The Long Road to Equality: Racial Capital and Generational Convergence*

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Abstract

We introduce the concept of *racial capital*, defined as the collective material and non-material assets of the racial groups to which a child is exposed while growing up, and examine its potential to explain racial disparities in life outcomes that persist even after accounting for a broad range of parental and neighborhood resources. Estimates for Asian, Black, Hispanic, and White children born around 1980 imply that metro-level racial capital measures: (i) have substantial power to explain racial differences in life outcomes, (ii) sharply close and, in many cases, *reverse* the sign of racial intergenerational mobility gaps in education, income, and employment, and (iii) matter most when *racial dissociation*, as measured by residential and marriage segregation, is greatest. In contrast to standard estimates, our empirical framework implies a steady state equilibrium that is characterized by near equality for Black and White Americans. The inclusion of racial capital in the model, however, greatly slows the speed of convergence to the steady state, helping to explain the historically slow speed of racial economic convergence in the United States over the past two centuries. Finally, our framework highlights the complementary way that policies related to racial dissociation and wealth transfers affect the speed of convergence across generations.

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1 Introduction

The economic prospects of Black and White children born to parents with comparable resources remain markedly unequal in the United States. For the 20 million children born between 1978-1983, Chetty et al. (2020) document a large gap in household income at age 35 — about 14 percentile points – for Black and White children born to parents with identical incomes. Controlling further for parents' education, wealth, marital status, family structure, and neighborhood closes this gap, but only by about 30 percent, leaving a large racial disparity unexplained by parental and neighborhood attributes.[1] Large racial mobility gaps are not new; Collins and Wanamaker (2022) show that substantial differences have existed in every generation since the late 1800s.[2] Not less puzzling for scholars than consistently large mobility gaps is the related phenomenon of the very slow decline across generations of racial differences in various socioeconomic outcomes.[3]

This paper examines *racial capital* as a possible explanation for persistent racial disparities in life outcomes that are unexplained by parental and neighborhood factors. The motivation for our analysis is that a person's adult outcomes are clearly partly determined by their exposure or access to resources from other adults in their parents' generation. We define racial capital as the material and non-material resources an individual is exposed to

[1]Similar unexplained racial gaps exist for other outcomes, including educational attainment, individual employment, and incarceration, especially for boys.

[2]Several other important studies have estimated large racial differences in intergenerational mobility including Bhattacharya and Mazumder (2011); Mazumder (2014), which document similar patterns to Chetty et al. (2020) using publicly available NLSY and SIPP samples, and Card et al. (2018), which documents systematic variation in upward mobility in education by race and location in the first half of the 20th century in the U.S., attributing most of these differences to inequalities in public schooling and racial segregation in education. Chetty et al. (2024) document and analyze the evolution of racial gaps for the recent birth cohorts.

[3]In economics, numerous studies have examined the historical evolution of racial differences in a wide variety of outcomes including: earnings (Bayer and Charles, 2018; Bayer et al., 2025; Darity Jr et al., 1998; Juhn et al., 1991; Kondo et al., 2023; Moody and Darity Jr., 2018; Pettit and Ewert, 2009; Smith and Welch, 1989), employment and labor force participation (Boustan et al., 2014; Moody and Darity Jr., 2018; Pettit and Ewert, 2009), education (Collins and Margo, 2006; Margo, 1990), income (Margo, 2016), home ownership (Collins and Margo, 2011), health (Boustan and Margo, 2015), and wealth (Darity Jr. and Nicholson, 2005; Derenoncourt et al., 2024; Oliver and Shapiro, 2013). See also Antman et al. (2023) for a recent comprehensive review of the literature on labor market outcomes and economic mobility of Hispanic Americans.

while growing up from adults in different racial groups. Because of historical processes, adults of different races systematically generate different amounts of collective resources, while patterns of racial segregation in social networks and interactions ensure that children are primarily exposed to adults of their own race. Despite similar parental and neighborhood backgrounds, young people of different races may therefore benefit from sharply unequal amounts of racial capital, with implications for their adult outcomes.

To implement racial capital in the analysis that follows, we first introduce two terms: *racial dissociation* to describe the extent to which social relationships are structured along racial lines, with values ranging from zero (fully integrated) to one (completely racially segregated); and *racial assets* to represent the various distinct elements of collective resources, associated with different racial groups, that affect the outcomes of younger individuals who can access them. These two factors together determine racial capital. As we show below, these definitions give rise to an extended version of the traditional intergenerational mobility equation which includes the racial assets of adults of a person's own race in the market where they grew up as key regressors. The estimated effect of racial capital on socioeconomic mobility reflects the combined influence of three things: (i) the overall importance for one's life outcomes of resources from adults other than one's parents; (ii) the degree of racial dissociation one's racial group faces in society; and (iii) historical disparities by race in racial assets (collective resources).

We estimate a flexible version of the extended mobility equation with racial capital for Asian, Black, Hispanic, and White children born around 1980 using data from Opportunity Insights (OI) and the National longitudinal Study of Youth 1997 (NLSY97). These data allow us to relate an individual's adult outcomes, such as their income, employment, educational attainment, and incarceration at around age 35, to information about the resources they experienced at about age 10. In addition to traditional measures related to parents and neighborhoods, we add several racial assets to the mobility equation based on the resources of adults in the same racial group in the metropolitan area where they lived as children. In

particular, we include measures of the average educational attainment, earnings, and housing wealth of adults in the same racial group who are of similar age to the child's parents.

Our first set of empirical results focuses on the differences in Black-White intergenerational mobility documented in the prior literature. We find that racial capital has a substantial role in explaining these gaps, comparable in magnitude to the role of parental resources. Strikingly, adding racial capital to the analysis sharply closes the previously unexplained Black-White gap in household income and *reverses* the sign of this disparity for individual income, educational attainment, and employment. Said differently, our estimates imply that the educational attainment, income, and employment of Black children exceed that of White children who grow up with comparable collective resources, when the assets associated with parents, neighborhood, *and* metro-level racial capital are taken fully into account.[4]

We turn next to a series of analyses designed to explore the role of racial dissociation in explaining the impact of racial capital. Our framework yields the strong empirical predictions that racial capital should have the greatest impact on estimated mobility differences between persons from pairs of groups with the greatest degree of racial dissociation; and that, for a given pair of groups, the estimated effect of racial capital should be largest in markets where racial dissociation between the two groups is biggest. To assess these predictions, we broaden the analysis to compare the results across the three major minority groups that we are able to study – Asian, Black, and Hispanic. We show that the estimated importance of racial capital, in pairwise comparisons with White outcomes, varies across these groups in the order in which the groups are racially dissociated from the White majority, as measured by indices of residential and marriage segregation. Then, for each of these minority groups, we show that racial capital matters more in metro areas characterized by greater racial dissociation with the White population. These results align closely with predictions of the motivating theoretical framework regarding racial dissociation.

[4]The impact of adding racial capital to the model is broadly similar for girls and boys and across the parental income distribution. The results for incarceration are more mixed and seem to depend on the way this outcome is defined.

We close the paper by analyzing how incorporating racial capital into the mobility equation affects our understanding of the evolution of group differences across generations by virtue of its impact on three factors: how average racial (dis)advantage is transferred, or persists, from one generation to another; the nature of the implied long-run, or steady-state, gap in outcomes towards which current estimates suggest the society will ultimately converge; and how close to the implied steady-state the society currently is.

When interpreted as a fixed difference between races, estimates of Black-White mobility gaps in the standard mobility equation without racial capital imply that the United States is currently close to a steady-state characterized by racial inequality that is substantial and (presumably) permanent. In contrast, our results attribute most, and for many outcomes all, of the current mobility gap to racial capital, which is mutable across generations rather than permanent. As a result, our framework and findings instead imply a long-run steady state of near-equality between Black and White Americans. Importantly, and again in contrast to previous work, our results suggest that the large gaps currently observed are far from the steady state implied by our empirical model.

The inclusion of racial capital also helps explain the glacial pace of historical Black-White socioeconomic convergence in the century and a half since the end of the Civil War. In particular, racial capital systematically increases the persistence of group differences from one generation to the next as a linear function of its weight in the extended mobility equation. Interestingly, our empirical estimates, which are based exclusively on modern data, imply a speed of generational convergence that is broadly consistent with the historical pace measured in Margo (2016) over the past 150 years.[5] More generally, our theoretical framework implies that greater dissociation between a minority racial group and the White majority leads to greater persistence in racial inequality from one generation to the next. This observation helps to explain historically why the economic fortunes of the minority groups that have

[5]In particular, Margo (2016) estimates that the Black-White per capita income ratio has increased slowly from about 0.25 in 1870 to about 0.65 in 2015. Our estimates imply a persistence of racial inequality across generations in the modern era that is not quite as strong as these historic rate would imply, but still substantial.

been the most socially segregated have converged at much slower rates than racial/ethnic groups that have been more quickly socially integrated or absorbed into the majority. Taken as a whole, our theoretical framework and empirical results provide a natural economic explanation for two broad observations – the slow speed of racial economic convergence since the end of slavery and unexplained racial mobility gaps in modern data – that are often used to rationalize non-economic or cultural explanations for racial disparities.

Our framework clarifies two distinct but complementary ways that policy affects the speed of convergence to racial equality. The importance of racial dissociation in our framework highlights the value of interventions that promote desegregation, reduce discrimination, or ensure that political power is more racially balanced in increasing the speed of progress toward racial equality. Our results also have several key implications for policies that work primarily through racial wealth transfers. Estimates of the standard intergenerational model, with the implication that American society is close to a permanent state of racial inequality, present a pessimistic view of the utility of these policies, suggesting any reduction in inequality would be quickly reversed in future generations as inequality reverts back to the steady state level. Our analysis, which suggests instead that any steady state racial differences are quite modest and that the United States is currently quite far from this point, implies that racial wealth transfers would work to push society faster towards a more equal long run state and, working through both the parental and racial capital channels, do so with double the efficacy.

Our analysis adds to a robust body of work relating an individual's outcomes to those of persons with whom they are socially connected.[6] In economics, the seminal work of Loury (1976) introduced the notion of social capital in his theoretical investigation of the dynamics of racial differences. Over the past fifty years, this idea has been actively explored

[6]Several recent papers have explored the impact on economic mobility of assets, resources, and social capital from additional individuals (beyond parents) including grandparents (Ferrie et al., 2021; Hjalmarsson and Lindquist, 2012) and Facebook friendships (Chetty et al., 2022). Chetty et al. (2024) includes measures of social capital in the mobility equation proxied by employment rates of adults with whom children are likely to interact, yielding several results that are consistent with and complementary to our analysis.

in sociology and the social sciences more generally (Coleman, 1988). The construct of racial capital that we introduce in this paper is directly inspired by and extends the foundational work of Borjas (1992, 1995) on the effect on individual outcomes of "ethnic capital", defined in that work as differences at the national level between the socioeconomic positions of ethnic groups. We discuss later in Section 2 how our formulation and empirical implementation of racial capital differs from related ideas in previous work.

