

Childhood Housing and Adult Earnings: A Between-Siblings Analysis of Housing Vouchers and Public Housing

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Fredrik Andersson, U.S. Office of the Comptroller of the Currency

John Haltiwanger, University of Maryland and U.S. Census Bureau

Mark Kutzbach, U.S. Census Bureau

Giordano Palloni, University of Maryland and U.S. Census Bureau

Henry Pollakowski, Harvard University

**Daniel Weinberg, Consultant, former Census Bureau Chief Economist
and Senior Research Scientist**

Disclaimer

Any opinions and conclusions expressed herein are those of the authors and do not necessarily represent the views of the U.S. Census Bureau or the Office of the Comptroller of the Currency. These results have been reviewed to protect confidentiality.

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Our Contribution

- **Analysis of longer-term labor market effects of living in subsidized voucher or public housing while young. Observe youth aged 13-18 in 2000, follow them 10 years (and potentially more) to see labor market outcomes.**
- **Construction of a large-scale national data infrastructure by merging Census household microdata, neighborhood data, annual HUD household data for subsidy recipients, and longitudinal employment data.**
- **Use of a between-siblings approach to control for unobservable determinants that might affect outcomes.**
- **Data infrastructure can be extended to all income groups to study Intergenerational Economic Mobility.**

Why “Between-Siblings”

Consider first:

1. Simple correlation between a child living in subsidized housing while young with adult earnings: strong negative relationship.
2. A Basic Regression: Limit sample to low-income households and include consideration of household and neighborhood characteristics: still strong negative relationship.
3. Consider Siblings Only: households with at least 2 siblings age 13-18 in 2000 Census. We can thus take advantage of variation in their subsidized housing participation over time within households.

Background Literature: Summary

Existing studies have suffered from data limitations:

- **Typically focus on short-term outcomes.**
- **Tend to focus on only a few (or one) geographic areas.**
- **Typically have inadequate sample sizes to fully consider gender, race/ethnicity, and neighborhood effects.**
- **How do we deal with determinants that we cannot observe?**

Research Questions

- **If a person lives in voucher-supported or public housing while young, how does that affect her/his employment and earnings outcomes 10 or so years later, compared to peers in non-subsidized housing?**
- **How do employment results differ based on the type of subsidy received? Length of subsidy received?**
- **How do effects vary by gender and race/ethnicity?**

Estimation Sample (1)

We extract all available records on youth aged 13-18 in 2000 from the Census 2000 short form, then restrict sample as follows:

- **Renter households**
- **Household has at least two children aged 13-18 in 2000**
- **Parents' earnings < 50% Area Median Income**
- **Thus can use Census short form (universe)**
- **Link to key administrative data, in addition to Census block group data for neighborhood characteristics**

Estimation Sample (2): Link to Administrative Records

- **Link to annual HUD data for all subsidized households, 1997-2005**
Create indicators for public- and voucher-based housing experience in each year, ages 13-18.
 - Ever resided: child resided in public/voucher housing**
 - Years resided: years in public/voucher housing**
- **Link to Longitudinal Employer-Household Data (LEHD) for total adult earnings, 2008-2010.**
 - Longitudinal unemployment insurance records for 130 million workers – essentially a universe of private sector employment.**

Again, Why “Between-Siblings” Analysis?

Example: Consider a household with relevant unobserved family or neighborhood characteristics. These characteristics could both depress youth economic outcomes and increase the likelihood of living in subsidized housing while young. If so, a naïve finding that subsidized housing depresses youth outcomes could be spurious.

We thus take advantage of variation within households in subsidized housing participation (aka household fixed effects specification)

Overview of Between-Siblings Model

Dependent Variable: Earnings 2008-2010

Explanatory Variables:

Exposure to Voucher Housing (ever lived in, years (0–6) lived in)

Male, Exposure to Voucher Housing

Exposure to Public Housing

Male, Exposure to Public Housing

Household-specific Fixed Effects (assigned to all youth in a specific household; thus only these observations used to obtain – “identify” - housing coefficient estimates)

Unchanging youth and household variables: Male, Age, Gender, Age by Gender, Race/Ethnicity by Gender

Overall Results: Effects of Youth Residence in Subsidized Housing on 2008-2010 Earnings

	Ever Received		Years Received	
	<i>Housing Vouchers</i>	<i>Public Housing</i>	<i>Housing Vouchers</i>	<i>Public Housing</i>
<u>All Households</u>				
Females	13.5% **	29.2% ***	6.2% ***	8.8% ***
Males	-23.6% ***	-6.8%	-2.7% **	0.2%
<u>Black Non-Hispanic Households</u>				
Females	14.5% *	17.7% *	6.1% ***	5.8% *
Males	-8.4%	12.6%	2.8%	7.0% ***

Summing Up

- **Use of comprehensive national data infrastructure combined with appropriate technique provides unique national estimates of housing subsidy effects on longer-term earnings for youth.**
- **Our between-siblings approach in most cases does not find the negative effects of subsidized housing found with naïve approaches.**
- **Females gain ground: The effects of living in public or voucher housing on later earnings are positive, substantial, and significant. Effects for males largely indeterminate, with one exception.**
- **Results largely driven by non-Hispanic Black youth findings.**
- **Comparing subsidy programs, we find no uniform differences.**
- **Our work to date opens the door to extending our efforts to comprehensive study of Intergenerational Economic Mobility.**