

Changing Opportunity: Rising Local Wealth Inequality and Growing Class Gaps in Income Mobility

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Abstract

Recent research documents widening class gaps in intergenerational income mobility. Children from low-income families in more recent cohorts attain lower incomes than their counterparts in earlier cohorts, while no comparable decline is observed among children from high-income families. This study examines whether rising local wealth inequality contributes to the growing class divide in income mobility. To do so, it combines newly published estimates of local wealth inequality (GEOWEALTH-US) with cohort-based measures of upward mobility from Opportunity Insights. First-difference models reveal a consistent, negative association between rising local wealth inequality and declining upward income mobility for low-income children, but no such relationship for their high-income peers. Rising local wealth inequality explains about one-fifth of the increase in class gaps in economic mobility.

Keywords: inequality, mobility, wealth.

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Introduction

Income inequality is negatively associated with intergenerational income mobility. This phenomenon, prominently coined as 'The Great Gatsby Curve', stands in direct contrast to the American Dream of upward mobility (1, 2). Whether children grow up in a poor or affluent household has a permanent imprint on their success in adulthood, and childhood exposure to local inequality matters for seizing on economic opportunities (3–7).

Yet, economic inequality extends beyond income. While most empirical studies focus on the downstream consequences of income disparities, wealth inequality is also a defining feature of contemporary America(8). Unlike income, wealth represents the stock of assets that can be directly transferred between generations (9), used to buffer against negative income shocks (10), or relied upon to finance major investments, such as post-secondary education (11).

The distinction between wealth and income is particularly important because wealth is far more concentrated than income in the United States (12, 13). Recent estimates place U.S. income inequality at a Gini index slightly above 0.50, while wealth inequality reaches 0.80 (8). As of 2020, local inequality is also much higher for wealth than income. Measured at the commuting-zone level, wealth inequality averaged 0.76 (ranging from 0.66 to 0.85), compared to 0.43 for income inequality (range: 0.34–0.54). In other words, income in the most unequal area is still more evenly distributed than wealth in the least unequal area (14). Additionally, local wealth inequality has grown faster than income inequality. Between 1990 and 2010, the average Gini coefficient rose by 0.03 for wealth compared with 0.01 for income (see Supplementary Figures S1 and S2).

This study argues that rising local wealth inequality is key to understanding growing class gaps in income mobility. Because wealth is a distinctive dimension in the intergenerational transmission of advantage and disadvantage (15, 16) and particularly in shaping upward mobility (17, 18), its increasingly unequal distribution can constrain the life-chances of disadvantaged populations while amplifying advantages among the affluent. Put simply, wealth can provide distinct access to goods, networks, and opportunities. If growing wealth inequality facilitates opportunity hoarding among better-off families (19, 20) while simultaneously constraining the prospects of low-income children, upward mobility becomes increasingly unattainable for children from low-income parental backgrounds.

Why would we expect the changing local distribution of wealth, rather than simply the level of wealth, to matter for income mobility? The key reason is that we conceptualize wealth as a *positional* resource for economic opportunities. If wealth were to rise proportionally for all households within a place, relative positions would remain unchanged—even though everyone could purchase “more” of the same inputs—and we would not expect systematic shifts in *rank-based* outcomes. By contrast, when wealth gains are concentrated at the top, affluent families are better able to translate resources into advantage for their children (e.g., by outbidding others for high-opportunity neighborhoods and schools or by expanding parental investments), so children from low-income families fall behind relative to their local peers even if average wealth increases. This logic parallels findings on income inequality and class divides in parental investments (e.g., Schneider et al. (21)), and it leads us to expect that increases in local wealth inequality will be linked to declining outcomes for children from disadvantaged parental backgrounds.

Even in a world with no association between household wealth and income, wealth inequality would still reduce intergenerational income mobility, because wealth can substitute for income, not merely complement it, in investments in children's education (22). Moreover, wealth has income-generating properties, allowing children from wealthy families to benefit from additional income streams (23). In the real world, however, household wealth and income are positively correlated such that high-income families tend to have much higher levels of wealth they can be transferred across generations (24). The positive association between income and wealth is likely to amplify the impact of wealth inequality on income mobility. This positional logic is especially relevant here because our outcome is defined as children's *national income rank* in adulthood. Empirically, what

matters is how local wealth changes shift children's *relative* standing rather than their absolute income level.

To understand the role of rising local wealth inequality for upward mobility of low-income children, this study builds on two unique datasets: GEOWEALTH-US (1960-2020), a recently published database of local wealth estimates for all commuting zones in the United States (14), and Changing Opportunity, which provides estimates of adult income ranks for children born in 1978 and 1992. These ranks are based on linked parent-child income tax records from the IRS and published by Opportunity Insights (25). Together, these data enable a novel assessment of the association between rising local wealth inequality and growing class gaps in economic mobility in the United States.

In this analysis, we use the rank-based measure of mobility proposed by Chetty et al. (25). For each parental income percentile, mobility is measured by the mean adult income rank a child attains in the national distribution (that is, children's position on the income ladder rather than whether they earn more or less than a cutoff defined by their parents' income). We define low-income origins as children whose parents are located at a given low percentile of the parental income distribution (e.g., the 25th percentile). High-income origin is defined analogously at a high parental percentile (e.g., the 75th percentile). *Class gaps* in mobility are then defined as the difference in mean adult income ranks across parental percentiles –in this case, the gap between the 75th- and 25th-percentile origin groups. Consequently, growing class gaps in these rank outcomes correspond to declining mobility (stronger intergenerational persistence), because parental background increasingly predicts children's position in the national rank distribution.

Our findings based on first-difference models show a negative association between rising local wealth inequality and declining upward income mobility among low-income children. A one percentage point increase in local wealth inequality, measured by the Gini coefficient, between 1990 and 2010 is associated with a .25 percentage point decrease in the income ranks achieved by children born to parents at the 25th income percentile. By contrast, there is no association between wealth inequality and mobility among children from high-income households. These associations are robust to controls for economic and demographic changes, including changes in income inequality. Counterfactual simulation exercises suggest that rising local wealth inequality accounts for about one-fifth of the growth in class gaps in relative mobility between children born to parents at the 25th and 75th percentiles. For low-income children born in 1992, the rise in local wealth inequality translates into an average annual income loss of roughly \$700 in 2023 dollars.

Taken together, these findings provide the first evidence that rising local wealth inequality contributes to widening class gaps in mobility in the United States.

Results

Does rising local wealth inequality contribute to growing class gaps in income mobility? Figure 1 plots the bivariate relationship between cohort changes in income mobility and changes in local wealth inequality from children born in 1987 (early cohort) to children born in 1992 (later cohort). Income mobility is measured as the adult income rank that children born to parents at the 1st, 25th, 50th, 75th, or 100th percentile achieve at age 27. While age 27 identifies early adulthood, previous research shows that the relationship between children's and parents' income ranks is similar when measured at later ages (25). Because the outcome is a percentile rank, mobility is inherently relative: improvements for some groups necessarily imply declines for others. Accordingly, a "decline in mobility" refers to children from low-income backgrounds attaining lower positions relative to their cohort peers nationwide, rather than to absolute declines or falling below their parents' income level.

We measure exposure to local wealth inequality in years 1990 and 2010, when the 1978 and 1992 birth cohorts were approximately 12 and 18 years old, respectively, because they are the closest available to the time when children from each cohort were claimed on their parents' income tax

returns. Thus, differences in local characteristics between 1990 and 2010 proxy for the changing local environment that each cohort experience in adolescence. Following prior research, we measure wealth inequality at the commuting-zone level (18).

