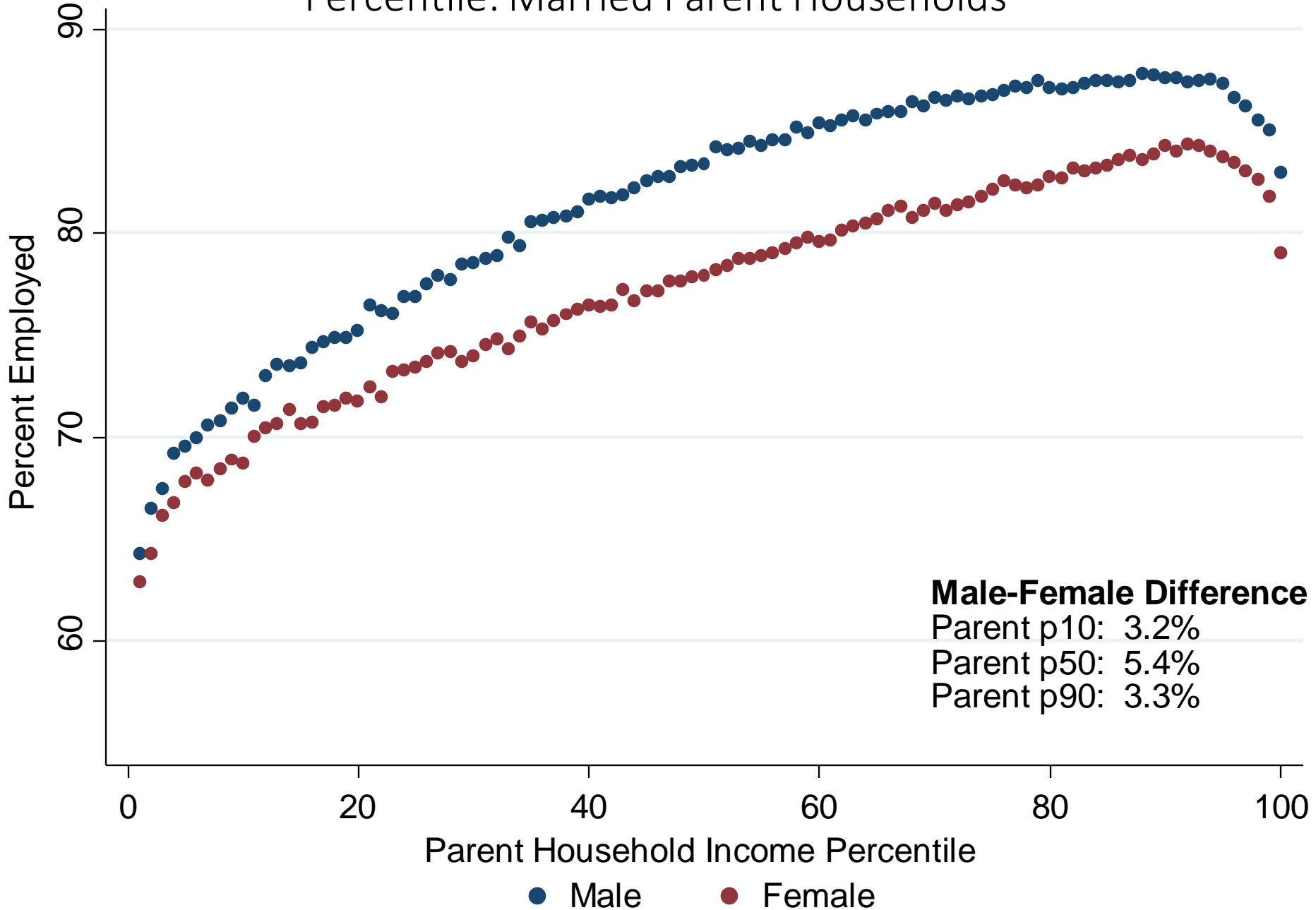
# Children's Employment Rates at Age 30 by Gender and Parent Income Percentile: Including Self-Employment (Non-Zero Schedule C Income)



