



## FAQ

### Opportunity Insights' 'Changing Opportunity' Study

*Frequently asked questions about the recently published study "Changing Opportunity: Sociological Mechanisms Underlying Growing Class Gaps and Shrinking Race Gaps in Economic Mobility." Responses prepared by Leading on Opportunity; when excerpted from the study, include page citations.*

Q. What are the historical roots of our present economic mobility challenges?

"Present-day differences in economic mobility can be traced in part back to historical factors such as rates of slavery before 1860, Jim Crow laws from 1870-1960, redlining in credit markets from 1930-1970, and the migration of Black Americans from the South to the North between 1910-1970." (p. 1)

Q. How could Charlotte rank so low in economic mobility?

"Present-day differences in economic mobility can be traced in part back to historical factors such as rates of slavery before 1860, Jim Crow laws from 1870-1960, redlining in credit markets from 1930-1970, and the migration of Black Americans from the South to the North between 1910-1970." (p. 1)

Q. What data were used?

"Our primary analysis uses de-identified data from federal income tax returns linked to information from decennial census data and the Numident [Social Security] database... We supplement these data using information on educational attainment, occupation, and other variables from the American Community Survey (ACS), as well as Scholastic Aptitude Test (SAT) and American College Testing (ACT) scores." (p. 1)

Q. What is the Numident database?

A Numident record is a computer extract of [Form SS-5](#) and subsequent applications for replacement Social Security number (SSN) cards. It may include the following data elements: SSN, first, middle, and last names, full name at birth, other first and last names used, date of birth (DOB), prior DOB, place of birth, citizenship, race/ethnicity, sex, mother's full name at her

birth, father's first and last name, date the record was established or corrected, control number, and date of death. (source: [Social Security Administration](#))

Q. How many people did they study/research?

The study included data on 57 million children linked with their parents. (p. 1)

Q. What races did they look at? Why weren't Hispanic children highlighted?

"We focus on five race and ethnicity groups — non-Hispanic white children, non-Hispanic Black children, Hispanic children, non-Hispanic Asian children, and non-Hispanic American Indian and Alaskan Native (AIAN) children — who together comprise 97.3% of the children with non-missing (self- or household-reported) race information in our sample. As has been noted in prior work, there is considerable heterogeneity in outcomes within these five groups, and our conclusions should not be interpreted as applying uniformly to all subgroups within each of these populations." (p. 1)

Q. What years does this study cover?

This study includes children born between 1978 and 1992. (p. 1)

Q. Why is the most recent birth year studied 1992 and not 2024?

"We limit our analysis to children born during or before 1992 because we generally measure children's outcomes in adulthood at age 27 and the last year for which we have tax data is 2019." (p. 8) Thus, we can expect outcomes data on children born this year to become available after the 2024 cohort turns 27, which will occur in 2051.

Q. Why does the study not follow children born before 1978?

"We limit our analysis to children born during or after 1978 because many children begin to leave the household at age 17 and the first year in which we have dependent claiming information is 1994." (p. 8)

Q. Does this study include undocumented individuals?

"This sample definition excludes both unauthorized immigrants and child dependents claimed by unauthorized immigrants because unauthorized immigrants do not have SSNs and therefore do not appear in the Numident [Social Security] file." (p. 8)

Q. When the paper talks about "parents" does this include non-biological caregivers?

"We define a child's parent(s) as the first person(s) who claims the child as a dependent on a 1040 tax form in the 1994-1995 and 1998-2019 tax data... The person(s) must be supporting the child to claim him or her as a dependent, but may not necessarily be the child's biological parent(s)." (p. 8)

Q. Does the study account for divorce?

"The definition of a child's parent(s) is held fixed after the initial link, regardless of subsequent dependent claims or changes in marital status." (p. 8) Additionally, "We measure parental marital status in the child's adulthood using the mother's 1040 tax return when the child is age 27." (p. 10)

Q. Does the study account for children of cohabitating partners and/or LGBT+ parents?

"We do not include incomes from cohabiting partners or other household members aside from the primary tax filer's spouse." (p. 9) In the United States, same-sex marriage was legalized in all 50 states on June 26, 2015, when the Supreme Court ruled in *Obergefell v. Hodges* that states could not ban same-sex marriage and had to recognize out-of-state licenses. Thus, tax data otherwise qualifying for inclusion in this analysis ostensibly begin to become available for married same-sex partners in the 2015 tax year.

