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THE LONG ROAD TO EQUALITY: RACIAL CAPITAL AND GENERATIONAL CONVERGENCE

Patrick Bayer
Kerwin Kofi Charles
JoonYup Park

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ABSTRACT

The slow convergence of racial disparities in economic outcomes since 1870 suggests a high degree of intergenerational persistence in socioeconomic status at the group level. In contrast, microdata-based estimates of family-level intergenerational mobility suggest much lower persistence. These models also consistently find large, unexplained racial gaps in mobility—even after controlling extensively for family and neighborhood characteristics—implying continued slow convergence in the future. To reconcile these patterns, we introduce the concept of racial capital: the collective material and nonmaterial assets of the racial groups to which a child is exposed while growing up. We show that racial capital (i) explains a substantial share of racial gaps in adult outcomes, (ii) significantly narrows and often reverses estimated racial mobility gaps, and (iii) has the strongest effects where racial dissociation from the White majority group is greatest, as measured by residential and marriage segregation. Unlike standard models, our framework predicts a long-run steady state of near racial equality, but also highlights how the influence of racial capital substantially slows the path to that equilibrium.

Patrick Bayer
Duke University
Department of Economics
and NBER
patrick.bayer@duke.edu

Kerwin Kofi Charles
Yale University
School of Management
and NBER
kerwin.charles@yale.edu

JoonYup Park
University of Hawaii at Mnoa
joonyup@hawaii.edu

1 Introduction

Although substantial disparities in socioeconomic outcomes persist across racial and ethnic groups in the United States—especially between Black and White Americans—these gaps were far larger in earlier generations and have narrowed over time. A central question is whether these racial disparities will continue to close in future generations, and if so, at what pace. Two separate strands of literature offer sobering perspectives on this issue, with differing implications for the path forward.

Studying aggregate per capita income, Margo (2016) shows that the Black–White income ratio grew steadily but slowly over the past century and a half, from approximately 0.24 in 1870 to 0.65 in 2015. Interpreting this through a structural intergenerational model, he argues that this "glacial" pace of convergence implies high persistence in socioeconomic status at the group level—specifically, that roughly 80 percent of the disadvantage experienced by one generation is transmitted to the next. The degree of generational persistence implied by the aggregate estimates and framework of Margo (2016) suggest that current Black-White disparities in the United States are likely to endure far into the future, as they continue to die out slowly across generations much as they have done since the end of the Civil War.

There is an extensive intergenerational mobility (IGM) literature that directly estimates parent–child associations—most often in income and earnings—using microdata. Although not causal parameters, these estimated associations have long interested economists because they reflect the combined influence of family investments, behavioral choices, and various constraints, and offer insights into the structure of economic mobility and inequality (Becker and Tomes, 1979). Moreover, carefully measured associations indicate policies and mechanisms that merit causal investigation (Solon, 1992). The IGM literature has consistently estimated parent–child persistence of between 0.3 and 0.6, depending on the context and the income measure used.[1] These estimates contrast sharply with the slow racial convergence

[1]Studies using log income, for example, often report persistence estimates of around 0.5-0.6 (Mazumder, 2005, 2016; Solon, 2018), while those using income rank typically yield estimates of approximately 0.3 (Chetty et al., 2020).

observed in historical data. Evidence of racial differences in persistence—or of residual racial gaps in outcomes once family and neighborhood factors are controlled for—might help reconcile this apparent contradiction. However, most early IGM studies relied on samples too small for reliable estimation of parent-child associations separately by race.

In a recent study, Chetty et al. (2020) use administrative data on millions of matched parent-child pairs to estimate race-specific IGM and find similar persistence in income ranks (approximately 0.3) for Black and White families, consistent with prior IGM estimates. While estimated parent-child persistence does not differ by race, Chetty et al. (2020) document a substantial gap in household income at age 35 — about 14 percentile points — between Black and White children whose parents had identical incomes.[2] Strikingly, about 70 percent of this gap remains even after controlling for a wide array of other parent and neighborhood measures including parental education, wealth, marital status, family structure, and neighborhood fixed effects. Importantly, when interpreted as a fixed racial difference within an IGM framework, these unexplained racial mobility gaps suggest that the disparities observed today may already reflect a long-run steady state - i.e., that continued convergence towards a state of racial equality may be quite limited.[3]

Understanding what factors - beyond family and neighborhood - account for the unexplained racial difference in mobility equations, assessing whether incorporating these factors can reconcile the slow pattern of historical convergence in life outcomes, and determining how these factors affect the nature and pace of future convergence are the primary aims of our paper. We analyze the importance of the resources associated with adults in a person's childhood metropolitan area with whom they were socially connected. Because adults of dif-

[2]Several important earlier studies also documented substantial racial gaps in intergenerational mobility including Hertz (2005), Bhattacharya and Mazumder (2011) and Mazumder (2014). These patterns are also not limited to recent cohorts; Collins and Wanamaker (2022) show that unexplained racial mobility gaps have persisted since at least 1890. Chetty et al. (2020) also document large unexplained gaps in education, employment, and incarceration, especially among boys, while Chetty et al. (2024) analyze the evolution of racial mobility gaps for recent birth cohorts.

[3]Chetty et al. (2020) calculates the implied steady state using their estimates and a traditional IGM framework. Solon (2018) works through a similar numerical example of group-level generational persistence in the presence of group fixed effects.

ferent races generate different collective resources, and because social interactions are racially segregated, children with similar family and neighborhood traits but of different races are exposed to systematically different broader social resources while growing up. We assess whether these disparities help account for the unexplained racial mobility gaps in adult outcomes, and by extension, inform the nature and pace of cross-generational socioeconomic convergence.

We define the *racial dissociation* of a metropolitan area (a market) as the extent to which social relationships within that market are organized along racial lines, ranging from full racial integration to complete racial segregation. We use the term *racial assets* to refer to the collective resources associated with adults of a given racial group within a market. A child's racial capital is the component of market-wide assets that she receives or is exposed to because she belongs to a racial group rather than another. We include racial capital in the intergenerational mobility equation by controlling for the racial assets of the prior generation of adults of their own race in their labor market when they were children. We expect the effect of own-race racial assets to be stronger in markets with higher overall racial dissociation and for racial groups that are more dissociated within a given market.

We estimate a flexible version of the extended mobility equation that augments traditional parental and neighborhood controls with racial capital measures for Asian, Black, Hispanic, and White children born around 1980, using data from Opportunity Insights (OI) and the National Longitudinal Survey of Youth 1997 (NLSY97). These data allow us to relate individuals' adult outcomes—such as income, employment, educational attainment, and incarceration at around age 35—to the racial capital they were exposed to at approximately age 10. We construct several measures of same-race racial assets among adults in the local labor market who are of similar age to the child's parents, including average educational attainment, earnings, and housing wealth.

We begin our empirical analysis by examining Black–White mobility differences, consistent with the literature's historical focus. We find that racial capital accounts for a sub-

stantial share of the previously unexplained Black–White gaps—comparable in magnitude to the estimated effects of parental resources. Adding racial capital to the analysis not only sharply reduces the portion of the household income gap that remains unexplained, but also reverses the sign of the disparity in individual income, educational attainment, and employment. Put differently, our estimates imply that Black children attain equal or higher levels of education, indiviudal income, and employment than White children who grow up with similar collective resources—once parental, neighborhood, and metro-level racial capital are fully accounted for.[4]

To test the prediction from our framework that racial capital matters more for places or groups with higher racial dissociation, we extend the analysis to compare outcomes across the three major minority groups: Asian, Black, and Hispanic. In pairwise comparisons, the estimated importance of racial capital varies across these groups in the same order as their racial dissociation from the White majority, as measured by indices of residential and marriage segregation. We also confirm the second implication of the framework: for each minority group, racial capital has a larger effect in metro areas with greater dissociation from the White majority, captured again by measures of residential and marriage segregation. These findings align closely with the core predictions of the theoretical framework.

We conclude by examining how incorporating racial capital into the mobility equation alters our understanding of the long-run evolution of racial group differences because of its relevance for three aspects of that evolution: (i) how average racial (dis)advantage is transferred—or persists—across generations; (ii) the long-run, or steady-state, gap in outcomes toward which society is likely to converge; and (iii) how close current outcomes are to that steady state. In standard models that omit racial capital, Black–White mobility gaps are typically interpreted as fixed group differences, implying that the United States is already near a steady state of persistent and substantial racial inequality. In contrast, our

[4]The impact of adding racial capital is broadly similar for girls and boys and across the parental income distribution. The results for incarceration are more mixed and appear sensitive to the definition of the outcome.

results attribute most—or for many outcomes, all—of the observed mobility gap to racial capital, which—unlike fixed group differences—evolves across generations. As a result, our framework implies a very different trajectory: a long-run steady state characterized by near-equality between Black and White Americans. Crucially, the large racial gaps observed today lie far from the steady state implied by our empirical model, and should therefore not be interpreted as evidence that long-run convergence has ceased.

The incorporation of racial capital also helps explain the glacial pace of Black–White socioeconomic convergence since the end of the Civil War. In particular, racial capital systematically increases the intergenerational persistence of group differences as a linear function of its weight in the extended mobility equation. Our empirical estimates imply a rate of convergence that is broadly consistent with the historical pace over the past 150 years documented by economic historians like Margo (2016).[5] Our framework also helps explain why the pace of convergence differs across racial minority groups. It predicts that higher racial dissociation from the White majority—which various measures show varies systematically across racial groups—should lead to slower convergence in economic outcomes, precisely the pattern observed in the data for different racial minority groups.

Contrary to the view that future convergence toward racial equality may be unaffected by policies, our analysis suggests the possible effectiveness of two distinct but complementary policy levers. First, the role of racial dissociation underscores the importance of interventions that foster cross-racial social interaction and mitigate segregation in its various forms. Second, our results have important implications for policies aimed at equalizing racial outcomes. Under the notion that society is already at a permanent state of racial inequality, any gains in income, wealth, or other resources achieved by racial minorities in the current generation would soon erode, as group differences revert to the steady-state level. In contrast, our framework suggests that policies that lower current differences in racial assets, whether through transfers or anti-discrimination efforts, can alter the trajectory of future

[5]Our estimates imply that the persistence of racial inequality across generations remains substantial, if somewhat lower than the rate implied by those aggregate historical trends.

socioeconomic convergence.

Our analysis contributes to a growing literature that relates an individual's outcomes to those of their social connections.[6] In economics, this idea traces back to the seminal work of Loury (1976), who introduced the notion of social capital in his theoretical investigation of racial inequality. It has since been widely developed in sociology and other social sciences (Coleman, 1988). The construct of racial capital that we develop in this paper is directly inspired by, and extends, the foundational work of Borjas (1992, 1995) on ethnic capital, which was defined in terms of national-level differences in the socioeconomic status of ethnic groups. As we discuss in Section 2, our formulation differs in both scope and empirical implementation: it focuses on local labor markets rather than national aggregates, and conceptualizes group-level resources as conditional on social structure—specifically, racial dissociation.

Our paper is most closely related to the literature in economics examining racial differences in intergenerational mobility. This includes the studies already discussed that measure overall racial mobility gaps, and several recent contributions that explore how geography—and in particular, historical patterns of segregation—shape those differences (Andrews et al., 2017; Chyn et al., 2022; Davis and Mazumder, 2018; Rothbaum and Massey, 2022).[7] Our finding that the effects of racial capital are larger in metro areas with greater racial segregation aligns closely with the conclusions of this geography-focused literature. In other closely related work, Jácome et al. (2025) and Ward (2023) show that including Black men and women in analyses of intergenerational mobility can substantially shift estimates of

[6] Recent work has shown that resources from individuals beyond parents—such as grandparents (Ferrie et al., 2021; Hjalmarsson and Lindquist, 2012) and peers in online networks (Chetty et al., 2022)—also shape mobility outcomes. Chetty et al. (2024) incorporates local social capital into the mobility equation by proxying it with adult employment rates, yielding results that are consistent with and complementary to ours.

[7] Another important set of related papers examines the long-run effects of key historical episodes and policy changes on racial inequality and mobility, including the end of slavery (Ager et al., 2021), the Great Migration (Boustan, 2009; Derenoncourt, 2022), the re-segregation of the civil service under Wilson (Aneja and Xu, 2022), the impact of trade shocks (Batistich and Bond, 2023), the construction of the interstate highway system (Weiwu, 2024), and the expansion of the minimum wage (Derenoncourt and Montialoux, 2021).

overall mobility, due to group-level differences in inequality.[8]

Finally, our framework also speaks to a broader debate in the mobility literature concerning the level at which persistence should be measured. Estimates based on parent–child outcomes typically suggest modest intergenerational persistence — on the order of 0.3 to 0.4 — whereas other approaches, such as those tracking outcomes across surnames over multiple generations, often report much higher levels of persistence in some settings (Clark, 2018; Clark and Cummins, 2015), though not in all (Aaronson and Mazumder, 2008; Card et al., 2000; Chetty et al., 2014). While not formally equivalent, our framework focuses attention on the role of broader social groupings and affiliations—such as racial groups—whose structure can produce a substantial wedge between persistence measured at the family level and that observed at the group level. In this way, our approach may help reconcile some of the variation in persistence estimates that emerge at different levels of aggregation.[9]

The rest of the paper is organized as follows. Section 2 presents our analytical framework. Section 3 describes the data and estimating equations. Section 4 presents our results for the Black–White analysis. In Section 5, we report results for the Asian–White and Hispanic–White comparisons and examine heterogeneity across metro areas by levels of residential and marriage segregation. Section 6 explores the implications of our framework and estimates for the long-run evolution of group differences. Section 7 concludes.

2 Analytical Framework

2.1 Conceptual Overview

This section introduces the framework around which we structure our analysis. The standard empirical model in the massive literature on intergenerational correlations and the conver-

[8]Several other studies explicitly measure intergenerational mobility among descendants of enslaved Black Americans (Althoff and Reichardt, 2024; Sacerdote, 2005). Most recently, Althoff and Reichardt (2024) shows that Black families whose ancestors were enslaved until the Civil War continue to face significantly lower education, income, and wealth levels than those whose ancestors were free prior to emancipation.

[9]See Solon (2018) for an excellent discussion of related issues.

gence of racial gaps in socioeconomic outcomes emphasizes the role of parental resources in determining individuals' adult outcomes.[10] Our framework extends this standard approach. We assume that besides their parents' resources, a person's adult outcomes also depend on the collective material and non-material assets of a broader set of people and groups to which they are socially connected. Because cataloging and measuring all meaningful individual relationships over a lifetime would be impossible, we focus on the impact of the collective assets of groups to which an individual is exposed. Our primary focus is on groups defined by race (ethnicity) and location and we use the term *racial capital* to refer to the various collective assets of the racial groups to which an individual is exposed.[11]

The collective assets of a racial group derive from the historical experiences, results, attainments, and relationships of the group as a whole. Some assets, such as the average levels of income and wealth or the homeownership rate, might transmit to the next generation primarily through mechanisms associated with financial resources. Others, such as the average educational attainment, the number and vibrancy of the group's organizations, its members' contacts in politics, or their knowledge of key aspects of business and the legal system might give rise to various forms of social capital. Another important collective asset is the set of beliefs (including possibly incorrect ones) that others hold about the abilities or proclivities of individual members of the group because of racial prejudice or statistical discrimination. In this way, racial capital, as we conceptualize it here, includes the collective assets one accesses by both *associating* and *being associated* with members of various racial groups.

To see how racial capital can affect a person's outcomes, consider college attendance. Irrespective of her parental background, someone is more likely to have pursued higher education if, as a youngster, she was closely familiar with examples of successful and happy adults who were themselves college graduates. Access to information from yet other adults about the

[10] See, for example, the seminal work of Becker and Tomes (1979) and the recent influential work of Chetty et al. (2020).

[11] The theoretical framework developed here could be easily extended to study the impact of group capital defined along any number of other interesting dimensions.

social dynamics at potential schools or guidance about scholarship applications would have also increased her likelihood of going to college, as would an excellent recommendation letter, or even financial support, from a church or similar institution in her community.

In principle, these helpful resources – each a type of collective asset – could have come from any or all racial groups in a child's community. However, because social interactions tend to be segregated by race, she likely interacts with some racial groups much less than others and almost surely interacts with her own racial group more frequently and meaningfully than with any other. Since racial groups differ systematically with respect to their collective assets, two youngsters of different races in the same market and with identical parental backgrounds will benefit from different amounts of racial capital and may have very different outcomes as a result. As we show below, our framework captures this notion of disproportionate exposure to one's own racial group in a precise way that yields a number of theoretical implications and empirical predictions.

2.2 Extended Intergenerational Mobility Equation

For expositional clarity, we present our theoretical framework in a context with two racial groups. We analyze outcomes for members of a racial minority group, r, *relative* to those of the White racial group, w, which we treat as the reference group throughout our analysis. Black-White differences receive the bulk of our attention, but we also present results for Asian-White and Hispanic-White differences.

Let $y_{i,m,t}$ be the annual earnings (or some other socioeconomic outcome) of individual i, from generation t, living in a metro area, or "market" m. Let I_r denote membership in racial group r. We assume that the earnings of individual i depend on earnings and other resources of their parents, $y_{i,m,t-1}$, *and* on the collective assets of other groups from her parents' generation that she is exposed to by virtue of her race – her racial capital. We denote the racial capital of members of groups w and r by $K^w_{m,t-1}$ and $K^r_{m,t-1}$, respectively.

Earnings may be expressed as:

$$y_{i,m,t} = \alpha_r I_r + \beta_r y_{i,m,t-1} + \theta_{m,t} + \gamma \left[I_r K^r_{m,t-1} + (1 - I_r) K^w_{m,t-1} \right] + \epsilon_{i,m,t} \tag{1}$$

where $\theta_{m,t}$ is a market fixed effect capturing factors that equally affect outcomes of all persons in generation t in market m, and $\epsilon_{i,m,t}$ is a random, mean-zero idiosyncratic component of earnings for each individual.

There are three parameters of interest in (1). The term α_r is a permanent "race effect," measuring the degree to which members of racial group r's earnings in every generation are shifted relative to White earnings. The parameter β_r , which much of the literature has the measure of *persistence*, represents how much parents' economic circumstances, $y_{i,m,t-1}$, are passed on to their children. A large literature on intergenerational associations finds that this parameter differs very little by race and is relatively small at roughly 0.3. Drawing on this literature, we assume for simplicity throughout the remainder of our analysis that $\beta_r = \beta$ – i.e., does not vary by race. The third parameter, γ, measures how an additional unit of racial capital affects adult earnings.

Operationalizng Racial Capital. As discussed above, an individual's racial capital consists of the various collective assets (both material and non-material) of different racial groups in the previous generation that they are exposed to (or can access) by virtue of their own race and location. To give the concept of racial capital empirical content, we now define it precisely, in terms of (i) an individual's exposure to various racial groups and (ii) the assets of each group.

To this end, we define *racial dissociation* to be the degree to which social interactions between members of racial groups r and w are determined along racial lines. We let $\sigma_t \in [0, 1]$ measure the degree of racial dissociation, with a value of 0 representing perfectly frictionless interactions across racial groups and a value of 1 representing total social isolation between the groups. Racial dissociation might result from many factors, including physical consider-

ations such as spatial separation, differences in language, cultural practices, or traditions, or from the intensity of exclusion by the majority group and the strength of homophily within a racial or ethnic group.[12]

We also denote the various collective assets (home ownership rates, average education level, information, mean income, professional contacts, etc.) of adults from the parental generation $t-1$ in racial groups r and w living in m by $\mu^r_{m,t-1}$ and $\mu^w_{m,t-1}$, respectively. We incorporate several observable collective assets in our empirical analysis below, referring to these as *racial assets*.

Given these definitions, it is natural to form expressions for racial capital as a weighted average of exposure to each racial group as:

$$\begin{aligned} K^w_{m,t-1} &= (1-\sigma_{t-1})\,\bar{K}_m + \sigma_{t-1}\,\mu^w_{m,t-1} \\ K^r_{m,t-1} &= (1-\sigma_{t-1})\,\bar{K}_m + \sigma_{t-1}\,\mu^r_{m,t-1} \end{aligned} \tag{2}$$

where $\bar{K}_m = \pi^r_m \mu^r_{m,t-1} + (1-\pi^r_m)\mu^w_{m,t-1}$ is the average capital for these two racial groups in the market as a whole, with π^r_m representing racial group r's population share in market m. The resulting expressions for racial capital in (2) are intuitive. When racial dissociation is minimal and social networks/relationships are well integrated, σ is near zero and racial capital is close to $\bar{K}$ for members of both racial groups. In contrast, when racial dissociation is great, the assets of one's own racial group, μ^r or μ^w, receive the vast majority of the weight in the measure of racial capital, with $\bar{K}$ having almost no impact.

Notice also that the first term, $(1-\sigma_{t-1})\,\bar{K}_m$, is identical in both equations in (2) and does not vary across individuals within a market. As a result, it can be absorbed in the market fixed effect, $\theta_{m,t}$, in (1). Substituting these expressions for racial capital into that

[12]The especially detrimental effects of racial residential segregation for Black versus White children are documented in many studies including Ananat (2011); Andrews et al. (2017); Chyn et al. (2022); Cutler and Glaeser (1997).

equation yields:

$$y_{i,m,t} = \alpha_r I_r + \beta y_{i,m,t-1} + \theta_{m,t} + \gamma \sigma_{t-1} \left[I_r \mu^r_{m,t-1} + (1 - I_r)\, \mu^w_{m,t-1} \right] + \epsilon_{i,m,t} \tag{3}$$

Equation (3), in which an individual's racial capital is captured by the mean of own-race productive elements in her market, will be the main estimating equation in the empirical analysis below that assesses racial differences in intergenerational mobility.

In motivating the role of racial capital, we have emphasized how interactions with adults beyond one's parents can *directly* shape outcomes. However, that the inclusion of racial assets in equation 3 may also reflect broader social mechanisms. Statistical discrimination(Aigner and Cain, 1977; Charles and Guryan, 2011), where the traits of their racial group influence beliefs about individuals, links individual outcomes to group-level outcomes. Discrimination driven by animus or prejudice may similarly depend on group resource levels if negative racial sentiments intensify with larger gaps in mean outcomes. Racial assets might also capture political economy effects: group resource disparities can influence relative political power, shaping the allocation of public goods across racial lines or affecting overall support for such provision. The importance of this mechanism is illustrated in Derenoncourt (2022), which shows that Black in-migration during the Great Migration led to large declines in public goods in Northern cities, with especially adverse consequences for the mobility of future generations of Black children.[13]

2.3 Implications and Empirical Predictions

When combined with several general observations about the nature of racial interactions and inequality in American society, the inclusion of racial capital in the standard model of intergenerational mobility in (3) leads directly to a number of empirical predictions.