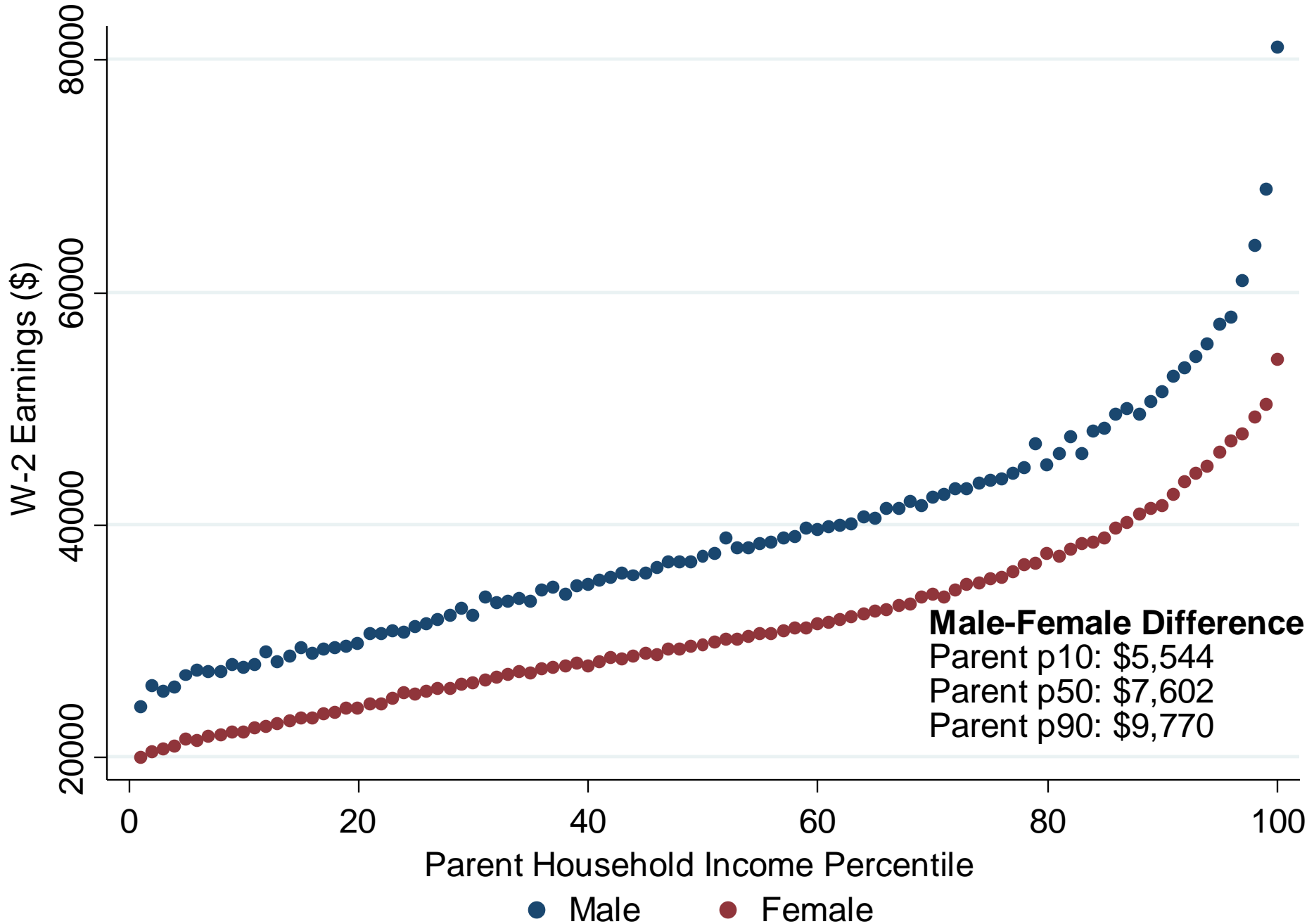
# Children's Employment Rates at Age 30 by Gender and Parent Income Percentile: Single Parent Households



# Children's Employment Rates at Age 30 by Gender and Parent Income Percentile: Married Parent Households



# W-2 Wage Earnings at Age 30 by Gender and Parent Income Percentile



# Interpretation

- Why is low parental income associated with particularly lower outcomes for boys relative to girls?
  - In particular, why do we see a “reversal” in employment rates
- One explanation: differential effects of childhood/family environment
  - Ex: poor boys substitute toward crime while girls do not
- Alternative explanation: other factors that are correlated with poverty and have differential effects by gender
  - Ex: Blacks more likely to grow up in poor families and black men are significantly more likely to be incarcerated than white men
  - Racial differences could be due to differences in childhood environment, but may also be due to factors such as discrimination in labor market

# Empirical strategy

- To isolate effects of childhood environment, analyze local area variation in gender gaps *based on where kids grew up*
- Motivation: substantial variation in children's outcomes across counties and commuting zones in the U.S.
  - Analysis of families who move reveals that this spatial variation primarily reflects causal effects of childhood environment [Chetty and Hendren 2015]
  - Childhood environment matters conditional on where kids live as adults
- Building on this approach, examine how gender gaps vary based on where children grow up