Q. Does the study account for parents who marry after the first year they claim a child as a dependent (e.g., after the *Obergefell* decision)?

"We measure parental marital status in the child's youth using the 1040 tax return in the first year in which a child is claimed. We consider the parents to be married (or, equivalently, that the household has two parents present) during childhood if there is both a primary and secondary filer in the first year in which the child is claimed." (p. 9)

Q. Does the study account for children whose parents don't file a tax return?

"Although we cannot link children to parents who never file a tax return, over 99.6% of children are claimed by an adult at some point in their childhood (Cilke, 1998; Chetty et al., 2020b). Chetty et al. (2020b) also show that the children in their sample have similar outcomes and demographic characteristics when compared to children in the same birth cohorts from representative surveys. The same pattern holds for the more recent birth cohorts that we study here." p. 9)

Q. Are there areas of the country where economic mobility is declining?

"Economic mobility fell the most for low-income white families in the Great Plains and the coasts, areas that had enjoyed relatively high rates of mobility in the 1978 birth cohort. By the 1992 cohort, these areas had levels of economic mobility comparable to the Southeast and industrial Midwest (e.g., Ohio and Michigan), which had low levels of mobility for all cohorts in our data." (p. 2)

Q. Where is economic mobility increasing most for low-income Black families?

"Economic mobility for low-income Black families increased sharply in the Southeast and the industrial Midwest, with modest changes on the coasts. Despite these divergent trends, low-income Black families still had significantly lower levels of economic mobility than low-income white families in virtually every county even in the 1992 birth cohort because the initial white-Black race gaps in mobility were so large for the 1978 birth cohort." (p. 2)

Q. Chetty's previous work has focused on changes by neighborhood. Does this new study support broad place-based strategies, like the Corridors of Opportunity, to target policy and investment by geography?

"Differential trends persist even when we control for childhood Census tract-by-cohort fixed effects, implying that white class gaps grew and white-Black race gaps shrank even among children who grew up in the same Census tract. The divergence in economic mobility must therefore be driven by factors that impact race and class groups differently *within* a given neighborhood." (p. 3) "Our analysis shows that the key unit in which change occurs is not the neighborhood as a whole but rather communities delineated by race and class within neighborhoods, perhaps because social interactions tend to be stratified along these lines" (p. 7)

Q. Are changes in economic mobility driven by individual hard work or societal factors?

"changes in family characteristics, such as parental education, wealth, occupation, or marital status, explain only 7% of the growing white class gaps and 10% of the shrinking white-Black race gaps." (p. 3)

Q. How does the study account for inflation?

"We measure all monetary variables in 2023 dollars, adjusting for inflation using the consumer price index" (p. 9)

Q. Does parental income differ across racial groups?

"Parental income differs sharply across racial groups. The median parental income when the child is between the ages of 13 and 17 is \$91,800 for white children, \$38,250 for Black children, \$44,600 for Hispanic children, \$72,900 for Asian children, and \$43,790 for AIAN children." (p. 11-12)

Q. What drivers account for the differences in parental income across racial groups?

"Differences in household income are partly driven by differences in the rates of having two parents present in the household, with 80.0% of white children growing up in two-parent households compared to 29.1% of Black children and 54.0% of Hispanic children." (p. 12)

Q. What were the outcomes for white children growing up in low-income households?

"Children growing up in families at the 25th percentile of the national income distribution reached, on average, the 48.4th percentile in the 1978 cohort, but only the 46.1st percentile in the 1992 cohort." (p. 12)

Q. What were the outcomes for white children growing up in high-income households?

"White children growing up in families at the 75th percentile of the national income distribution saw their mean income rank rise from the 59.5th to the 60.2nd percentile." (p. 12)

