

# Effects of Income in Early Childhood: New Evidence Using Census Data and Tax Discontinuities

Connor Cole<sup>1</sup>

University of Michigan

October 11, 2020

[\[Click here for most updated version\]](#)

DISCLAIMER: Any opinions and conclusions expressed herein are those of the author and do not necessarily represent the views of the U.S. Census Bureau. This research was performed at a Federal Statistical Research Data Center under FSRDC Project Number 1284. All results have been reviewed to ensure that no confidential information is disclosed.

The U.S. tax code offers sizable tax credits to families with children, and eligibility for these credits depends on a child's birthday. If the child is born before the New Year, that family is eligible for tax benefits related to the child for the previous tax year, but if the child is born after the New Year, the family will be eligible for the benefits starting with the next tax year. These eligibility rules create differences in after-tax income in the first year of a child's life, worth on average approximately \$2,000 for families in tax year 2016. This paper uses 'doughnut' regression discontinuity techniques to calculate the effect of this discontinuity in after-tax family income on outcomes for children and young adults using restricted access Census and ACS data from 2000 to 2016. This paper finds that a \$1,000 discontinuity in after-tax income results in an estimated 0.94 percentage point increase in the probability of a student being grade-for-age by high school, a basic indicator of academic achievement and social maturity. This result is largely driven by children from families that are more disadvantaged at a child's birth, including families with low education attainment and Black families. Moving forward to post-schooling outcomes, small differences in labor-force attachment, earnings and education attainment persist for years after the adults leave high school, and are especially large for Black young adults and adults born in counties with lower education attainment, but appear to attenuate with age.