First, a main focus of the previous work on racial differences in intergenerational mobility

[13]Other recent papers highlighting important political economy mechanisms affecting outcomes differentially by race include Aneja and Avenancio-Leon (2019), and Feigenberg and Miller (2021).

has been on estimating the permanent "race effect," α_r, which Chetty et al. (2020) (CHJP) label the *absolute mobility parameter*. The inclusion of racial capital in the model has straightforward implications for estimates of this key parameter. Denote estimates from traditional intergeneratonal models that do not account for racial capital as $\widetilde{\alpha}_r$. Assuming that (3) is the correct empirical model, $\widetilde{\alpha}_r$ will systematically differ from the true α_r by the mean differences (across race) in the impact of racial capital: $\gamma\sigma_{t-1}(\bar{\mu}^r_{m,t-1} - \bar{\mu}^w_{m,t-1})$. In this way, as long as group assets matter for life outcomes ($\gamma > 0$), society is not perfectly integrated ($\sigma \neq 0$), and there are systematic differences in resource levels across racial groups ($\mu^r_{m,t-1} - \mu^w_{m,t-1} \neq 0$), estimates of the absolute mobility parameter in specifications that exclude racial capital, $\tilde{\alpha_r}$, will tend to overstate α_r. Indeed, if the true absolute mobility effect were 0, but there was a large racial gap in the omitted variable, racial capital, the resulting estimate of α_r might lead to the erroneous (and depressing) conclusion of a permanent long-run racial difference in outcomes, rather than of a difference that would decline over time as differences in the impact of racial capital fade.

A second set of empirical predictions follows directly from considering how racial dissociation, σ, and group resources, $\bar{\mu}$ vary across racial groups. In particular, consider two racial minority groups, a and b, for which the following conditions hold:

$$\begin{aligned} \bar{\mu}^b_{t-1} &\leq \bar{\mu}^a_{t-1} \\ \sigma^b_{t-1} &> \sigma^a_{t-1} \end{aligned} \tag{4}$$

These conditions (4) say, in turn, that group b has lower levels of collective assets than group a and that racial dissociation with the White majority is higher for members of racial minority group b than those of group a. In such cases, our analysis of bias in the absolute mobility parameter predicts that the inclusion of racial capital in the intergenerational mobility equation should lead to a sharper reduction in the magnitude of estimated α_r for group b versus group a. As we show below, $\bar{\mu}$ and σ can generally be strictly ordered for

the three major minority groups – Asian, Black, and Hispanic – that we are able to study, yielding the empirical prediction that controlling for racial capital should have the greatest impact on the magnitude of α_r in the Black-White analysis and the least in the Asian-White analysis, with the impact for the Hispanic-White analysis falling in the middle.

A final empirical prediction follows from considering heterogeneity in σ across markets. In particular, we expect that controlling for measures of collective assets should matter more and produce larger changes in the estimates for α_r in a sample of markets with higher levels of measured racial dissociation than in a sample of markets where measured $\sigma_{m,t-1}$ is lower. This prediction applies for every racial minority group. We consider two empirical measures of market-level racial dissociation, residential and marriage segregation, to test this prediction in our Asian-, Black-, and Hispanic-White analyses below.

As noted in the Introduction, our analysis is partly motivated by Borjas (1992), which includes measures of group-level resources at the national level in models of adult outcomes. This approach estimates a single coefficient, γ, implicitly assuming that the effect of ethnic capital is homogeneous across groups. Our analysis differs in three key respects. First, we exploit variation both across racial groups and across metropolitan areas, allowing us to relax the constraint of a uniform γ and permit the effect of racial capital to differ across groups. Second, this finer level of variation enables the inclusion of metro and neighborhood fixed effects, accounting for potentially important location-level confounders that cannot be addressed with national-level data. Third, and perhaps most importantly, our framework introduces the construct of racial dissociation, which—together with group mean resources—determines racial capital. This framework yields sharp, testable predictions about how observed measures of dissociation shape heterogeneity across both markets and racial groups in the measured effect of racial capital.[14]

[14]It is also worth noting that Borjas (1995) explored how the impact of ethnic capital (measured across ethnic groups at the national level) varied with local segregation levels. In general, despite exploiting quite different sources of variation, our empirical findings are broadly consistent with those of Borjas (1992, 1995).

2.4 Convergence Across Generations

We close this section by deriving the implications of our theoretical framework for the dynamics of racial inequality across generations. In particular, we derive expressions for the generational persistence of racial differences and the steady-state level of racial inequality implied by the model in the long run. In so doing, we follow the existing literature by repeatedly applying the model to successive generations, treating the parameters as structural and fixed. This theoretical analysis highlights, in particular, how incorporating racial capital into the mobility equation works systematically to make group differences much more persistent.

For expositional clarity, we make two simplifications in the analysis that follows. First, we assume here that there is a single element of racial capital, which is measured as the group mean of the same earnings variable, y, used for parent's capital and children's adult outcomes. We write this group mean as $\bar{y}^w_{t-1}$ and $\bar{y}^r_{t-1}$ for racial groups w and r respectively. Second, we focus on the implications of the model for a single metropolitan area, abstracting away from migration and dropping the m subscript in the equations below. This yields a simplified intergenerational transmission equation:

$$y_{i,t} = \alpha_r I_r + \beta y_{i,t-1} + \gamma \sigma_{t-1} \left[I_r \bar{y}^r_{t-1} + (1 - I_r)\, \bar{y}^w_{t-1} \right] + \epsilon_{i,t} \tag{5}$$

Generational Persistence. We define $\Delta_r(y_t)$ to be the difference in the mean of the variable y between adults from racial groups r and w in generation t. Assuming a large population, which allows us to smooth over the idiosyncratic terms, ϵ, the racial gap at time $t+1$ is given by:

$$\Delta_r(y_{t+1}) = (\beta + \gamma \sigma_t) \Delta_r(y_t) + \alpha_r. \tag{6}$$

Thus, the racial difference in outcomes in generation t is transmitted to generation $t+1$ with a weight that combines the impact of parents and racial capital. We label this transmission rate *generational persistence*, g_t, yielding:

$$g_t = \beta + \gamma\sigma_t. \tag{7}$$

This expression for generational persistence is intuitive and is closely related to the comparable measure of persistence in the standard model, which is simply β. In our framework, the addition of the term related to racial capital, $\gamma\sigma_t$, systematically makes group differences more persistent, slowing the speed of racial economic convergence across generations.[15]

This expression highlights the key role of racial dissociation, σ_t, in driving the speed of convergence between groups over time. In particular, the greater the dissociation between racial groups r and w, the slower the socioeconomic differences between these groups diminish generation after generation. And, reductions in σ_t over time work to speed the convergence of the economic fortunes of group r with the majority. This observation helps to explain why racial groups that are more quickly and fully connected socially and economically with the majority group have experienced faster historical rates of economic convergence. It also helps to explain why efforts to reduce racial dissociation represent a key potential policy lever for moving society more quickly towards a state of greater racial equality.

Steady State Inequality. The steady state gap, $\Delta_r(y_{ss})$, implied by the estimated parameters can be calculated by repeatedly applying (6) to infinity. This gap has been a major focus of the literature, in part because the estimates of CHJP imply that Black-White inequality is currently near its steady state (permanent) level, as we discuss below. If the racial dissociation parameter is constant through time – i.e., $\sigma_{s+t} = \sigma_t = \sigma \; \forall \; s$ – the steady state gap is given by:

$$\Delta_r(y_{ss}) = \frac{\alpha_r}{1 - \beta - \gamma\sigma} \tag{8}$$

[15] Another useful measure of persistence is the ratio of the racial gap from one period to the next: $\frac{\Delta_r(y_{t+1})}{\Delta_r(y_t)} = \beta + \gamma\sigma_t + \frac{\alpha_r}{\Delta_r(y_t)}$. Compared to the definition of generational persistence in (7), this measure includes an additional term that, in essence, accounts for the proximity of the current gap to the steady state.

The inclusion of racial capital in the intergenerational transmission equation affects the steady state gap in two key ways. First, it adds the $\gamma\sigma$ term to the denominator, thereby increasing racial inequality in the long term. The steady-state earnings gap in the standard model (without racial capital) is simply, $\alpha_r/(1-\beta)$, as CHJP show. Comparing these measures highlights an appealing feature of our framework: it subsumes the steady-state measure from the standard model as a special case where racial capital does not affect outcomes (i.e. $\gamma = 0$). In this special case, with the assumption that β is small, the long-run racial gap in earnings (or other outcomes) is determined mainly by α_r.

Second, including racial capital in the model has the potential to significantly reduce the estimated magnitude of α_r and, in turn, estimates of steady-state racial inequality. In essence, our framework attributes a part of the $\tilde{\alpha}_r$ estimated in a traditional model of intergenerational transmission to the role of racial capital, thus viewing this component of inequality as mutable and subject to possible convergence over time, rather than being permanently fixed.[16]

3 Data and Estimation

In this section, we provide an overview of the main data sources and variables used in our analysis. A more detailed description of each component of the data set is provided in Appendix A.

[16]It is also possible to calculate steady state inequality under the assumption that racial dissociation decreases over time at a rate ρ^r – i.e., $\sigma_{t+s} = \rho_s\sigma_t$. This assumption is consistent with evidence of (perhaps slow, but undoubtedly positive) improvement in race relations and decreases in segregation and discrimination over the long sweep of history. In this case, the steady state inequality reverts to the same formula as in the standard model without racial capital, $\Delta_r(y_{ss}) = \alpha_r/(1-\beta)$, as eventually racial dissociation in society goes to zero and the $\gamma\sigma$ term drops out. Note that the empirical implications of including racial capital in the model for the estimate of α_r continue to hold here, again implying convergence to a much more equal society, albeit at a relatively slow pace.

3.1 Opportunity Insights

The main intergenerational outcomes come from a data set graciously made publicly available by Opportunity Insights (OI) based on Chetty et al. (2018). For children born between 1978 and 1983, these data provide estimates of adult outcomes separately by (i) sex, (ii) race/ethnicity, (iii) Census tract, and (iv) parents' household income percentile (available for the 25th and 75th percentiles). We use data for children in four major race/ethnicity categories – non-Hispanic Asian, non-Hispanic Black, Hispanic, and non-Hispanic White – provided in the OI data. Parental income percentiles are defined as the position in the national income distribution of the mean of parental household income across 1994, 1995, and 1998-2000. They reflect household income levels when the child is still a youth.

The OI estimates are based on an extremely comprehensive matched child-parent data set covering virtually all (20.5 million) children living in the United States born between 1978 and 1983.[17] The estimates are constructed using data from 2000 and 2010 decennial Censuses matched with federal income tax returns from 1989, 1994, 1995, and 1998-2015 and 2005-2015 American Community Surveys (ACS). Using this matched child-parent data set, the OI team estimates a child's average adult outcomes by sex, race/ethnicity, Census tract, and parents' income percentile.

The adult outcomes made available by OI include household and individual income percentile, employment rate, college and high school completion rate, and incarceration rate. The income measures are given as mean percentile ranks based on children's earnings as adults in 2014-2015. The employment status is based on whether a child has a positive W-2 income in 2015. Educational attainment is based on the highest level of education children report having completed.[18] Incarceration status is based on whether a child lives in any of the following institutional settings in 2010: federal detention center, federal prison, state

[17] The sample excludes children of unauthorized immigrant parents as well as children with no address information during childhood. These excluded children make up only a small fraction of the total population.

[18] Educational outcomes in the OI data are not available at the neighborhood (Census tract) level but only at the county level.

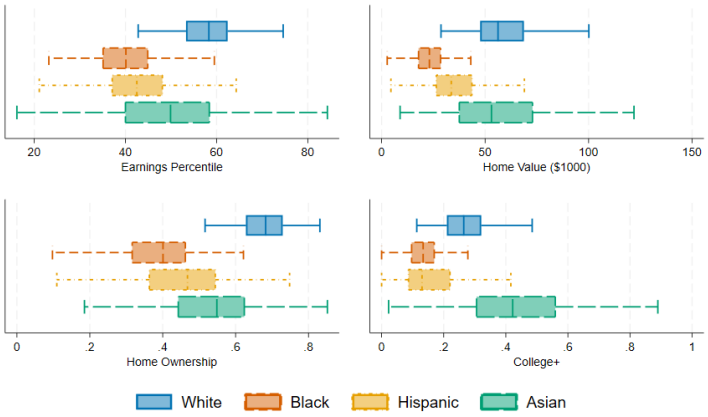
prison, local jail, residential correctional facility, military jail, or juvenile correctional facility. A more detailed discussion of how these results are calculated can be found in CHJP.

3.2 National Longitudinal Survey of Youth 1997

We use the restricted-access geocoded version of the National Longitudinal Survey of Youth 1997 (NLSY97) to complement our main analysis based on the publicly available OI data. The NLSY97 allows us to construct a matched parent-child individual-level data set, consisting of a nationally representative sample of 8,984 children who were between 12 and 16 years old as of December 31, 1996. This sample aligns closely with the one used by OI to construct their estimates, as the children surveyed in the NLSY97 were born between 1980 and 1984. The children were first interviewed in 1997, along with their parents, and followed up biannually.

Using the NLSY97, we construct measures of each child's individual-level adult outcomes in 2017 (when respondents are approximately 33 to 37 years old), including household and individual income percentiles, educational attainment, and whether they were ever incarcerated. We measure the parents' household income percentile in 1997, when the child was 12 to 16 years old. The geocoded version of the NLSY97 also provides information on the metropolitan area in which the child lived in 1997. Combined with information on the child's race and ethnicity, this allows us to merge in the metro-level racial capital measures, which we discuss in more detail in Section 3.3. A key limitation of the NLSY data is its relatively small sample size, particularly for Hispanic and Asian children, relative to the comprehensive coverage in the OI data. Hence, we focus only on Black-White comparisons with the NLSY97 sample, and we treat the NLSY97 analysis primarily as a robustness check for our main analysis based on the OI data.

Figure 1: Summary of Racial Capital Elements by Racial Group



Notes: The figures above display box plots for the four metropolitan-level racial capital elements by race we use in the analysis. These elements include average earnings percentiles, average home values, homeownership rates, and college completion rates for each racial group. Outliers are not shown in the box plots.

3.3 Racial Assets

The measures for racial assets, μ, used throughout our analysis are based on the average race-specific resources in each child's metropolitan area in 1990, when children were 7-12 years old in the OI sample and 6-10 years old in the NLSY sample. [19] We construct measures using the Integrated Public Use Micro Series (IPUMS) from the 1990 Census 5% state sample (Ruggles et al., 2021). For each metropolitan area, we calculate the mean (i) earnings percentile, (ii) homeownership status, (iii) house value (including zeroes for renters), and (iv) college completion status for non-Hispanic Asian, non-Hispanic Black, Hispanic, and non-Hispanic White adults between 25 and 45 years of age in 1990, matching each child to the average resources of adults in the same race/ethnicity. We chose this age group to correspond roughly to the age range of children's parents in 1990.

[19] The fact that Census data is only available every ten years during the childhood period precludes controlling for these measures at other ages. The coarseness of the Census data also makes it conceptually challenging to compare estimates of the mobility equation across birth cohorts.

3.4 Race-Specific Measures of Neighborhood Resources

For robustness analysis aimed at ruling out measurement error in parental income as a potential explanation for why our metropolitan-level racial capital measures predict children's outcomes, we also construct measures of race-specific resources at the neighborhood level. These measures are derived from the 1990 Census Summary Tape File 3 dataset at the Census tract and county levels provided by the National Historical Geographic Information System (NHGIS) (Manson et al., 2021). The main measures we include are per capita income in 1989, homeownership status, and educational attainment of individuals 25 years and over, constructed separately by race and/or ethnicity.[20]

3.5 Estimating Equations

As discussed in Section 2, our main analysis consists of adding measures of racial capital to a traditional intergenerational mobility equation. When estimating this equation at the individual level, as in our analysis using the NLSY sample, the estimating equation is given by (3), which we repeat here for convenience:

$$y_{i,m,t} = \alpha_r I_r + \beta y_{i,m,t-1} + \theta_{m,t} + \gamma \sigma_{m,t-1} \left[I_r \mu^r_{m,t-1} + (1 - I_r)\, \mu^w_{m,t-1} \right] + \epsilon_{i,m,t}$$

The Opportunity Insights data provide estimated mean adult outcomes for children at a slightly more aggregated level – i.e., by Census tract j, parental income percentile p, and race r. When we estimate the model with the OI data set, an observation is a (p, r, j) triplet and our main estimating equation is given by:

$$\bar{y}_{p,r,j,t} = \alpha_r I_r + \beta y_{p,t-1} + \theta_{m,t} + \gamma \sigma_{m,t-1} \left[I_r \mu^r_{m,t-1} + (1 - I_r)\, \mu^w_{m,t-1} \right] + \epsilon_{p,r,j,t} \tag{9}$$

[20] A limitation of these neighborhood-level measures from the 1990 Census is that they are provided by either race (e.g. Asian, Black, and White) *or* Hispanic status. This limits our ability to perfectly align with the distinct race/ethnicity categories in Opportunity Insights – i.e., to construct race-specific neighborhood measures for non-Hispanic Asian, Black, and White children. We address these limitations by including only the Census tracts and counties with less than 10% Hispanic population in all Black-White and Asian-White analyses presented in the paper. For the Hispanic-White analysis, we include all Census tracts and counties.

We estimate (9) using weighted least squares, weighting by the estimated number of households in a given (p, r, j) triplet.[21] In some specifications, we additionally include neighborhood fixed effects $\theta_{j,t-1}$ to the equation in order to compare with results from CHJP. In other specifications, we add race-specific neighborhood resource measures $X_{r,j,t-1}$, in order to examine the potential role of measurement error in parents' resources.

In all specifications, the coefficient on the racial capital measures, $\gamma\sigma$, captures the combined effect of the two components of racial capital: (i) γ, the general importance of broader social networks and interactions with adults beyond parents on children's long-term outcomes and (ii) σ, the extent of racial dissociation in these social networks/interactions. These parameters are not separately identified in our main specifications. In Section 5 below, we explore heterogeneity in the estimates using several empirical measures of racial dissociation.

We are interested in both the direct role of these metropolitan racial capital measures in intergenerational mobility, and how adding these terms to the equation changes the estimated value of α_r. The latter has implications for potential mechanisms driving the racial differences in intergenerational mobility rates estimated in previous work. And, as we show in Section 6 below, the relative sizes of $\gamma\sigma$, β, and α_r are a critical determinant of the nature of evolution of racial inequality across generations, affecting both the speed and ultimate extent of group convergence.

4 Black-White Analysis

4.1 Opportunity Insights Sample

We begin the presentation of our empirical results by focusing on Black-White differences in intergenerational mobility using the OI data. Table 1 presents key coefficients for six specifications of a model in which the dependent variable is children's household income

[21] Details on the specific weights used are in Appendix A.

Table 1: Intergenerational Impact of Racial Capital: Black-White Analysis

	Household Income Percentile					
	(1)	(2)	(3)	(4)	(5)	(6)
Black	-20.159***	-15.392***	-11.920***	-7.130***	-5.507***	-5.092***
	(0.079)	(0.053)	(0.087)	(0.426)	(0.531)	(0.535)
Parent Income Percentile		0.310***	0.253***	0.253***	0.253***	0.253***
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Racial Capital: Mean Earnings Percentile				0.228***	0.281***	0.272***
				(0.020)	(0.027)	(0.028)
Tract Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific Tract Resources						Y
Adjusted R-squared	0.374	0.744	0.921	0.921	0.922	0.922
Observations	100055	100055	100055	100055	100055	100055

Notes: The table above documents the gaps in adulthood household income percentile between Black and white children, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific tract-level resources include per capita income in 1989, housing tenure status, and college completion rates. The analysis includes Census tracts with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

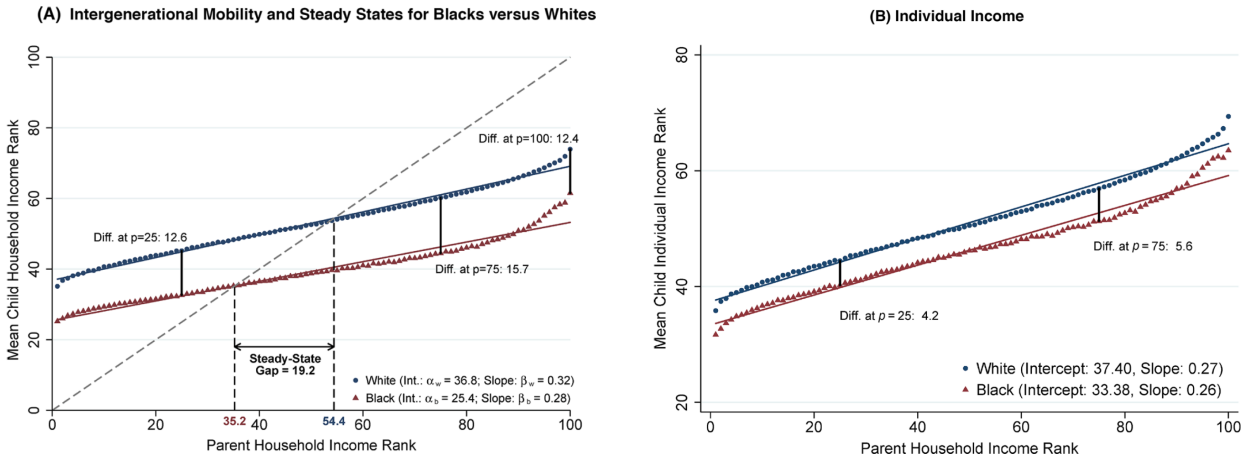
percentile in 2015, when they are approximately 35 years old. Column (1) reports the results for a specification that does not include any parental, neighborhood, or racial capital measures. The estimate, in this case, is the unconditional racial gap in household income percentile at age 35, which is approximately 20.2 percentile points. This raw gap provides a measure of racial inequality for young adults in the United States in 2015, as measured by household income.