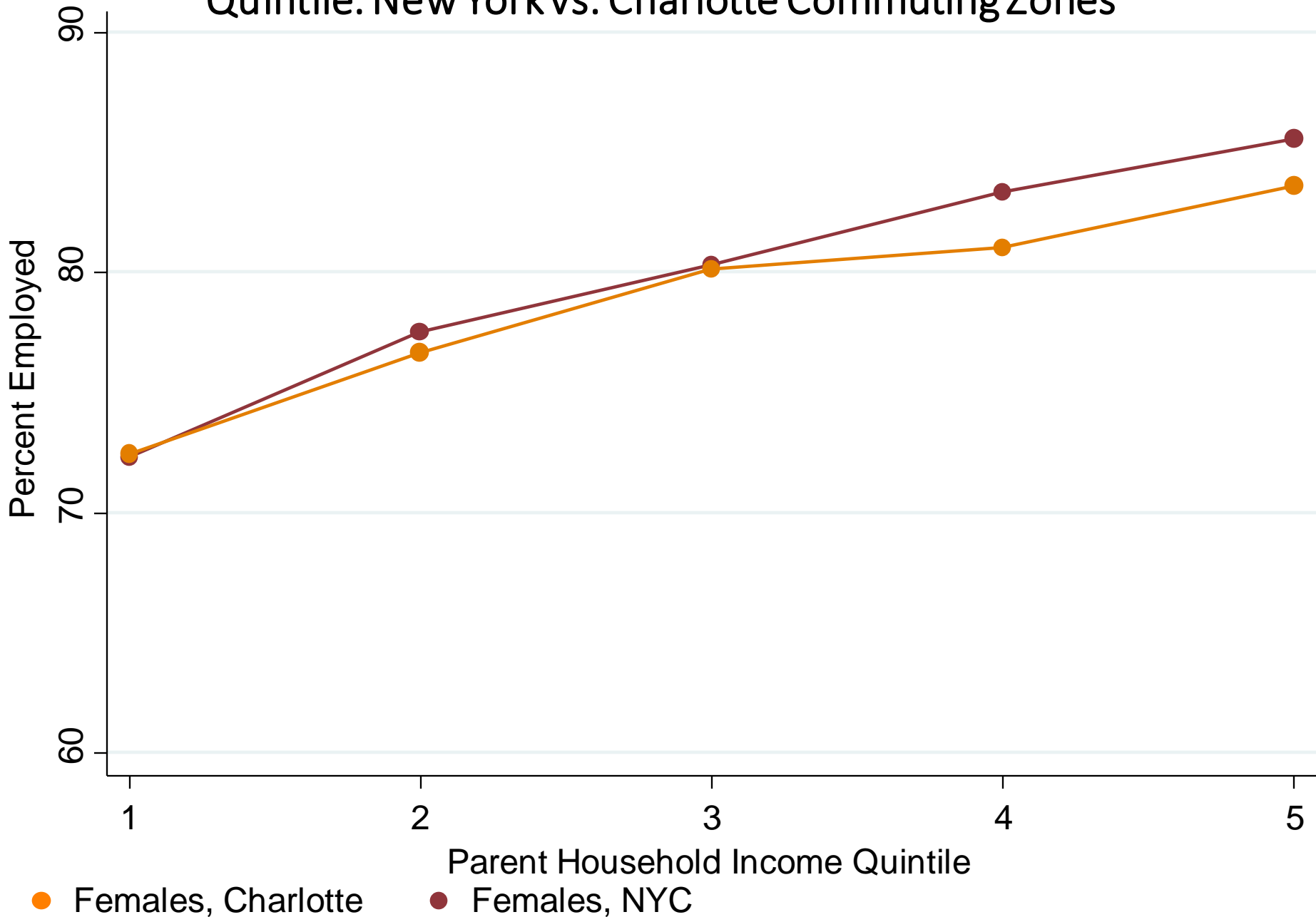
# Local Area Variation in Gender Gaps by Where Kids Grow Up

# Empirical Strategy (2)

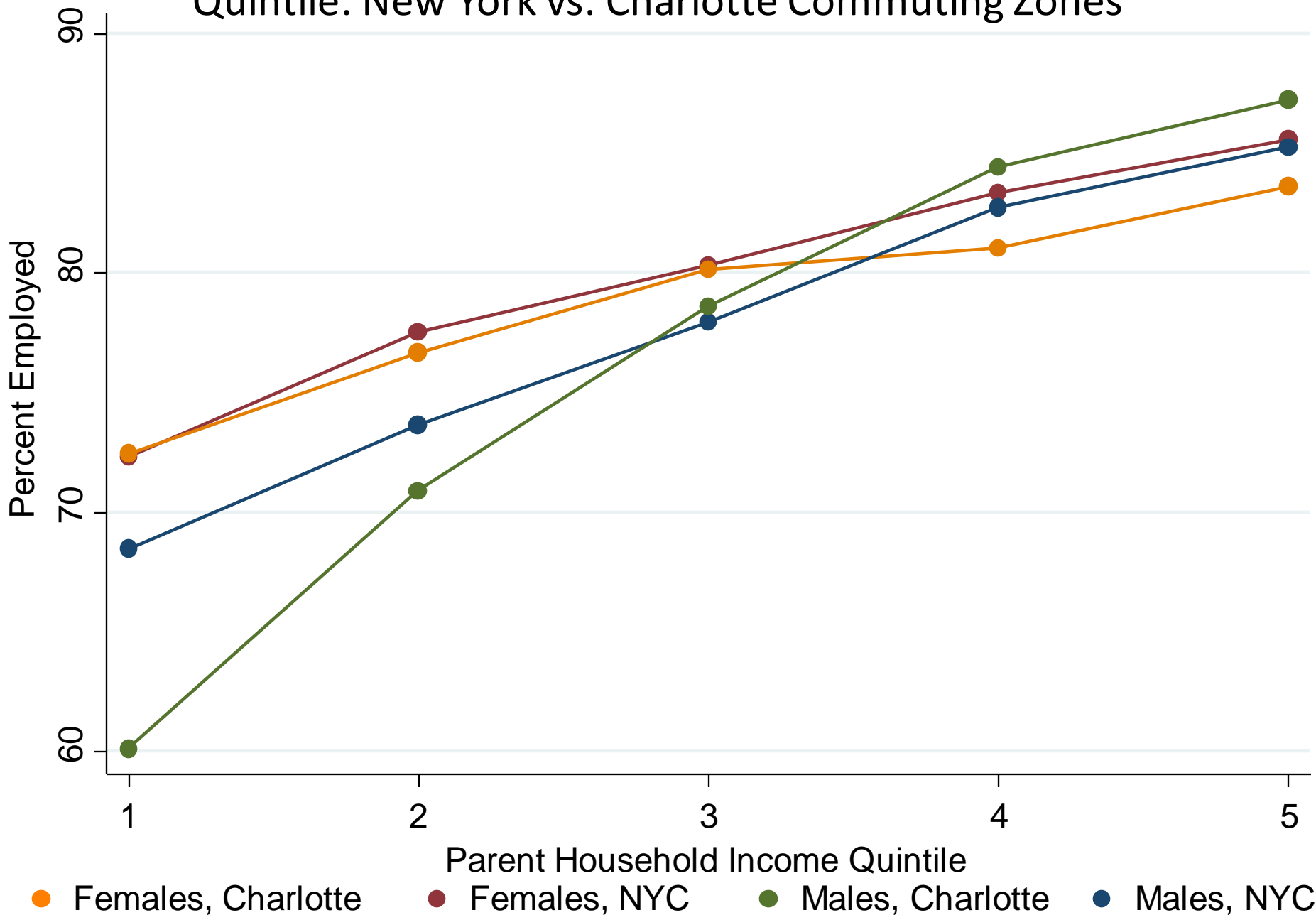
- Begin by estimating gender gap in employment rates for children by parent quintile in each commuting zone (labor market) and county
- Classify children into areas based on where they grew up
  - Where child was first claimed as a dependent by his/her parents
- First analyze “permanent residents” – children whose parents never move between 1996-2012 (later discuss movers)