Our paper is most closely related to the literature in economics examining racial differences in intergenerational mobility. This includes the papers discussed above, which measure overall differences, and several important recent studies that examine how geography and, in particular, historical segregation levels affect racial mobility gaps (Andrews et al., 2017; Chyn et al., 2022; Davis and Mazumder, 2018; Rothbaum and Massey, 2022).[7] Our results implying that the role of racial capital is greater in metro areas with more evident racial segregation are very much consistent with the findings in the latter literature. In other closely related work, Jácome et al. (2025) and Ward (2023) show how including Black men and women in analyses of intergenerational mobility can dramatically change estimates of overall mobility rates, due to changes in inequality at the group level.[8]

Finally, our framework also has implications for another broad point of debate in the literature on intergenerational mobility. Although estimates based on measures of persistence in outcomes from one generation of a family to the next are typically fairly small, around 0.3-0.4, estimates that measure persistence in other ways, such as among surnames over several generations, can be much greater in some (Clark, 2018; Clark and Cummins, 2015) but not

[7]Another important set of related papers examines the impact of key historical episodes and policy changes on racial inequality and economic 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), increased trade with China and Japan (Batistich and Bond, 2023), the construction of the interstate highway system (Weiwu, 2024), and the expansion of the minimum wage (Derenoncourt and Montialoux, 2021).

[8]Several other studies have explicitly measured intergenerational mobility for descendants of enslaved Black Americans (Althoff and Reichardt, 2024; Sacerdote, 2005). Most recently, Althoff and Reichardt (2024) finds that, relative to Black families whose ancestors were free before the Civil War, Black families whose ancestors were enslaved until the Civil War continue to have considerably lower education, income, and wealth into the 21st Century.

all (Aaronson and Mazumder, 2008; Card et al., 2000; Chetty et al., 2014) circumstances. While not completely isomorphic, our framework focuses attention on mechanisms operating through a broader network of social groups and associations that create a substantial gap between group- and family-level persistence, thereby potentially helping to explain some of the differences in estimates of persistence measured at different levels of aggregation.[9]

The rest of the paper is organized as follows. We lay out our analytical framework in Section 2, describe the data and estimating equations in Section 3, and present the results of our Black-White analysis in Section 4. In Section 5, we present the results for our Asian-White and Hispanic-White analyses and explore heterogeneity across metro areas on the basis of residential and marriage segregation. We analyze the implications of our theoretical framework and empirical estimates for the evolution of group differences across generations in Section 6. 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 convergence 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

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

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

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 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

[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.

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 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 considerations 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*.

[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).

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 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 in the mobility equation, we have highlighted a number of examples that represent fairly direct forms of social capital – i.e., the impact of a wider set of regular relationships/interactions with adults beyond one's parents. It is important to emphasize, however, that the inclusion of racial assets in equation 3 might also capture the effects of several other broad social mechanisms. Racial discrimination,

for example, can link the treatment of individuals in many social and economic contexts (and thus their lifetime outcomes) to the resources of their racial group. This connection is especially direct in the case of statistical discrimination (Aigner and Cain, 1977; Charles and Guryan, 2011), which occurs when inferences or beliefs about individuals are based, in part, on the characteristics of others in the same racial group. But discrimination motivated by racial animus or prejudice may also be affected by group resource levels if, for instance, these forms of discrimination are more severe when the disparities between a given racial group and the majority group are greater. The included racial assets may also capture several political economy mechanisms. Resource differences between racial groups, for example, might affect relative political power in a region, thereby impacting how public goods and other government resources are allocated across racial groups, or the level of support public goods in general. The importance of these kinds of political economy mechanisms is especially evident in Derenoncourt (2022), which documents large reductions in public good provision in Northern cities following Black in-migration during the Great Migration that, in turn, had especially negative effects on the economic 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 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 bias in this key parameter. Denote estimates of this parameter from previous regressions that did not account for racial capital by $\widetilde{\alpha}_r$. Assuming that (3) is the correct empirical model, bias in the estimate $\widetilde{\alpha}_r$ will be greater (in magnitude)

[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).

when racial differences in the impact of racial capital, $\gamma\sigma_{t-1}(\mu^r_{m,t-1} - \mu^w_{m,t-1})$, are greater. In this way, as long as group assets matter for life outcomes ($\gamma \neq 0$), 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 from regressions that exclude racial capital, $\tilde{\alpha_r}$, will be biased. Moreover, for any minority racial group r for which mean differences in group resources across markets, $\bar{\mu}^r_{t-1}$, are less than those for the reference group, $\bar{\mu}^w_{t-1}$, the true α_r will be smaller in magnitude than the parameter, $\widetilde{\alpha}_r$, estimated in regression models that do not control for racial capital. Indeed, if the true absolute mobility effect were 0, but there was a large racial gap in the omitted variable, racial capital, the resulting biased 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.

Testing these last two broad sets of predictions related to heterogeneity in σ represents a key way that our analysis builds on and extends the existing literature. Borjas (1992), for example, included a measure of the mean resources of an individual's racial or ethnic group measured at the national level, using variation across racial/ethnic groups (at the national level) to identify a single parameter, γ, for all racial groups. In contrast, the primary variation our analysis exploits is at the racial group-by-metropolitan area level, allowing us to (i) relax the assumption that racial capital has the same effect for all racial groups, (ii) absorb any general effect of location through metro and/or neighborhood fixed effects, and (iii) explore heterogeneity in the impact of racial capital across markets as a function of observable measures of racial dissociation.[14]

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.

[14]Related to this last point, Borjas (1995) explored how the impact of national variation in ethnic capital is affected by local segregation levels. In general, despite exploiting quite different sources of variation, our empirical findings are broadly consistent with those of Borjas (1992, 1995).

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 1st, 10th, 25th, 50th, 75th, and 100th 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.[15] 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.[16] Incarceration status is based on whether a child lives in any

[15] 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.

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

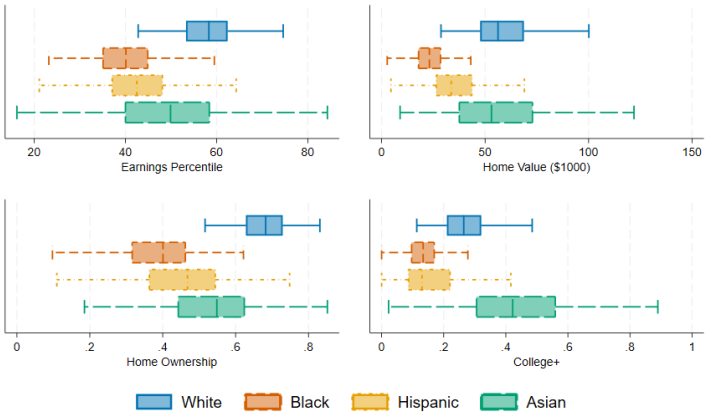
of the following institutional settings in 2010: federal detention center, federal prison, state prison, local jail, residential correctional facility, military jail, or juvenile correctional facility. A more detailed discussion of how these results are calculated can be found in CHJP.

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. [17] 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.

[17] 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.[18]

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:

$$\bar{y}_{p,r,j,t} = \alpha_r I_r + \beta y_{p,t-1} + \theta_{m,t} + \gamma \sigma_{m,t-1} \left[I_r \mu^r_{m,t-1} + (1 - I_r)\, \mu^w_{m,t-1} \right] + \epsilon_{p,r,j,t} \tag{5}$$

[18] 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 (5) using weighted least squares, weighting by the estimated number of households in a given (p, r, j) triplet.[19] 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

[19] 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	-22.328***	-13.794***	-10.684***	-5.578***	-4.855***	-4.361***
	(0.068)	(0.047)	(0.064)	(0.301)	(0.377)	(0.378)
Parent Income Percentile		0.334***	0.275***	0.275***	0.275***	0.275***
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Racial Capital: Mean Earnings Percentile				0.245***	0.280***	0.264***
				(0.015)	(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	0.493	0.810	0.933	0.934	0.934	0.934
Observations	58577	279079	279079	279079	279079	279079

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.

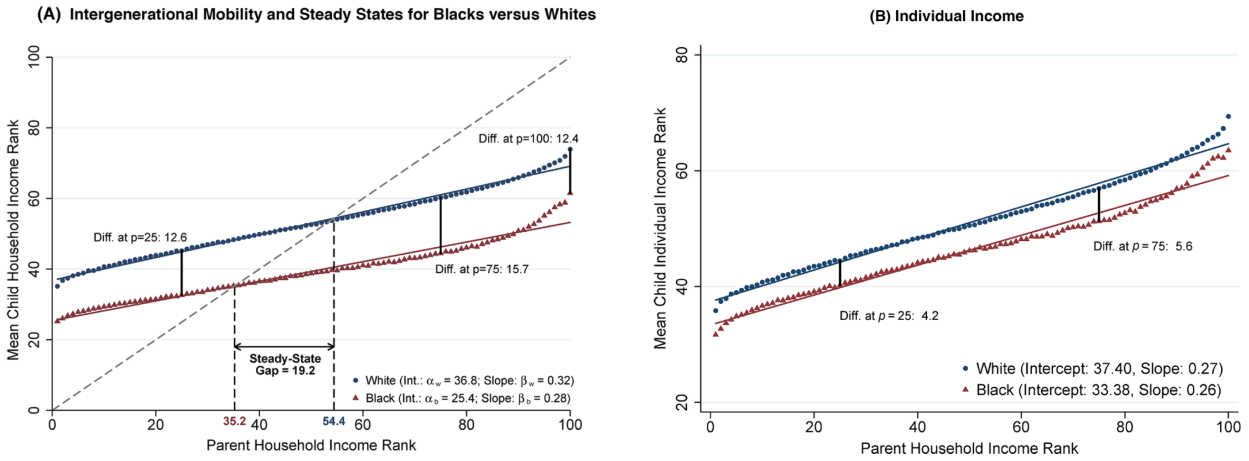
percentile in 2015, when they are approximately 35 years old. Column (1) reports the results for a specification that does not include any parental, neighborhood, or racial capital measures. The estimate, in this case, is the unconditional racial gap in household income percentile at age 35, which is approximately 22.4 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 six points of the parents' income distribution, 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: 0.33. As in CHJP, the estimated racial gap in children's

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)

household income percentile falls to approximately 13.8 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 10.7 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.[20] 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).[21]

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

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

[21] 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.

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: 0.28 for the parental income and 0.25 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 5.6 percentile points, nearly half 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 4.9 percentile points.[22] 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.