The second column adds the parental income percentile and is analogous to the baseline estimates provided in CHJP and illustrated in Figure 2, which is taken from their paper. Because the slope of the relationship between children's and parent's income percentile (i.e., the two lines plotted in the figure) is very similar for Black and White families in CHJP, we simplify our model by constraining the slopes to be identical across races here. In addition, because we do not have access to the underlying individual-level data and instead only have estimates for two points of the parents' income distribution (25th and 75th percentiles), we constrain the relationship to be linear. The plots in CHJP suggest that this is a reasonable approximation and we get a similar estimate for the slope: 0.31. As in CHJP, the estimated

Figure 2: Empirical Estimates of Intergenerational Mobility from CHJP

(a) Household Income

(b) Individual Income



Source: Figure 2 - Panel (A) and Figure 4 - Panel (B) from Chetty et al. (2020)

racial gap in children's household income percentile falls to approximately 15.4 percentile points conditional on parents' income percentile. This corresponds well to the average vertical distance between the Black and White intergenerational mobility plots in Figure 2, which CHJP labels the absolute mobility gap. Overall, our analysis approximates the main results from CHJP quite well, which is reassuring, but not entirely surprising, of course, given our reliance on an aggregate version of their data.

Adding Neighborhood Fixed Effects. The third column of Table 1 adds Census tract fixed effects to the analysis. As in CHJP, controlling for the neighborhood where a child lives at approximately 10 years of age further reduces the racial gap in their adult incomes to 11.92 percentile points, or by about 23 percent of the absolute mobility gap in column (2).

In general, adding neighborhood fixed effects to the analysis captures several potentially important dimensions of differences in the resources that Black and White children have available while growing up. Most directly, residential locations may have a causal effect on children's outcomes. Along these lines, neighborhood fixed effects capture differences in resources that vary by location – i.e., metro area, community, school district, and neighborhood

– due to systematic differences in the residential locations of Black and White households *with the same income levels*.[22] In most metropolitan areas, Black and White households with the same household income levels typically live in very different neighborhoods, with Black households exposed to much higher rates of poverty and lower levels of neighborhood resources (Aliprantis et al., 2024; Bayer et al., 2021; Logan, 2011).[23]

It is important to emphasize, however, that the interpretation of neighborhood fixed effects need not be causal in a descriptive analysis like this. Controlling for neighborhood may, instead, partially reflect unobserved differences in households, such as educational attainment or wealth, that lead households with the same income to reside in different neighborhoods. Similarly, neighborhood fixed effects are also likely to reflect, to some extent, any measurement error in the parental income measure. The intergenerational mobility literature has long recognized that (i) a measure of parental income based on a single (or several) year(s) may not fully reflect differences in parental lifetime income and (ii) the income of one's neighbors may be highly correlated with the difference between such a short-term measure and lifetime income. In this way, neighborhood fixed effects may also matter in part because they reflect some measurement error in parental income.

Adding Racial Capital to the Analysis. The specification shown in column (3) is an important starting point for our paper. It closely approximates the main results in CHJP, capturing the role of neighborhood and parental resource differences (observed and unobserved) in explaining intergenerational mobility. Importantly, the cumulative impact of these controls reduces the racial gap in children's adult household income, but substantial differences remain unexplained. Moreover, in their paper, CHJP add a series of additional household-level controls for parents' education, wealth, and household structure, with little

[22] See Chyn and Katz (2021) for a comprehensive recent review of the neighborhood effects literature.

[23] Importantly, to the extent that household preferences for neighbors' race or housing discrimination are important drivers of such neighborhood sorting, the resulting racial differences in neighborhood resources (conditional on household income) reflect a dimension of the segregating mechanisms included in our concept of racial capital. See Bayer et al. (2021); Bayer and McMillan (2005); Christensen and Timmins (2022, 2023); Gregory et al. (2025); Weiwu (2024), for further discussion of how discrimination and racial sorting shapes unequal neighborhood outcomes.

impact on the racial gap that remains unexplained in this specification.

The fourth and fifth columns of Table 1 add measures of racial capital to the analysis. Accounting for racial capital is new to the mobility literature and the basis for our paper's key findings. We begin by adding just one collective asset as the measure of racial capital to the specification in column (4): metro-level mean earnings percentile for adults in the same racial group. Adding the mean own-race earnings percentile in the metro provides a fairly direct comparison of the relative importance of parental resources versus the broader resources among adults of the same race in the metro area. Interestingly, the point estimates for the two parameters are quite similar: 0.25 for the parental income and 0.23 for the earnings racial capital measure. This suggests that the mean earnings of same-race households in a metropolitan area capture mechanisms that matter nearly as much as parental income in explaining a child's household income as an adult. Strikingly, controlling for this measure of race-specific resources at the metro level cuts the unexplained racial gap in household income at age 35 to 7.1 percentile points, about 40 percent of what remained after controlling for neighborhood fixed effects. That adding a single element of racial capital at the metro level in column (4) explains substantially more of the racial gap in household income than did the inclusion of thousands of neighborhood fixed effects in column (3) implies the existence of significant mechanisms of mobility that operate at the racial group-by-metro area level.

The fifth column adds measures for the three other collective resources to the specification in column (4): own-race specific means of home ownership, house value, and educational attainment for adults aged 25-45 in the same metro area in 1990, when the children are about 10 years old. Controlling for the four racial assets together reduces the unexplained racial gap in household income a bit more – to 5.5 percentile points.[24] In this way, differences in the collective assets of the previous generation of adults in the same racial group and metro area have a substantial role in explaining why racial gaps persist across generations.

[24]Due to the correlation of the four included own-race collective assets, we do not try to interpret the individual coefficients associated with each racial asset, focusing instead on their combined impact. In Appendix B, we present a series of figures that highlight the variation in the combined impact of these four racial assets across metropolitan areas for each racial group.

It is important to emphasize that the neighborhood effects included in the specifications shown in columns (3)-(5) absorb any generic effect of location on mobility that applies regardless of race. Recall from the theoretical discussion above that some part of an individual's racial capital is common to all persons of all races in a given market. This common component is absorbed by the neighborhood fixed effect in the regression models reported here. The dimension of racial capital that differs between persons of different races in a given market is the own-race mean of various collective assets multiplied by the degree of racial dissociation. In this way, the variation that identifies the impact of racial capital in columns (4) and (5) is at the racial group-by-metro area level. As we show in Section 5 below, exploiting variation at the racial group-by-metro area level has the additional advantage of allowing us to examine how the impact of racial capital varies across racial groups and locations.

Even Finer Controls for Potential Measurement Error in Parental Income. The specification shown in the final column of Table 1 is designed to address the possibility of race-specific measurement error in parental income that may not have been absorbed by including neighborhood fixed effects. In particular, one potential concern with the specification shown in column (5) is that our measures of racial capital (at the metro area) may be capturing unobserved race-specific differences in parents' resources.[25] To address this potential concern, we add a vector of race-specific variables – adult educational attainment, income, and home ownership rates measured in 1990 at a much finer level of geography – the neighborhood (Census tract) level – to the analysis. Such measures of the average characteristics of other adults of the same race in the same neighborhood naturally absorbs any race-specific measurement error in parental resources not captured by the neighborhood fixed effects. The coefficients in columns (5) and (6) remain quite stable, suggesting that measurement issues are not an important driver of our main racial capital results.

[25]See Black and Devereux (2011); Solon (1992, 1999); Solon et al. (2000) for detailed discussions of biases induced by measurement error related to parental income, including their implications for interpreting correlations between siblings and children in the same neighborhood.

That own-race measures of group assets matter much more at the metropolitan versus the neighborhood level also has interesting implications for the nature of the mechanisms driving the impact of racial capital in the mobility equation. Potential mechanisms related to statistical discrimination, for example, would naturally operate at the metropolitan level if employers, landlords, and other economic agents condition their decisions on the average attributes of members of a racial group within the metro area. Many political economy-related mechanisms also naturally operate at the level of a city or metro area as a whole versus a neighborhood.

Individual Income Outcome. A well-known challenge in studying Black-White income inequality in the United States is that measuring it at either the household or individual level is subject to (opposing) biases due to racial differences in household structure. In particular, because White adults are more likely to reside with a partner than Black adults, household income inequality likely overstates and individual income inequality likely understates underlying differences in economic well-being. Throughout our analysis, therefore, we present results for both household and individual income, with the understanding that a blended model likely best captures difference in well-being.

Table 2 presents an analogous set of specifications to those presented in Table 1, using individual income percentile as the outcome of interest. The unconditional racial gap for individual income is 10.2 percentile points, which is considerably smaller than the gap for household income due to racial differences in household structure. The additional controls for parental income percentile and neighborhood fixed effects reduces the unconditional racial gap significantly to 3.8 percentile points, as shown in CHJP. As for household income, the racial capital measures have substantial explanatory power for individual income, in this case not only closing the previously unexplained racial gap, but actually *reversing* it. That is, the sign of the coefficient shown in the first row flips once the full set of racial capital measures are included in the specification in column (5).

Table 2: Intergenerational Impact of Racial Capital: Black-White Analysis

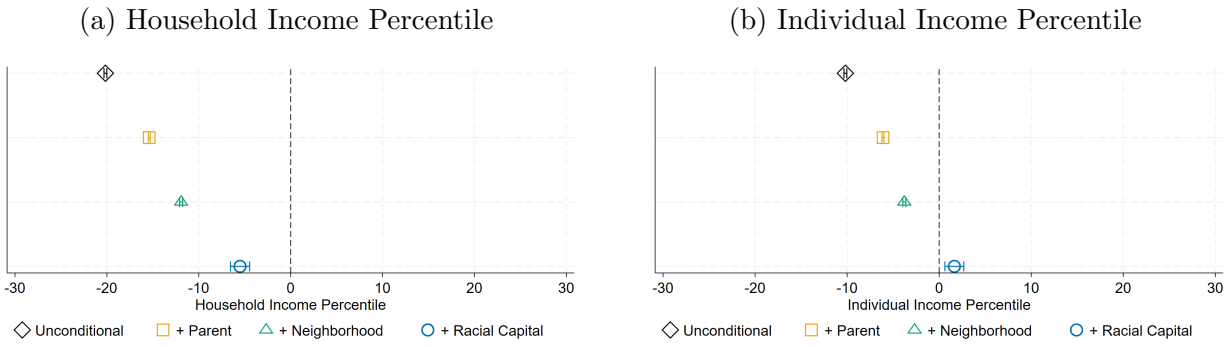
	Individual Income Percentile					
	(1)	(2)	(3)	(4)	(5)	(6)
Black	-10.189***	-6.100***	-3.784***	-0.659	1.652***	2.054***
	(0.079)	(0.053)	(0.085)	(0.416)	(0.526)	(0.527)
Parent Income Percentile		0.266***	0.213***	0.213***	0.213***	0.212***
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Racial Capital: Mean Earnings Percentile				0.149***	0.201***	0.196***
				(0.020)	(0.028)	(0.029)
Tract Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific Tract Resources						Y
Adjusted R-squared	0.159	0.613	0.879	0.880	0.880	0.881
Observations	100055	100055	100055	100055	100055	100055

Notes: The table above documents the gaps in adulthood Individual income percentile between Black and white children, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific tract-level resources include per capita income in 1989, housing tenure status, and college completion rates. The analysis includes Census tracts with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

The results presented in the final columns of Table 2 suggest that if provided equal access to parental, neighborhood, and metropolitan-level resources, the individual adult income of Black children would actually slightly exceed that of White children. Instead, historically unequal resources in their households and neighborhoods, and differences at the metropolitan levels in resources of Black adults compared to the metro-level assets of White adults work to perpetuate racial inequality across generations, as reflected in the estimated Black coefficient in the first several columns of the table.

The substantial shift in the estimated Black coefficient from the inclusion of metro-level, race-specific measures of resources highlights a critical role for racial capital in perpetuating Black-White inequality across generations. Viewed through the lens of our theoretical framework, it is the combination of historical racial inequities in resource levels, and the fact that individuals are especially affected by those of their racial group because of the various factors that limit cross-racial interactions in neighborhoods, social networks, or in schools and other institutions, that works to perpetuate group differences. We explore more directly in Section 5 the role of racial dissociation in driving the significance of racial capital.

Figure 3: Intergenerational Mobility Gaps in Income: Black and White Analysis



Notes: The figures above show the gaps in adulthood outcomes between Black and White children, conditional on different sets of resources. Black diamonds depict unconditional gaps; yellow squares depict gaps conditional on parental income; green triangles depict gaps conditional on parental income and tract fixed effects; and blue circles depict gaps conditional on parental income, tract fixed effects, and racial capital measures. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. The analysis includes Census tracts with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

To provide a visualization of the impact of controlling for parental income, neighborhood, and racial capital measures on the outcome gaps between Black and White children (i.e. α_r) from Tables 1 and 2, Figure 3 plots the racial gaps for four specifications reported in each table. The unconditional gaps corresponding to the coefficients from the first row of column (1) are depicted in black diamonds. The gaps after controlling for parental income are depicted in yellow squares. These estimates are taken from column (2) in the tables. The green triangles depict the gaps after controlling for both parental income and tract fixed effects, which correspond to column (3). Lastly, the gaps after controlling for parental income, tract fixed effects, and all four racial capital measures are depicted in blue circles. These correspond to column (5) in the tables. The figures illustrate the substantial additional explanatory power provided by the racial capital measures.

Education, Employment, and Incarceration Outcomes. Figure 4 presents an analogous set of results for four additional outcomes provided in the Opportunity Insights data

set: employment, incarceration, and high school and college completion rates.[26] As the unconditional gaps suggest, White children are more likely to be employed, less likely to being incarcerated, and receive more education than their Black counterparts. Conditional on the full set of parental, neighborhood, and racial capital measures, these gaps again *reverse* for college completion and employment. In particular, Black children are 6.6 percentage points more likely to complete college and 9.0 percentage points more likely to be employed, conditional on these broader measures of available resources. The inclusion of racial capital measures in the analysis also completely closes the gap in high school completion rates.

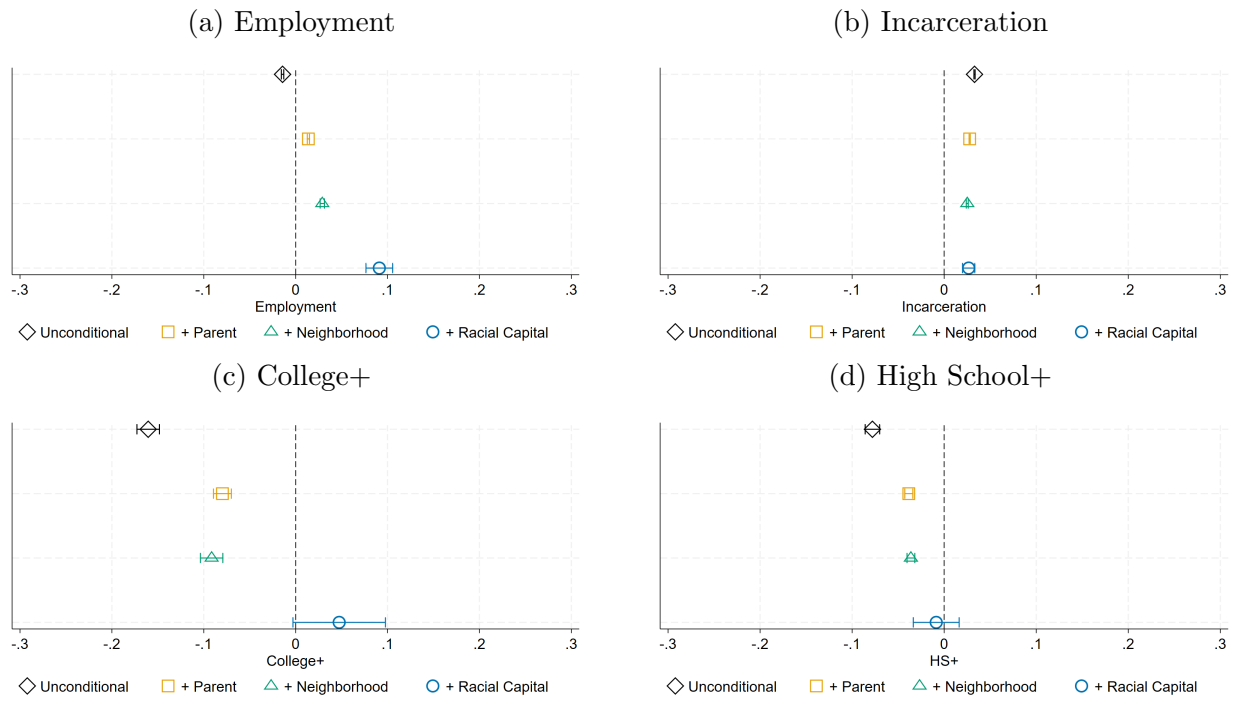
Unlike the outcomes for education, income, and employment, the addition of parental, neighborhood, and racial capital measures, respectively, barely move the racial gap in incarceration rates. The unconditional estimate implies that Black children are 3.3 percentage points more likely to be incarcerated. CHJP had already shown that adding controls for parental income and neighborhood fixed effects barely budges this gap, suggesting that these resources are barely protective of Black children from the interactions with the criminal legal system. In line with these prior results, the addition of racial capital measures also has a very limited impact, leaving 2.3 percentage points of the racial gap in incarceration unexplained. One limitation of the OI measure of incarceration is that it examines incarceration in 2010, when the children are approximately 30 years old. We explore an alternative measure of incarceration, ever incarcerated, using the NLSY data below, which yields different results.

Estimating Separately for Female and Male Children. Racial differences in many of the outcomes examined here – i.e., earnings, employment, and incarceration – differ substantially by sex. It is also possible that the mechanisms captured by our racial capital measures might differ for female and male children.[27] To explore this possibility, we estimate the

[26] We report the corresponding estimates and standard errors in Appendix C. We are limited to studying these outcomes by the nature of the available OI data. Researchers have documented similar patterns for other important outcome measures. For example, Halliday et al. (2021) document substantial health mobility gaps by race.

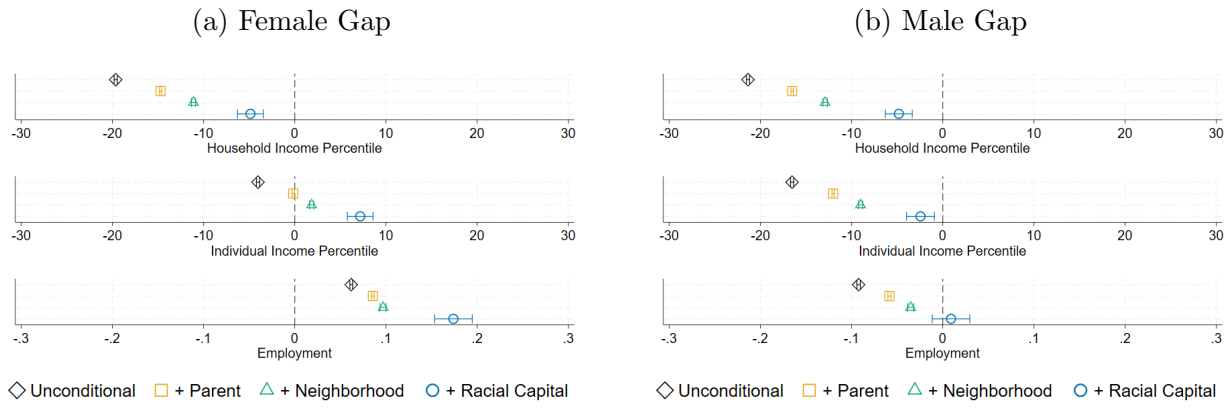
[27] The impact of resources at the parent and neighborhood levels also affect mobility rates differentially by sex and race (Autor et al., 2019; Chetty et al., 2020; Murnane, 2013).

Figure 4: Intergenerational Mobility Gaps in Employment, Incarceration, and Education: Black-White Analysis



Notes: The figures above show the gaps in adulthood outcomes between Black and White children, conditional on different sets of resources. Black diamonds depict unconditional gaps; yellow squares depict gaps conditional on parental income; green triangles depict gaps conditional on parental income and tract fixed effects; and blue circles depict gaps conditional on parental income, tract fixed effects, and racial capital measures. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. The analysis includes Census tracts with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

Figure 5: Intergenerational Mobility Gaps in Labor Market Outcomes: Black-White Analysis by Sex



Notes: The figures above show the gaps in adulthood outcomes between Black and White children by sex, conditional on different sets of resources. Black diamonds depict unconditional gaps; yellow squares depict gaps conditional on parental income; green triangles depict gaps conditional on parental income and tract fixed effects; and blue circles depict gaps conditional on parental income, tract fixed effects, and racial capital measures. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. The analysis includes Census tracts with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

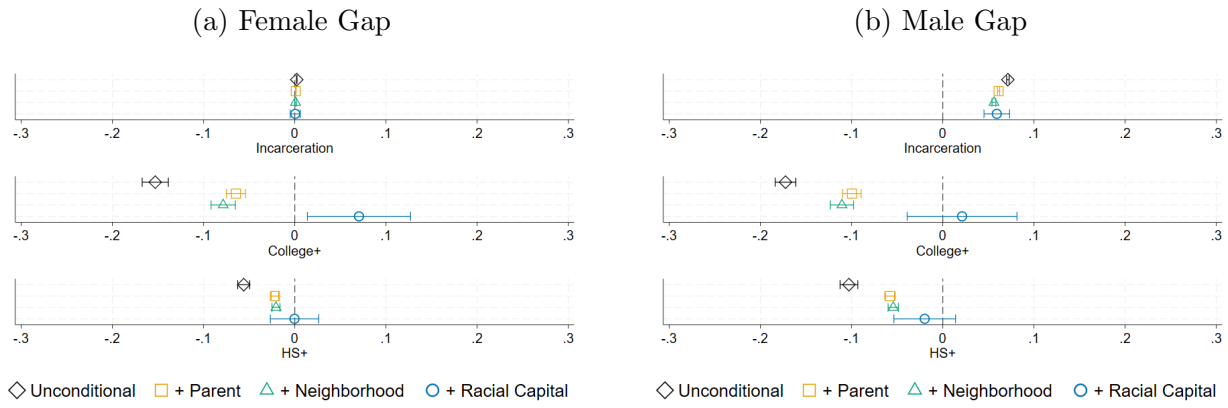
intergenerational mobility regressions separately by sex, presenting results for adult labor market outcomes in Figure 5 and education and incarceration outcomes in Figure 6.[28]

Examining the racial gaps across all six outcomes reveals several broad takeaways. First, the racial gaps in educational attainment and household income are quite similar for men and women and the effect of controlling for parental income, neighborhood fixed effects, and racial capital measures is almost identical for men and women for these outcomes. For example, adding racial capital measures to the analysis (on top of parental income and neighborhood fixed effects), reduces the racial gap in household income by 6-7 percentile points for both women and men. Similarly, the college completion gap shifts by 16.6 percentage points for female and 15.0 for male children.