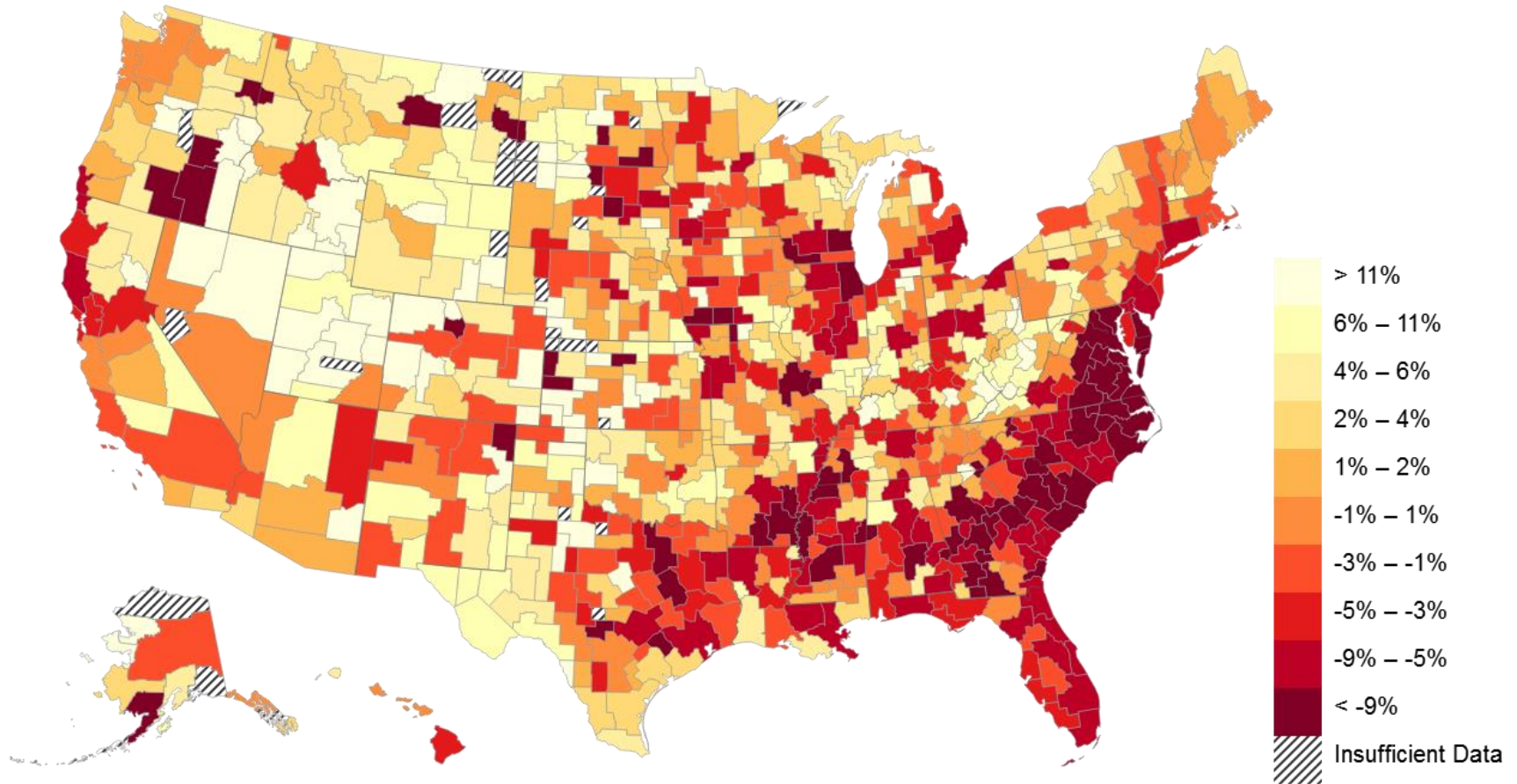
# Children's Employment Rates at Age 30 by Gender and Parent Income Quintile: New York vs. Charlotte Commuting Zones



# Children's Employment Rates at Age 30 by Gender and Parent Income Quintile: New York vs. Charlotte Commuting Zones



# Gender Gaps (M-F) in Employment Rates at Age 30 by Commuting Zone For Children with Parents in Bottom Quintile of National Income Distribution



*Note: Darker colors depict places where boys have lower employment rates than girls*