Q. What were the outcomes for Black children growing up in low-income households?

“Black children born to parents at the 25th percentile of the national income distribution reached, on average, the 33.5th percentile in the 1978 cohort and the 35.1st percentile in the 1992 cohort. As a result, the white-Black race gap for children born to low-income families narrowed.” (p. 13)

Q. What were the outcomes for Black children growing up in high-income households?

“The income ranks of Black children born to families at the 75th percentile of the national income distribution increased by 1.4 percentiles on average, similar to the change for white children born to families at the 75th percentile of the national income distribution. The white-Black race gap for children from high-income families thus remained essentially unchanged.” (p. 13)

Q. What was the primary driver of the shrinking Black-White race gap among low-income families?

“The white-Black race gap among low-income families narrowed primarily because of changes in children’s chances of escaping poverty... In the 1978 cohort, Black children from families in the bottom income quintile were 14.7 percentage points more likely to remain in the bottom quintile than their white counterparts. By the 1992 cohort, this gap shrank to 4.1 percentage points—a 72% reduction in the racial gap in the intergenerational persistence of poverty—a measure that has been the focus of recent policy discussions” (p. 2, see also p. 13)

Q. What were the outcomes for children from other racial and ethnic groups?

“Changes for the Hispanic, Asian, and AIAN children were generally much more modest than the changes for white and Black children. For children born to low-income families, for example, the mean household income ranks were unchanged for Asian children, and income ranks increased by only about 0.5 percentiles for Hispanic and AIAN children... An exception to this pattern are American Indian children born to high-income families. These children exhibit a significant increase in incomes but constitute only 0.3% of our sample, making it difficult to draw reliable inferences about trends, particularly across areas.” (p. 17)

Q. Why does the study focus on trends for white and Black Americans?

“We focus on identifying the sources of the divergent trends in mobility by race and class for white and Black Americans” because “Changes for the Hispanic, Asian, and AIAN children were generally much more modest than the changes for white and Black children.” (p. 17)

## FAQ

# Opportunity Insights' 'Changing Opportunity' Study Construction of Parent and Child Indicators

Q. How does the study measure parent education?

"We measure parental educational attainment using the 2000 Census long form and the ACS (prioritizing the long form when both are available). We define parental educational attainment as the highest level of education completed by the parent. High school completion is defined as receiving a high school diploma, GED, or equivalent credential. College completion is defined as completing a bachelor's degree or higher level of education. We prioritize the mother's education information if available and, if not, we use the father's education information." (p. 9)

Q. How does the study measure parent wealth?

"We measure parental wealth using the 2000 Census long form and the ACS (prioritizing the long form when both are available). We measure parental wealth using an indicator for home ownership, indicators for the monthly mortgage payment quintile, and indicators for the home value quintile. As above, we prioritize the mother's wealth information if available and, if not, we use the father's wealth information." (p. 9)

Q. How does the study measure parent occupation?

"We measure parental occupation using the 2000 Census long form and the ACS (prioritizing the long form when both are available). We define parental occupation using the 1990 IPUMS definitions of occupation at the three-digit level. We prioritize the father's occupation information if available and, if not, we use the mother's occupation information, as fathers are more likely to be employed." (p. 10)

Q. How does the study measure parent employment rates?

"We measure parental employment for each parent and year using an indicator for positive W-2 income. We consider parents who do not have a W-2 in a given year to be unemployed. In our baseline analysis, we define parental employment rates in the child's adulthood as the fraction of the child's parents who are employed when the child is age 27. For children claimed by a single parent when they are first linked to parents, this variable is an indicator equal to 1 if their parents are employed when the children are age 27. For children with married parents, the variable takes on values of 0, 0.5, or 1 depending upon whether 0, 1, or 2 of the claiming parents are employed when the children are 27 years old. We also measure parental employment at other ages in sensitivity analyses." (p. 10)

**Q. How does the study measure parent mortality rates?**

“We measure parental mortality using the Census Numident, which contains death records compiled by the Social Security Administration. We define parental mortality in the child’s adulthood as the fraction of the child’s parents who died when the child is ages 18-27. We measure mortality after children are 18 because we measure parental income when the child is ages 13-17 in our baseline analysis.” (p. 10)