In contrast, the gaps in employment, individual income, and incarceration vary substantially by sex: the incarceration gap is driven entirely by men; Black women are substantially

[28]Corresponding tables for the figures are presented in Appendix C.

Figure 6: Intergenerational Mobility Gaps in Incarceration and Education Outcomes: Black and White Analysis by Sex



Notes: The figures above show the gaps in adulthood outcomes between Black and White children by sex, conditional on different sets of resources. Black diamonds depict unconditional gaps; yellow squares depict gaps conditional on parental income; green triangles depict gaps conditional on parental income and tract fixed effects; and blue circles depict gaps conditional on parental income, tract fixed effects, and racial capital measures. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. The analysis includes Census tracts with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

more likely to be employed than White women, while the opposite pattern holds for men. Despite substantial differences in the racial gaps by sex for individual income and employment, however, the effect of controlling for parental income, neighborhood fixed effects, and racial capital measures is again largely similar for men and women. One exception is that the addition of racial capital measures matters more for the female employment gap, potentially due, in part, to the fact that including these measures has no effect on the incarceration gap.

The Impact of Racial Capital Across the Income Distribution. For each life outcome, Appendix Figure B.5 presents estimates of the impact of adding neighborhood fixed effects and the four racial capital measures to the mobility equation separately for the 25th and 75th percentiles of parents' income distribution. This allows us to explore whether the mechanisms related to racial capital interact with parents' income in an important way – e.g., have a different impact in the upper versus lower portions of the income distribution

– or instead operate essentially independently of parents' income. For income and employment, the explanatory power of racial capital is significantly larger at the 75th percentile. For college completion, the impact is essentially similar across the income distribution, while for high school completion the effect is noticeably stronger at the 25th percentile, suggesting that racial capital may be particularly important in helping children from relatively poor households avoid especially deleterious outcomes.

4.2 NLSY97 sample

We supplement our main analysis using the OI data with the NLSY97 sample. While these data include the metro areas where respondents lived as children, more precise neighborhood information is not available. As a result, we report (i) unconditional gaps, (ii) gaps conditional on parental income, and (iii) gaps conditional on both parental income and our four metro-level racial capital measures. These estimates are shown for Black-White differences in Figure 7.[29]

The NLSY results are broadly consistent with the OI analysis above.[30] Including racial capital measures significantly closes and sometimes reverses the adulthood outcome gaps of Black and White children for all outcomes. As in the OI analysis, the gaps fully close for high school completion and reverse in sign for individual income and the college completion rate, once racial capital measures are controlled for. If anything, the impact of including racial capital measures is more pronounced for the education outcomes in the NLSY compared to the OI analysis.

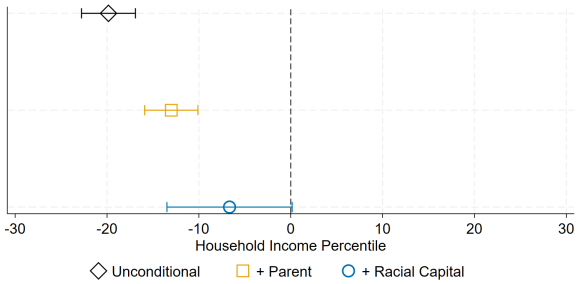
Interestingly, the NLSY results show a more significant closing of the estimated racial gap in incarceration rates with the inclusion of parental income and the racial capital measures. While the NLSY point estimates are noisier due to the smaller sample size, the shift in the point estimates for incarceration is qualitatively quite different from that observed in

[29] As mentioned above, Hispanic-White and Asian-White comparisons are infeasible with the NLSY data, as the number of observations for Asian and Hispanic children is too small to draw meaningful conclusions.

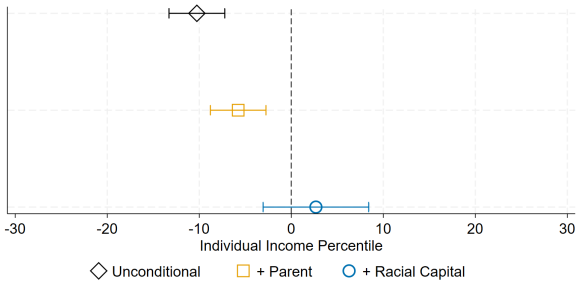
[30] The NLSY results are also largely consistent with the OI results when estimated separately for men and women. This analysis can be found in Appendix B.

Figure 7: Intergenerational Mobility Gaps: Black and White Analysis (NLSY)

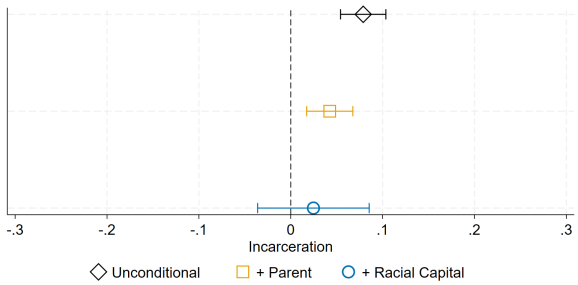
(a) Household Income Percentile



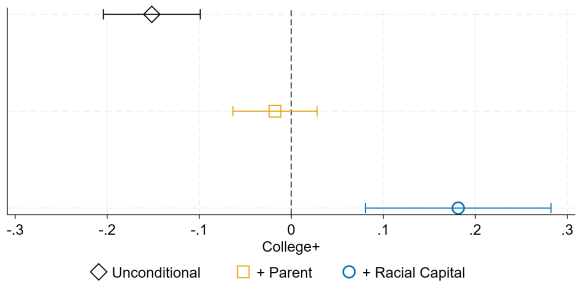
(b) Individual Income Percentile



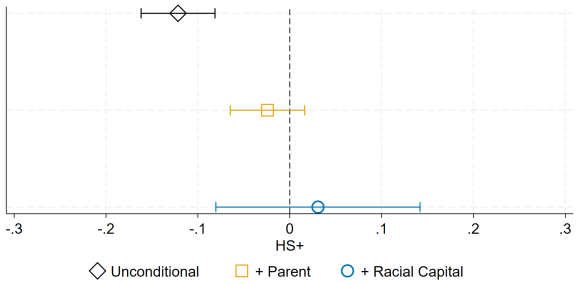
(c) Incarceration



(d) College+



(e) High School+



Notes: The figures above show the gaps in adulthood outcomes between Black and White children, conditional on different sets of resources. Black diamonds depict unconditional gaps; yellow squares depict gaps conditional on parental income; and blue circles depict gaps conditional on parental income and racial capital measures. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. The analysis is based on NLSY97 data. The household and individual income percentiles are based on the 2017 survey sample in the data. Income analyses are weighted by the sampling weights given for 2017. No weights were used for the remaining outcome variables. Standard errors are clustered at the metro level.

the OI analysis. As mentioned above, one potential explanation is that the measure of incarceration in the NLSY analysis is measured as "ever incarcerated," whereas in the OI it refers to "currently incarcerated" in 2010 near age 30 in the OI data. In this way, the differences in results might be attributable to the way that resources affect incarceration at younger ages versus when measured at age 30.

5 Racial Dissociation and the Effect of Racial Capital

We have argued throughout that the difference in racial capital between individuals of different races derives from two sources: average race-specific differences in resources and assets in the market and the cumulative influence of factors that cause individuals to interact disproportionately within their own racial group, a concept we call racial dissociation. As racial dissociation declines, relationships and networks become more racially integrated, and the particular relevance of the assets of one's own racial or ethnic group should decrease.

As discussed in Section 2, given how racial capital is assumed to operate, our framework yields several important and interesting implications that can be empirically evaluated. First, in analyses comparing White outcomes to those of different racial/ethnic minority groups, we would expect there to be significant heterogeneity in the measured importance of racial capital across groups. In particular, the estimated effect of own-race racial capital elements should increase with the degree of racial dissociation experienced by the minority group. To examine this issue, we first show that racial dissociation with the White majority, as measured by residential and marriage segregation, is ordered: Black $\ggg$ Hispanic $\geq$ Asian. We then conduct Asian-White and Hispanic-White analyses that mirror the Black-White analysis presented in Section 4. We predict that own-race racial capital elements should matter less for other racial minority groups, given the lower racial dissociation these groups experience relative to that experienced by Black Americans.

A second clear implication from our framework is that the effect of racial capital elements

should, for a given racial minority group, vary *across* metro areas based on racial dissociation in those markets. In particular, the estimated effect of own-racial capital measures should be larger in metro areas where neighborhoods, schools, social networks, and interactions are highly racially segregated and smaller the more meaningfully racially integrated the market. To test this prediction, we estimate the impact of racial capital for each of the Asian-, Black-, and Hispanic-White analyses on the basis of residential segregation and segregation in marriages in different markets.

5.1 Metropolitan Measures of Racial Dissociation

Our measure of residential segregation is the dissimilarity index based on Duncan and Duncan (1955). We calculate the measure separately for the three pairs of racial/ethnic groups that form the basis for our empirical analyses: Asian-White, Black-White, and Hispanic-White. For each metropolitan area and [Race]-White comparison, the dissimilarity index is given by:

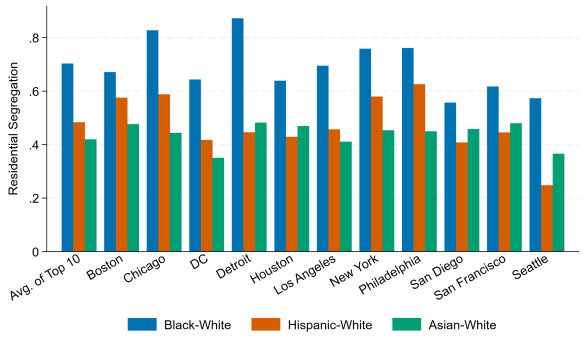
$$ResidentialSegregationIndex = \frac{1}{2}\sum_{j}\left|\frac{[\text{Race}]_j}{[\text{Race}]_{\text{total}}} - \frac{\text{White}_j}{\text{White}_{\text{total}}}\right|$$

where j indexes the residential neighborhoods (Census tracts) within the metro area. The dissimilarity index has a natural interpretation as the share of the [Race] population that would need to change neighborhoods for the [Race] and White populations to be evenly distributed within a metropolitan area. The value varies between zero and one and a higher number represents a greater degree of residential segregation.

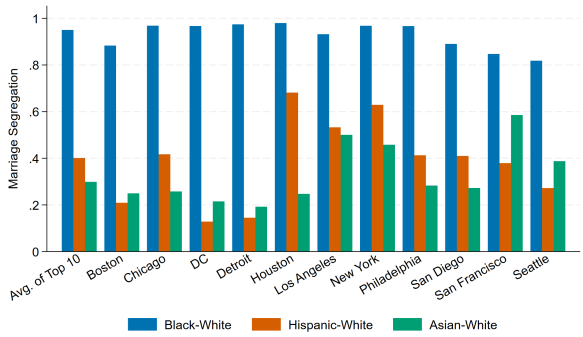
To measure the degree of segregation in marriages, we compare the actual share of interracial marriages of a given kind, σ_{ACTUAL}, in the metropolitan area to the share that would be predicted under random assignment of marriage partners, σ_{RANDOM}. Because our measure is based on the 1990 Census, we focus on marriages between men and women. We again construct these measures separately for our Asian-White, Black-White, and Hispanic-White analyses. For each [Race]-White comparison, the measure of marriage segregation that we

Figure 8: Residential and Marriage Segregation across Selected Metropolitan Areas

(a) Residential Segregation



(b) Marriage Segregation



Notes: The figures above display measures of Black-White, Hispanic-White, and Asian-White residential segregation (left panel) and marriage segregation (right panel) for selected metropolitan areas. The first set of bars on the left in both panels represents the average of these measures for the ten most populous metropolitan areas in 1990.

use is:

$$MarriageSegregationIndex = \frac{(\sigma_{RANDOM} - \sigma_{ACTUAL})}{\sigma_{RANDOM}}$$

where the actual and random shares are of [Race]-White marriages.

This measure of marriage segregation takes a value of one when there are no [Race]-White marriages and marriages are, therefore, perfectly segregated. The index equals zero when the [Race]-White marriage rate exactly matches that predicted by random assignment, which can be interpreted as a perfectly integrated marriage market. It is also theoretically possible for the index to fall below zero, if there are more [Race]-White couples in a metropolitan area than under the random assignment scenario.

Figure 8 shows these measures of residential and marriage segregation for several large metropolitan areas and, in the first set of column of each panel, the average across the ten largest metro areas in 1990. Overall, Black-White segregation is significantly greater than Hispanic-White and Asian-White segregation for both measures, and especially for marriage segregation.

The top panel of Figure 9 shows a scatter plot of our measures of residential and marriage

Black-White segregation across metropolitan areas. Comparable figures for the Asian-White and Hispanic-White are shown in the remaining panels of the same figure. Because segregation measures can be sensitive to group size, we first residualize both measures using an OLS regression that includes the Asian, Black, or Hispanic share of the metro population, respectively, as the only right-hand side variable.

The panels of Figure 9 show clearly that while there is some positive correlation between these measures of racial dissociation, the two measures have a great deal of independent variation. The plots also reveal several notable regional patterns. For segregation: (i) metro areas in the Northeast and Midwest regions generally have the highest degree of Black-White residential segregation but with varied degrees of marriage segregation, (ii) many metro areas in the South have high levels of marriage segregation despite having lower levels of residential segregation, and (iii) many metropolitan areas in the West have among the lowest levels of segregation based on either measure.

5.2 Heterogeneity by Race and Ethnicity

We now present results for Asian-White and Hispanic-White analyses that mirror the Black-White analysis presented in Section 4.[31] Following the same methodology as Figure 3 above, the middle and lower panels of Figure 10 report the estimated Hispanic and Asian coefficients from the intergenerational mobility equations for household and individual income as controls are added for parental income, neighborhood fixed effects, and our ethnic capital measures.[32] The top panel of Figure 10 repeats Figure 3 for easy visual comparison.

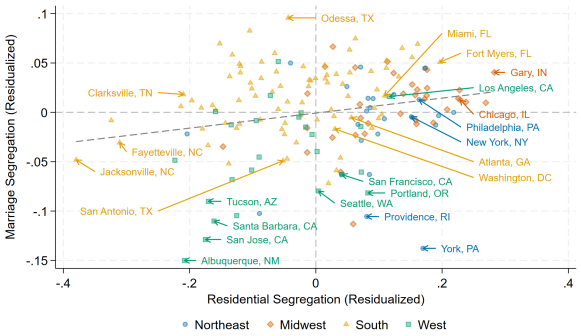
Comparing the Hispanic-White analysis to the Black-White analysis above yields several intriguing takeaways. First, the pattern resulting from successively controlling for parental income, neighborhood, and the racial capital measures is qualitatively quite similar. Interest-

[31] A limitation of our analysis is that the publicly-available OI data do not provide information on immigration status. This is important because children of immigrants have substantially higher rates of upward mobility than their U.S. born counterparts, both historically and in recent cohorts (Abramitzky et al., 2021).

[32] Comparable figures for the education, employment, and incarceration outcomes are shown in Appendix Figures B.8 and B.9.

Figure 9: Residential and Marriage Segregation by Race

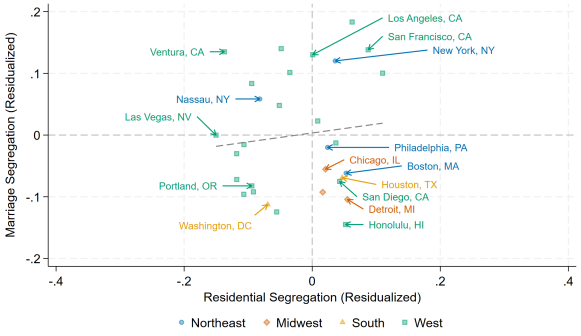
(a) Black-White



(b) Hispanic-White



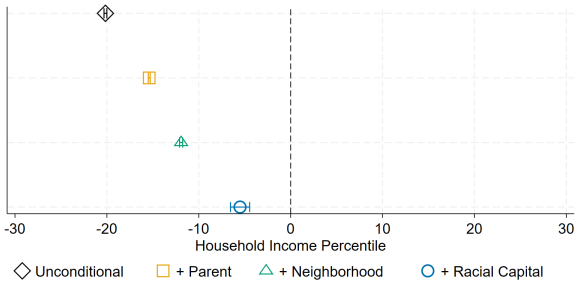
(c) Asian-White



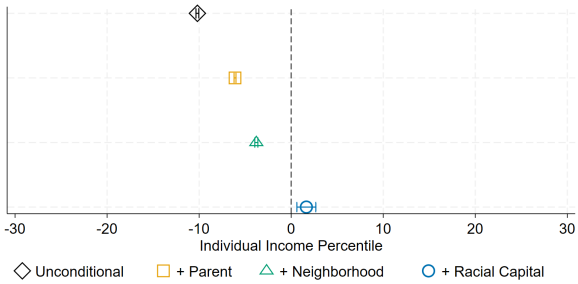
Notes: The figures above show scatter plots of Black-White, Hispanic-White, and Asian-White residential segregation and marriage segregation across metropolitan areas. All measures are residualized after controlling for the relevant racial group's share of each metropolitan area.

Figure 10: Mobility Gaps in Household and Individual Income by Race

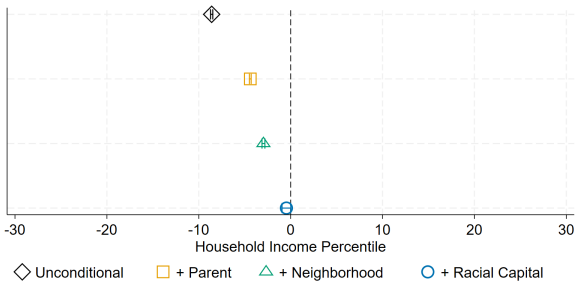
(a) HH Income Percentile (Black-White)



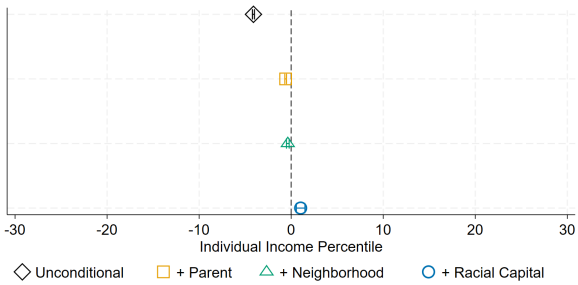
(b) Indiv. Income Percentile (Black-White)



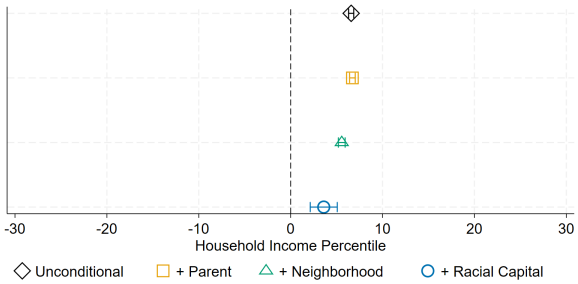
(c) HH Income Percentile (Hispanic-White)



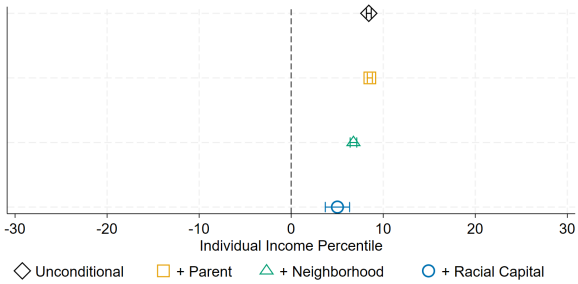
(d) Indiv. Income Percentile (Hispanic-White)



(e) HH Income Percentile (Asian-White)



(f) Indiv. Income Percentile (Asian-White)



Notes: The figures above show the gaps in adulthood outcomes between Hispanic and White children, conditional on different sets of resources. Black diamonds depict unconditional gaps; yellow squares depict gaps conditional on parental income; green triangles depict gaps conditional on parental income and tract fixed effects; and blue circles depict gaps conditional on parental income, tract fixed effects, and racial capital measures. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

ingly, the magnitudes of both the overall raw gaps and the shift that results from controlling for racial capital are about *half* the size of those in Black-White analysis. The raw household income gap, for example, is about 8.6 percentile points in the Hispanic-White analysis versus 20.2 percentile points of the Black-White analysis and, controlling for racial capital shifts the estimate by about 2.5 versus 6.4 percentile points. Also, strikingly, the inclusion of racial capital measures again *reverses* the sign of the Hispanic coefficient for individual income, just as observed in the Black-White analysis. Overall, the Hispanic-White analysis is remarkably similar qualitatively to the Black-White analysis but with a reduced (40 percent) role for racial capital, consistent with greater social salience of race in contemporary society for Black versus Hispanic Americans in interactions with the White Americans.

The Asian-White comparison shown in the bottom panel of the figure depicts a quite different picture from both the Black- and Hispanic-White analyses. Unconditionally, Asian children have higher levels of both household and individual income as adults than their White counterparts. Most relevant for our analysis, these overall raw gaps are little affected by the inclusion of controls for parental income, neighborhood, and our racial capital measures, as implied by the minimal shifts in the point estimates across specifications. In this case, the shift in the point estimate of the Asian coefficient with the inclusion of racial capital measures is only about 1/10th that for the Black-White analysis. This is consistent with both a smaller resource gap between the parents of Asian and White children and with a significantly reduced social salience of race/ethnicity in American society for Asian-White versus Black-White interactions.[33]

Taken together, the results depicted in Figure 10 are broadly consistent with the predictions of our theoretical framework in a society in which racial dissociation from the majority group remains strongest for Black Americans and is important, but somewhat diminished, for Asian and Hispanic Americans. For both Black and Hispanic children, the role of racial

[33] A challenge for the Asian-White analysis is that the Asian population is quite small in many metropolitan areas. To account for this concern, we conducted robustness checks that restrict the sample to include only metropolitan areas with Asian population shares above alternative thresholds (3% and 5%). These estimates are shown in Appendix B. In general, the results are robust to alternative population thresholds.

capital in the intergenerational mobility equation helps to explain the absolute mobility gaps observed for Black and Hispanic children compared to their White counterparts in CHJP. Even more importantly, it works to tie the fortunes of Black and Hispanic children more strongly to those of the same racial/ethnic group in the previous generation.