It is important to emphasize that the neighborhood effects included in the specifica-

[22]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.

tions 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.[23] 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.

That own-race measures of group assets matter much more at the metropolitan versus

[23]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.

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 12.8 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 3.3 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 racial capital measures are included in the specification.

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

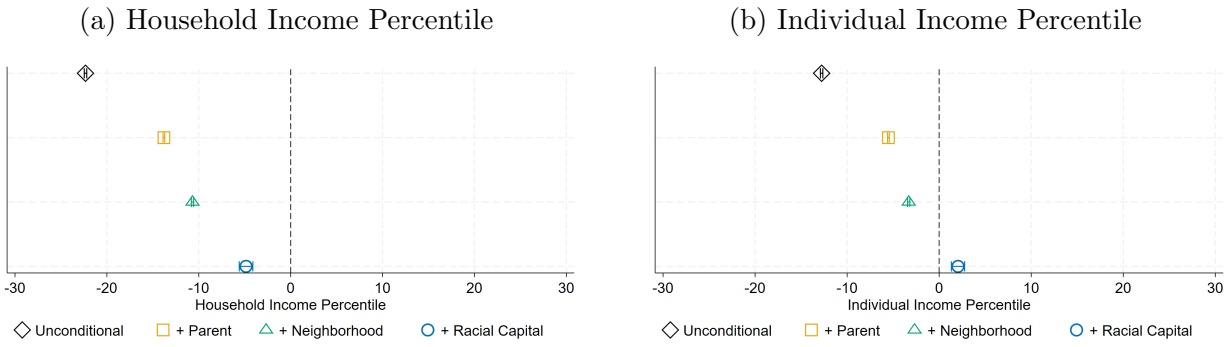
	Individual Income Percentile					
	(1)	(2)	(3)	(4)	(5)	(6)
Black	-12.770***	-5.513***	-3.306***	0.130	2.047***	2.478***
	(0.067)	(0.047)	(0.062)	(0.290)	(0.368)	(0.367)
Parent Income Percentile		0.293***	0.238***	0.238***	0.238***	0.237***
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Racial Capital: Mean Earnings Percentile				0.165***	0.206***	0.193***
				(0.014)	(0.019)	(0.020)
Tract Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific Tract Resources						Y
Adjusted R-squared	0.280	0.733	0.903	0.903	0.904	0.904
Observations	58577	279079	279079	279079	279079	279079

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

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.

in Section 5 the role of racial dissociation in driving the significance of racial capital.

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.[24] 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 8.4 percentage points more likely to complete college and 7.8 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.

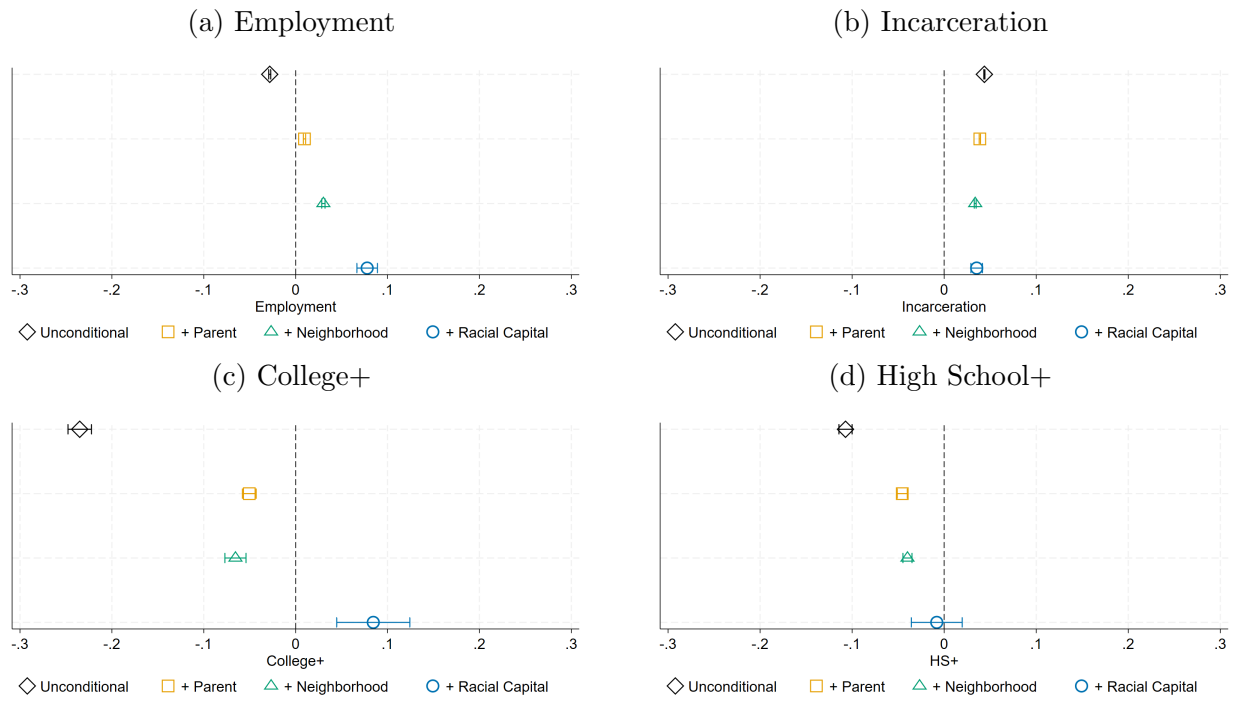
Unlike the outcomes for education, income, and employment, the addition of parental, neighborhood, and racial capital measures, respectively, barely move the racial gap in incarceration rates. The unconditional estimate implies that Black children are 4.4 percentage points more likely to be incarcerated. 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 3.5 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.[25] To explore this possibility, we estimate the

[24]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.

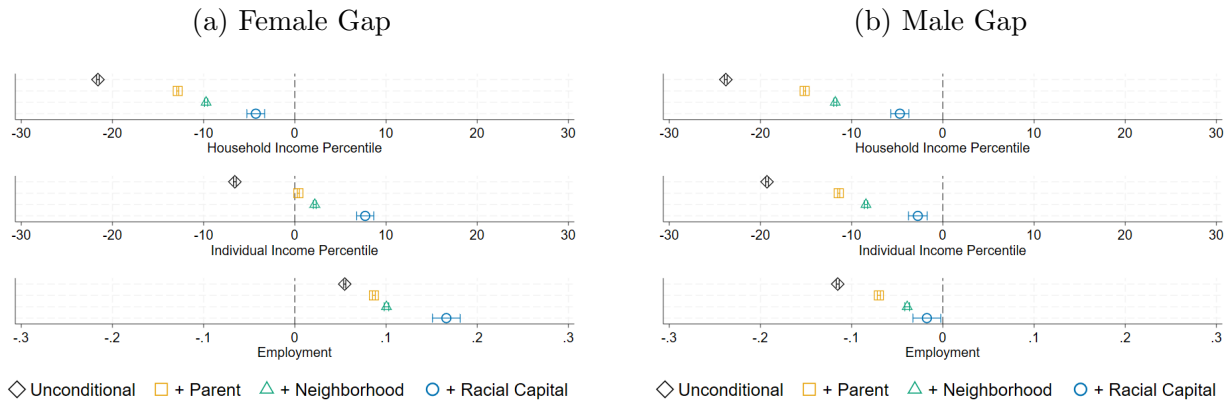
[25]The impact of resources at the parent and neighborhood levels also affect mobility rates differentially by sex and race (Autor et al., 2019; Chetty et al., 2020; Murnane, 2013).

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 Analsyis 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.

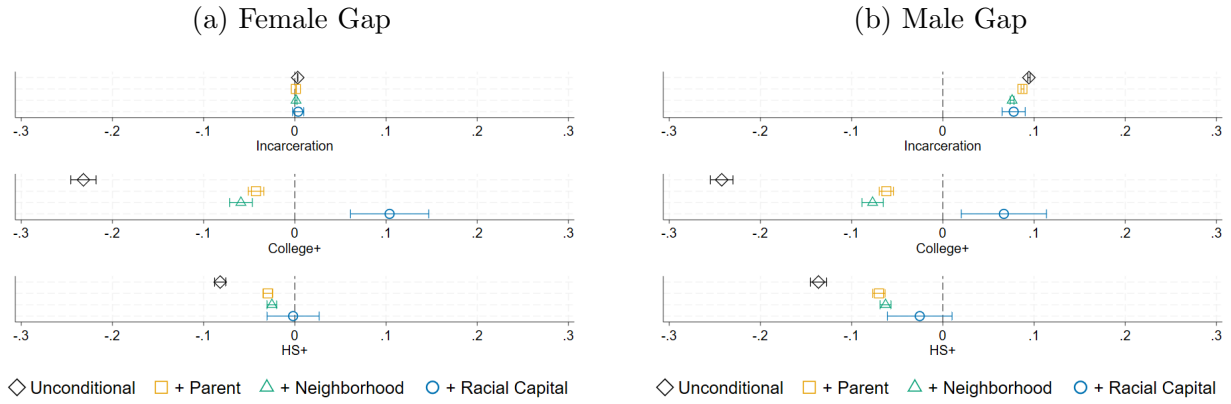
intergenerational mobility regressions separately by sex, presenting results for adult labor market outcomes in Figure 5 and education and incarceration outcomes in Figure 6.[26]

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 16.3 percentage points for female and 14.4 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

[26]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, Figure 7 presents estimates of the impact of adding neighborhood fixed effects and the four racial capital measures to the mobility equation for each of the six percentiles of parents' income distribution available in the OI data – 1st, 10th, 25th, 50th, 75th, and 100th – separately. 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 near the top versus

bottom of the income distribution – or instead operate essentially independently of parents' income. In these figures, the orange-square line shows the racial gap at the corresponding percentile of the parents' income distribution, while the green-triangle lines depicts the gap remaining after controlling for neighborhood fixed effects, and the blue-circle line shows the gap remaining after further conditioning on the four metro-level own-race group assets.

For household and individual income, racial capital has substantial explanatory power at every income percentile, although the effect is noticeably smaller in magnitude at the very top of the income distribution. For employment and college completion, the impact is large and essentially uniform across the full income distribution. Finally, for high school completion and incarceration, the effect of adding racial capital is noticeably stronger at the 1st and 10th percentile points than in the middle or upper portions of the income distribution, suggesting that racial capital is particularly important in helping children from relatively poor households avoid the most 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 8.[27]

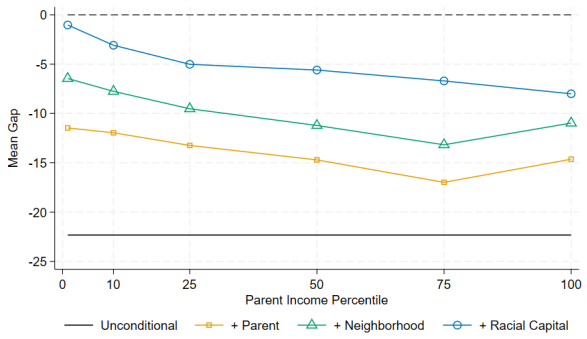
The NLSY results are broadly consistent with the OI analysis above.[28] Including racial capital measures significantly closes and sometimes reverses the adulthood outcome gaps of Black and White children for all outcomes. As in the OI analysis, the gaps fully close for high school completion and reverse in sign for individual income and the college completion rate,

[27] 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.