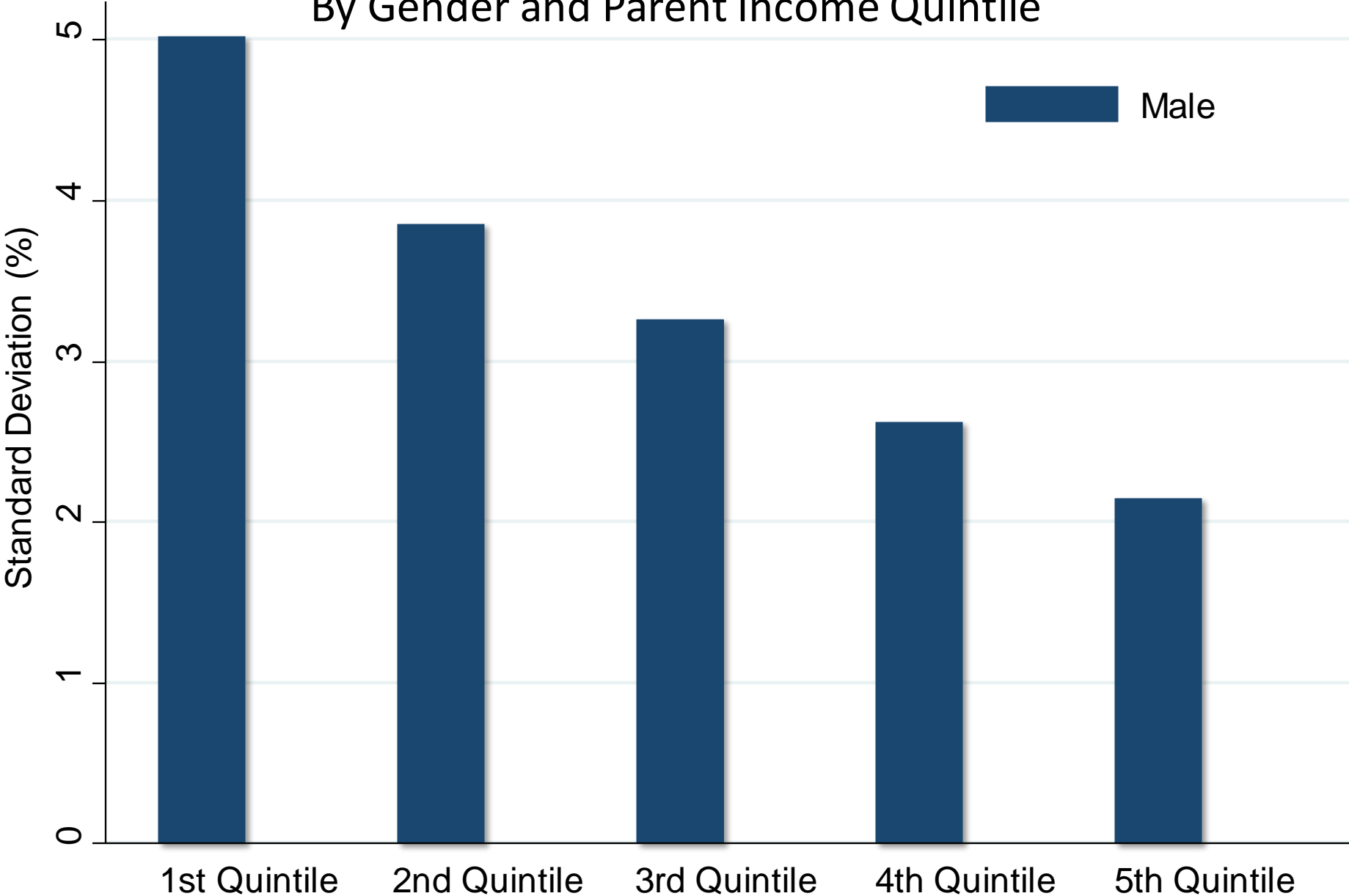
# Gender Gaps (M-F) in Employment in the Bottom Parent Income Quintile