That the impact of racial capital varies considerably across the Asian-, Black-, and Hispanic-White analyses as a whole, and across the various outcomes within each of these analyses, highlights the fact that the relationship between the collective assets of adults in the same racial group and metro area that a child experienced at age 10 and their life outcomes at age 35 is not mechanical or automatic. Instead, in the same way that the β coefficient captures intergenerational persistence of outcomes within the family, the $\gamma\sigma$ coefficient captures additional persistence in outcomes across generations at the racial group-by-metro level. It is possible, of course, that some of this persistence is related to time-invariant unobserved factors that vary at the racial-group-by-metro level, although Rothbaum and Massey (2022) find that there was little systematic persistence in the places that were especially good for poor Black children to grow up from the first to the second half of the 20th Century.

5.3 Heterogeneous Impact of Racial Capital Across Metro Areas

We close this section by estimating heterogeneity in the impact of racial capital across metropolitan areas for each of the Asian-, Black-, and Hispanic-White analyses above. We use measures of residential segregation and marriage segregation to capture two distinct dimensions of racial dissociation within a metropolitan area. In the notation of our theoretical framework, these segregation levels serve as proxies for $\sigma^r_{m,t-1}$, thereby allowing us to test whether racial capital matters more in places with greater levels of racial dissociation, as our theoretical framework predicts.

To simplify the exposition, we include only the earnings racial capital measure for this heterogeneity analysis (instead of including interactions with each of our original four racial capital measures). We include the earnings racial capital measure directly in the analysis and

interact it with our measures of residential and marriage segregation. We also interact the racial capital measure with the Asian, Black, or Hispanic population share in the respective analysis in order to control for both a potential direct role for population share and any effect that population share might have on the segregation measures. The specifications reported here also include interactions of the segregation measures and population shares with parental income percentile.

Panel A of Table 4 shows the heterogeneity in the impact of racial capital for the Black-White analyses, respectively. The first three columns report results for household income and the last three columns for individual income. For each outcome, the specification in the first column includes only interactions with residential segregation, the second column includes only interactions with marriage segregation, and the third column includes interactions with both segregation measures. For each of the specifications, the table reports only the coefficients for the interactions of our measures of segregation and racial capital. The full set of coefficients and standard errors for each of the specifications is reported in Appendix C.

The coefficients in columns (1) and (4) for both household and individual income reveal a strong positive coefficient on the interaction between racial capital and residential segregation. These results imply that, as predicted by our theoretical framework, the broader resources of a child's own racial group matter more for their adult outcomes in metropolitan areas in which neighborhoods are more racially segregated. The results reported in columns (2) and (5) capture a second dimension of the social salience of race: marriage segregation. The coefficients for both household and individual income are strongly positive, again consistent with a greater role for racial capital in metropolitan areas that show a greater degree of racial dissociation along that dimension.[34]

Columns (3) and (6) include both the residential and marriage segregation measures

[34]The estimates shown in Table 4 implying a smaller role for racial capital in metropolitan areas with lower levels of segregation are consistent with the results of several recent papers that have studied the impact of geography and segregation, in particular, on racial mobility gaps (Andrews et al., 2017; Chyn et al., 2022; Davis and Mazumder, 2018).

Table 3: Heterogeneity in Impact of Racial Capital by Metro Area Residential and Marriage Segregation Measures

	Household Income			Individual Income		
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Black-White						
RC × Residential Segregation	0.645***		0.581***	0.718***		0.660***
	(0.102)		(0.108)	(0.102)		(0.107)
RC × Marriage Segregation		1.946***	1.191***		1.631***	0.776*
		(0.400)	(0.421)		(0.402)	(0.420)
Additional Controls	Y	Y	Y	Y	Y	Y
Tract Fixed Effects	Y	Y	Y	Y	Y	Y
Adjusted R-squared	0.934	0.934	0.935	0.904	0.904	0.904
Observations	255943	255943	255943	255943	255943	255943
Panel B: Hispanic-White						
RC × Residential Segregation	1.237***		1.223***	1.028***		1.023***
	(0.083)		(0.085)	(0.084)		(0.086)
RC × Marriage Segregation		0.296***	-0.068		0.281***	-0.026
		(0.061)	(0.062)		(0.060)	(0.060)
Additional Controls	Y	Y	Y	Y	Y	Y
Tract Fixed Effects	Y	Y	Y	Y	Y	Y
Adjusted R-squared	0.878	0.878	0.878	0.841	0.840	0.841
Observations	313662	313662	313662	313662	313662	313662
Panel C: Asian-White						
RC × Residential Segregation	2.521***		1.912***	2.666***		2.086***
	(0.653)		(0.667)	(0.620)		(0.619)
RC × Marriage Segregation		0.776*	0.633		1.191***	0.999**
		(0.397)	(0.431)		(0.402)	(0.433)
Additional Controls	Y	Y	Y	Y	Y	Y
Tract Fixed Effects	Y	Y	Y	Y	Y	Y
Adjusted R-squared	0.861	0.861	0.862	0.836	0.836	0.837
Observations	82301	82301	82301	82301	82301	82301

Notes: The table above shows the heterogeneous impact of racial capital across metropolitan areas with varying degrees of racial dissociation as measured by residential and marriage segregation. The results are presented separately by racial groups relative to White children. For each outcome, household and individual income, the first column includes only the interaction term with residential segregation, second with marriage segregation, and third with both segregation measures. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

Table 4: Heterogeneity in Impact of Racial Capital by Metro Area Residential and Marriage Segregation Measures

	Household Income			Individual Income		
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Black-White						
RC × Residential Segregation	0.711***		0.704***	0.787***		0.761***
	(0.142)		(0.148)	(0.141)		(0.146)
RC × Marriage Segregation		1.283**	0.373		1.371**	0.406
		(0.582)	(0.608)		(0.629)	(0.653)
Additional Controls	Y	Y	Y	Y	Y	Y
Tract Fixed Effects	Y	Y	Y	Y	Y	Y
Adjusted R-squared	0.923	0.923	0.923	0.881	0.881	0.881
Observations	92002	92002	92002	92002	92002	92002
Panel B: Hispanic-White						
RC × Residential Segregation	1.129***		1.079***	0.939***		0.901***
	(0.107)		(0.109)	(0.107)		(0.108)
RC × Marriage Segregation		0.293***	-0.018		0.291***	0.030
		(0.081)	(0.082)		(0.080)	(0.080)
Additional Controls	Y	Y	Y	Y	Y	Y
Tract Fixed Effects	Y	Y	Y	Y	Y	Y
Adjusted R-squared	0.850	0.849	0.850	0.806	0.806	0.807
Observations	114135	114135	114135	114135	114135	114135
Panel C: Asian-White						
RC × Residential Segregation	2.225***		1.906***	2.532***		2.143***
	(0.729)		(0.739)	(0.729)		(0.735)
RC × Marriage Segregation		0.575	0.331		1.025**	0.753
		(0.478)	(0.524)		(0.458)	(0.502)
Additional Controls	Y	Y	Y	Y	Y	Y
Tract Fixed Effects	Y	Y	Y	Y	Y	Y
Adjusted R-squared	0.833	0.834	0.835	0.816	0.816	0.818
Observations	29288	29288	29288	29288	29288	29288

Notes: The table above shows the heterogeneous impact of racial capital across metropolitan areas with varying degrees of racial dissociation as measured by residential and marriage segregation. The results are presented separately by race groups relative to White children. For each outcome, household and individual income, the first column includes only the interaction term with residential segregation, second with marriage segregation, and third with both segregation measures. Each observation is weighted by the number of households in each race group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract-level.

simultaneously. While it might be asking a lot of the data to try to distinguish the relative importance of these two segregation measures, Figure 9 above suggests that there is some independent variation in these measures across metro areas.[35] The results shown in the last columns for respective outcomes return positive and statistically significant point estimates for the interaction of racial capital with both segregation measures. In this way, the results for the Black-White analysis show a strong and robust relationship between these two measures of racial dissociation in the metropolitan area and the strength of the role of racial capital in the intergenerational mobility equation. Interestingly, the coefficient on marriage segregation is greater than that on residential segregation, perhaps suggesting that, for Black Americans, marriage segregation may be a more accurate proxy for racial dissociation than residential segregation.

Panels B and C of Table 4 report analogous coefficients for the Hispanic- and Asian-White analyses. Overall, the results are quite similar to the Black-White analysis, implying a greater role for racial capital in more segregated metro areas. In all three analyses, the coefficient on the interaction of racial capital with residential and marriage segregation, respectively, is positive and significant when included as the only segregation measures in both the household and individual income specifications. Interestingly, residential segregation emerges as the more salient measure of racial dissociation for the Asian- and Hispanic-White analyses, although the point estimates are quite noisy, limiting our ability to distinguish between the two measures.

6 Racial Group Convergence Across Generations

We close the paper by exploring the implications of our empirical estimates for the dynamics of racial inequality in the United States. Relative to the standard intergenerational model,

[35] in addition to the cross-sectional analysis presented here, an interesting direction for future study would be to examine how the impact of racial capital has changed as racial segregation has declined in recent decades, particularly in some metro areas. Chetty et al. (2024) document declines in racial gaps in economic mobility for recent birth cohorts that are broadly consistent with this conjecture.

our empirical framework implies much greater racial equality in the long run, while simultaneously explaining the historically slow speed of Black-White convergence in the United States over the past two centuries documented in Margo (2016). These results have a number of important policy implications, which we explore in a second part of this section.

6.1 Empirical Results

We now consider the implications of our empirical estimates for the speed and extent of racial convergence across generations, focusing on Black-White differences. For expositional clarity and to match the theoretical expressions for persistence and steady state inequality derived in Section 2, we assume throughout this section that there is a single element of racial capital, which is measured as the group mean of the same earnings variable, y, used for parent's capital and children's adult outcomes. This differs, of course, from our primary empirical specification, which incorporated four elements of racial capital to capture the potentially multidimensional nature of the intergenerational transmission of education, income, and wealth but provides a closer link with the theory.

The panels of Table 5 report results separately for household and individual income. As discussed above, because White adults are more likely to reside with a partner than Black adults, household income inequality likely overstates and individual income inequality likely understates underlying racial differences in economic well-being. We present results here for both household and individual income, therefore, with the understanding that a blended model would likely best capture difference in economic well-being.

Each column of the table summarizes results for a specific scenario/model. The parameter estimates used for each scenario are shown in the first four rows. What we have termed the generational persistence measure is shown in the fifth row. The implied estimates for steady state inequality are shown in the sixth row, and the distance between the current gap and the steady state is shown in the last row. The left panel of the table reports the results for household income. The first column, labeled "Standard Model" reports results using

Table 5: Speed and Extent of Black-White Convergence in Various Scenarios

	Household Income			Individual Income		
	Standard Model	Racial Capital Model	No Racial Dissociation	Standard Model	Racial Capital Model	No Racial Dissociation
Parameters						
α	-15.4	-5.5	-5.5	-6.1	1.7	1.7
β	0.31	0.25	0.25	0.27	0.21	0.21
$\gamma\sigma$	0.00	0.28	0.00	0.00	0.20	0.00
Δ	-20.2	-20.2	-20.2	-10.2	-10.2	-10.2
Generational Persistence						
$\beta + \gamma\sigma$	0.31	0.53	0.25	0.27	0.41	0.21
Steady State Gap						
$\frac{\alpha}{1-\beta-\gamma\sigma}$	-22.3	-11.8	-7.4	-8.3	2.8	2.1
Distance to Steady State						
$\Delta - \frac{\alpha}{1-\beta-\gamma\sigma}$	-2.1	8.4	12.8	1.9	13.0	12.3

Notes: The table above presents estimates of the speed and extent of Black-White convergence across generations, with separate panels for household and individual income. Each outcome is evaluated across three scenarios or models, corresponding to the three columns. The first four rows report parameter estimates from the respective models, with Δ measuring the current unconditional racial income gap. The fifth row present the implied measure generational persistence, the sixth row shows the implied steady-state inequality, and the seventh reports the implied distance between the current racial income gap and the gap in the implied steady state.

parameter estimates from an intergenerational model without racial capital. This scenario draws on the parameter estimates in the specification reported in column (2) of Table 2, which closely resemble those from CHJP.

The implied measure of generational persistence is fairly weak in the standard model, 0.33, which would imply rapid group-level convergence. Repeatedly applying this estimate for just four generations, for example, would imply a 99 percent reduction (towards the steady state) in group differences. As discussed above, the estimates of the permanent inequality parameter, α_r, is quite large in this model, -15.4, leading to an estimate of steady state inequality of approximately -22.3 percentile points, which is actually larger than the current racial gap of -20.2 percentile points.

The second column, labeled "Racial Capital Model", reports results using the parameter estimates from the model that includes racial capital. Given that our preferred specification includes four distinct elements of racial capital, it is not obvious which specification to use

for these estimates. We show here estimates based on the parameters reported in column (5) of Table 2, although similar estimates would obtain from the specification in column (4), which includes the only the single racial capital element for earnings.

There are several important things to notice about the results for the racial capital model. First, as discussed above, the estimate of α_r is much smaller when racial capital is included, compared to the standard model in column (1). This cuts the implied steady state inequality level roughly in half, from 22 percentile points in the standard model to 12 in the racial capital model. Generational persistence is also much stronger in this case, driven by the combined effects of parental capital, β, and racial capital, $\gamma\sigma$, which tie the fortunes of each racial group more strongly to the previous generation. Strikingly, the higher rate of generational persistence in the racial capital model, 0.53, estimated in modern data, is much closer to the persistence in racial differences measured in historical data. Margo (2016), for example, estimates that the Black-White per capita income ratio has increased steadily, but slowly, from about 0.25 in 1870 to about 0.65 in 2015, implying a rate of generational persistence in group differences of approximately 0.75-0.8. Finally, the racial capital model implies that at 11.8 percentile points, society is currently much farther away from the steady-state than results based on the standard model would imply,

The third column considers a scenario in which σ is set equal to zero, while all other parameters are kept at their levels from the racial capital model. This column, labeled "No Racial Dissociation", highlights both the role that racial capital plays in slowing the speed of racial convergence and also provides a measure of estimated steady state inequality in a world in which social networks and associations are fully racially integrated. Steady state inequality levels for household income are further reduced in this scenario to -7.4, and generational persistence is much weaker, 0.25. In this way, both the persistence and long-run level of racial inequality would be sharply reduced in a world in which social networks and associations were more racially integrated.

The right panel of Table 5 repeats the same set of calculations for individual income. In

this case, the inclusion of racial capital in the model flips the sign of the estimated α_r. As a result, the implied steady state inequality level is not only reduced sharply in magnitude in the racial capital model, but also flips sign. Taken together with the estimate of the implied steady state for the household income model, the inclusion of racial capital in the mobility equation is consistent with a steady state of near equality in economic well being for Black and White Americans. Similar to the results for household income, the corresponding estimate of generational persistence is significantly greater in the individual income model that includes racial capital and would be sharply reduced in a world in which social networks and associations were more fully integrated.

6.2 Policy Implications

We close this section with a brief discussion of the implications of including racial capital in the intergenerational model, along with our empirical estimates, for policy efforts to alter the rate of racial economic convergence in the United States. In essence, each parameter in (6), which shows how racial differences change from generation to generation, is associated with a distinct channel through which policy might increase (or decrease) the speed of racial economic convergence. These include policies that (i) increase economic mobility in general, by reducing β or γ, (ii) reduce racial dissociation, σ, or (iii) reduce current levels of racial inequality, Δ. Within our framework, the latter two categories are specific in the way they impact racial inequality across generations and several additional points are worth emphasizing.

First, the critical role of racial dissociation in our model highlights how policies or behaviors that reduce racial segregation or discrimination increase the speed of convergence towards racial equality, and vice versa.[36] This applies not only to policies that directly target segregation or discrimination but also to policies that affect the way that households sort

[36]Substantial long-run effects of school desegregation on a wide variety of outcomes for Black and White children have been shown in a number of studies including: (Billings et al., 2022; Johnson, 2011, 2019; Reber, 2011; Tuttle, 2019). Anti-discrimination laws and affirmative action policies passed in the Civil Rights era have also been shown to have a significant impact on racial inequality (Collins, 2003; Miller, 2017).

across schools, neighborhoods, jobs, and other institutions, such as laws governing school choice and school finance.

Second, the inclusion of racial capital in (6) has several interesting implications for the impact of redistributive policies that aim to directly reduce the current level of racial inequality, such as racial reparations. From a theoretical perspective, the inclusion of racial capital means that there are two channels through which any such changes get transmitted to the next generation – i.e., through parents' capital and the broader resources of one's racial group. Our parameter estimates suggest that these channels are about equal in magnitude, implying an approximate doubling of the impact of such transfers on the next generation through the racial capital channel.

Even more interestingly, as discussed above, estimates of the standard intergenerational model imply that the current level of racial inequality is close to the steady state. This leads to the perverse prediction that a large one-time racial wealth transfer would reduce inequality only temporarily, with racial differences quickly reverting back towards the larger steady state gap over subsequent generations. Estimates of the model with racial capital instead imply a steady state with minimal racial inequality. In this case, a large one-time wealth transfer would accelerate progress towards racial equality without the reversion predicted by the standard model.[37]

Finally, it is straightforward to amend the theoretical framework to highlight the potential role of racial wealth transfers in affecting the speed of racial convergence and steady state inequality. In particular, assume a fraction h_t of the racial gap $\Delta_r(y_t)$ in period t is made to the members of group r. In this case, the gap in period $t+1$ is given by: $\Delta_r(y_{t+1}) = (\beta + \gamma\sigma_t - h_t)\Delta_r(y_t) + \alpha_r$, steady state inequality is given by:$\Delta_r(y_{ss}) = \frac{\alpha_r}{1-\beta-\gamma\sigma+g_t}$, and generational persistence is: $g_t = \beta + \gamma\sigma_t - h_t$. As these equations make clear, wealth transfers designed to systematically close a fraction of racial wealth work to both reduce the level of steady state inquality and speed the rate of convergence to the steady state.

[37]See Darity Jr et al. (2018); Darity Jr and Mullen (2022) for more detailed discussions of the predicted impact of policy – and reparations, in particular – on racial wealth inequality.

Systematic transfers in the opposite direction, of course, would instead slow the speed of racial convergence across generations.

7 Conclusion

This paper is motivated by two longstanding puzzles from the literature on intergenerational mobility. One of these is the slow speed of racial economic convergence in the United States since the Civil War. Conventional mobility equations yield an estimate of persistence of about 0.3 to 0.6, which, if the only relevant factor, would imply that disparity in any generation should essentially vanish within four or five generations. Yet, as Margo (2016) shows, Black-White convergence over the past 160 years has been much slower than this, consistent instead with persistence closer to 0.75 or 0.8. Explaining the glacial speed of racial convergence while resolving this apparent contradiction regarding measured and implied persistence is one of the key aims of our study.

The second motivating puzzle concerns the large gap between the outcomes of Black and White adults from similar backgrounds that is not accounted for by an exhaustively detailed set of controls for parental and neighborhood traits (Chetty et al., 2020). When interpreted as a fixed difference between the races, this unexplained gap suggests that the U.S. is close to a steady state of substantial racial inequality, with little hope for convergence in future generations. The second motivation for this paper is to understand what accounts for these unexplained racial differences in economic mobility, even after conditioning for family and neighborhood background.

We develop a theoretically straightforward yet conceptually rich extension of the traditional intergenerational mobility equation that provides a unifying explanation for both puzzles. Motivated by two observations—that a child's life outcomes are shaped by a broader social environment beyond their parents, and that social interactions are often racially segmented—we introduce the concept of racial capital. A young person's racial capital is a

function of the collective resources of all adults in their broader market, with disproportionate weight placed on the resources of adults of their own race because social interactions occur predominantly along racial lines. The salience of own-race resources increases with the degree of *racial dissociation*—that is, the extent of racial segregation in social interactions.

We operationalize racial capital by incorporating four indices—measured when the child was approximately 10 years old—of the collective assets of adults in the parents' generation, from the same racial group and metropolitan area. Adding these measures to the mobility equation yields several striking findings. First, racial capital has substantial explanatory power for children's adult outcomes, comparable to that of parental and neighborhood characteristics. Second, its inclusion largely explains—and often reverses the sign of—previously unexplained racial differences in intergenerational mobility for outcomes such as income, educational attainment, and employment. These results suggest that traditional models overlook the critical role played by the collective assets of one's racial or ethnic group in shaping mobility.

A third consequence of incorporating racial capital is a fundamental shift in our understanding of the evolution of racial inequality across generations. Whereas the conventional model implies a persistent steady-state racial gap, our framework instead predicts long-run convergence toward near equality in outcomes between Black and White Americans. At the same time, the combined influence of parental resources and racial capital increases the intergenerational weight of the past, slowing the pace at which convergence occurs. Together, these features reconcile our empirical estimates with the historically slow decline in racial inequality documented by Margo (2016), while underscoring that the long-run trajectory points toward greater racial equality.

A fourth set of results highlights the crucial role of racial dissociation in the operation of racial capital. We examine this empirically in two ways. First, as predicted by our framework, racial capital has greater explanatory power for socioeconomic gaps between the White majority group and the three major minority groups—Asian, Hispanic, and Black—in

proportion to their degree of social isolation from the White majority. Second, within each group, the effects of racial capital are larger in metro areas with higher levels of dissociation, as measured by residential and marriage segregation.

The role of racial dissociation in shaping the effects of racial capital carries several implications. Most directly, greater dissociation between a minority group and the White majority group leads to both stronger intergenerational persistence of inequality and larger steady-state disparities. This helps explain why minority groups historically most socially segregated from the White majority have experienced the slowest economic convergence.

Our results have important policy implications. Conventional mobility models that omit racial capital suggest that reductions in racial inequality today will quickly dissipate as outcomes revert toward a steady state marked by persistent disparities, casting doubt on the long-term effectiveness of interventions aimed at reducing current racial inequality, such as anti-discrimination efforts or race-specific wealth transfers. By contrast, our framework suggests that the U.S. remains far from a steady state characterized by small racial gaps. Policies that reduce current disparities could therefore accelerate convergence toward this more equal long-run equilibrium, and do so with amplified effect as they operate through the dual channels of parental and racial capital. Our results regarding the importance of racial dissociation suggest that movement towards a steady-state of greater racial equality can also be achieved by polices that reduce racial segregation or foster more cross-racial social interactions.

Finally, our analysis indicates promising areas for future research. While this paper focuses on the collective assets of groups defined by race and ethnicity (and location), the general concept of group capital introduced here can be applied to the analysis of groups defined along other dimensions that shape the complex network of social interactions influencing a child's long-run outcomes. Besides race, future work might examine other types of social groupings, such as class, religious affiliation, immigrant communities, or peer networks.