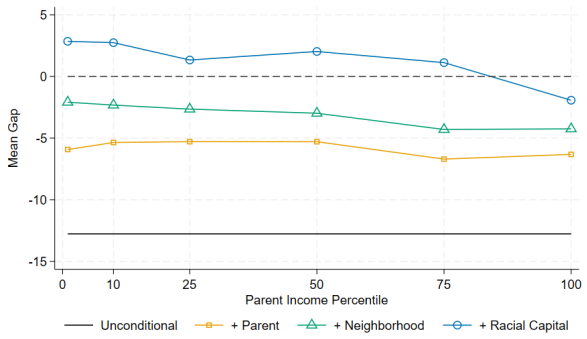
[28] The NLSY results are also largely consistent with the OI results when estimated separately for men and women. This analysis can be found in Appendix B.

Figure 7: Intergenerational Mobility Gaps between Black and White Children by Parental Income Percentile

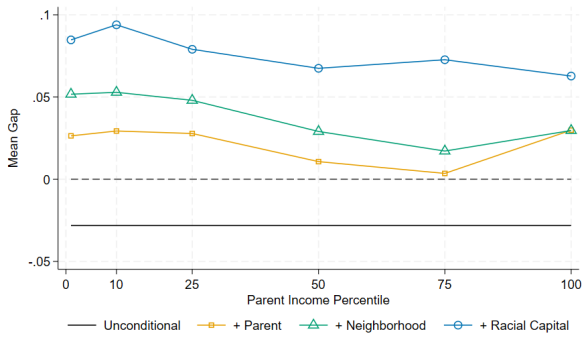
(a) Household Income Percentile



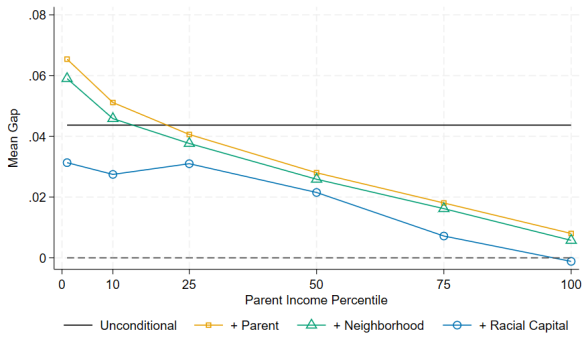
(b) Individual Income Percentile



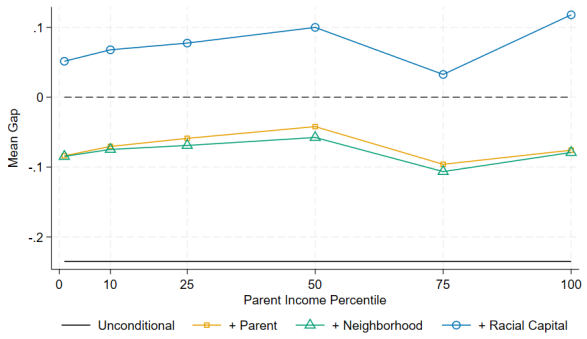
(c) Employment



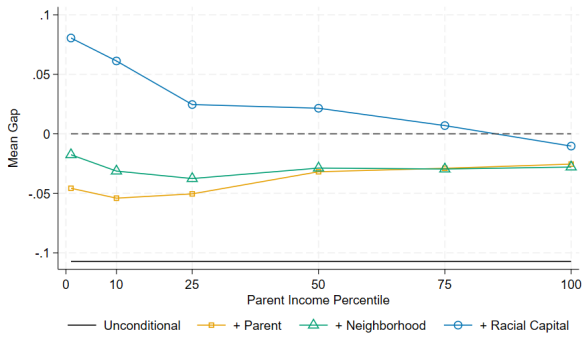
(d) Incarceration



(e) College+



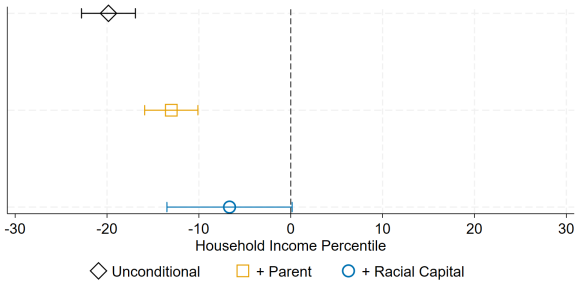
(f) High School+



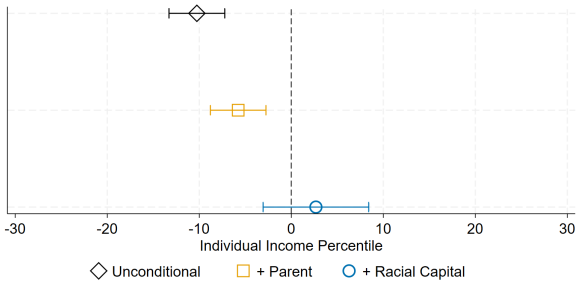
Notes: The figures above show the gaps in adulthood outcomes between Black and White children at each parental income percentile, conditional on different sets of resources. Solid black lines depict unconditional gaps; yellow squares depict gaps conditional on parental income; green triangles depict 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 six parental income percentile points given in the OI data. Standard errors are omitted for simple presentations.

Figure 8: Intergenerational Mobility Gaps: Black and White Analysis (NLSY)

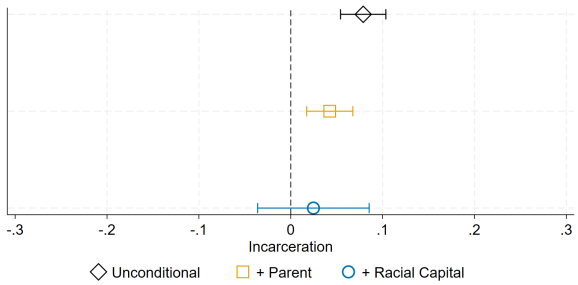
(a) Household Income Percentile



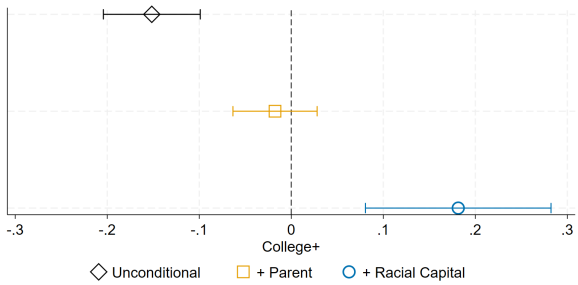
(b) Individual Income Percentile



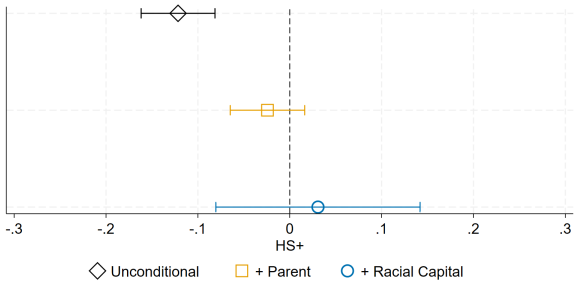
(c) Incarceration



(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.

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 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 use is:

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

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

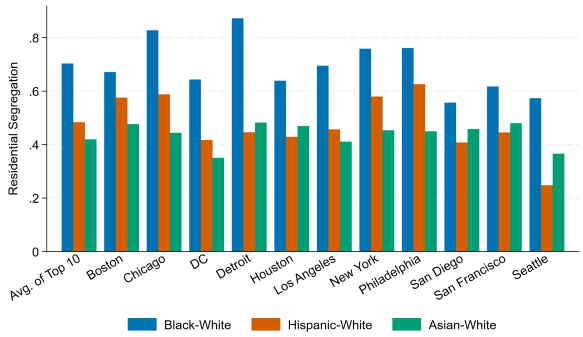
This measure of marriage segregation takes a value of one when there are no [Race]-White marriages and marriages are, therefore, perfectly segregated. The index equals zero when the [Race]-White marriage rate exactly matches that predicted by random assignment, which can be interpreted as a perfectly 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 9 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.

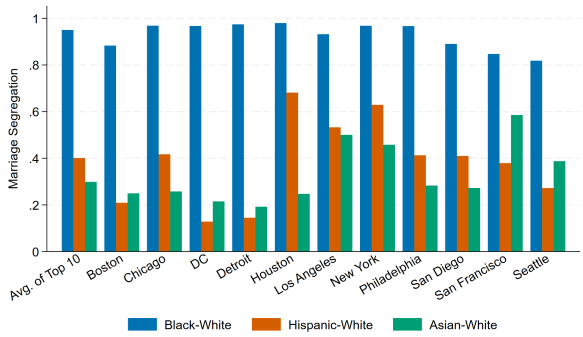
The top panel of Figure 10 shows a scatter plot of our measures of residential and marriage Black-White segregation across metropolitan areas. Comparable figures for the Asian-White and Hispanic-White are shown in the remaining panels of the same figure. Because segregation measures can be sensitive to group size, we first residualize both measures using an OLS regression that includes the Asian, Black, or Hispanic share of the metro population,

Figure 9: 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.

respectively, as the only right-hand side variable.

The panels of Figure 10 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.

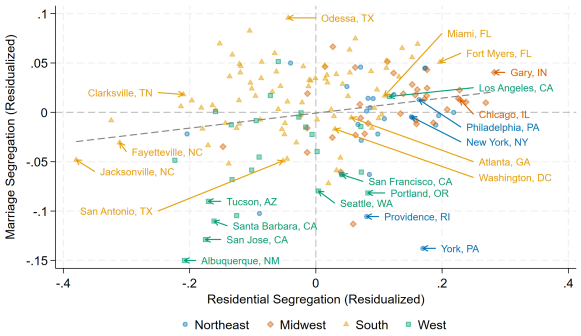
5.2 Heterogeneity by Race and Ethnicity

We now present results for Asian-White and Hispanic-White analyses that mirror the Black-White analysis presented in Section 4.[29] Following the same methodology as Figure 3 above, the middle and lower panels of Figure 11 report the estimated Hispanic and Asian coefficients

[29] 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).