**Q. How does the study measure parent location?**

“We measure parental location each year using the address listed on their 1040 tax return. Addresses are geocoded and assigned to standard Census geographic units (e.g., block, tract, county) by Census staff. For non-filers, we use the address from information returns such as W-2s when available. We track the mother’s location if the child is linked to two parents and parental marital status changes.” (p. 10)

**Q. How does the study determine children’s race and ethnicity?**

“We measure children’s race and ethnicity using the information they or a household member report on the 2000 and 2010 Census short forms and the ACS. We prioritize the 2010 Census short form, then the 2000 Census short form, and finally the ACS. We use these data to construct five main race and ethnicity groups—non-Hispanic white, non-Hispanic Black, Hispanic, non-Hispanic Asian, and non-Hispanic American Indian and Alaskan Natives (AIAN)—who together comprise 97.3% of the children with non-missing race information in our sample.” (p. 10)

**Q. Do individuals change the race or ethnicity with which they identify over time?**

“Self- and household-identified race and ethnicity measures are fairly stable over time. For non-Hispanic white individuals who are in both the 2000 and 2010 Censuses, only 3% changed their response. For non-Hispanic Black individuals, only 6% changed their response.” (p. 10)

**Q. How does the study measure children’s incomes in adulthood?**

“In our primary analysis, we measure children’s income at both the individual and household level using their pre-tax income at age 27, top coding incomes at \$1 million. If a child files a tax return, we define household income as the sum of Adjusted Gross Income, social security payments, and tax-exempt interest payments, as reported on their 1040 tax return. We define individual income as wage income reported on their W-2, in addition to self-employment and other non-wage income reported on their 1040 tax returns. We assign individuals who are married and filing jointly half of the self-employment and other non-wage income. For non-filers, we define both individual and household income as total wage earnings from W-2s, or as 0 if no W-2 is filed. We also consider alternative definitions of child income that measure income at later ages or average over multiple years in sensitivity analyses. Appendix Figure A.3 shows the mapping between dollars and percentiles for child household income at age 27, as well as a replication of our main results using this dollar-to-percentile mapping.” (p. 10-11)

Q. How does the study measure children's employment rates?

"We define children as employed at age 27 using an indicator for positive W-2 income." (p. 11)

Q. How does the study measure children's marital status?

"We measure children's marital status using their filing status on 1040 tax returns at ages 27 and 32." (p. 11)

Q. How does the study measure children's mortality rates?

"We measure children's mortality using the Census Numident. We measure mortality between ages 24 and 27. We measure mortality at these ages to ensure that we have data on child race and ethnicity — which we observe only in the 2000 and 2010 decennial censuses and the ACS — for all cohorts." (p. 11)

Q. How does the study measure children's incarceration rates?

"We measure children's incarceration using the 2000 and 2010 Census short forms. We define individuals as incarcerated if on the day of the Census they live in a federal detention center, federal prison, state prison, local jail, residential correctional facility, military jail, or juvenile correctional facility. We measure incarceration at a fixed age to adjust for changes over the lifecycle, focusing on age 22 because our analysis begins with the 1978 birth cohort, which turned 22 in the year 2000." (p. 11)

Q. How does the study measure children's educational attainment?

"We measure children's educational attainment using the ACS. We measure the number of completed years of schooling by age 27. High school completion is defined as receiving a high school diploma, GED, equivalent credential, or higher level of education at or before age 27. College completion is defined as completing a bachelor's degree or higher level of education at or before age 27." (p. 11)

Q. How does the study measure children's SAT/ACT scores?

"We measure the fraction of children taking the SAT/ACT in high school and their mean SAT/ACT scores using aggregate statistics by race and parental income constructed in Chetty, Deming and Friedman (2023). Chetty, Deming and Friedman (2023) report statistics for students graduating from high school in 1998-2005, 2007, 2009, 2011, 2013, and 2015. These high school cohorts align approximately with the 1980-1997 birth cohorts. ACT scores are mapped into equivalent SAT scores using published concordance tables. SAT scores are prioritized when both SAT and ACT scores are available. Scores are converted to percentile ranks by ranking students relative to all other test takers in the U.S. in the same high school cohort." (p. 11)