It may also be interesting to extend this paper's analysis to other countries or, by taking

advantage of new data sources, to other historical periods in the U.S. The detailed linked data available for historical censuses, which many researchers have used to estimate economic mobility, may be especially fruitful for exploring the role of racial capital in driving socioeconomic convergence across generations, particularly for more granular categories of race and ethnicity, something we intend to explore in future work. Finally, we see the thoughtful integration of ideas related to racial capital developed here with theories of the social construction and endogenous use of race (and other group categories), as well as the evolution of racial identity across generations, as especially valuable areas for future study.

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A Data Appendix

A.1 Transforming Earnings/Income Measures to Percentile Positions

For consistency across different data sources and to provide an intuitive interpretation of the mobility coefficients, we transform metropolitan-level average earnings measures that we use as one of elements of racial capital from levels to percentile points in the national income distribution. Specifically, we use the 1990 IPUMS Current Population Survey (CPS) data to construct the national income distribution of adults from 25 to 45 (Flood et al., 2021).[38] Then, we assign the metro-level mean earnings for each racial group its correspdonding percentile position. We also transform the per capita income measure that we use as one of the race-specific *neighborhood-level* resources to percentile values using a similar approach. The only difference is that we assign the percentile position in the national income distribution of adults who are 25 and over, as the per capita income measures at the Census tract level are based on the population who are 25 or older.

A.2 Data Preparation for NLSY Analysis

To make our NLSY97 analysis as comparable as possible to our OI analysis, we assign each income value its percentile position within the national income distribution according to the child's age in each respective survey year in a similar fashion as above. We use the CPS data to calculate the national income distribution in each year and age. For example, we use the 2017 CPS to assign children's income percentile position in the national income distribution for the income measures given in the 2017 survey year.

Similar to children's adult income measures, we assign percentile positions in the 1997 national income distribution to parental incomes using the CPS data. One challenge here is that the parent's date of birth is not observed in the survey; instead, the data contains information on the mother's age at the time of her child's birth. For simplicity, we assume that the father and mother are of the same age and assign this as the parents' age in 1997, for the purposes of calculating parents' income percentile.

It is important to note that some responses about income are given as ranges in the NLSY97 data. For such cases, we randomly draw an income value from a uniform distribution within each respective range. For education outcomes, we define college and high school completion status from information on the highest degree achieved by each child. Lastly, we

[38] We use the total income variable given in the CPS to construct the distribution.

define incarceration status as an indicator for whether the child was ever incarcerated in the sample period of the data.

A.3 Notes on Regression Weights

This section describes how we construct regression weights to estimate (9). We use the number of households to approximate the number of children for each (j, p, r) triplet. To see how many households are in each triplet, we first have to know the exact dollar amount that corresponds to each parental income in each neighborhood. The exact amounts of household income for the 25th, 50th, 75th, and 99th percentiles are given in Chetty et al. (2020) as \$14,724, \$30,424, \$51,384, \$254,193, respectively (all values are CPI-adjusted to 1990 dollar). We calculate the 1st and 10th percentile values as \$419 and \$9,929, respectively, using the household income data of household heads between 25 and 45 years of age from the 1998 CPS.

Using the values above, we select an appropriate income $\times$ race bin to approximate the number of households in a given triplet. In particular, we use the number of households in neighborhood j of racial group r earning less than \$5,000 as the weight for the $(j, 1, r)$ triplets. Moreover, we use households earning between \$5,000 and \$10,000, between \$10,000 and \$15,000, between \$25,000 and \$35,000, between \$50,000 and \$75,000, and more than \$100,000 as the weights for $(j, 10, r)$, $(j, 25, r)$, $(j, 50, r)$, $(j, 75, r)$, $(j, 100, r)$ triplets, respectively.

A.4 Robustness Checks for Asian-White Analysis

A challenge for the Asian-White analysis is that the Asian population is quite small in many metropolitan areas. To account for this concern, we conducted robustness checks that restrict the analysis sample to include only metropolitan areas with Asian population shares above alternative thresholds and find that the results are not sensitive to the choice of threshold population size. Specifically, we re-estimate the Asian-White analysis based on Equation (9), including only Census tracts within metropolitan areas where the Asian population share is greater than 3% or 5%. We then generate analogous figures to Figures 10e and 10f, presented in Figure B.6. These figures depict the Asian-White racial gaps across four specifications, illustrating how the gaps change after controlling for parental income, tract fixed effects, and racial capital elements. The results indicate that our findings are robust to the choice of population thresholds.

A.5 Constructing Metropolitan Measures of Racial Dissociation

We construct two measures of evident racial dissociation: residential and marriage segregation. The measure of residential segregation is based on the dissimilarity index and is calculated for a given metropolitan area as follows:

$$ResidentialSegregationIndex = \frac{1}{2}\sum_{j}\left|\frac{[\text{Race}]_j}{[\text{Race}]_{\text{total}}} - \frac{\text{White}_j}{\text{White}_{\text{total}}}\right|$$

where j indexes the residential neighborhoods (Census tracts) within the metro area. The dissimilarity index has a natural interpretation as the share of the [Race] population that would need to change neighborhoods for the [Race] and White populations to be evenly distributed within a metropolitan area. The value varies between zero and one and a higher number represents a greater degree of residential segregation.

As the OI data are based on the 2010 Census tract definition, we construct the metropolitan-level dissimilarity index using the 1990 NHGIS data (Manson et al., 2021) harmonized to 2010 Census tract boundaries following Logan et al. (2014). The dissimilarity indices were computed only for metro areas where there were more than 2,000 people from the racial group that is being compared to the White population.

Our second measure of racial dissociation is marriage segregation. To measure the degree of segregation in marriages, we compare the actual share of marriages of a given kind, σ_{ACTUAL}, in the metropolitan area to the share that would be predicted under random assignment of marriage partners, σ_{RANDOM}. Because our measure is based on the 1990 Census, we focus on marriages between men and women. We again construct these measures separately for our Asian-White, Black-White, and Hispanic White analyses. For each [Race]-White comparison, the measure of marriage segregation that we use is:

$$MarriageSegregationIndex = \frac{(\sigma_{RANDOM} - \sigma_{ACTUAL})}{\sigma_{RANDOM}}$$

where the actual and random shares are of [Race]-White marriages.

In constructing the measure, we use IPUMS of the 1990 Census 5% state sample. We first identify all married individuals/couples in a given metro in 1990. We exclude married individuals who do not reside in the same household, as the data do not identify the race of their spouse. Additionally, we drop couples in which either or both partners are immigrants. To ensure consistency with the racial capital measures we develop, we keep only couples in which at least one partner is between the ages of 25 and 45. Finally, to maintain accuracy, we calculate marriage segregation rates only for metropolitan areas with at least 30 survey

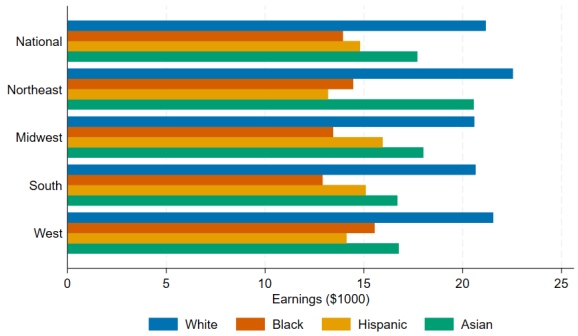
observations for the race group of interest in the 1990 Census.

This measure of marriage segregation equals one when there are no [Race]-White marriages and marriages are, therefore, perfectly segregated. The index equals zero when the [Race]-White marriage rate exactly matches that predicted by random assignment, which can be interpreted as a perfectly integrated marriage market. It is also theoretically possible for the index to fall below zero, if there are more [Race]-White couples in a metropolitan area than under the random assignment scenario.

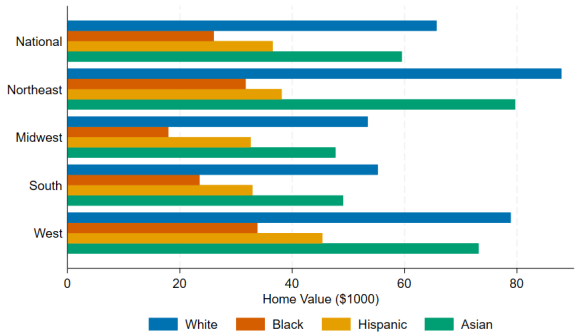
B Appendix Figures

Figure B.1: Average Racial Capital Measures by Race and Census Region

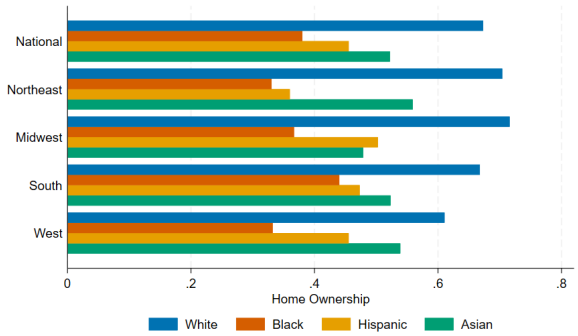
(a) Earnings



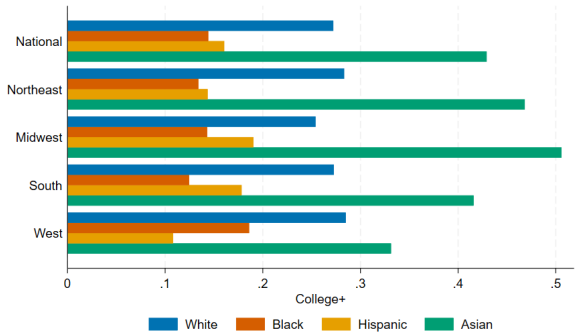
(b) Home Value



(c) Home Ownership



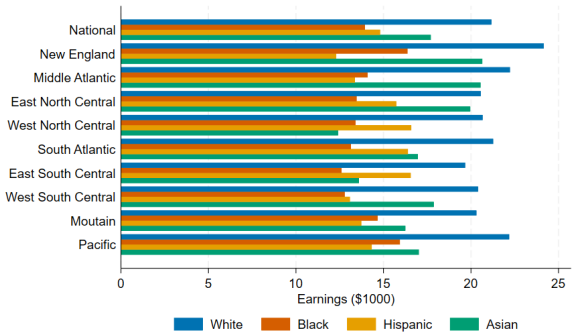
(d) College+



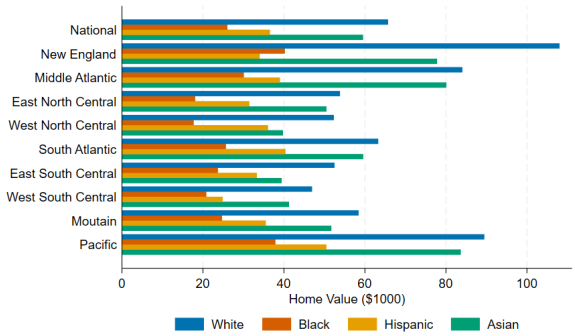
Notes: The figures above depict the average values of racial capital elements used in the analysis by race for the entire nation and by Census regions. These elements include earnings, home values, homeownership rates, and college completion rates for each racial group.

Figure B.2: Average Racial Capital Measures by Race and Census Division

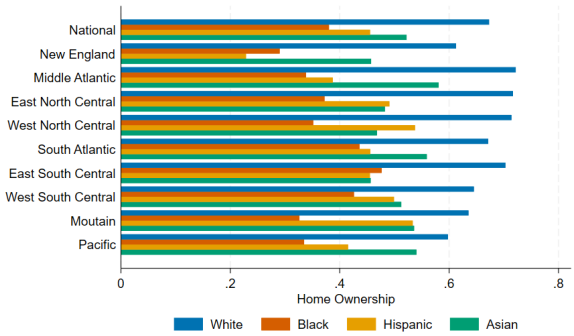
(a) Earnings



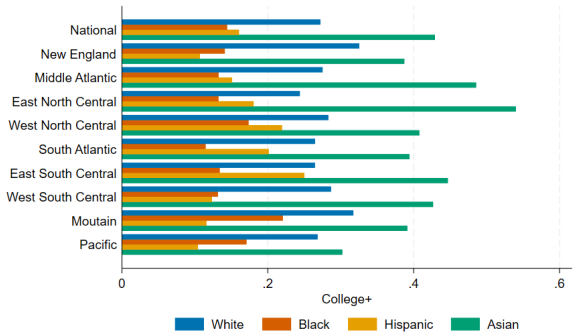
(b) Home Value



(c) Home Ownership



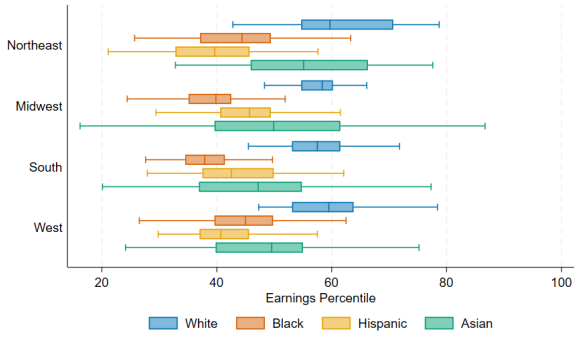
(d) College+



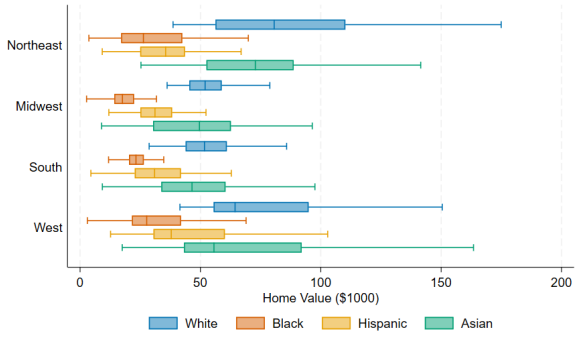
Notes: The figures above depict the average values of racial capital elements used in the analysis by race for the entire nation and by Census divisions. These elements include earnings, home values, homeownership rates, and college completion rates for each racial group.

Figure B.3: Summary of Racial Capital Measures by Census Region

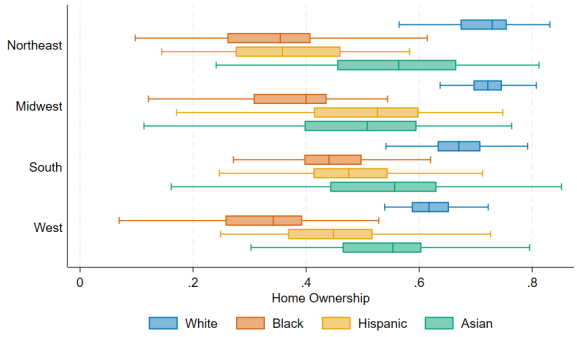
(a) Earnings Percentile



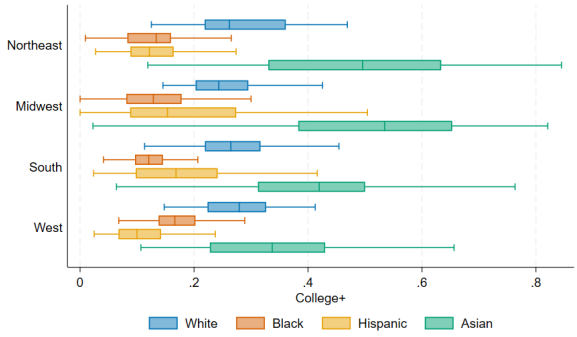
(b) Home Value



(c) Home Ownership



(d) College+



Notes: The figures above display box plots for the four metropolitan-level racial capital elements we use in the analysis by race and Census region. These elements include average earnings percentiles, average home values, homeownership rates, and college completion rates for each racial group. Outliers are not shown in the box plots.

Figure B.4: Summary of Racial Capital Measures by Census Division

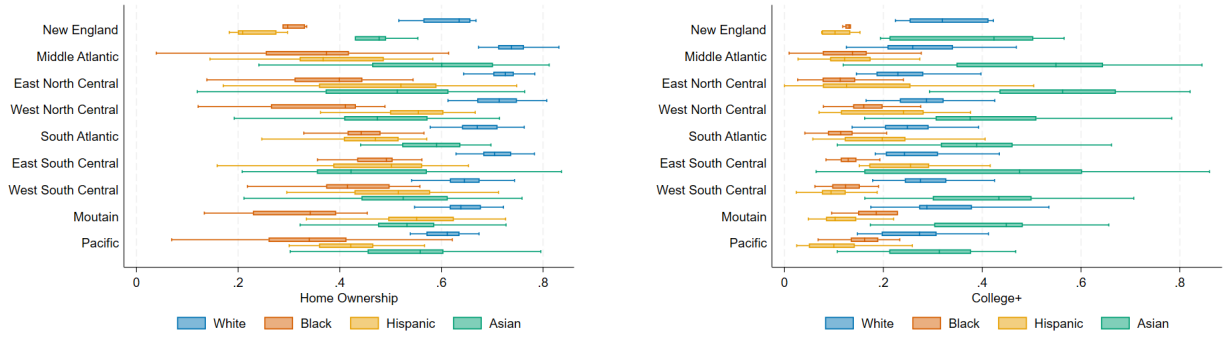
(a) Earnings Percentile

(b) Home Value



(c) Home Ownership

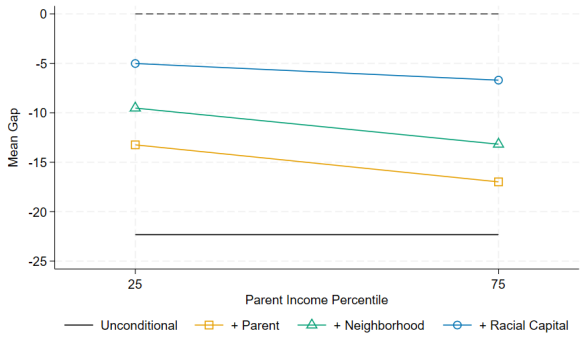
(d) College+



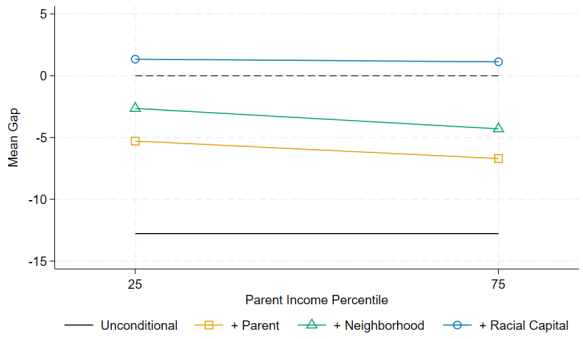
Notes: The figures above display box plots for the four metropolitan-level racial capital elements we use in the analysis by race and Census divisions. These elements include average earnings percentiles, average home values, homeownership rates, and college completion rates for each racial group. Outliers are not shown in the box plots.

Figure B.5: Intergenerational Mobility Gaps between Black and White Children by Parental Income Percentile

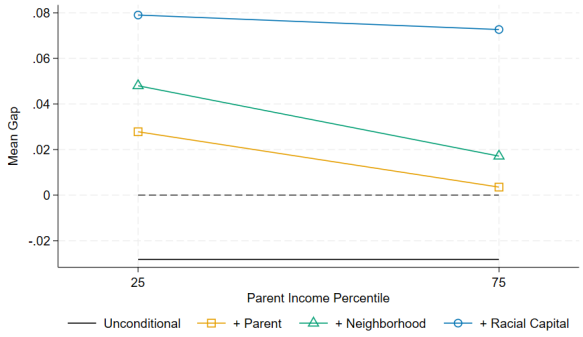
(a) Household Income Percentile



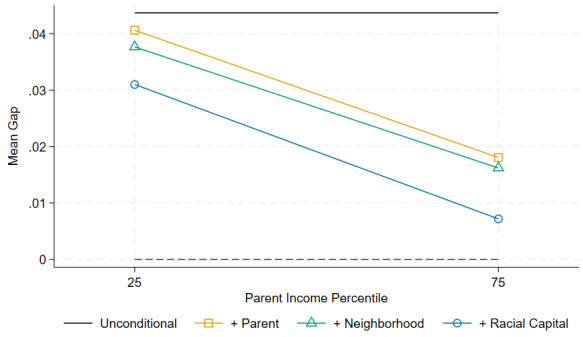
(b) Individual Income Percentile



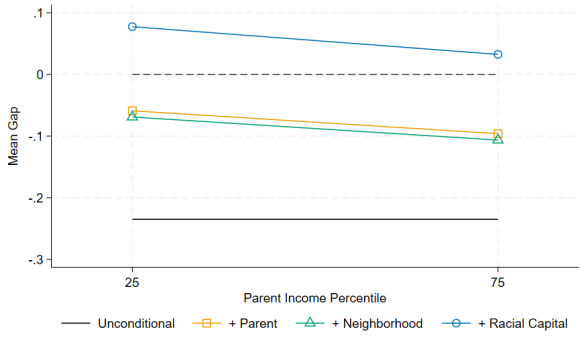
(c) Employment



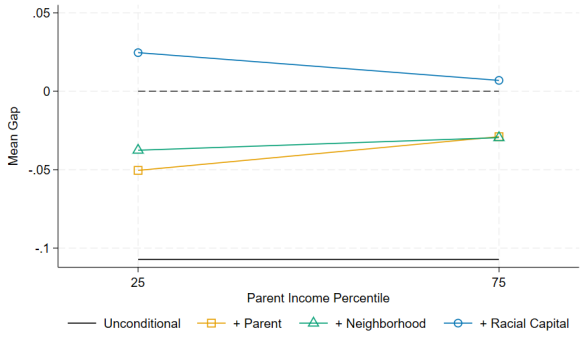
(d) Incarceration



(e) College+



(f) High School+

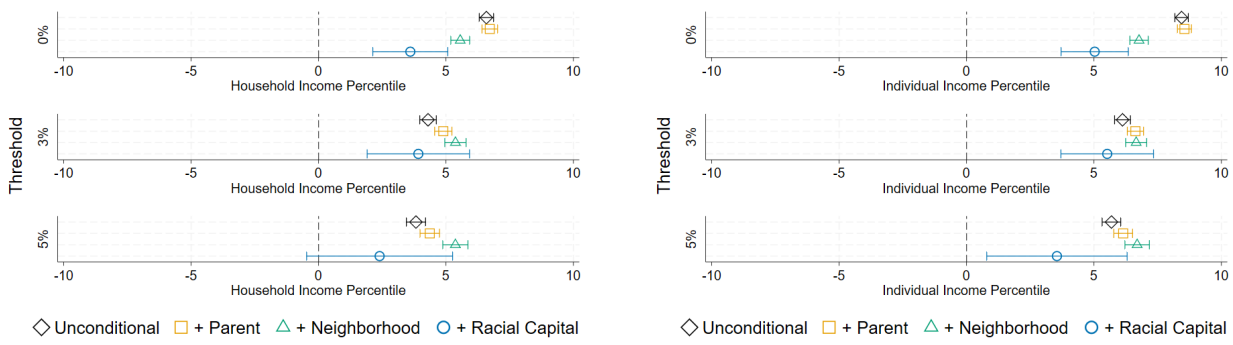


Notes: The figures above show the gaps in adulthood outcomes between Black and White children at each parental income percentile, conditional on different sets of resources. Solid black lines depict unconditional gaps; yellow squares depict gaps conditional on parental income; green triangles depict gaps conditional on parental income and tract fixed effects; and blue circles depict gaps conditional on parental income, tract (or county) fixed effects, and racial capital measures. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. The analysis includes Census tracts with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the two parental income percentile points given in the OI data. Standard errors are omitted for simple presentations.