Figure 10: 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.

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.[30] The top panel of Figure 11 repeats Figure 3 for easy visual comparison.

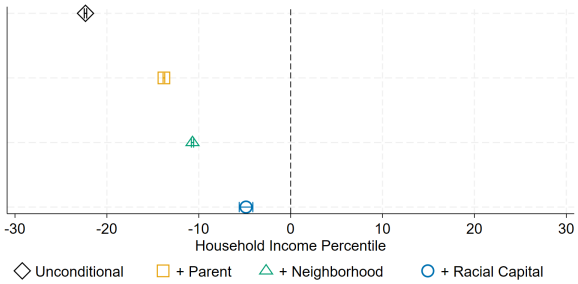
Comparing the Hispanic-White analysis to the Black-White analysis above yields several intriguing takeaways. First, the pattern resulting from successively controlling for parental income, neighborhood, and the racial capital measures is qualitatively quite similar. Interestingly, the magnitudes of both 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 10.4 percentile points in the Hispanic-White analysis versus 22.4 percentile points of the Black-White analysis and, controlling for racial capital shifts the estimate by about 3.1 versus 6.3 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 (halved) 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

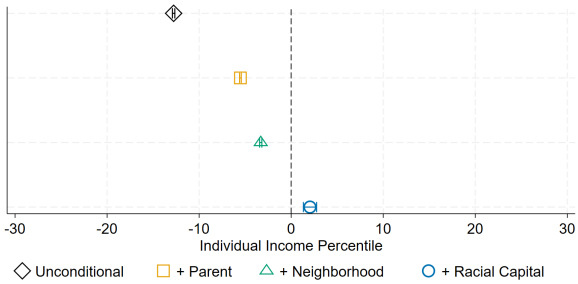
[30] Comparable figures for the education, employment, and incarceration outcomes are shown in Appendix Figures B.7 and B.8.

Figure 11: Mobility Gaps in Household and Individual Income by Race

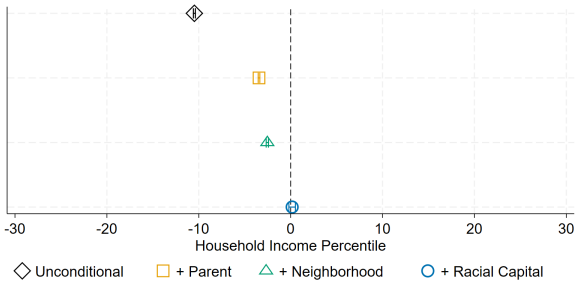
(a) HH Income Percentile (Black-White)



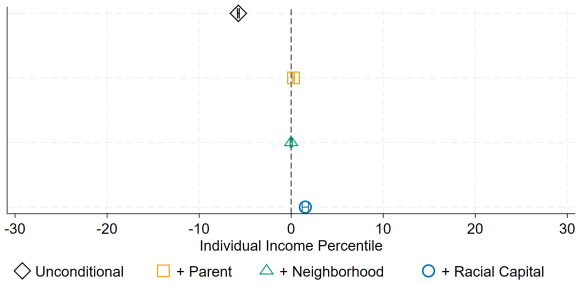
(b) Indiv. Income Percentile (Black-White)



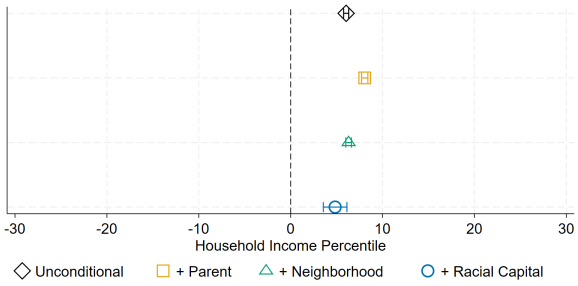
(c) HH Income Percentile (Hispanic-White)



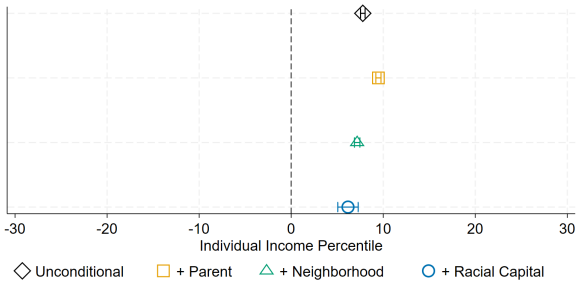
(d) Indiv. Income Percentile (Hispanic-White)



(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.

versus Black-White interactions.[31]

Taken together, the results depicted in Figure 11 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 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 di-

[31] 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.

mensions 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 3 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

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.

(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.[32]

Columns (3) and (6) include both the residential and marriage segregation measures simultaneously. While it might be asking a lot of the data to try to distinguish the relative importance of these two segregation measures, Figure 10 above suggests that there is some independent variation in these measures across metro areas.[33] 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 3 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,

[32]The estimates shown in Table 3 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).

[33]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.

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 studying the implications of our theoretical framework and empirical estimates for the dynamics of racial inequality across generations. We begin with the theory, deriving 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.

We then explore the implications of our empirical estimates for the dynamics of racial inequality in the United States. Relative to the standard empirical model, 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 final part of this section.

6.1 Convergence Across Generations: Theory

For expositional clarity, we make two simplifications in the analysis that follows. First, in our empirical analysis above, we incorporated four elements of racial capital to capture the potentially multidimensional nature of the intergenerational transmission of education, income, and wealth. We assume here, instead, 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:

$$y_{i,t} = \alpha_r I_r + \beta y_{i,t-1} + \gamma \sigma_{t-1} \left[I_r \bar{y}^r_{t-1} + (1 - I_r)\, \bar{y}^w_{t-1} \right] + \epsilon_{i,t} \tag{6}$$

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:

$$\Delta_r(y_{t+1}) = (\beta + \gamma \sigma_t) \Delta_r(y_t) + \alpha_r. \tag{7}$$

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:

$$g_t = \beta + \gamma \sigma_t. \tag{8}$$

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.[34]

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

[34] 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 (8), this measure includes an additional term that, in essence, accounts for the proximity of the current gap to the steady state.

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 (7) 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. We calculate the steady state level of racial inequality under two assumptions about σ_t. First, 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:

$$\Delta_r(y_{ss}) = \frac{\alpha_r}{1 - \beta - \gamma\sigma} \tag{9}$$

The inclusion of racial capital in the intergenerational transmission equation affects the steady state gap in two key ways. First, from a theoretical perspective, the inclusion of racial capital in the model 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, as discussed in Section 2 above and as our empirical estimates reveal, including racial capital in the model sharply reduces the estimated magnitude of α_r, and in some speci-

fications reverses its sign. Thus, from an empirical perspective, including racial capital in the model sharply reduces estimates of steady-state racial inequality. In essence, our framework attributes a substantial 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.

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.

6.2 Convergence Across Generations: Empirics

With these expressions for persistence and steady state inequality in hand, we now consider the implications of our empirical estimates for the speed and extent of racial convergence across generations, focusing on Black-White differences. The panels of Table 4 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 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, -13.8, leading to an estimate of steady state inequality of approximately -20.6 percentile points, which is very close to the current racial gap of -22.4 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 21 percentile points in the standard model to 11 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

Table 4: 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	-13.8	-4.9	-4.9	-5.5	2.0	2.0
β	0.33	0.28	0.28	0.29	0.24	0.24
$\gamma\sigma$	0.00	0.28	0.00	0.00	0.21	0.00
Δ	-22.4	-22.4	-22.4	-12.8	-12.8	-12.8
Generational Persistence						
$\beta + \gamma\sigma$	0.33	0.56	0.28	0.29	0.44	0.24
Steady State Gap						
$\frac{\alpha}{1-\beta-\gamma\sigma}$	-20.6	-11.0	-6.8	-7.8	3.7	2.7
Distance to Steady State						
$\Delta - \frac{\alpha}{1-\beta-\gamma\sigma}$	1.8	11.4	15.6	5.0	16.5	15.5

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.

persistence in the racial capital model, 0.56, 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 11.4 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 -6.8, and

generational persistence is much weaker, 0.28. 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 4 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.

6.3 Racial Convergence Across Generations: 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 (7), 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.[35] This applies not only to policies that directly target segregation or discrimination but also to policies that affect the way that households sort across schools, neighborhoods, jobs, and other institutions, such as laws governing school choice and school finance.

Second, the inclusion of racial capital in (7) 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.[36]

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: $\Delta_r(y_{t+1}) =$

[35]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).

[36]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.

$(\beta + \gamma\sigma_t - h_t)\Delta_r(y_t) + \alpha_r$, 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. 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 empirical puzzles related to traditional models of intergenerational mobility. First, in recent data, a large unexplained gap between the adult outcomes of Black and White children exists, even after including the most detailed sets of controls ever gathered for parents' income, wealth, family structure, and presence in the home, as well as the neighborhood in which the child grew up (Chetty et al., 2020). When interpreted as a fixed difference between the races, this gap has stark implications, seemingly justifying non-economic or cultural explanations for modern racial differences and implying that the United States is close to a steady state characterized by permanent and substantial racial inequality. The first motivation for this paper is the central question raised by these recent studies: What explains racial differences in economic mobility beyond family and neighborhood?

The second empirical puzzle relates to the especially slow speed of racial economic convergence in the United States since the end of the Civil War. Estimates of traditional mobility equations yield a persistence parameter of about 0.3, which, if the only relevant factor, would imply that group differences should diminish by 99 percent (in approaching the steady state) in just four generations. Instead, as Margo (2016) shows, Black-White convergence over the past 160 years, while steady, has been much slower than this, consistent instead with a persistence parameter closer to 0.75 or 0.8. Explaining this glacial speed of group-level racial

convergence is the second broad motivation for our study.

In this paper, we develop an extended version of the intergenerational mobility equation that is theoretically straightforward yet conceptually rich and, as it turns out, yields empirical results that provide a single unifying explanation for both empirical puzzles. In particular, motivated by two key social observations, we introduce the concept of racial capital. The first observation is that, in addition to one's parents, a much broader set of relationships shape a child's life outcomes, with the collective material and non-material assets associated with those relationships creating many forms of meaningful social capital. The second observation is that when social interactions, associations, and networks are, at least partially, organized along racial lines, a child will tend to be over-exposed to the collective assets of those in the same racial group in their local society. These observations lead to a precise characterization of the way that the collective assets of one's own racial group enter the mobility equation that is a function of both the general importance of social capital and the level of racial dissociation – i.e., the degree to which society is organized along racial lines.