Figure 1 displays our main findings. It shows cohort changes in adult income rank comparing the early (1978) and later (1992) cohorts across commuting zones ranked by the change in local wealth inequality over the period. We observe a marked relationship between increases in local wealth inequality and reduced mobility for children in the lower half of the income distribution. Specifically, in commuting zones where wealth inequality grew, children born in the 1992 cohort achieve lower adult income ranks than those in the 1978 cohort, but only among children growing up in low- and middle-income households (1st, 25th, and 50th percentile). In contrast, we find no relationship between rising wealth inequality and mobility for children from high-income households (75th and 100th percentiles). For children born to parents at the 25th percentile, a one percentage point increase in local wealth inequality between 1990 and 2010 is associated with the later cohort achieving approximately 0.20 percentile points lower income ranks than their counterparts in the earlier cohort.

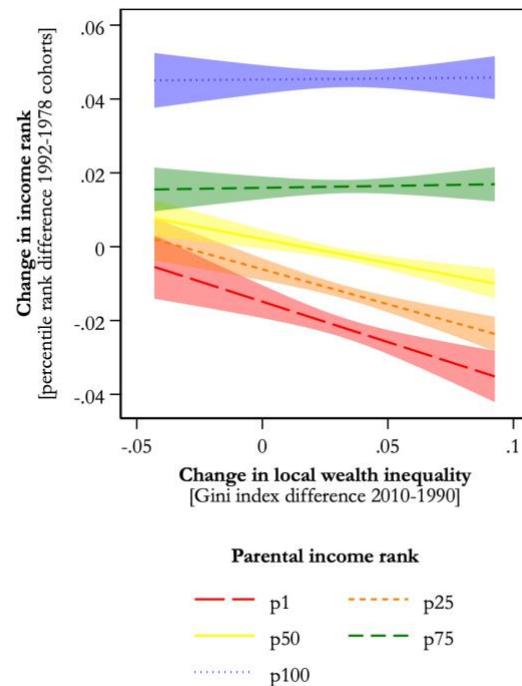


Fig. 1. Correlations between changes in local wealth inequality and changes in income mobility by parental income percentile. Shaded areas indicate 95 percent confidence intervals. Each line shows the bivariate association between changes in the income ranks that children growing up to parents at the 1st, 25th, 50th, 75th, or 100th percentile achieve at age 27 (1978 vs 1992 cohorts) and changes in local wealth inequality between 1990 and 2010. Commuting zones are weighted by the reliability estimates provided by Opportunity Insights (25). Mobility information is based on data published by Opportunity Insights (25). Local wealth inequality is measured as the commuting zone level Gini coefficient. Wealth data are from the GEOWEALTH-US project (14). Author's calculation.

Many changes in the local environment during childhood, other than wealth inequality, could contribute to income declines among low-income children born in 1992 relative to those born in 1978. These include shifts in employment levels, as well as broader economic, and demographic

changes. In particular, one factor closely correlated with rising wealth inequality is growing income inequality.

To account for these potential confounders, we estimate a set of first-difference OLS models that adjust for economic and demographic changes. Fig. 2 shows estimates from four models for each parental income percentile (1st, 25th, 50th, 75th, and 100th). Model 1 captures the bivariate association between changes in local wealth inequality and cohort changes in the incomes achieved by otherwise similar children (these coefficients underlie the associations shown in Fig. 1). Model 2 controls for changes in demographic factors at the commuting-zone level, including change in the share of single parents, college graduates, foreign-born residents, employed adults, Black residents, as well as changes in mean population age and the total number of households. Model 3 further adjusts for changes in economic conditions, including mean household income and median wealth. Model 4 additionally controls for changes in income inequality (see Supplementary Table S1 for summary statistics and Supplementary Tables S2, S3, S4, S5, and S6 for all estimation results).

Local wealth inequality remains robustly associated with income losses for children growing up to parents at the median income or below across specifications. By contrast, we find no association among children from high-income households. Taken together, these models indicate a distinct impact of rising wealth inequality on income mobility, net of changes in income inequality and other economic and demographic shifts.

These results suggest that children from high-income households are largely insulated from the adverse effects of rising local wealth inequality on economic opportunity. Importantly, increases in local wealth inequality predict lower upward mobility for low-income children even after accounting for changes in income inequality (see Supplementary Fig. S3 for a comparison of both measures of economic inequality in our models). The analysis indicates that growing wealth inequality contributes to the widening class gaps in income mobility recently observed in recent decades in the United States (25).

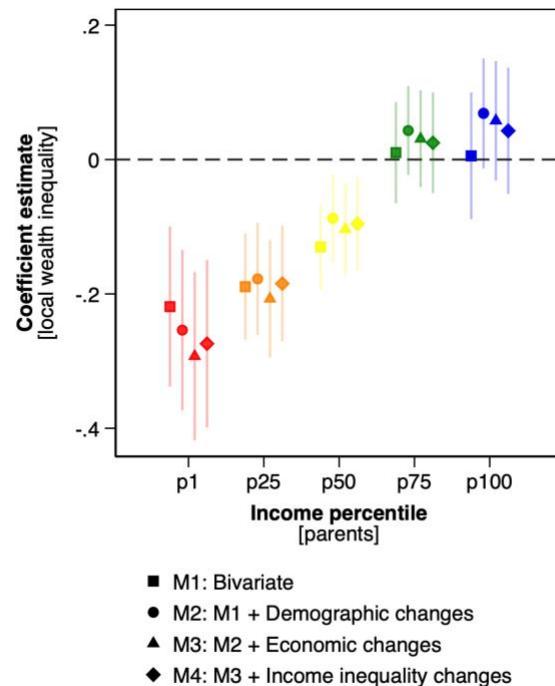


Fig. 2. Rising local wealth inequality is associated with decreasing upward income mobility. Whiskers indicate 95 percent confidence intervals. Each marker gives the estimated coefficient of changes in local wealth inequality between 1990 and 2010 on changes in the income ranks that children growing up to parents at the 1st, 25th, 50th, 75th, or 100th percentile achieve at age 27 (1978 vs 1992 cohorts). Model 1 gives the bivariate association. Model 2 includes a set of demographic characteristics: population share of single parents, college graduates, foreign born residents, and employed adults, as well as the share of Black residents, average age (log), and total number of households (log). Model 3 adds to that a set of economic covariates: average household income and median wealth (log). Model 4 finally adds income inequality (Gini index). All covariates are measured as their change between 1990 and 2010. Commuting zones are weighted by the reliability estimates provided by Opportunity Insights (25). Wealth inequality is measured as the commuting zone level Gini coefficient. Data are from the GEOWEALTH-US project (14) and Opportunity Insights (25). Author's calculation.

These findings are robust to a range of alternative specifications. Measuring local wealth inequality by the top 10 percent wealth share rather than the Gini index yields similar results (Supplementary Fig. S4), as does measuring income ranks using individual rather than household income (Supplementary Fig. S5). Sequentially excluding one state at a time shows that the results are not driven by any single state outlier (Supplementary Fig. S6). Findings also remain unchanged when estimating mobility separately for women (Supplementary Fig. S7) and men (Supplementary Fig. S8). We do not conduct heterogeneity analyses by race, because the spatial coverage of race-specific mobility estimates in our data is insufficient to support meaningful comparisons.