## Top 10 CZs in Male-Female Diff.

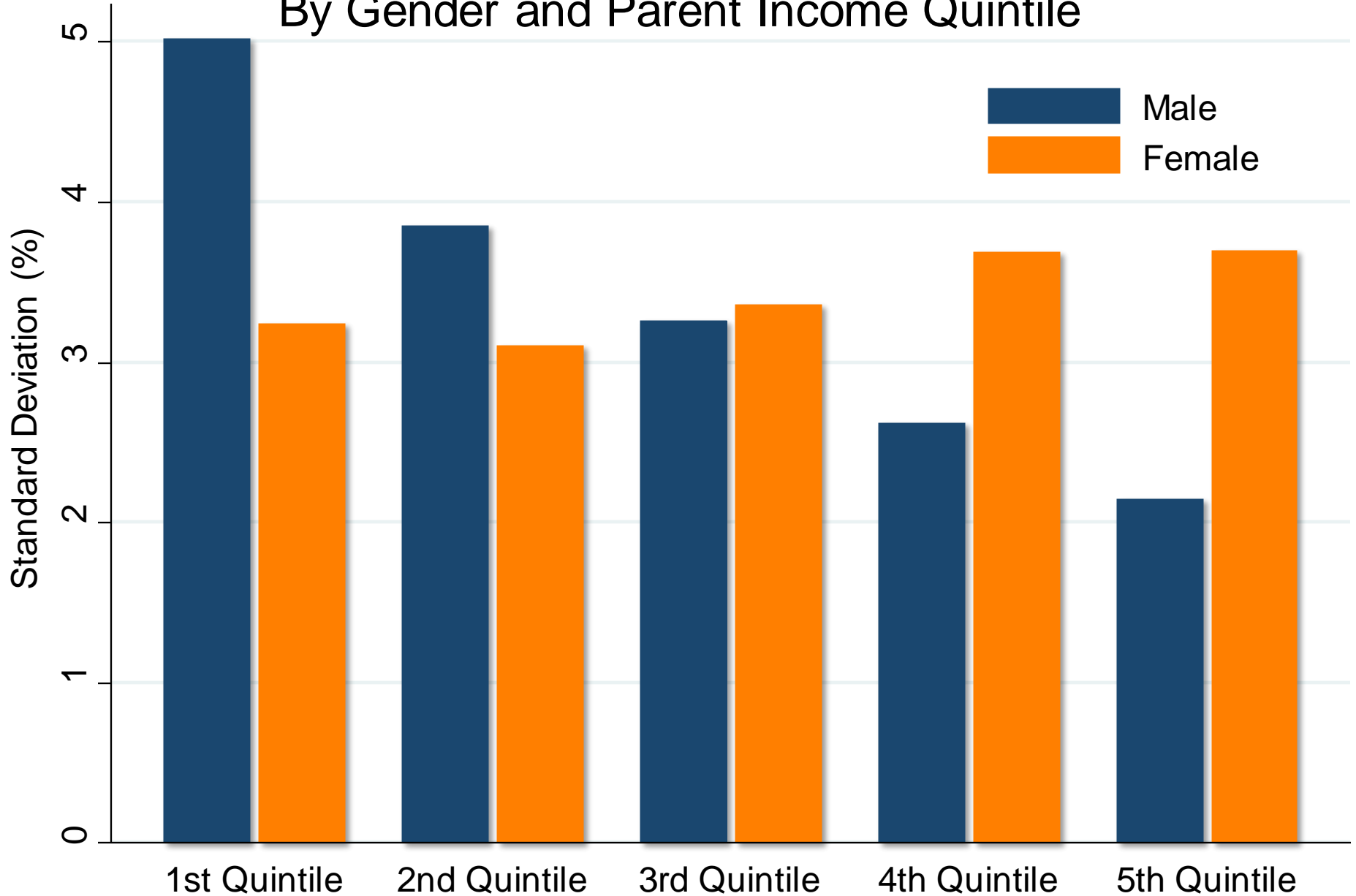
## Bottom 10 CZs in Male-Female Diff.

Rank	CZ	Gap	Male	Female	Rank	CZ	Gap	Male	Female
1	Salt Lake City, UT	9.8	78.9	69.1	91	Milwaukee, WI	-9.2	65.0	74.2
2	Bakersfield, CA	7.3	76.8	69.5	92	Dallas, TX	-9.4	64.7	74.1
3	El Paso, TX	7.2	81.8	74.6	93	Washington DC	-9.7	66.6	76.3
4	Brownsville, TX	5.8	82.6	76.8	94	St. Louis, MO	-11.0	65.0	76.0
5	Erie, PA	4.1	75.6	71.5	95	Atlanta, GA	-11.1	59.3	70.4
6	Eugene, OR	4.0	69.0	65.0	96	Virginia Beach, VA	-11.6	65.0	76.6
7	Canton, OH	3.7	69.0	65.3	97	Charlotte, NC	-12.4	60.1	72.5
8	Reading, PA	3.2	73.7	70.5	98	Raleigh, NC	-13.6	59.9	73.5
9	Spokane, WA	2.5	70.3	67.8	99	Memphis, TN	-15.3	59.2	74.5
10	Syracuse, NY	2.4	74.2	71.8	100	Richmond, VA	-16.0	62.3	78.3