Figure B.6: Asian-White Analysis Using Varying Population Share Thresholds

(a) Household Income Percentile

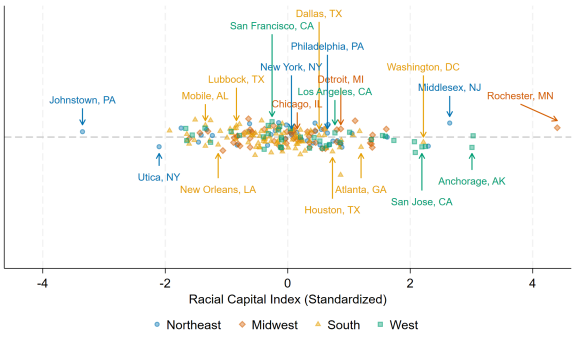
(b) Individual Income Percentile



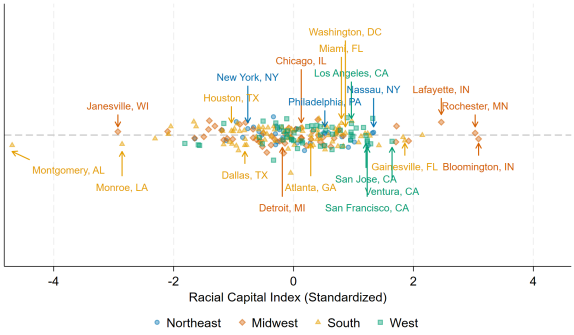
Notes: The figures above display the Asian-White racial gaps estimated using samples restricted to metropolitan areas where the Asian population share exceeds 3% or 5% with household income (left panel) and individual income (right panel) as outcomes. For reference, the first set of graphs on the top in both panels replicates the results from the main analysis.

Figure B.7: Racial Capital Index for Each Racial Group

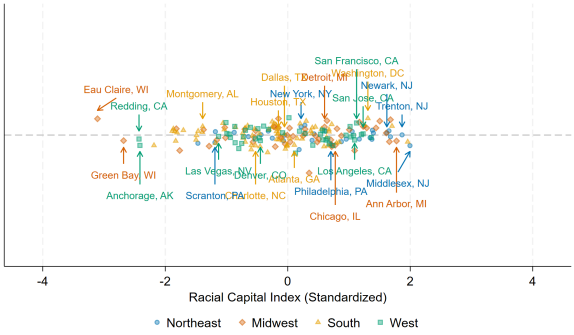
(a) Black



(b) Hispanic

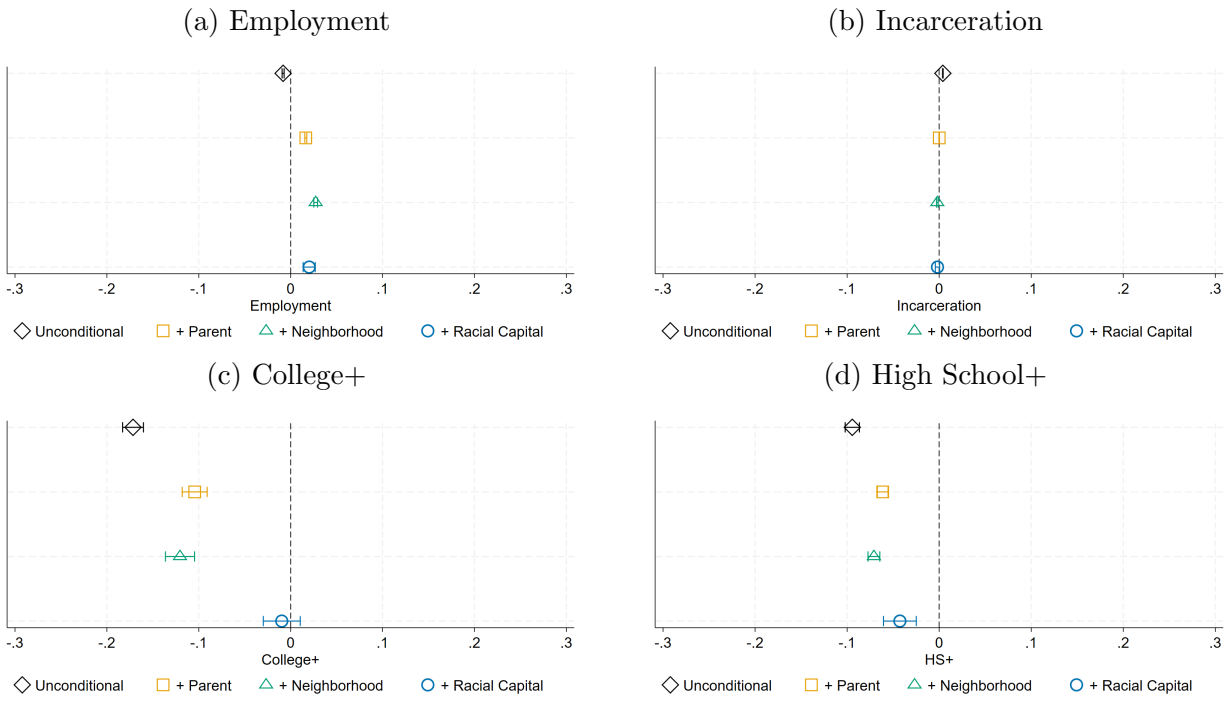


(c) Asian



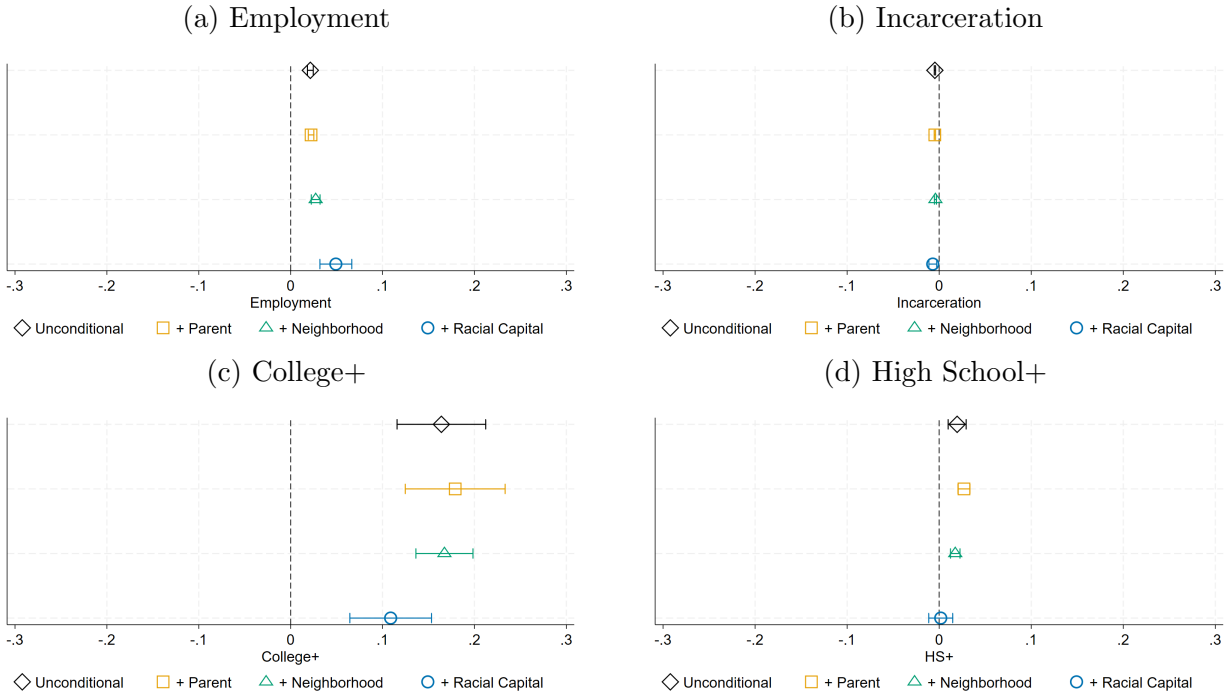
Notes: The figures above show RCI for each racial group in a horizontal scatter plot. The RCI is constructed by multiplying the estimated coefficients of the four metropolitan-level racial capital elements from equation (9) with household income as outcome by their respective resource levels. To ensure comparability across racial groups, the index is standardized to have a mean of 0 and a standard deviation of 1. Higher RCI values indicate areas where racial capital plays a greater role.

Figure B.8: Intergenerational Mobility Gaps between Hispanic and White Children



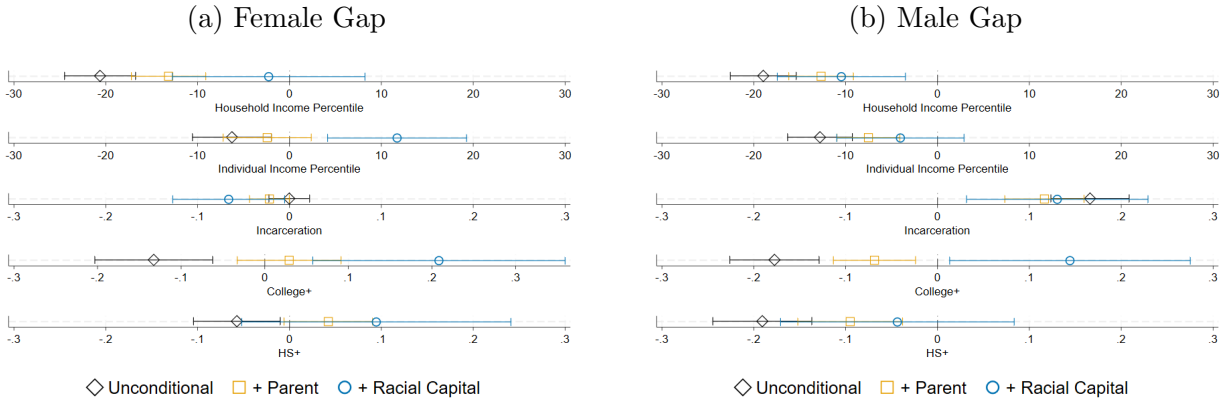
Notes: The figures above show the gaps in adulthood outcomes between Hispanic and White children, conditional on different sets of resources. Black diamonds depict unconditional gaps; yellow squares depict gaps conditional on parental income; green triangles depict gaps conditional on parental income and tract fixed effects; and blue circles depict gaps conditional on parental income, tract fixed effects, and racial capital measures. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

Figure B.9: Intergenerational Mobility Gaps between Asian and White Children



Notes: The figures above show the gaps in adulthood outcomes between Asian and White children, conditional on different sets of resources. Black diamonds depict unconditional gaps; yellow squares depict gaps conditional on parental income; green triangles depict gaps conditional on parental income and tract fixed effects; and blue circles depict gaps conditional on parental income, tract fixed effects, and racial capital measures. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. The analysis includes Census tracts with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

Figure B.10: Intergenerational Mobility Gaps between Black and White Children by Sex (NLSY)



Notes: The figures above show the gaps in adulthood outcomes between Black and White children by sex, conditional on different sets of resources. Black diamonds depict unconditional gaps; yellow squares depict gaps conditional on parental income; and blue circles depict gaps conditional on parental income and racial capital measures. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. The analysis is based on NLSY97 data. The household and individual income percentiles are based on the 2017 survey sample in the data. Income analyses are weighted by the sampling weights given for 2017. No weights were used for the remaining outcome variables. Standard errors are clustered at the metro level.

C Appendix Tables

C.1 Black-White Analysis

This section reports the coefficient estimates that underlie the figures in the main text associated with the main Black-White analysis.

Table C.1: Intergenerational Impact of Racial Capital: Black-White Analysis

	Employment					
	(1)	(2)	(3)	(4)	(5)	(6)
Black	-0.014***	0.014***	0.029***	0.045***	0.091***	0.090***
	(0.001)	(0.001)	(0.001)	(0.006)	(0.007)	(0.008)
Parent Income Percentile		0.002***	0.002***	0.002***	0.002***	0.002***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Racial Capital: Mean Earnings Percentile				0.001***	-0.000	0.000
				(0.000)	(0.000)	(0.000)
Tract Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific Tract Resources						Y
Adjusted R-squared	0.004	0.311	0.546	0.546	0.548	0.548
Observations	100055	100055	100055	100055	100055	100055

Notes: The table above documents the gaps in adulthood employment between Black and white children, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific tract-level resources include per capita income in 1989, housing tenure status, and college completion rates. The analysis includes Census tracts with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

Table C.2: Intergenerational Impact of Racial Capital: Black-White Analysis

	Incarceration					
	(1)	(2)	(3)	(4)	(5)	(6)
Black	0.033***	0.028***	0.025***	0.040***	0.027***	0.023***
	(0.000)	(0.000)	(0.001)	(0.003)	(0.003)	(0.003)
Parent Income Percentile		-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Racial Capital: Mean Earnings Percentile				0.001***	0.001***	0.001***
				(0.000)	(0.000)	(0.000)
Tract Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific Tract Resources						Y
Adjusted R-squared	0.251	0.364	0.375	0.376	0.380	0.383
Observations	98480	98480	98480	98480	98480	98480

Notes: The table above documents the gaps in adulthood incarceration rate between Black and white children, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific tract-level resources include per capita income in 1989, housing tenure status, and college completion rates. The analysis includes Census tracts with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

Table C.3: Intergenerational Impact of Racial Capital: Black-White Analysis

	College+					
	(1)	(2)	(3)	(4)	(5)	(6)
Black	-0.160***	-0.080***	-0.091***	-0.030	0.047*	0.066***
	(0.006)	(0.005)	(0.006)	(0.025)	(0.026)	(0.025)
Parent Income Percentile		0.005***	0.005***	0.005***	0.005***	0.005***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Racial Capital: Mean Earnings Percentile				0.003**	0.001	0.002
				(0.001)	(0.002)	(0.001)
County Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific County Resources						Y
Adjusted R-squared	0.134	0.751	0.954	0.955	0.958	0.965
Observations	2186	2186	2186	2186	2186	2186

Notes: The table above documents the gaps in adulthood college completion rate between Black and white children, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific county-level resources include per capita income in 1989, housing tenure status, and college completion rates. The analysis includes counties with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the county level.

Table C.4: Intergenerational Impact of Racial Capital: Black-White Analysis

	High School+					
	(1)	(2)	(3)	(4)	(5)	(6)
Black	-0.078***	-0.038***	-0.036***	-0.010	-0.009	0.003
	(0.004)	(0.002)	(0.002)	(0.009)	(0.013)	(0.012)
Parent Income Percentile		0.003***	0.002***	0.002***	0.002***	0.002***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Racial Capital: Mean Earnings Percentile				0.001***	0.002***	0.002**
				(0.000)	(0.001)	(0.001)
County Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific County Resources						Y
Adjusted R-squared	0.147	0.827	0.899	0.900	0.900	0.902
Observations	2270	2270	2270	2270	2270	2270

Notes: The table above documents the gaps in adulthood high school completion rate between Black and white children, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific county-level resources include per capita income in 1989, housing tenure status, and college completion rates. The analysis includes counties with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the county level.

C.2 Black-White Analysis: Men and Women

This section reports the coefficient estimates that underlie the figures in the main text associated with the Black-White analysis, estimated separately for men and women.

Table C.5: Intergenerational Impact of Racial Capital: Black-White Analysis by Sex

	Household Income Percentile											
	Female						Male					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Black	-19.640***	-14.714***	-11.111***	-5.917***	-4.868***	-4.402***	-21.362***	-16.524***	-12.903***	-7.726***	-4.820***	-4.440***
	(0.089)	(0.063)	(0.118)	(0.574)	(0.720)	(0.729)	(0.088)	(0.065)	(0.118)	(0.601)	(0.751)	(0.759)
Parent Income Percentile		0.313***	0.251***	0.251***	0.251***	0.250***		0.307***	0.255***	0.255***	0.255***	0.255***
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Racial Capital: Mean Earnings Percentile				0.248***	0.327***	0.315***				0.247***	0.273***	0.265***
				(0.028)	(0.038)	(0.039)				(0.029)	(0.039)	(0.041)
Tract Fixed Effects			Y	Y	Y	Y			Y	Y	Y	Y
All Racial Capital Measures					Y	Y					Y	Y
Race-Specific Tract Resources						Y						Y
Adjusted R-squared	0.326	0.683	0.890	0.891	0.891	0.891	0.377	0.713	0.890	0.890	0.891	0.891
Observations	94294	94294	94294	94294	94294	94294	94162	94162	94162	94162	94162	94162

Notes: The table above documents the gaps in adulthood household income percentile between Black and white children by sex, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific tract-level resources include per capita income in 1989, housing tenure status, and college completion rates. The analysis includes Census tracts with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

Table C.6: Intergenerational Impact of Racial Capital: Black-White Analysis by Sex

	Individual Income Percentile											
	Female						Male					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Black	-4.034***	-0.178***	1.845***	4.497***	7.174***	7.773***	-16.525***	-12.026***	-9.017***	-5.240***	-2.444***	-2.153***
	(0.090)	(0.066)	(0.117)	(0.576)	(0.716)	(0.717)	(0.089)	(0.066)	(0.120)	(0.598)	(0.779)	(0.785)
Parent Income Percentile		0.245***	0.187***	0.187***	0.187***	0.186***		0.286***	0.237***	0.237***	0.237***	0.236***
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Racial Capital: Mean Earnings Percentile				0.127***	0.210***	0.196***				0.180***	0.202***	0.201***
				(0.028)	(0.039)	(0.040)				(0.029)	(0.040)	(0.042)
Tract Fixed Effects			Y	Y	Y	Y			Y	Y	Y	Y
All Racial Capital Measures					Y	Y					Y	Y
Race-Specific Tract Resources						Y						Y
Adjusted R-squared	0.024	0.410	0.829	0.829	0.830	0.831	0.287	0.657	0.858	0.859	0.859	0.859
Observations	94294	94294	94294	94294	94294	94294	94162	94162	94162	94162	94162	94162

Notes: The table above documents the gaps in adulthood Individual income percentile between Black and white children by sex, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific tract-level resources include per capita income in 1989, housing tenure status, and college completion rates. The analysis includes Census tracts with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

Table C.7: Intergenerational Impact of Racial Capital: Black-White Analysis by Sex

	Employment											
	Female						Male					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Black	0.062***	0.086***	0.097***	0.115***	0.174***	0.169***	-0.092***	-0.058***	-0.035***	-0.023***	0.009	0.009
	(0.001)	(0.001)	(0.002)	(0.008)	(0.011)	(0.011)	(0.001)	(0.001)	(0.002)	(0.008)	(0.010)	(0.011)
Parent Income Percentile		0.001***	0.001***	0.001***	0.001***	0.001***		0.002***	0.002***	0.002***	0.002***	0.002***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Racial Capital: Mean Earnings Percentile				0.001**	-0.000	-0.000				0.001	0.000	0.000
				(0.000)	(0.001)	(0.001)				(0.000)	(0.001)	(0.001)
Tract Fixed Effects			Y	Y	Y	Y			Y	Y	Y	Y
All Racial Capital Measures					Y	Y					Y	Y
Race-Specific Tract Resources						Y						Y
Adjusted R-squared	0.049	0.173	0.499	0.499	0.501	0.501	0.111	0.371	0.513	0.513	0.514	0.514
Observations	94294	94294	94294	94294	94294	94294	94162	94162	94162	94162	94162	94162

Notes: The table above documents the gaps in adulthood employment between Black and white children by sex, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific tract-level resources include per capita income in 1989, housing tenure status, and college completion rates. The analysis includes Census tracts with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

Table C.8: Intergenerational Impact of Racial Capital: Black-White Analysis by Sex

	Incarceration											
	Female						Male					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Black	0.002***	0.001***	0.001*	0.003	0.001	0.000	0.071***	0.061***	0.056***	0.082***	0.059***	0.051***
	(0.000)	(0.000)	(0.000)	(0.002)	(0.003)	(0.003)	(0.001)	(0.001)	(0.001)	(0.005)	(0.007)	(0.007)
Parent Income Percentile		-0.000***	-0.000***	-0.000***	-0.000***	-0.000***		-0.001***	-0.001***	-0.001***	-0.001***	-0.001***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Racial Capital: Mean Earnings Percentile				0.000	0.000	0.000				0.001***	0.001***	0.001***
				(0.000)	(0.000)	(0.000)				(0.000)	(0.000)	(0.000)
Tract Fixed Effects			Y	Y	Y	Y			Y	Y	Y	Y
All Racial Capital Measures					Y	Y					Y	Y
Race-Specific Tract Resources						Y						Y
Adjusted R-squared	0.002	0.010	0.110	0.110	0.110	0.110	0.315	0.427	0.476	0.477	0.481	0.486
Observations	92679	92679	92679	92679	92679	92679	91702	91702	91702	91702	91702	91702

Notes: The table above documents the gaps in adulthood incarceration rate between Black and white children by sex, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific tract-level resources include per capita income in 1989, housing tenure status, and college completion rates. The analysis includes Census tracts with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

Table C.9: Intergenerational Impact of Racial Capital: Black-White Analysis by Sex

	College+											
	Female						Male					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Black	-0.153***	-0.065***	-0.079***	-0.022	0.070**	0.087***	-0.172***	-0.100***	-0.111***	-0.046*	0.021	0.039
	(0.007)	(0.005)	(0.007)	(0.030)	(0.029)	(0.029)	(0.006)	(0.005)	(0.006)	(0.027)	(0.031)	(0.030)
Parent Income Percentile		0.006***	0.005***	0.005***	0.005***	0.005***		0.005***	0.004***	0.004***	0.004***	0.004***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Racial Capital: Mean Earnings Percentile				0.003*	0.001	0.002				0.003**	0.001	0.002
				(0.001)	(0.002)	(0.002)				(0.001)	(0.002)	(0.002)
County Fixed Effects			Y	Y	Y	Y			Y	Y	Y	Y
All Racial Capital Measures					Y	Y					Y	Y
Race-Specific County Resources						Y						Y
Adjusted R-squared	0.104	0.738	0.948	0.948	0.951	0.956	0.174	0.740	0.938	0.939	0.943	0.949
Observations	2045	2045	2045	2045	2045	2045	2030	2030	2030	2030	2030	2030

Notes: The table above documents the gaps in adulthood college completion rate between Black and white children by sex, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific county-level resources include per capita income in 1989, housing tenure status, and college completion rates. The analysis includes counties with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the county level.