We next implement a counterfactual simulation to examine how mobility would have changed had local wealth inequality not increased between 1990 and 2010. Fig. 3 plots predicted cohort differences in economic mobility between the 1978 and 1992 cohorts for each parental income percentile (1st, 25th, 50th, 75th, and 100th). Light, circular markers show predicted cohort differences under our preferred Model (Model 4). Solid, diamond markers denote simulated differences in the absence of rising local wealth inequality.

In the observed data, children from the 1992 cohort born to parents at the 25th percentile achieve income ranks 1.4 percentiles lower than their 1978 counterparts. In the counterfactual scenario without an increase in local wealth inequality, this disparity drops to 0.7 percentiles. From the 1978 to the 1992 cohort, the class gap between children from the 25th and the 75th percentile origins grew by roughly 3.5 percentiles. Thus, rising local wealth inequality accounts for roughly one-fifth of the rise in class gaps in income mobility (0.7/3.5 percentiles). Based on the earnings distribution, for low-income children born in 1992 to parents at the 25th percentile, a 0.7-percentile reduction in income rank relative to their 1978 peers translates into an average annual income loss of approximately \$700 (2023 dollars). For a poor family, \$700 is consequential. It represents nearly three percent of annual income at the poverty line; roughly the cost of two months of groceries, or about a quarter of annual utility bills. In practical terms, it can determine whether a family can cover an unexpected medical expense or has to take on debt.

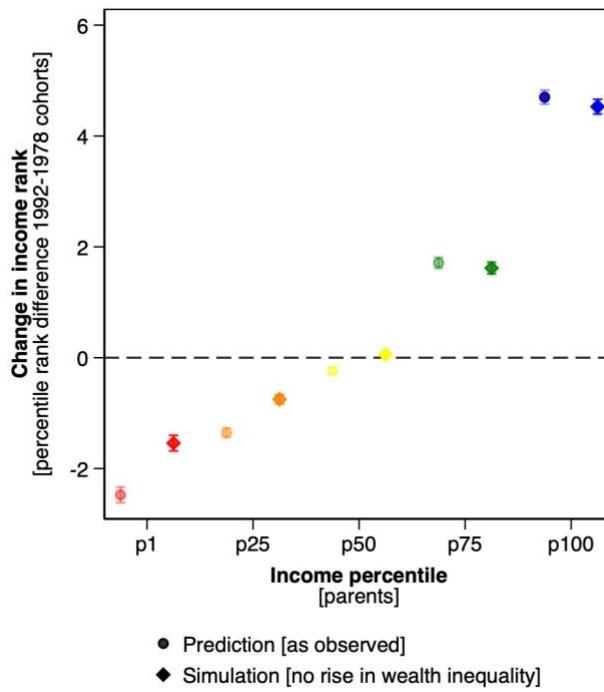


Fig. 3. Static simulations of cross-cohort changes in income mobility by parental income percentile had local wealth inequality stayed the same. Whiskers indicate 95 percent confidence intervals. Each coefficient gives the estimated change in the income ranks that children growing up to parents at the 1st, 25th, 50th, 75th, or 100th percentile achieve at age 27 (1978 vs 1992 cohorts). Commuting zones are weighted by the reliability estimates provided by Opportunity Insights (25). Wealth inequality is measured as the commuting zone level Gini coefficient. Data are from the GEOWEALTH-US project (14) and Opportunity Insights (25). Author's calculation.

Discussion

This paper has examined whether rising local wealth inequality contributes to the widening class gaps in intergenerational income mobility observed for recent cohorts. Using cohort-based comparisons across commuting zones, we show that increases in local wealth inequality consistently predict declines in upward mobility among children from low-income families, but not among those from high-income families. Although our argument highlights causal pathways linking local wealth inequality to children's later-life income outcomes, our first-difference design does not provide causal identification; we therefore interpret these estimates as associations that are nonetheless consistent with the mechanisms we outline. These patterns suggest that wealth shapes mobility through relative resources and competition for intergenerational opportunity, plausibly by multiple mechanisms such as directly funding educational investments, buffering shocks, and being directly transferred across generations.

Our evidence is consistent with the idea that changes in the distribution of wealth at the local level –rather than just wealth levels– is a salient contextual characteristic for rank-based mobility outcomes. In our analyses, changes in local median wealth are not associated with changes in children's income ranks, whereas changes in local wealth inequality are. Although rising average wealth levels could benefit all families in a given place (regardless of their own household's wealth) --for instance through rising property tax revenue and better public services-- recent research has shown that taxable property is often shielded from the public purse through the establishment of fragmented tax jurisdictions (26), rendering commuting-zone median wealth a poor indicator for

economic opportunities. In contrast, rising wealth inequality directly reflects a reordering in resources within communities that can intensify competition for scarce opportunity-relevant goods. This distinction is consequential given the positional nature of our outcome.

Our empirical strategy combined commuting-zone measures of wealth inequality from GEOWEALTH-US with cohort-based mobility estimates from Opportunity Insights for children born in 1978 and 1992 and used first-difference models to relate changes in local wealth inequality to changes in income mobility. Children's income ranks are measured at age 27, and models sequentially adjusted for demographic, economic, and income-inequality changes. In the preferred specification with all covariates, a one-percentage-point increase in local wealth inequality is associated with about .20 of a percentile lower income ranks for children from the 25th parental percentile, with no detectable relationship among children from upper-income families. Static simulations indicate that rising local wealth inequality accounts for about one-fifth of the observed growth in class gaps between the 25th and 75th parental percentiles, implying an average \$700 annual income loss in 2023 dollars for low-income children in the 1992 cohort.

While our analysis relies on a novel linkage of wealth inequality and economic mobility longitudinal data, our empirical findings should be interpreted in light of important data limitations. We observe local wealth inequality at the commuting-zone level but lack more granular measures of wealth concentration or segregation within places, limiting our ability to probe neighborhood-scale mechanisms through which an unequal wealth distribution might shape children's opportunities. Still, commuting zones are substantively meaningful units because they capture local labor market and educational environments that provide realistic choice-sets for families better than idiosyncratic political geographies. In addition, while our first-difference design can account for all time-invariant confounders and we additionally adjust for a wide set of economic and demographic trends, we cannot conclusively rule out the possibility of unobserved sources of confounding.

These constraints point to promising avenues for future research. First, developing tract- or block-level estimates of wealth inequality would allow researchers to test concrete mechanisms through which local wealth structures might depress mobility for low-income children. Second, future research could connect administrative or survey-based information on family wealth to child earnings trajectories to evaluate how local inequality interacts with household resources. Third, natural experiments that shift local wealth distributions, longitudinal analyses around asset-market shocks, or policy shocks could sharpen causal inference. Finally, tracing life-course exposure windows would clarify when and for whom local wealth inequality is most consequential.

Taken together, our results recenter local wealth inequality as a core dimension of stratification shaping children's economic opportunities above and beyond income inequality. Rising local wealth inequality is linked to declining upward mobility for children from low-income families and to widening class gaps, placing the distribution of wealth squarely on the agenda of scholars and policymakers concerned with opportunity in America.

Materials and Methods

Data availability

All code necessary to replicate this study can be accessed via a repository at OSF: https://osf.io/a3vfd/?view_only=0124f89526104108a9b980070c9f40c6.