Empirically, we operationalize racial capital by adding four measures of the collective assets of adults in the parents' generation in the same racial group in the same metro area to the mobility equation. The inclusion of these variables yields several striking findings. First, racial capital matters a lot, with independent power to explain children's adult outcomes of the same order of magnitude as that of parents and neighborhoods. Second, the inclusion of these elements of racial capital largely explains (and often reverses the sign of) previously unexplained racial differences in intergenerational mobility for outcomes related to income, educational attainment, and employment. This suggests that what is missing from traditional models is the impact of mechanisms related to the broader collective assets of one's racial/ethnic group.

Third, adding racial capital to the mobility equation meaningfully alters the mathematics of the evolution of group differences across generations. One aspect of this is that, in stark contrast to the implications of the standard model, the steady state is characterized by near

racial equality for Black and White Americans. A second is that the combination of parents' capital and racial capital essentially doubles the weight of history, tying each generation more closely to the past and implying a much slower speed of convergence towards the steady state. Thus, taken together, the estimates of our Black-White analysis based on modern data are consistent with a broad continuation of the historically slow pace of decline in racial inequality documented in Margo (2016), towards a society that will eventually be much more equal.

A fourth set of results point to the important role of racial dissociation in explaining how racial capital matters. We explore this empirically in two ways. First, results for the three broad minority groups that we are able to study -– Asian, Black, and Hispanic – show that racial capital matters more in the order with which these groups are socially isolated from the White majority. Second, for each of these minority groups, we show that racial capital matters more in metro areas characterized by greater evident dissociation with the White population, as measured by residential and marriage segregation.

The role of racial dissociation in driving the importance of racial capital in the mobility equation has several important implications. Most directly, greater dissociation between a minority racial group and the White majority leads to both greater persistence in racial inequality from generation to generation and greater inequality in the steady state. This helps to explain historically why the economic fortunes of the minority groups that have been the most socially excluded by the majority have converged at much slower rates than racial/ethnic groups that have been more quickly socially included or absorbed in the majority. The important role of racial dissociation in maintaining racial inequality also highlights the value of policy interventions designed to increase cross-race interactions, and, in turn, the harm done by policies and practices that reinforce segregation and social isolation.

Our results also have several key implications for policies that work primarily through racial wealth transfers, such as reparations. Estimates of the standard model, with the implication that American society is close to a permanent state of racial inequality, present

a pessimistic view of the utility of these policies, suggesting any reduction in inequality would be quickly reversed in future generations as inequality reverts back to the steady state level. Our analysis implies instead that any steady state racial differences are quite modest and that the United States is currently quite far from this point. In our framework, therefore, racial wealth transfers would work to push society faster towards this more equal long run state and do so with double the power, as they work through both the parental and racial capital channels.

Finally, it is helpful to highlight several limitations of our current study that might point to exciting avenues for future research. We have focused in this paper on the role of the collective assets of groups defined by broad categories of race and ethnicity (and location). The general concept of group capital introduced here can be applied, however, to many other ways of defining groups that might contribute to the complex network of social interactions that impact a child's long run outcomes. While race is certainly an important dimension, as our results indicate, many others will also be critical to study, including class, religious organizations, immigrant communities, peer networks, and more detailed categorizations of race and ethnicity.

It will also be fruitful to extend the analysis here – based on relatively modern data in the United States – to other countries and historical periods. The detailed linked data available for historical Censuses that many researchers have used to estimate economic mobility may be especially fruitful for exploring the impact of racial capital, and its role in driving socioeconomic convergence across generations, for more granular categories of race and ethnicity – something we intend to explore in future work. And, finally, we see the thoughtful integration of the 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, to be 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).[37] 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

[37] 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 (5). 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 (5), 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 11e and 11f, presented in Figure B.5. 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

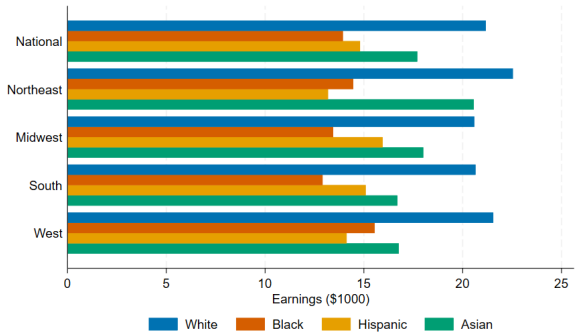
observations for the race group of interest in the 1990 Census.

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.

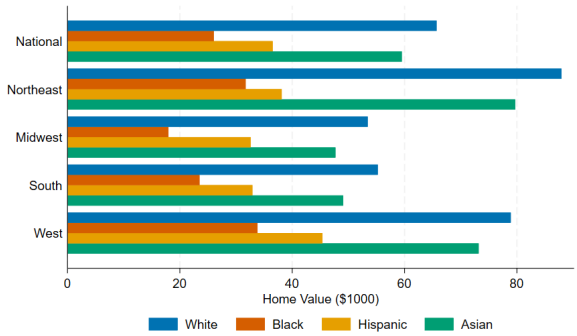
B Appendix Figures

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

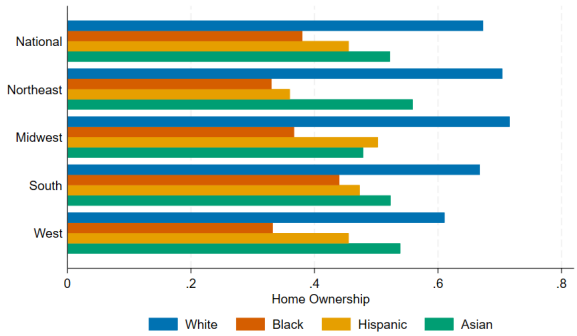
(a) Earnings



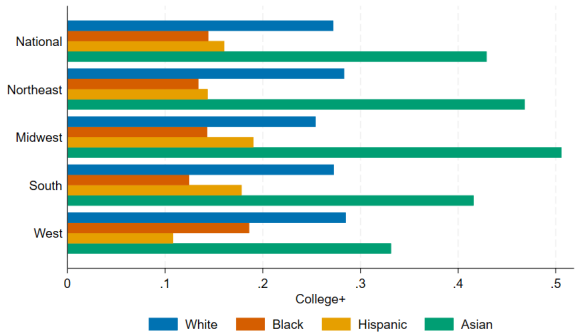
(b) Home Value



(c) Home Ownership



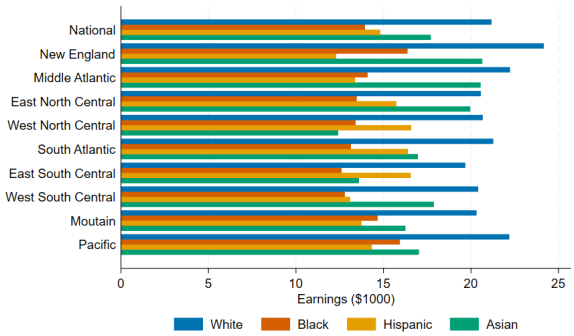
(d) College+



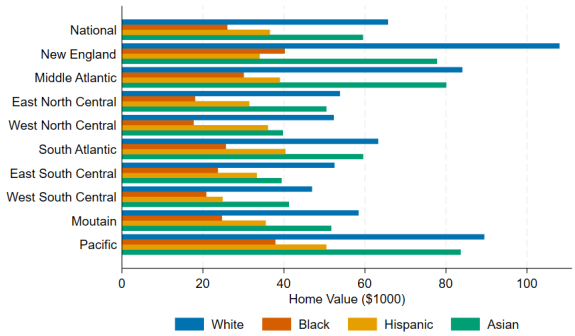
Notes: The figures above depict the average values of racial capital elements used in the analysis by race for the entire nation and by Census regions. These elements include earnings, home values, homeownership rates, and college completion rates for each racial group.

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

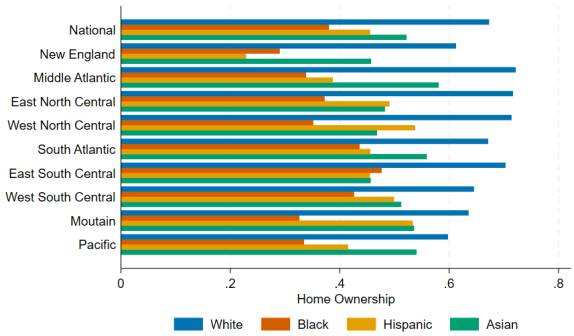
(a) Earnings



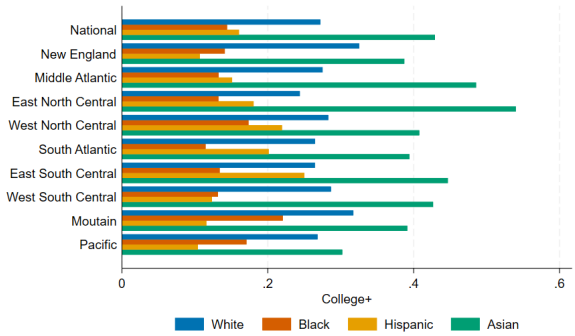
(b) Home Value



(c) Home Ownership



(d) College+

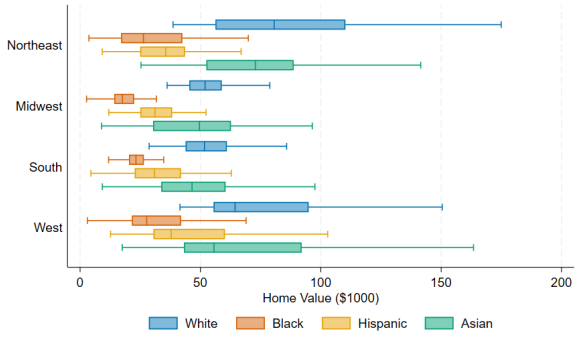


Notes: The figures above depict the average values of racial capital elements used in the analysis by race for the entire nation and by Census divisions. These elements include earnings, home values, homeownership rates, and college completion rates for each racial group.