# Standard Deviation of Employment Rates Across CZs By Gender and Parent Income Quintile



# Standard Deviation of Employment Rates Across CZs By Gender and Parent Income Quintile



# Findings

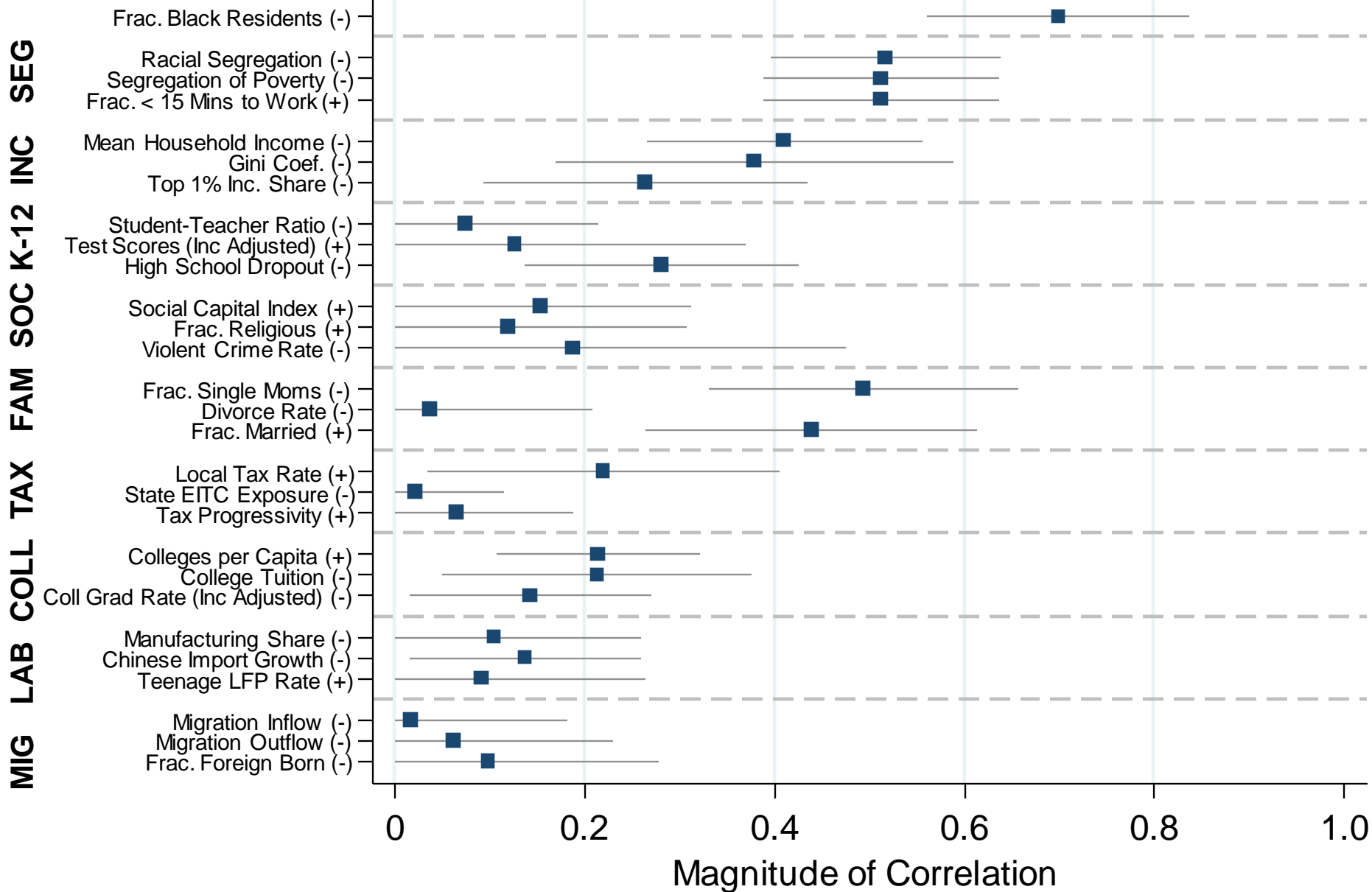
- Key lesson: where a child grows up matters most for poor boys
- Importantly, most of the variance across areas is driven by causal effects of place (rather than sorting)
- Chetty and Hendren (2015) identify causal effects of spending one more year growing up in each area by studying families who move
  - Find *gender-specific* convergence in children's outcomes
  - When a family with a daughter and son moves to a place where boys do well, son does better in proportion to exposure time but daughter does not
- Variation based on where children grow up implies that gender gaps in adulthood are shaped partly by childhood environment

# Further research

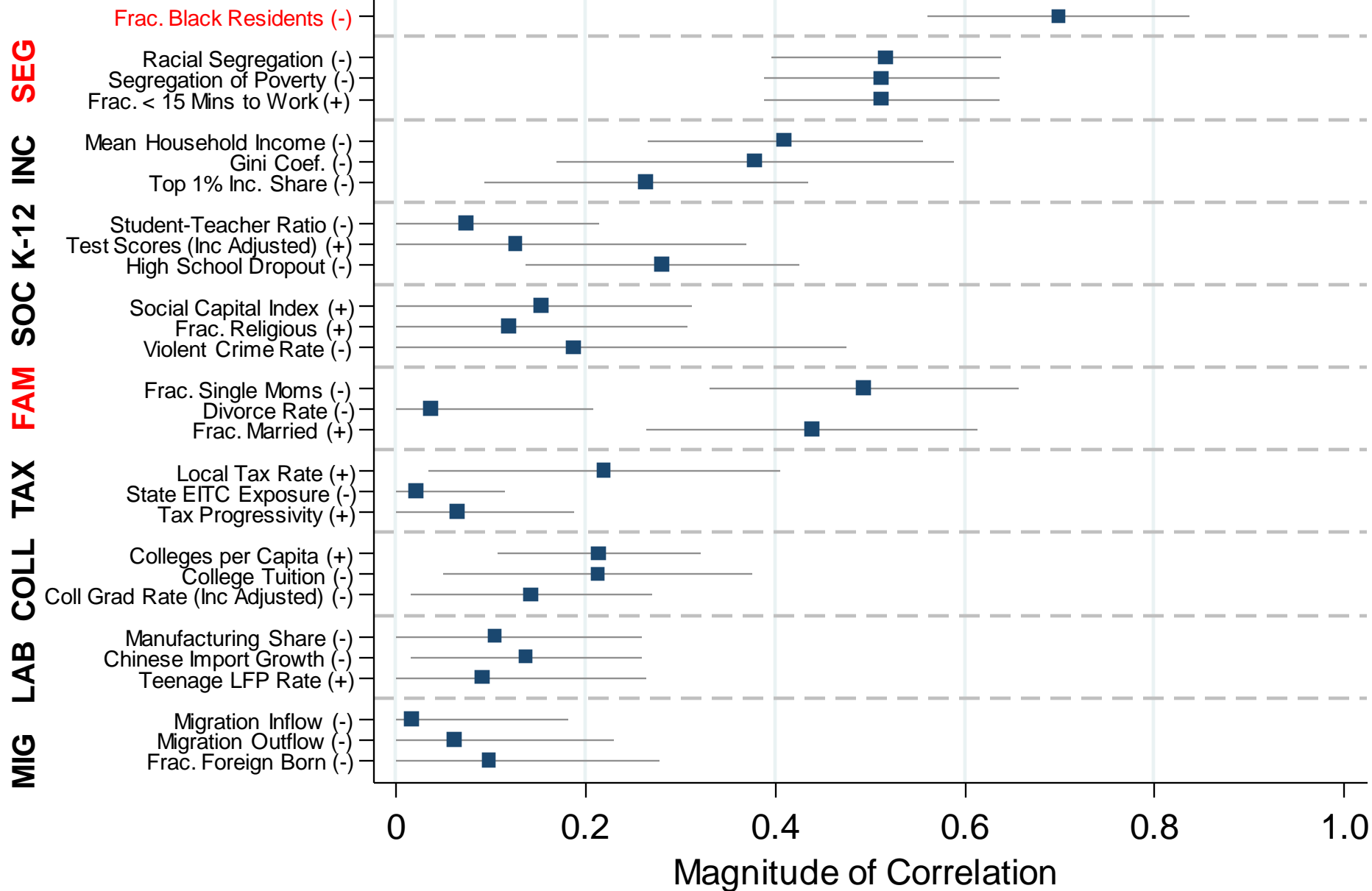
- Natural next question: what are the characteristics of areas for which exposure during childhood produces lower employment rates for low income boys relative to girls in adulthood?
- Correlate gender gap in employment rates for children with low-income parents with various CZ-level characteristics