Data sources

This study makes use of recently published local wealth estimates from GEOWEALTH-US (14). This novel database draws on the Survey of Consumer Finances (SCF) as well as the Decennial Census and American Community Survey (ACS) and applies machine-learning-based imputation to estimate local wealth and wealth inequality. These data are combined with income mobility estimates published by Opportunity Insights (based on linked parent-child income tax returns for the cohorts 1978 and 1992) (25). Both measures are publicly available at the commuting zone

level. In supplementary models, the study draws on information from the Segregation Explorer (27). The data provide local estimates of economic segregation in schools between 1991 and 2022. The database builds on the Longitudinal Imputed School Dataset (LISD) 1.0 which is prepared based on the National Center for Education Statistics Common Core of Data (CCD).

First-difference models

The study estimates the association between changes in local wealth inequality and changes in income mobility across commuting zones using linear models estimated by ordinary least squares regression:

$$\Delta Y_c = \beta_1 \Delta G_c + \Delta \mathbf{X}'_c \beta_2 + \varepsilon_c$$

Where ΔY_c is the change between incomes at age 27 achieved by children born 1978 vs 1992 in commuting zone c , growing up to families at the 1st, 25th, 50th, 75th, or 100th percentile of the national income distribution, ΔG_c indicates the change in commuting zone-level Gini index of local wealth inequality between 1990 and 2010, and $\Delta \mathbf{X}'_c$ denotes a vector of changes in commuting zone covariates detailed below. Exploiting variation in within-commuting zone differences over time allows us to account for all unobserved, time-constant sources of heterogeneity between commuting zones. Because our data are limited to 1990 and 2010, this approach is effectively a first-differences model.

All models are estimated using robust standard errors. Dependent and independent variables are winsorized at the 1st and 99th percentile (results remain largely unchanged when using unadjusted measures, see Supplementary Figure S9). Models weight commuting zones by the reliability measure of the underlying mobility estimates to account for uncertainty due to the estimated nature of the dependent variable, see (25, 28). Due to increased uncertainty and estimate imprecision, some estimates fail to reach significance without those weights, in particular in our more parsimonious models (see Supplementary Figure S10). Results are identical to the main analysis when substituting the reliability weights for population weights (see Supplementary Figure S11).

Covariates are included stepwisely: Model 1 gives the bivariate association between changes in local wealth inequality and changes in income mobility. Model 2 includes changes in economic characteristics: average household income, and median wealth (log). Model 3 adds to Model 2 a set of changes in demographic covariates: population share of single parents, college graduates, foreign born residents, and employed adults, as well as the share of Black residents, average age (log), and total number of households (log). Finally, Model 4 additionally adjusts for changes in income inequality (Gini index). All covariates are measured as their change between 1990 and 2010.

Following the approach outlined by Chetty et al. (25), we use years 1990 and 2010 to measure predictors because they are closest to the time when children from the 1978 and 1992 cohorts were claimed on their parents income tax returns. Thus, differences in local characteristics between 1990 and 2010 proxy for the changing local environment that both cohorts experience in early adulthood. The comparison is not perfect because children in the earlier cohort are about 12 years old when they are claimed on their parents' income tax returns while children in the later cohort are about 18 years old. This is a clear limitation of the data, inherent to the information published by Opportunity Insights (25). This constraint might lead to biased cross-cohort differences in the underlying mobility estimates. There is no reason, however, to suspect that biases in cohort differences would systematically vary by the level and change in local wealth inequality.

References

1. M. Corak, Income Inequality, Equality of Opportunity, and Intergenerational Mobility. *Journal of Economic Perspectives* **27**, 79–102 (2013).
2. S. N. Durlauf, A. Kourtellos, C. M. Tan, The Great Gatsby Curve. *Annual Review of Economics* **14**, 571–605 (2022).
3. A. S. Browman, M. Destin, M. S. Kearney, P. B. Levine, How economic inequality shapes mobility expectations and behaviour in disadvantaged youth. *Nat Hum Behav* **3**, 214–220 (2019).
4. R. Chetty, N. Hendren, The Impacts of Neighborhoods on Intergenerational Mobility I: Childhood Exposure Effects. *The Quarterly Journal of Economics* **133**, 1107–1162 (2018).
5. R. Chetty, N. Hendren, The Impacts of Neighborhoods on Intergenerational Mobility II: County-Level Estimates. *The Quarterly Journal of Economics* **133**, 1163–1228 (2018).
6. R. Chetty, N. Hendren, P. Kline, E. Saez, Where is the land of Opportunity? The Geography of Intergenerational Mobility in the United States. *The Quarterly Journal of Economics* **129**, 1553–1623 (2014).
7. R. Chetty, N. Hendren, L. F. Katz, The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment. *American Economic Review* **106**, 855–902 (2016).
8. F. T. Pfeffer, N. Waitkus, The Wealth Inequality of Nations. *American Sociological Review* **86**, 567–602 (2021).
9. S. Morelli, B. Nolan, J. C. Palomino, P. Van Kerm, The influence of inheritances on wealth inequality in rich countries. *Journal of Public Economics* **247**, 105398 (2025).
10. R. Rodems, F. T. Pfeffer, Avoiding material hardship: The buffer function of wealth. *Journal of European Social Policy* **31**, 517–532 (2021).
11. F. T. Pfeffer, Growing Wealth Gaps in Education. *Demography* **55**, 1033–1068 (2018).
12. L. A. Keister, S. Moller, Wealth inequality in the United States. *Annual Review of Sociology* **26**, 63–81 (2000).
13. J. B. Davies, S. Sandström, A. Shorrocks, E. N. Wolff, The Level and Distribution of Global Household Wealth. *The Economic Journal* **121**, 223–254 (2011).
14. J. Suss, T. Kemeny, D. S. Connor, GEOWEALTH-US: Spatial wealth inequality data for the United States, 1960–2020. *Scientific Data* **11**, 253 (2024).
15. M. Hällsten, M. Thaning, Wealth as One of the “Big Four” SES Dimensions in Intergenerational Transmissions. *Social Forces* **100**, 1533–1560 (2022).
16. F. T. Pfeffer, A. Killewald, Generations of advantage. Multigenerational correlations in family wealth. *Social Forces* **96**, 1411–1442 (2018).

17. B. Braga, S.-M. McKernan, C. Ratcliffe, S. Baum, "Wealth Inequality Is a Barrier to Education and Social Mobility" (Urban Institute, 2017).
18. M. Schecht, The association between childhood exposure to local wealth inequality and intergenerational income mobility in the United States. *Nat Commun* **16**, 9164 (2025).
19. C. Tilly, *Durable Inequality* (University of California Press, 1998).
20. M. N. Hansen, M. Toft, Wealth Accumulation and Opportunity Hoarding: Class-Origin Wealth Gaps over a Quarter of a Century in a Scandinavian Country. *American Sociological Review* **86**, 603–638 (2021).
21. D. Schneider, O. P. Hastings, J. LaBriola, Income Inequality and Class Divides in Parental Investments. *Am Sociol Rev* **83**, 475–507 (2018).
22. D. Conley, Capital for College: Parental Assets and Postsecondary Schooling. *Sociology of Education* **74**, 59–72 (2001).
23. P. Fessler, M. Schürz, "Structuring the Analysis of Wealth Inequality Using the Functions of Wealth: A Class-Based Approach" in *Measuring Distribution and Mobility of Income and Wealth*, (University of Chicago Press, 2021), pp. 221–248.
24. A. Killewald, F. T. Pfeffer, J. N. Schachner, Wealth inequality and accumulation. *Annual Review of Sociology* **43**, 379–404 (2017).
25. R. Chetty, W. Dobbie, B. Goldman, S. R. Porter, C. S. Yang, Changing Opportunity: Sociological Mechanisms Underlying Growing Class Gaps and Shrinking Race Gaps in Economic Mobility. (2024).
26. R. Manduca, B. Highsmith, J. Waggoner, Tax base fragmentation as a dimension of metropolitan inequality. *Socioecon Rev* mwaf055 (2025).
<https://doi.org/10.1093/ser/mwaf055>.
27. S. F. Reardon, A. Owens, D. Kalogrides, H. Jang, T. Tom, "The Segregation Explorer" (2024).
28. A. S. Hornstein, W. H. Greene, Usage of an estimated coefficient as a dependent variable. *Economics Letters* **116**, 316–318 (2012).