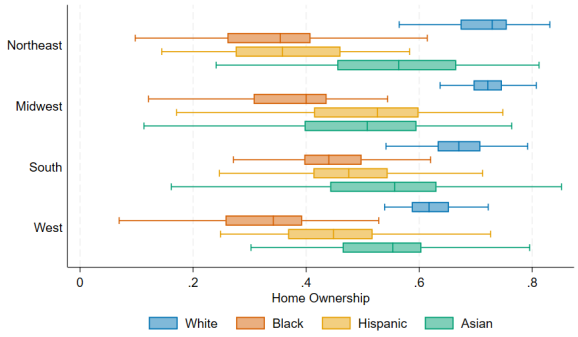
Figure B.3: Summary of Racial Capital Measures by Census Region

(a) Earnings Percentile

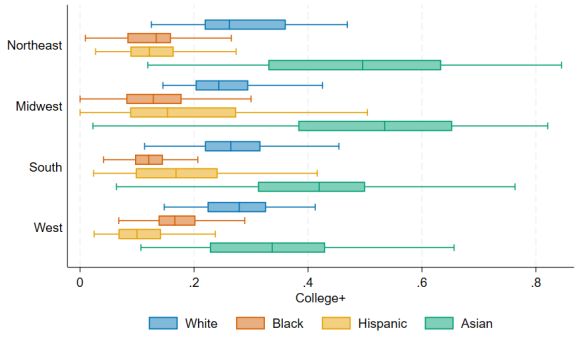
(b) Home Value



(c) Home Ownership



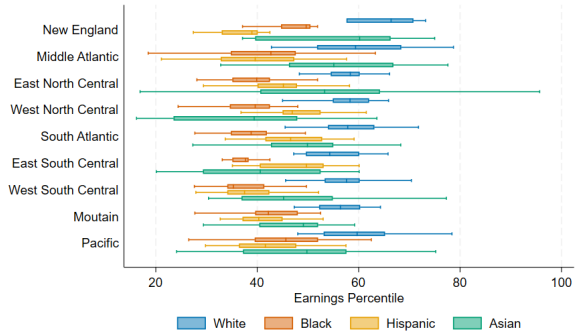
(d) College+



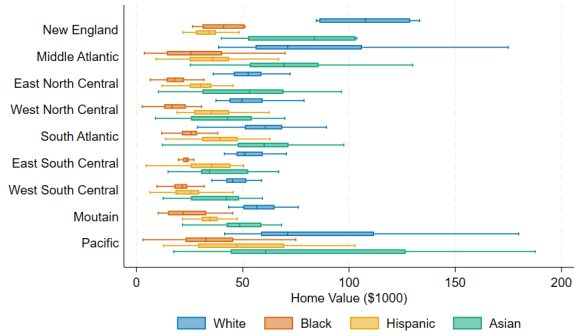
Notes: The figures above display box plots for the four metropolitan-level racial capital elements we use in the analysis by race and Census region. These elements include average earnings percentiles, average home values, homeownership rates, and college completion rates for each racial group. Outliers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

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

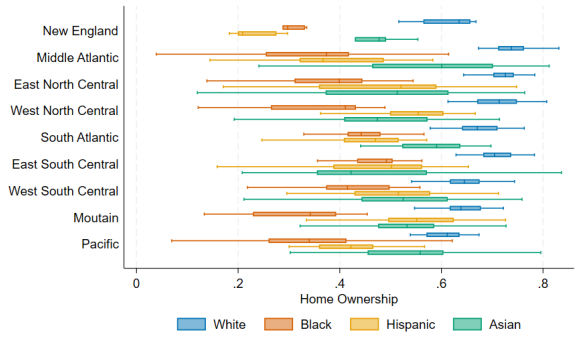
(a) Earnings Percentile



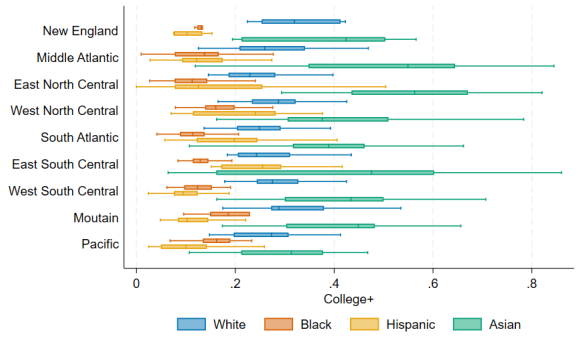
(b) Home Value



(c) Home Ownership



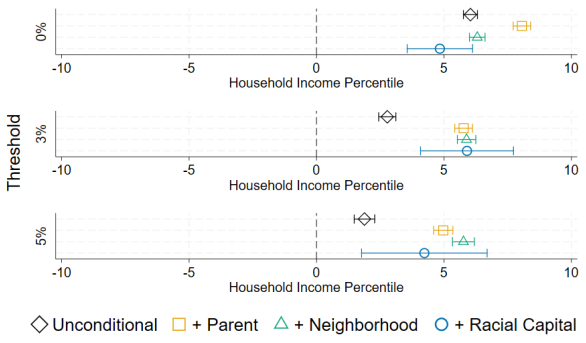
(d) College+



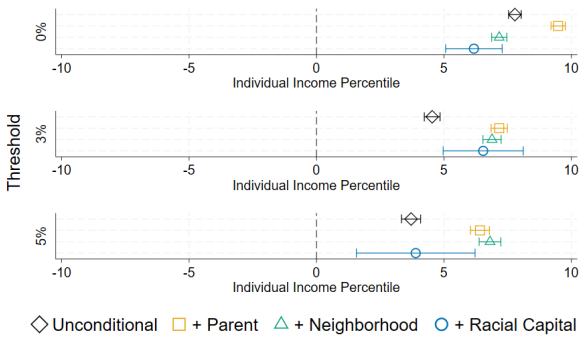
Notes: The figures above display box plots for the four metropolitan-level racial capital elements we use in the analysis by race and Census divisions. These elements include average earnings percentiles, average home values, homeownership rates, and college completion rates for each racial group. Outliers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

Figure B.5: Asian-White Analysis Using Varying Population Share Thresholds

(a) Household Income Percentile



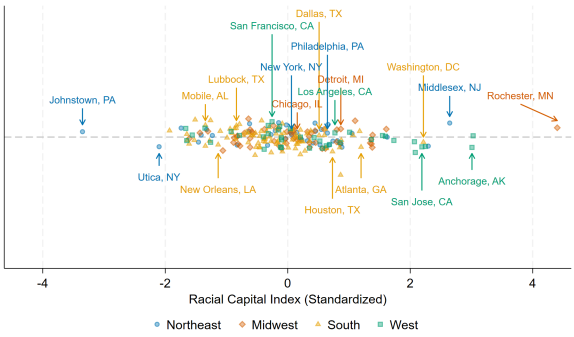
(b) Individual Income Percentile



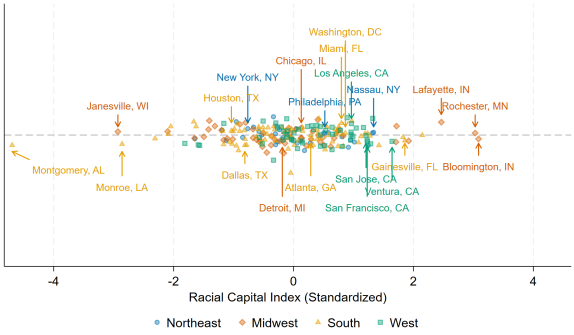
Notes: The figures above display the Asian-White racial gaps estimated using samples restricted to metropolitan areas where the Asian population share exceeds 3% or 5% with household income (left panel) and individual income (right panel) as outcomes. For reference, the first set of graphs on the top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

