

# THE EFFECTS OF RESIDENTIAL SEGREGATION DURING CHILDHOOD ON LIFE CHANCES: CAUSAL EVIDENCE USING HISTORICAL RAILROAD TRACK CONFIGURATIONS

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## Abstract:

Human capital accumulation may depend on the neighborhood in which one grows up through a variety of channels, including access to school resources, health and social service funding, neighborhood crime, peer and role model effects, proximity to a chemical dumping ground or related environmental hazards, and connectedness to job networks and informal sources of support. This paper provides new causal estimates of the effects of racial residential segregation during childhood on subsequent adult attainment outcomes. I account for the potential endogeneity of segregation and neighborhood location choice using instrumental variables based on 19<sup>th</sup> Century railroad track configurations, historical migration patterns, political factors, and topographical features. Following Ananat (2011), it is shown that cities that were subdivided by railroads into a greater number of physically-defined neighborhoods became significantly more segregated after the Great Migration of African-Americans to northern and western cities. To examine the consequences of segregation during childhood, this study analyzes the life trajectories of children born since 1950 and followed through 2009. Data from the Panel Study of Income Dynamics (PSID) spanning four decades are linked with information on neighborhood attributes and school quality resources that prevailed at the time these children were growing up. Results from 2SLS/IV models demonstrate that, for blacks, the level of racial residential segregation during childhood negatively impacts subsequent educational attainment, reduces the likelihood of high school graduation, increases the probability of incarceration, reduces adult earnings and the likelihood of intergenerational mobility, increases the annual incidence of poverty in adulthood, and leads to worse health status in adulthood; segregation effects for whites were not statistically significant across each of these outcomes but the point estimates were in the opposite direction of the corresponding estimates for blacks. The results are consistent with prior research that has found that increased segregation leads to more inequality in spending across districts of the same MSA, thus worsening the relative position of poorer districts.

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