SUPPLEMENTARY MATERIAL

**Changing Opportunity: Rising Local Wealth
Inequality and Growing Class Gaps in Income
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Table S1: Descriptive statistics

	mean	sd	min	max
Δ Mobility (p1)	-0.03	0.05	-0.26	0.07
Δ Mobility (p25)	-0.02	0.03	-0.14	0.05
Δ Mobility (p50)	-0.00	0.03	-0.09	0.08
Δ Mobility (p75)	0.02	0.03	-0.05	0.21
Δ Mobility (p100)	0.05	0.04	-0.04	0.32
Δ Wealth inequality (Gini)	0.03	0.03	-0.04	0.09
Δ Income inequality (Gini)	0.01	0.02	-0.10	0.15
Δ Median wealth (log)	0.13	0.19	-0.47	1.03
Δ Single parenthood	0.12	0.03	0.01	0.23
Δ College educated	0.06	0.03	-0.03	0.18
Δ Employment	-0.01	0.04	-0.24	0.12
Δ Mean income (in thousands)	2.13	5.64	-28.31	21.46
Δ Share Black	0.01	0.02	-0.08	0.12
Δ Share foreign-born	-0.64	0.18	-0.91	0.15
Δ Mean age	4.19	1.45	0.18	9.89
Δ N households (log)	0.20	0.19	-0.48	0.95
Observations	721			

Note: Mobility refers to the income ranks that children growing up to parents at the 1st, 25th, 50th, 75th, or 100th percentile achieve at age 27 (1978 vs 1992 cohorts). All covariates reflect changes between 1990 and 2010. Data are from the GEOWEALTH-US project (14) and Opportunity Insights (24).

Table S2: Full model results (p1)

	Model 1	Model 2	Model 3	Model 4
Wealth inequality (Gini index)	-0.22*** (0.00)	-0.25*** (0.00)	-0.29*** (0.00)	-0.27*** (0.00)
Single parent (share)		-0.03 (0.60)	-0.05 (0.45)	-0.05 (0.44)
College educated (share)		0.07 (0.35)	0.06 (0.41)	0.10 (0.22)
Employed (share)		-0.37*** (0.00)	-0.28*** (0.00)	-0.29*** (0.00)
Black (share)		0.09 (0.20)	0.07 (0.36)	0.07 (0.36)
Foreign-born (share)		-0.02** (0.00)	-0.03*** (0.00)	-0.03** (0.00)
Age (mean)		-0.00*** (0.00)	-0.00*** (0.00)	-0.00*** (0.00)
N households (log)		0.02** (0.00)	0.03*** (0.00)	0.03*** (0.00)
Median wealth (log)			0.00 (0.80)	0.00 (0.69)
Household income (mean)			-0.00** (0.00)	-0.00*** (0.00)
Income inequality (Gini index)				-0.14 (0.23)
Constant	-0.01*** (0.00)	-0.02** (0.01)	-0.02+ (0.05)	-0.02+ (0.05)
Observations	655	655	655	655

Two-sided t-test, p-values in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note: First-difference models estimated by OLS. Data are from the GEOWEALTH-US project (14) and Opportunity Insights (24). Author's calculation.

Table S3: Full model results (p25)

	Model 1	Model 2	Model 3	Model 4
Wealth inequality (Gini index)	-0.19*** (0.00)	-0.18*** (0.00)	-0.21*** (0.00)	-0.18*** (0.00)
Single parent (share)		-0.01 (0.90)	-0.01 (0.77)	-0.01 (0.77)
College educated (share)		-0.05 (0.37)	-0.05 (0.31)	-0.00 (0.96)
Employed (share)	-0.19*** (0.00)	-0.14*** (0.00)	-0.15*** (0.00)	
Black (share)		-0.06 (0.20)	-0.07+ (0.10)	-0.08+ (0.10)
Foreign-born (share)	-0.02** (0.00)	-0.02*** (0.00)	-0.02** (0.00)	
Age (mean)	-0.00** (0.00)	-0.00*** (0.00)	-0.00*** (0.00)	
N households (log)	0.01* (0.03)	0.02** (0.00)	0.02** (0.00)	
Median wealth (log)		-0.00 (0.77)	-0.00 (0.94)	
Household income (mean)		-0.00** (0.01)	-0.00** (0.00)	
Income inequality (Gini index)			-0.17* (0.01)	
Constant	-0.01*** (0.00)	-0.01 (0.19)	-0.01 (0.37)	-0.01 (0.34)
Observations	654	654	654	654

Two-sided t-test, p-values in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note: First-difference models estimated by OLS. Data are from the GEOWEALTH-US project (14) and Opportunity Insights (24). Author's calculation.

Table S4: Full model results (p50)

	Model 1	Model 2	Model 3	Model 4
Wealth inequality (Gini index)	-0.13*** (0.00)	-0.09** (0.01)	-0.10** (0.00)	-0.10** (0.01)
Single parent (share)		-0.01 (0.82)	-0.01 (0.74)	-0.01 (0.74)
College educated (share)		-0.10* (0.01)	-0.11* (0.01)	-0.09+ (0.05)
Employed (share)		-0.06** (0.01)	-0.03 (0.31)	-0.03 (0.26)
Black (share)		-0.15*** (0.00)	-0.16*** (0.00)	-0.16*** (0.00)
Foreign-born (share)		-0.03*** (0.00)	-0.03*** (0.00)	-0.03*** (0.00)
Age (mean)		-0.00** (0.00)	-0.00*** (0.00)	-0.00*** (0.00)
N households (log)		0.00 (0.39)	0.01 (0.17)	0.01 (0.20)
Median wealth (log)			0.00 (0.78)	0.00 (0.71)
Household income (mean)			-0.00* (0.02)	-0.00* (0.01)
Income inequality (Gini index)				-0.06 (0.30)
Constant	0.00 (0.12)	-0.01 (0.33)	-0.00 (0.54)	-0.00 (0.53)
Observations	653	653	653	653

Two-sided t-test, p-values in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note: First-difference models estimated by OLS. Data are from the GEOWEALTH-US project (14) and Opportunity Insights (24). Author's calculation.