Table C.10: Intergenerational Impact of Racial Capital: Black-White Analysis by Sex

	High School+											
	Female						Male					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Black	-0.056***	-0.022***	-0.021***	-0.009	-0.000	0.007	-0.103***	-0.058***	-0.054***	-0.015	-0.020	-0.004
	(0.003)	(0.002)	(0.002)	(0.010)	(0.014)	(0.014)	(0.005)	(0.003)	(0.003)	(0.013)	(0.017)	(0.017)
Parent Income Percentile		0.002***	0.002***	0.002***	0.002***	0.002***		0.003***	0.003***	0.003***	0.003***	0.003***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Racial Capital: Mean Earnings Percentile				0.001	0.001	0.001				0.002***	0.003***	0.002***
				(0.000)	(0.001)	(0.001)				(0.001)	(0.001)	(0.001)
County Fixed Effects			Y	Y	Y	Y			Y	Y	Y	Y
All Racial Capital Measures					Y	Y					Y	Y
Race-Specific County Resources						Y						Y
Adjusted R-squared	0.101	0.785	0.854	0.854	0.854	0.855	0.184	0.820	0.887	0.888	0.889	0.891
Observations	2170	2170	2170	2170	2170	2170	2174	2174	2174	2174	2174	2174

Notes: The table above documents the gaps in adulthood high school completion rate between Black and white children by sex, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific county-level resources include per capita income in 1989, housing tenure status, and college completion rates. The analysis includes counties with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the county level.

C.3 Hispanic-White Analysis

This section reports the coefficient estimates that underlie the figures in the main text associated with the main Hispanic-White analysis.

Table C.11: Intergenerational Impact of Racial Capital: Hispanic-White Analysis

	Household Income Percentile					
	(1)	(2)	(3)	(4)	(5)	(6)
Hispanic	-8.595***	-4.392***	-2.962***	-1.210***	-0.461*	-0.060
	(0.063)	(0.049)	(0.080)	(0.245)	(0.242)	(0.254)
Parent Income Percentile		0.301***	0.245***	0.245***	0.245***	0.245***
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Racial Capital: Mean Earnings Percentile				0.069***	-0.229***	-0.222***
				(0.010)	(0.020)	(0.020)
Tract Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific Tract Resources						Y
Adjusted R-squared	0.082	0.594	0.850	0.851	0.853	0.854
Observations	133716	133716	133716	133716	133716	133716

Notes: The table above documents the gaps in adulthood household income percentile between Hispanic and white children, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, home-ownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific tract-level resources include per capita income in 1989, housing tenure status, and college completion rates. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

Table C.12: Intergenerational Impact of Racial Capital: Hispanic-White Analysis

	Individual Income Percentile					
	(1)	(2)	(3)	(4)	(5)	(6)
Hispanic	-4.098***	-0.601***	-0.368***	0.408*	1.032***	1.322***
	(0.055)	(0.046)	(0.075)	(0.239)	(0.238)	(0.247)
Parent Income Percentile		0.251***	0.203***	0.203***	0.203***	0.203***
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Racial Capital: Mean Earnings Percentile				0.031***	-0.194***	-0.187***
				(0.010)	(0.020)	(0.020)
Tract Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific Tract Resources						Y
Adjusted R-squared	0.025	0.507	0.814	0.814	0.816	0.817
Observations	133716	133716	133716	133716	133716	133716

Notes: The table above documents the gaps in adulthood Individual income percentile between Hispanic and white children, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific tract-level resources include per capita income in 1989, housing tenure status, and college completion rates. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

Table C.13: Intergenerational Impact of Racial Capital: Hispanic-White Analysis

	Employment					
	(1)	(2)	(3)	(4)	(5)	(6)
Hispanic	-0.008***	0.016***	0.027***	0.015***	0.020***	0.020***
	(0.001)	(0.001)	(0.001)	(0.003)	(0.003)	(0.004)
Parent Income Percentile		0.002***	0.002***	0.002***	0.002***	0.002***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Racial Capital: Mean Earnings Percentile				-0.000***	-0.002***	-0.002***
				(0.000)	(0.000)	(0.000)
Tract Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific Tract Resources						Y
Adjusted R-squared	0.001	0.264	0.500	0.500	0.501	0.501
Observations	133716	133716	133716	133716	133716	133716

Notes: The table above documents the gaps in adulthood employment between Hispanic and white children, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific tract-level resources include per capita income in 1989, housing tenure status, and college completion rates. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

Table C.14: Intergenerational Impact of Racial Capital: Hispanic-White Analysis

	Incarceration					
	(1)	(2)	(3)	(4)	(5)	(6)
Hispanic	0.004***	0.000	-0.002***	-0.001	-0.002	-0.003**
	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)
Parent Income Percentile		-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Racial Capital: Mean Earnings Percentile				0.000	0.000**	0.000**
				(0.000)	(0.000)	(0.000)
Tract Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific Tract Resources						Y
Adjusted R-squared	0.004	0.100	0.165	0.165	0.166	0.166
Observations	131577	131577	131577	131577	131577	131577

Notes: The table above documents the gaps in adulthood incarceration rate between Hispanic and white children, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific tract-level resources include per capita income in 1989, housing tenure status, and college completion rates. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

Table C.15: Intergenerational Impact of Racial Capital: Hispanic-White Analysis

	College+					
	(1)	(2)	(3)	(4)	(5)	(6)
Hispanic	-0.172***	-0.104***	-0.120***	-0.028**	-0.010	0.003
	(0.006)	(0.007)	(0.008)	(0.013)	(0.010)	(0.010)
Parent Income Percentile		0.005***	0.005***	0.005***	0.005***	0.005***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Racial Capital: Mean Earnings Percentile				0.004***	-0.001	-0.002*
				(0.001)	(0.001)	(0.001)
County Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific County Resources						Y
Adjusted R-squared	0.133	0.697	0.960	0.965	0.968	0.970
Observations	2436	2436	2436	2436	2436	2436

Notes: The table above documents the gaps in adulthood college completion rate between Hispanic and white children, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific county-level resources include per capita income in 1989, housing tenure status, and college completion rates. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the county level.

Table C.16: Intergenerational Impact of Racial Capital: Hispanic-White Analysis

	High School+					
	(1)	(2)	(3)	(4)	(5)	(6)
Hispanic	-0.094***	-0.061***	-0.071***	-0.045***	-0.043***	-0.034***
	(0.004)	(0.003)	(0.003)	(0.009)	(0.009)	(0.009)
Parent Income Percentile		0.002***	0.002***	0.002***	0.002***	0.002***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Racial Capital: Mean Earnings Percentile				0.001***	-0.001	-0.002***
				(0.000)	(0.001)	(0.001)
County Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific County Resources						Y
Adjusted R-squared	0.186	0.815	0.885	0.886	0.889	0.892
Observations	2515	2515	2515	2515	2515	2515

Notes: The table above documents the gaps in adulthood high school completion rate between Hispanic and white children, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific county-level resources include per capita income in 1989, housing tenure status, and college completion rates. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the county level.

C.4 Asian-White Analysis

This section reports the coefficient estimates that underlie the figures in the main text associated with the main Asian-White analysis.

Table C.17: Intergenerational Impact of Racial Capital: Asian-White Analysis

	Household Income Percentile					
	(1)	(2)	(3)	(4)	(5)	(6)
Asian	6.587***	6.720***	5.561***	5.754***	3.601***	3.405***
	(0.144)	(0.156)	(0.188)	(0.375)	(0.750)	(0.768)
Parent Income Percentile		0.319***	0.259***	0.259***	0.259***	0.259***
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Racial Capital: Mean Earnings Percentile				0.016	-0.157***	-0.146***
				(0.030)	(0.055)	(0.055)
Tract Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific Tract Resources						Y
Adjusted R-squared	0.014	0.588	0.883	0.883	0.883	0.883
Observations	81986	81986	81986	81986	81986	81986

Notes: The table above documents the gaps in adulthood household income percentile between Asian and white children, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific tract-level resources include per capita income in 1989, housing tenure status, and college completion rates. The analysis includes Census tracts with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

Table C.18: Intergenerational Impact of Racial Capital: Asian-White Analysis

	Individual Income Percentile					
	(1)	(2)	(3)	(4)	(5)	(6)
Asian	8.438***	8.551***	6.770***	6.701***	5.029***	4.847***
	(0.134)	(0.140)	(0.183)	(0.369)	(0.673)	(0.704)
Parent Income Percentile		0.268***	0.214***	0.214***	0.214***	0.214***
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Racial Capital: Mean Earnings Percentile				-0.006	-0.156***	-0.142***
				(0.029)	(0.049)	(0.049)
Tract Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific Tract Resources						Y
Adjusted R-squared	0.028	0.535	0.868	0.868	0.868	0.868
Observations	81986	81986	81986	81986	81986	81986

Notes: The table above documents the gaps in adulthood Individual income percentile between Asian and white children, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific tract-level resources include per capita income in 1989, housing tenure status, and college completion rates. The analysis includes Census tracts with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

Table C.19: Intergenerational Impact of Racial Capital: Asian-White Analysis

	Employment					
	(1)	(2)	(3)	(4)	(5)	(6)
Asian	0.021***	0.022***	0.027***	0.027***	0.049***	0.049***
	(0.002)	(0.002)	(0.002)	(0.005)	(0.009)	(0.009)
Parent Income Percentile		0.002***	0.002***	0.002***	0.002***	0.002***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Racial Capital: Mean Earnings Percentile				-0.000	0.001	0.001
				(0.000)	(0.001)	(0.001)
Tract Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific Tract Resources						Y
Adjusted R-squared	0.002	0.310	0.544	0.544	0.546	0.547
Observations	81986	81986	81986	81986	81986	81986

Notes: The table above documents the gaps in adulthood employment between Asian and white children, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific tract-level resources include per capita income in 1989, housing tenure status, and college completion rates. The analysis includes Census tracts with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

Table C.20: Intergenerational Impact of Racial Capital: Asian-White Analysis

	Incarceration					
	(1)	(2)	(3)	(4)	(5)	(6)
Asian	-0.005***	-0.005***	-0.004***	-0.006***	-0.007***	-0.007***
	(0.000)	(0.000)	(0.001)	(0.001)	(0.002)	(0.002)
Parent Income Percentile		-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Racial Capital: Mean Earnings Percentile				-0.000*	-0.000	-0.000
				(0.000)	(0.000)	(0.000)
Tract Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific Tract Resources						Y
Adjusted R-squared	0.002	0.145	0.278	0.278	0.278	0.278
Observations	80854	80854	80854	80854	80854	80854

Notes: The table above documents the gaps in adulthood incarceration rate between Asian and white children, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific tract-level resources include per capita income in 1989, housing tenure status, and college completion rates. The analysis includes Census tracts with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

Table C.21: Intergenerational Impact of Racial Capital: Asian-White Analysis

	College+					
	(1)	(2)	(3)	(4)	(5)	(6)
Asian	0.164***	0.179***	0.167***	0.182***	0.109***	0.116***
	(0.025)	(0.028)	(0.016)	(0.033)	(0.023)	(0.028)
Parent Income Percentile		0.005***	0.005***	0.005***	0.005***	0.005***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Racial Capital: Mean Earnings Percentile				0.001	-0.001	-0.001
				(0.002)	(0.001)	(0.002)
County Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific County Resources						Y
Adjusted R-squared	0.036	0.699	0.963	0.963	0.967	0.968
Observations	1806	1806	1806	1806	1806	1806

Notes: The table above documents the gaps in adulthood college completion rate between Asian and white children, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific county-level resources include per capita income in 1989, housing tenure status, and college completion rates. The analysis includes counties with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the county level.

Table C.22: Intergenerational Impact of Racial Capital: Asian-White Analysis

	High School+					
	(1)	(2)	(3)	(4)	(5)	(6)
Asian	0.020***	0.027***	0.017***	0.014***	0.002	0.007
	(0.005)	(0.003)	(0.003)	(0.004)	(0.007)	(0.008)
Parent Income Percentile		0.002***	0.002***	0.002***	0.002***	0.002***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Racial Capital: Mean Earnings Percentile				-0.000	-0.001**	-0.001***
				(0.000)	(0.001)	(0.001)
County Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific County Resources						Y
Adjusted R-squared	0.002	0.789	0.884	0.884	0.884	0.884
Observations	1906	1906	1906	1906	1906	1906

Notes: The table above documents the gaps in adulthood high school completion rate between Asian and white children, conditioning on different sets of resources. Racial capital variables include metropolitan-level measures of average earnings, homeownership status, college completion rates, and housing value of individuals between 25 and 45 years of age for each racial group. Race-specific county-level resources include per capita income in 1989, housing tenure status, and college completion rates. The analysis includes counties with less than 10% Hispanic population. Each observation is weighted by the number of households in each racial group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the county level.

C.5 Heterogeneous Impact of Racial Capital across Metropolitan Areas by Residential and Marriage Segregation Measures

Table C.23: Heterogeneity in Impact of Racial Capital by Metro Area Residential and Marraige Segregation Measures: Black-White Analysis

	Household Income			Individual Income		
	(1)	(2)	(3)	(4)	(5)	(6)
Black	-17.111***	-25.972**	-18.092*	-11.793***	-26.049**	-17.799
	(2.109)	(10.732)	(10.861)	(2.085)	(11.415)	(11.535)
Black × Residential Segregation	10.826***		11.074***	12.207***		11.735***
	(2.983)		(3.141)	(2.946)		(3.085)
Black × Marriage Segregation		17.808	0.472		25.193**	6.910
		(11.940)	(12.578)		(12.552)	(13.144)
Black × Racial Share	17.436***	16.644***	20.629***	22.979***	18.625***	21.898***
	(4.578)	(5.713)	(6.104)	(4.402)	(5.412)	(5.743)
Parent Income Percentile	0.277***	0.125***	0.131***	0.218***	0.110***	0.113***
	(0.005)	(0.019)	(0.019)	(0.005)	(0.018)	(0.018)
Parent × Residential Segregation	-0.038***		-0.050***	-0.016**		-0.025***
	(0.007)		(0.007)	(0.007)		(0.007)
Parent × Marriage Segregation		0.146***	0.175***		0.111***	0.126***
		(0.021)	(0.022)		(0.020)	(0.020)
Parent × Racial Share	-0.008	-0.070***	-0.078***	0.029***	-0.018	-0.022*
	(0.009)	(0.012)	(0.012)	(0.008)	(0.011)	(0.011)
Racial Capital: Mean Earnings Percentile	-0.353***	-1.028*	-0.705	-0.437***	-1.123*	-0.792
	(0.103)	(0.526)	(0.530)	(0.104)	(0.576)	(0.581)
RC × Residential Segregation	0.711***		0.704***	0.787***		0.761***
	(0.142)		(0.148)	(0.141)		(0.146)
RC × Marriage Segregation		1.283**	0.373		1.371**	0.406
		(0.582)	(0.608)		(0.629)	(0.653)
RC × Racial Share	0.666***	0.472*	0.718***	0.632***	0.337	0.566**
	(0.202)	(0.255)	(0.268)	(0.195)	(0.240)	(0.252)
Additional Controls	Y	Y	Y	Y	Y	Y
Tract Fixed Effects	Y	Y	Y	Y	Y	Y
Adjusted R-squared	0.923	0.923	0.923	0.881	0.881	0.881
Observations	92002	92002	92002	92002	92002	92002

Notes: The table above shows the heterogeneous impact of racial capital across metropolitan areas with varying degrees of racial dissociation as measured by residential and marriage segregation. The results are presented for Black children relative to White children. For each outcome, household and individual income, the first column includes only the interaction term with residential segregation, second with marriage segregation, and third with both segregation measures. Each observation is weighted by the number of households in each race group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

Table C.24: Heterogeneity in Impact of Racial Capital by Metro Area Residential and Marraige Segregation Measures: Hispanic-White Analysis

	Household Income			Individual Income		
	(1)	(2)	(3)	(4)	(5)	(6)
Hispanic	-8.597***	-1.048*	-7.980***	-6.135***	0.001	-5.970***
	(1.012)	(0.615)	(1.035)	(1.013)	(0.610)	(1.044)
Hispanic × Residential Segregation	13.155***		14.990***	13.188***		13.469***
	(2.574)		(2.585)	(2.594)		(2.594)
Hispanic × Marriage Segregation		0.865	-4.843**		3.972**	-0.985
		(1.923)	(1.938)		(1.897)	(1.891)
Hispanic × Racial Share	-8.252***	-1.760	-0.315	-7.187***	-6.672**	-5.029*
	(2.106)	(3.168)	(3.095)	(2.058)	(3.049)	(2.980)
Parent Income Percentile	0.280***	0.263***	0.282***	0.219***	0.219***	0.222***
	(0.003)	(0.002)	(0.003)	(0.003)	(0.002)	(0.003)
Parent × Residential Segregation	-0.060***		-0.051***	-0.021***		-0.007
	(0.007)		(0.008)	(0.007)		(0.007)
Parent × Marriage Segregation		-0.035***	-0.021***		-0.036***	-0.033***
		(0.006)	(0.006)		(0.005)	(0.006)
Parent × Racial Share	-0.154***	-0.109***	-0.131***	-0.123***	-0.082***	-0.086***
	(0.007)	(0.010)	(0.010)	(0.006)	(0.009)	(0.009)
Racial Capital: Mean Earnings Percentile	-0.513***	0.041	-0.488***	-0.430***	0.009	-0.423***
	(0.054)	(0.030)	(0.054)	(0.053)	(0.029)	(0.054)
RC × Residential Segregation	1.129***		1.079***	0.939***		0.901***
	(0.107)		(0.109)	(0.107)		(0.108)
RC × Marriage Segregation		0.293***	-0.018		0.291***	0.030
		(0.081)	(0.082)		(0.080)	(0.080)
RC × Racial Share	-0.199**	-0.459***	-0.055	-0.192**	-0.508***	-0.175
	(0.088)	(0.121)	(0.122)	(0.083)	(0.116)	(0.116)
Additional Controls	Y	Y	Y	Y	Y	Y
Tract Fixed Effects	Y	Y	Y	Y	Y	Y
Adjusted R-squared	0.850	0.849	0.850	0.806	0.806	0.807
Observations	114135	114135	114135	114135	114135	114135

Notes: The table above shows the heterogeneous impact of racial capital across metropolitan areas with varying degrees of racial dissociation as measured by residential and marriage segregation. The results are presented for Hispanic children relative to White children. For each outcome, household and individual income, the first column includes only the interaction term with residential segregation, second with marriage segregation, and third with both segregation measures. Each observation is weighted by the number of households in each race group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.

Table C.25: Heterogeneity in Impact of Racial Capital by Metro Area Residential and Marraige Segregation Measures: Asian-White Analysis

	Household Income			Individual Income		
	(1)	(2)	(3)	(4)	(5)	(6)
Asian	-2.110	6.229***	-0.722	-2.096	5.267***	-2.603
	(3.777)	(2.058)	(5.225)	(3.820)	(1.981)	(4.940)
Asian × Residential Segregation	20.487**		17.230*	21.874**		19.475**
	(9.348)		(9.978)	(9.390)		(9.750)
Asian × Marriage Segregation		1.450	-0.289		6.679	4.762
		(6.686)	(7.472)		(6.387)	(7.026)
Asian × Racial Share	-4.365	-8.317	-6.391	-2.176	-9.712*	-7.556
	(2.712)	(5.066)	(5.263)	(2.824)	(4.957)	(5.132)
Parent Income Percentile	0.182***	0.273***	0.221***	0.117***	0.215***	0.142***
	(0.010)	(0.006)	(0.012)	(0.010)	(0.005)	(0.012)
Parent × Residential Segregation	0.116***		0.127***	0.172***		0.179***
	(0.025)		(0.025)	(0.024)		(0.024)
Parent × Marriage Segregation		-0.164***	-0.169***		-0.105***	-0.112***
		(0.022)	(0.022)		(0.021)	(0.021)
Parent × Racial Share	-0.159***	-0.006	0.006	-0.077***	0.016	0.032
	(0.027)	(0.033)	(0.033)	(0.025)	(0.031)	(0.031)
Racial Capital: Mean Earnings Percentile	-0.796***	0.003	-0.744**	-0.969***	-0.172	-1.011***
	(0.299)	(0.144)	(0.354)	(0.301)	(0.140)	(0.340)
RC × Residential Segregation	2.225***		1.906***	2.532***		2.143***
	(0.729)		(0.739)	(0.729)		(0.735)
RC × Marriage Segregation		0.575	0.331		1.025**	0.753
		(0.478)	(0.524)		(0.458)	(0.502)
RC × Racial Share	-1.220***	-2.109***	-1.961**	-1.085**	-2.395***	-2.229***
	(0.457)	(0.756)	(0.762)	(0.454)	(0.729)	(0.735)
Additional Controls	Y	Y	Y	Y	Y	Y
Tract Fixed Effects	Y	Y	Y	Y	Y	Y
Adjusted R-squared	0.833	0.834	0.835	0.816	0.816	0.818
Observations	29288	29288	29288	29288	29288	29288

Notes: The table above shows the heterogeneous impact of racial capital across metropolitan areas with varying degrees of racial dissociation as measured by residential and marriage segregation. The results are presented for Asian children relative to White children. For each outcome, household and individual income, the first column includes only the interaction term with residential segregation, second with marriage segregation, and third with both segregation measures. Each observation is weighted by the number of households in each race group and tract that (approximately) corresponds to the six parental income percentile points given in the OI data. Standard errors are clustered at the tract level.