# Correlates of Spatial Variation in Employment Gender Gap Across CZs, Bottom Parent Income Quintile



# Correlates of Spatial Variation in Employment Gender Gap Across CZs, Bottom Parent Income Quintile



# Regression Estimates of Gender Gaps in Employment with Key Correlates: For Children with Parents in the Bottom Quintile of National Income Distribution

	<i>Male-Female Employment Gap</i>	
	(1)	(2)
Segregation of Poverty	-1.620 (0.323)	-1.948 (0.197)
% Black	-3.552 (0.536)	-3.335 (0.563)
% Single Mothers	0.404 (0.666)	0.526 (0.413)
State FE		X

**Notes:** Standard errors clustered by state.  
 Significance levels: \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

# Mechanism

- Why do areas with concentrated poverty produce lower employment rates for poor boys relative to girls?
- One potential mechanism: growing up in poverty induces low-ability boys to select out of formal labor force
  - Growing up in poverty reduces perceived return of formal work relative to crime/other activities → more men drop out of labor force
  - Consistent with this explanation, more segregated areas have higher rates of crime (correlation = 0.27 across CZs)

# Mechanism (2)

- Gender gap in employment is now reversed for children who grow up in low-income families in the U.S.
  - Men who grow up in poor families work *less* than women
- Gender gaps vary substantially across areas, with lower employment rates for boys in high-poverty, high-minority neighborhoods
- Findings suggest that childhood disadvantage may have particularly detrimental long-term effects on boys
- More broadly, understanding of gender gaps in adulthood can be enriched by starting analysis from childhood
  - Can increasing segregation and inequality in America explain recent declines in male labor force participation rates?

# Download County-Level Data on Social Mobility in the U.S.

[www.equality-of-opportunity.org/data](http://www.equality-of-opportunity.org/data)



## THE EQUALITY OF OPPORTUNITY PROJECT

[HOME](#)[EXECUTIVE  
SUMMARIES](#)[PAPERS](#)[SLIDES &  
VIDEOS](#)[CITY  
RANKINGS](#)[DOWNLOAD  
DATA](#)[FAQ'S](#)[RESEARCH  
TEAM](#)[PREVIOUS  
RESEARCH](#)[PRESS](#)[CONTACT US](#)

### Downloadable Data

Data from Chetty and Hendren (2015): Causal Effects, Mobility Estimates and Covariates by County, CZ and Birth Cohort

Data Description			
Online Data Table 1: Preferred Estimates of Causal Place Effects by Commuting Zone	<a href="#">Stata file</a>	<a href="#">Excel file</a>	<a href="#">ReadMe</a>
Online Data Table 2: Preferred Estimates of Causal Place Effects by County	<a href="#">Stata file</a>	<a href="#">Excel file</a>	<a href="#">ReadMe</a>
Online Data Table 3: Complete CZ-Level Dataset: Causal Effects and Covariates	<a href="#">Stata file</a>	<a href="#">Excel file</a>	<a href="#">ReadMe</a>
Online Data Table 4: Complete County-Level Dataset: Causal Effects and Covariates	<a href="#">Stata file</a>	<a href="#">Excel file</a>	<a href="#">ReadMe</a>
Online Data Table 5: Pairwise Place Effects by Origin-Destination Pairs of Commuting Zones	<a href="#">Stata file</a>	<a href="#">Excel file</a>	<a href="#">ReadMe</a>
Online Data Table 6: Parent Income Distribution by Child's Birth Cohort	<a href="#">Stata file</a>	<a href="#">Excel file</a>	<a href="#">ReadMe</a>



EVROPSKÁ UNIE  
Evropské strukturální a investiční fondy  
Operační program Výzkum, vývoj a vzdělávání



## Národohospodářská fakulta VŠE v Praze



This work is licensed under the Creative Commons Attribution-ShareAlike 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-sa/4.0/> or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.