Table S5: Full model results (p75)

	Model 1	Model 2	Model 3	Model 4
Wealth inequality (Gini index)	0.01 (0.79)	0.04 (0.20)	0.03 (0.40)	0.02 (0.51)
Single parent (share)		0.01 (0.75)	0.01 (0.85)	0.01 (0.85)
College educated (share)		-0.01 (0.88)	-0.01 (0.80)	-0.02 (0.64)
Employed (share)		0.08** (0.00)	0.11*** (0.00)	0.11*** (0.00)
Black (share)		-0.16*** (0.00)	-0.16*** (0.00)	-0.17*** (0.00)
Foreign-born (share)		-0.05*** (0.00)	-0.05*** (0.00)	-0.05*** (0.00)
Age (mean)		-0.00*** (0.00)	-0.00*** (0.00)	-0.00*** (0.00)
N households (log)		-0.01** (0.00)	-0.01* (0.01)	-0.01* (0.02)
Median wealth (log)			0.00 (0.78)	0.00 (0.82)
Household income (mean)			-0.00+ (0.07)	-0.00 (0.12)
Income inequality (Gini index)				0.04 (0.51)
Constant	0.02*** (0.00)	-0.00 (0.49)	-0.00 (0.70)	-0.00 (0.70)
Observations	654	654	654	654

Two-sided t-test, p-values in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note: First-difference models estimated by OLS. Data are from the GEOWEALTH-US project (14) and Opportunity Insights (24). Author's calculation.

Table S6: Full model results (p100)

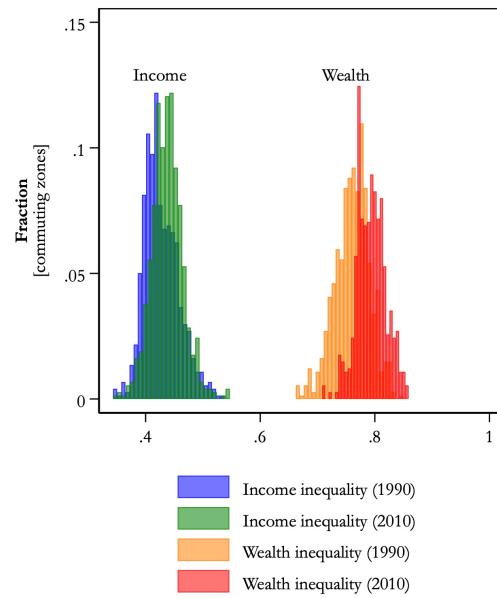
	Model 1	Model 2	Model 3	Model 4
Wealth inequality (Gini index)	0.01 (0.91)	0.07+ (0.10)	0.06 (0.20)	0.04 (0.37)
Single parent (share)		0.03 (0.59)	0.02 (0.67)	0.02 (0.67)
College educated (share)		-0.06 (0.30)	-0.06 (0.27)	-0.09 (0.13)
Employed (share)		0.15*** (0.00)	0.18*** (0.00)	0.19*** (0.00)
Black (share)		-0.18** (0.00)	-0.19** (0.00)	-0.19** (0.00)
Foreign-born (share)		-0.06*** (0.00)	-0.06*** (0.00)	-0.06*** (0.00)
Age (mean)		-0.00** (0.00)	-0.00** (0.00)	-0.00*** (0.00)
N households (log)		-0.02*** (0.00)	-0.02*** (0.00)	-0.02*** (0.00)
Median wealth (log)			0.00 (0.75)	0.00 (0.83)
Household income (mean)			-0.00 (0.16)	-0.00 (0.28)
Income inequality (Gini index)				0.10 (0.20)
Constant	0.05*** (0.00)	0.03** (0.00)	0.03*** (0.00)	0.03*** (0.00)
Observations	654	654	654	654

Two-sided t-test, p-values in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

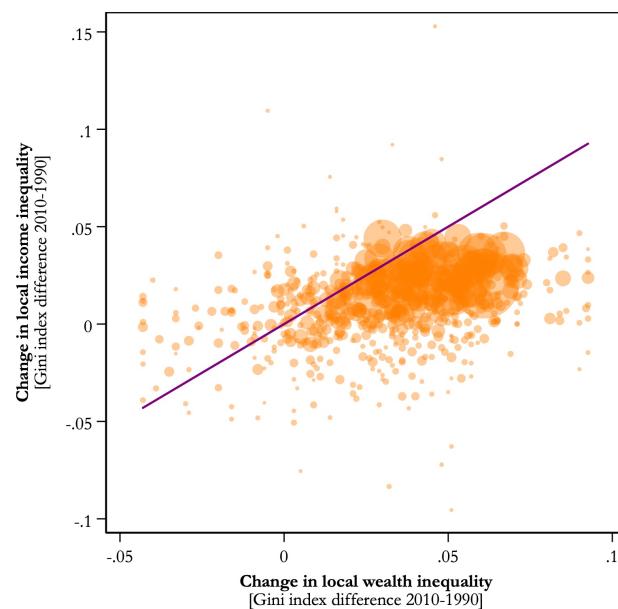
Note: First-difference models estimated by OLS. Data are from the GEOWEALTH-US project (14) and Opportunity Insights (24). Author's calculation.

Figure S1: Distributions of local inequality in income vs wealth measured with the Gini index (1990 and 2010)



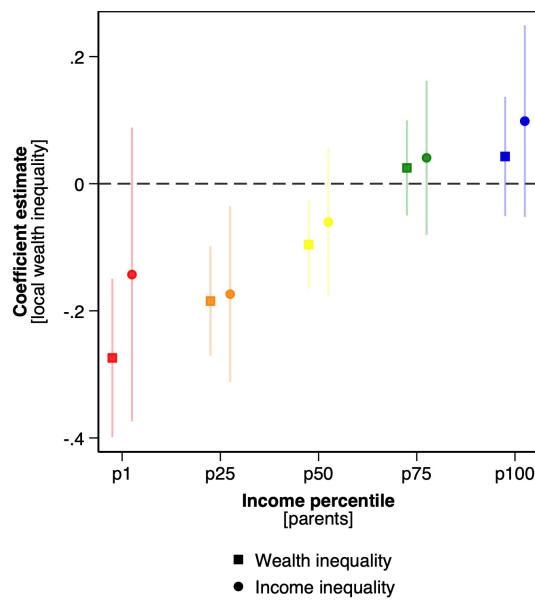
Note: Inequality is measured as the commuting zone level Gini coefficient. Data are from the GEOWEALTH-US project (14) and Opportunity Insights (24).

Figure S2: Change in local inequality in income vs wealth (difference between 2010 and 1990)



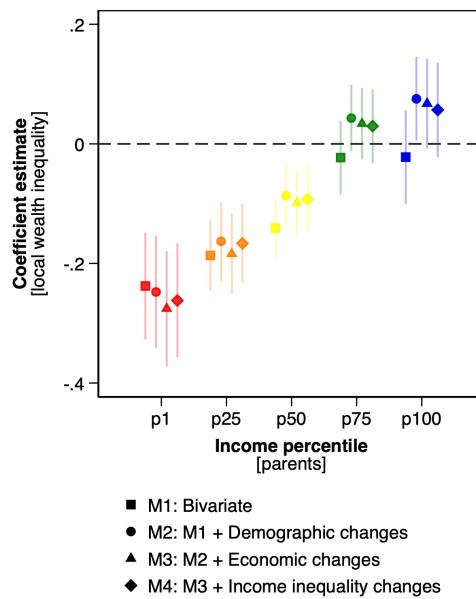
Note: Inequality is measured as the commuting zone level Gini coefficient. The solid, purple line indicates equal changes in income and wealth inequality. Data are from the GEOWEALTH-US project (14) and Opportunity Insights (24).

Figure S3: Rising local wealth inequality is associated with decreasing upward income mobility (independently from local income inequality)



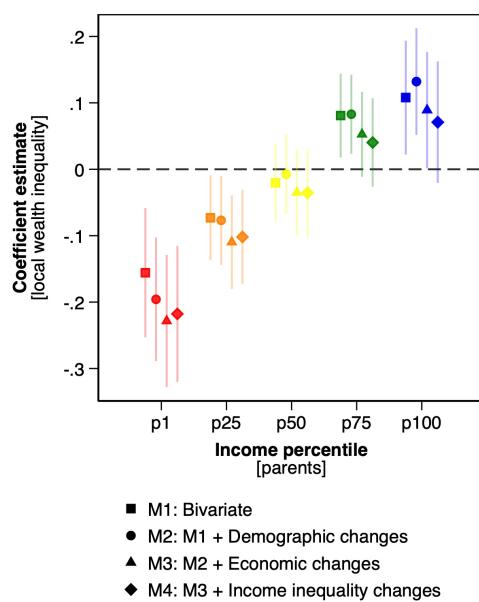
Note: Whiskers indicate 95% confidence intervals. Each marker gives the estimated coefficient of changes in local economic inequality between 1990 and 2010 on changes in the income ranks that children growing up to parents at the 1st, 25th, 50th, 75th, or 100th percentile achieve at age 27 (1978 vs 1992 cohorts). Models include the full set of commuting zone characteristics: average household income and median wealth (log), population share of: single parents, college graduates, foreign born residents, and employed adults, as well as the share of Black residents, average age (log), and total number of households (log). All covariates are measured as their change between 1990 and 2010. Commuting zones are weighted by the reliability estimates provided by Opportunity Insights (24). Wealth and income inequality are measured as the commuting zone level Gini coefficient. Data are from the GEOWEALTH-US project (14) and Opportunity Insights (24). Author's calculation.

Figure S4: Rising local wealth inequality is associated with decreasing upward income mobility (top 10 percent wealth share)



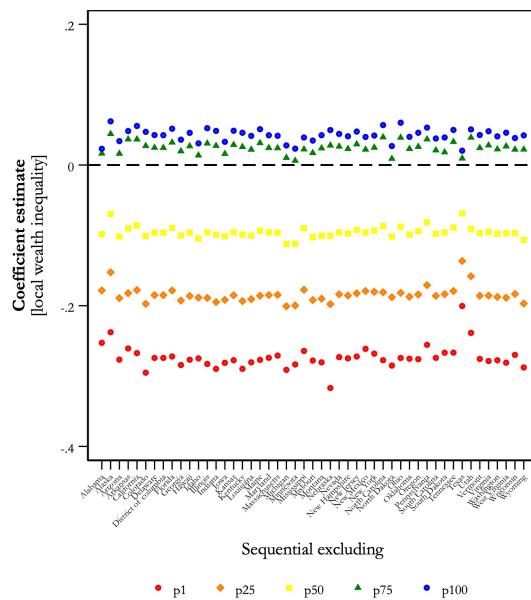
Note: Whiskers indicate 95% confidence intervals. Each marker gives the estimated coefficient of changes in local wealth inequality between 1990 and 2010 on changes in the income ranks that children growing up to parents at the 1st, 25th, 50th, 75th, or 100th percentile achieve at age 27 (1978 vs 1992 cohorts). Model 1 gives the bivariate association. Model 2 includes a set of demographic characteristics: population share of: single parents, college graduates, foreign born residents, and employed adults, as well as the share of Black residents, average age (log), and total number of households (log). Model 3 adds to that a set of economic covariates: average household income and median wealth (log). Model 4 finally adds income inequality (Gini index). All covariates are measured as their change between 1990 and 2010. Wealth inequality is measured as the commuting zone level wealth share of the top ten percent. Data are from the GEOWEALTH-US project (14) and Opportunity Insights (24). Author's calculation.

Figure S5: Rising local wealth inequality is associated with decreasing upward income mobility (individual income)



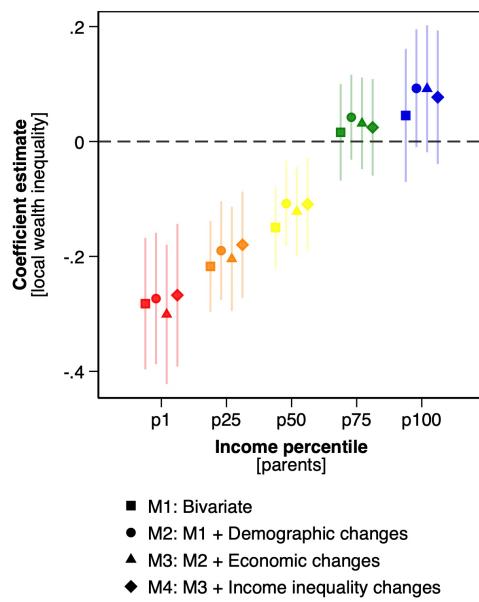
Note: Whiskers indicate 95% confidence intervals. Each marker gives the estimated coefficient of changes in local wealth inequality between 1990 and 2010 on changes in the individual income ranks that children growing up to parents at the 1st, 25th, 50th, 75th, or 100th percentile achieve at age 27 (1978 vs 1992 cohorts). Model 1 gives the bivariate association. Model 2 includes a set of demographic characteristics: population share of: single parents, college graduates, foreign born residents, and employed adults, as well as the share of Black residents, average age (log), and total number of households (log). Model 3 adds to that a set of economic covariates: average household income and median wealth (log). Model 4 finally adds income inequality (Gini index). All covariates are measured as their change between 1990 and 2010. Wealth inequality is measured as the commuting zone level Gini coefficient. Data are from the GEOWEALTH-US project (14) and Opportunity Insights (24). Author's calculation.

Figure S6: Rising local wealth inequality is associated with decreasing upward income mobility (dropping one state at a time)



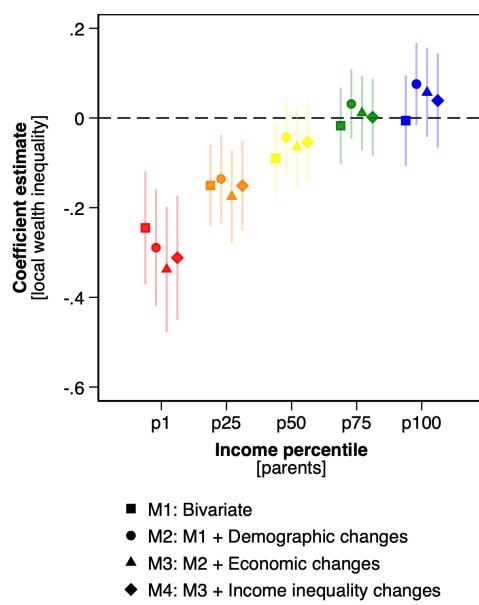
Note: Whiskers indicate 95% confidence intervals. Each marker gives the estimated coefficient of changes in local wealth inequality between 1990 and 2010 on changes in the income ranks that children growing up to parents at the 1st, 25th, 50th, 75th, or 100th percentile achieve at age 27 (1978 vs 1992 cohorts). All models include the full set of covariates, measured as their change between 1990 and 2010. Commuting zones are weighted by the reliability estimates provided by Opportunity Insights (24). Wealth inequality is measured as the commuting zone level Gini coefficient. Data are from the GEOWEALTH-US project (14) and Opportunity Insights (24). Author's calculation.

Figure S7: Rising local wealth inequality is associated with decreasing upward income mobility (females)



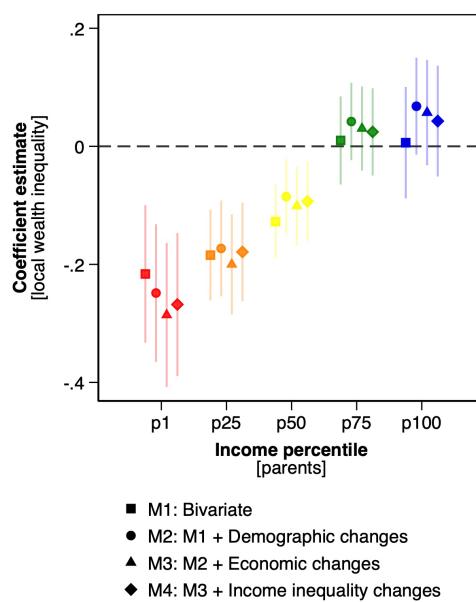
Note: Whiskers indicate 95% confidence intervals. Each marker gives the estimated coefficient of changes in local wealth inequality between 1990 and 2010 on changes in the income ranks that children growing up to parents at the 1st, 25th, 50th, 75th, or 100th percentile achieve at age 27 (1978 vs 1992 cohorts). Model 1 gives the bivariate association. Model 2 includes a set of demographic characteristics: population share of: single parents, college graduates, foreign born residents, and employed adults, as well as the share of Black residents, average age (log), and total number of households (log). Model 3 adds to that a set of economic covariates: average household income and median wealth (log). Model 4 finally adds income inequality (Gini index). All covariates are measured as their change between 1990 and 2010. Wealth inequality is measured as the commuting zone level Gini coefficient. Data are from the GEOWEALTH-US project (14) and Opportunity Insights (24). Author's calculation.

Figure S8: Rising local wealth inequality is associated with decreasing upward income mobility (males)



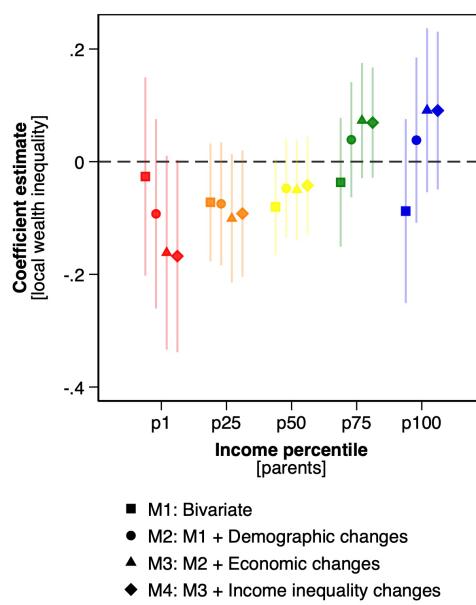
Note: Whiskers indicate 95% confidence intervals. Each marker gives the estimated coefficient of changes in local wealth inequality between 1990 and 2010 on changes in the income ranks that children growing up to parents at the 1st, 25th, 50th, 75th, or 100th percentile achieve at age 27 (1978 vs 1992 cohorts). Model 1 gives the bivariate association. Model 2 includes a set of demographic characteristics: population share of: single parents, college graduates, foreign born residents, and employed adults, as well as the share of Black residents, average age (log), and total number of households (log). Model 3 adds to that a set of economic covariates: average household income and median wealth (log). Model 4 finally adds income inequality (Gini index). All covariates are measured as their change between 1990 and 2010. Wealth inequality is measured as the commuting zone level Gini coefficient. Data are from the GEOWEALTH-US project (14) and Opportunity Insights (24). Author's calculation.

Figure S9: Rising local wealth inequality is associated with decreasing upward income mobility (no top and bottom coding)



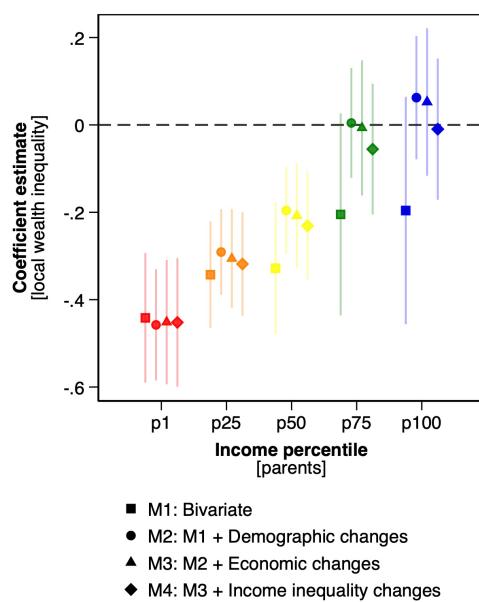
Note: Whiskers indicate 95% confidence intervals. Each marker gives the estimated coefficient of changes in local wealth inequality between 1990 and 2010 on changes in the income ranks that children growing up to parents at the 1st, 25th, 50th, 75th, or 100th percentile achieve at age 27 (1978 vs 1992 cohorts). Model 1 gives the bivariate association. Model 2 includes a set of demographic characteristics: population share of: single parents, college graduates, foreign born residents, and employed adults, as well as the share of Black residents, average age (log), and total number of households (log). Model 3 adds to that a set of economic covariates: average household income and median wealth (log). Model 4 finally adds income inequality (Gini index). All covariates are measured as their change between 1990 and 2010. Wealth inequality is measured as the commuting zone level Gini coefficient. Data are from the GEOWEALTH-US project (14) and Opportunity Insights (24). Author's calculation.

Figure S10: Rising local wealth inequality is associated with decreasing upward income mobility (no reliability weights)



Note: Whiskers indicate 95% confidence intervals. Each marker gives the estimated coefficient of changes in local wealth inequality between 1990 and 2010 on changes in the income ranks that children growing up to parents at the 1st, 25th, 50th, 75th, or 100th percentile achieve at age 27 (1978 vs 1992 cohorts). Model 1 gives the bivariate association. Model 2 includes a set of demographic characteristics: population share of: single parents, college graduates, foreign born residents, and employed adults, as well as the share of Black residents, average age (log), and total number of households (log). Model 3 adds to that a set of economic covariates: average household income and median wealth (log). Model 4 finally adds income inequality (Gini index). All covariates are measured as their change between 1990 and 2010. Wealth inequality is measured as the commuting zone level Gini coefficient. Data are from the GEOWEALTH-US project (14) and Opportunity Insights (24). Author's calculation.

Figure S11: Rising local wealth inequality is associated with decreasing upward income mobility (population weights)



Note: Whiskers indicate 95% confidence intervals. Each marker gives the estimated coefficient of changes in local wealth inequality between 1990 and 2010 on changes in the income ranks that children growing up to parents at the 1st, 25th, 50th, 75th, or 100th percentile achieve at age 27 (1978 vs 1992 cohorts). Model 1 gives the bivariate association. Model 2 includes a set of demographic characteristics: population share of: single parents, college graduates, foreign born residents, and employed adults, as well as the share of Black residents, average age (log), and total number of households (log). Model 3 adds to that a set of economic covariates: average household income and median wealth (log). Model 4 finally adds income inequality (Gini index). All covariates are measured as their change between 1990 and 2010. Wealth inequality is measured as the commuting zone level Gini coefficient. Data are from the GEOWEALTH-US project (14) and Opportunity Insights (24). Author's calculation.