Figure B.6: Racial Capital Index for Each Racial Group

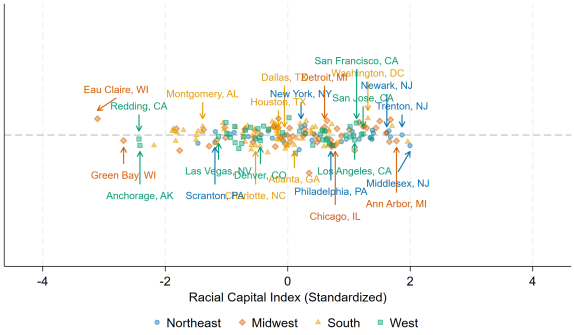
(a) Black



(b) Hispanic

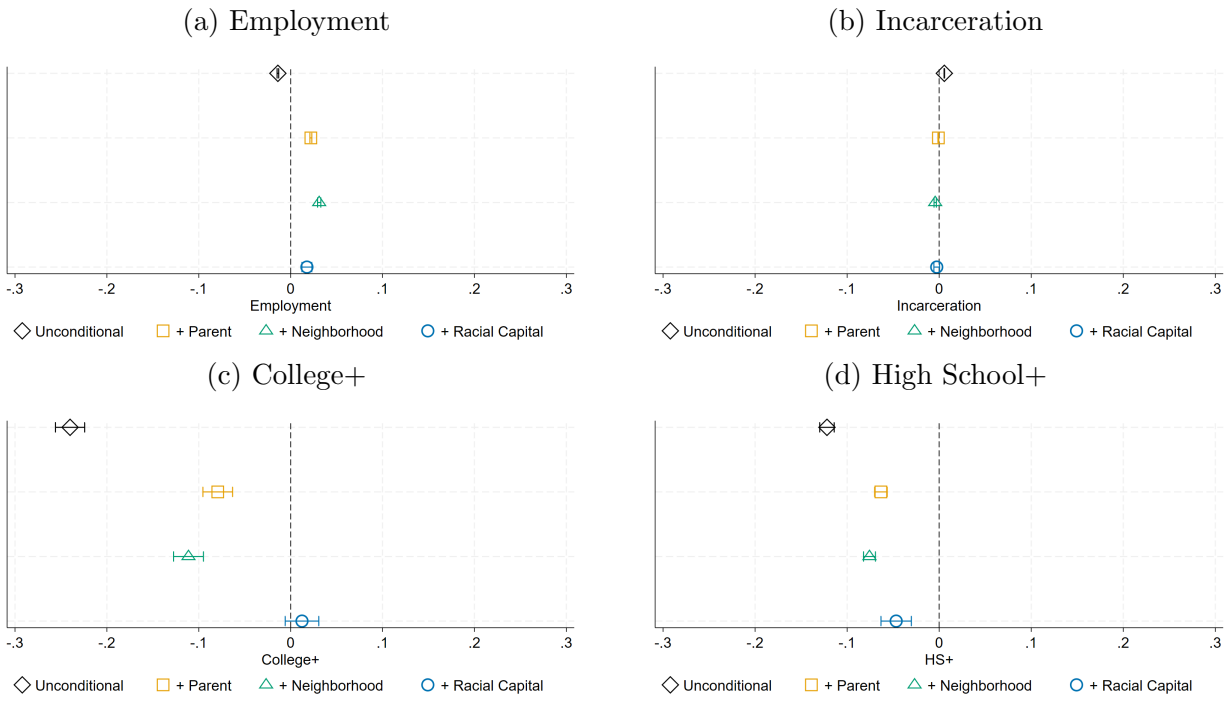


(c) Asian



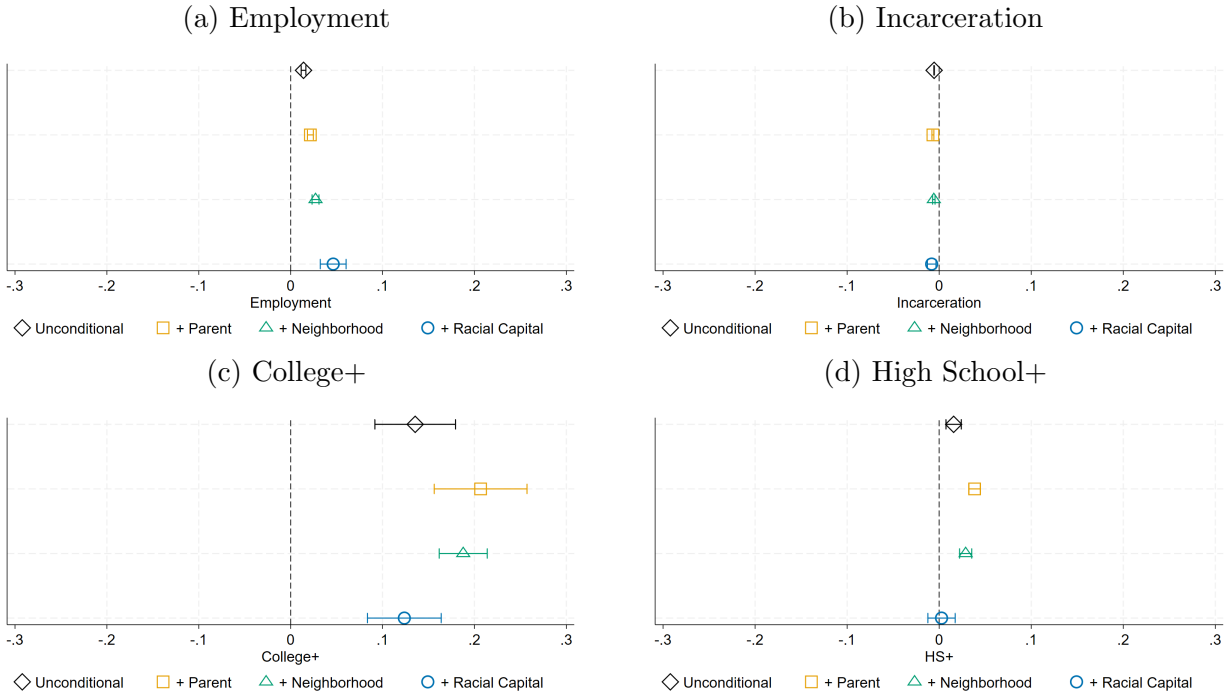
Notes: The figures above show RCI for each racial group in a horizontal scatter plot. The RCI is constructed by multiplying the estimated coefficients of the four metropolitan-level racial capital elements from equation (5) with household income as outcome by their respective resource levels. To ensure 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.7: Intergenerational Mobility Gaps between Hispanic and White Children



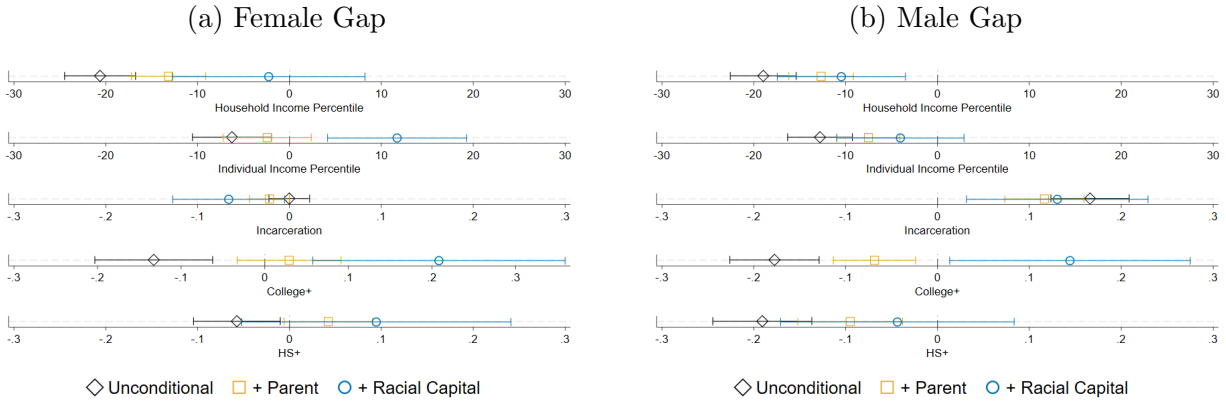
Notes: The figures above show the gaps in adulthood outcomes between Hispanic and White children, conditional on different sets of resources. Black diamonds depict unconditional gaps; yellow squares depict gaps conditional on parental income; green triangles depict gaps conditional on parental income 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.8: 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.9: 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	-0.028***	0.010***	0.030***	0.038***	0.078***	0.077***
	(0.001)	(0.001)	(0.001)	(0.004)	(0.006)	(0.006)
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*	-0.000	-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	0.036	0.301	0.522	0.522	0.524	0.524
Observations	58577	279079	279079	279079	279079	279079

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	0.044***	0.039***	0.034***	0.053***	0.035***	0.031***
	(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	0.542	0.368	0.486	0.486	0.488	0.490
Observations	56814	275152	275152	275152	275152	275152

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	-0.235***	-0.050***	-0.066***	0.011	0.084***	0.108***
	(0.006)	(0.004)	(0.006)	(0.022)	(0.020)	(0.021)
Parent Income Percentile		0.006***	0.006***	0.006***	0.006***	0.006***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Racial Capital: Mean Earnings Percentile				0.004***	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	0.367	0.773	0.870	0.870	0.873	0.877
Observations	1103	6421	6421	6421	6421	6421

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	-0.107***	-0.046***	-0.040***	-0.002	-0.008	0.006
	(0.004)	(0.003)	(0.003)	(0.010)	(0.014)	(0.014)
Parent Income Percentile		0.003***	0.003***	0.003***	0.003***	0.003***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Racial Capital: Mean Earnings Percentile				0.002***	0.003***	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	0.545	0.805	0.868	0.868	0.869	0.870
Observations	1154	6630	6630	6630	6630	6630

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	-21.588***	-12.842***	-9.726***	-4.145***	-4.277***	-3.636***	-23.792***	-15.153***	-11.792***	-6.484***	-4.709***	-4.301***
	(0.074)	(0.056)	(0.085)	(0.393)	(0.496)	(0.501)	(0.074)	(0.057)	(0.084)	(0.403)	(0.505)	(0.510)
Parent Income Percentile		0.334***	0.269***	0.269***	0.269***	0.268***		0.334***	0.281***	0.281***	0.281***	0.281***
		(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				0.269***	0.323***	0.297***				0.256***	0.286***	0.273***
				(0.019)	(0.026)	(0.027)				(0.020)	(0.027)	(0.028)
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	0.442	0.756	0.908	0.908	0.908	0.909	0.515	0.784	0.906	0.907	0.907	0.907
Observations	52764	264439	264439	264439	264439	264439	52667	264196	264196	264196	264196	264196

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	-6.573***	0.391***	2.189***	5.578***	7.719***	8.313***	-19.275***	-11.409***	-8.427***	-4.856***	-2.739***	-2.342***
	(0.074)	(0.057)	(0.081)	(0.383)	(0.478)	(0.473)	(0.075)	(0.060)	(0.085)	(0.409)	(0.525)	(0.527)
Parent Income Percentile		0.273***	0.211***	0.211***	0.211***	0.210***		0.313***	0.264***	0.264***	0.264***	0.264***
		(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				0.163***	0.210***	0.190***				0.172***	0.214***	0.200***
				(0.019)	(0.026)	(0.026)				(0.020)	(0.028)	(0.029)
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	0.079	0.571	0.849	0.849	0.849	0.850	0.445	0.747	0.883	0.883	0.883	0.883
Observations	52764	264439	264439	264439	264439	264439	52667	264196	264196	264196	264196	264196

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	0.055***	0.087***	0.101***	0.116***	0.166***	0.163***	-0.115***	-0.070***	-0.039***	-0.043***	-0.017**	-0.016**
	(0.001)	(0.001)	(0.001)	(0.006)	(0.008)	(0.008)	(0.001)	(0.001)	(0.001)	(0.006)	(0.008)	(0.008)
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**	-0.001*	-0.000				-0.000	0.000	0.000
				(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	0.084	0.159	0.417	0.417	0.418	0.418	0.307	0.372	0.553	0.553	0.554	0.554
Observations	52764	264439	264439	264439	264439	264439	52667	264196	264196	264196	264196	264196

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	0.003***	0.001***	0.001***	0.006**	0.004	0.004	0.094***	0.087***	0.076***	0.110***	0.078***	0.067***
	(0.000)	(0.000)	(0.001)	(0.002)	(0.003)	(0.003)	(0.001)	(0.001)	(0.001)	(0.005)	(0.006)	(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				0.002***	0.001***	0.002***
				(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	0.034	0.008	0.190	0.190	0.190	0.190	0.606	0.440	0.576	0.576	0.579	0.581
Observations	51356	260245	260245	260245	260245	260245	50461	257762	257762	257762	257762	257762

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	-0.232***	-0.043***	-0.059***	0.016	0.104***	0.127***	-0.242***	-0.062***	-0.077***	0.003	0.067***	0.090***
	(0.007)	(0.004)	(0.006)	(0.024)	(0.022)	(0.022)	(0.006)	(0.004)	(0.006)	(0.023)	(0.024)	(0.025)
Parent Income Percentile		0.006***	0.006***	0.006***	0.006***	0.006***		0.006***	0.005***	0.005***	0.005***	0.005***
		(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				0.004***	0.001	0.002*				0.004***	0.001	0.002
				(0.001)	(0.002)	(0.001)				(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	0.336	0.788	0.898	0.898	0.901	0.904	0.394	0.735	0.820	0.820	0.823	0.826
Observations	1026	6041	6041	6041	6041	6041	1017	5998	5998	5998	5998	5998

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	-0.082***	-0.030***	-0.025***	-0.002	-0.002	0.009	-0.136***	-0.070***	-0.063***	-0.008	-0.025	-0.007
	(0.003)	(0.003)	(0.003)	(0.010)	(0.015)	(0.015)	(0.005)	(0.003)	(0.003)	(0.013)	(0.018)	(0.018)
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**	0.002**	0.001				0.003***	0.005***	0.004***
				(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	0.464	0.754	0.815	0.816	0.816	0.817	0.585	0.808	0.870	0.871	0.873	0.874
Observations	1094	6373	6373	6373	6373	6373	1094	6383	6383	6383	6383	6383

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	-10.481***	-3.443***	-2.538***	-0.549***	0.161	0.581***
	(0.056)	(0.045)	(0.064)	(0.183)	(0.180)	(0.190)
Parent Income Percentile		0.327***	0.269***	0.269***	0.269***	0.268***
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Racial Capital: Mean Earnings Percentile				0.079***	-0.217***	-0.207***
				(0.008)	(0.016)	(0.015)
Tract Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific Tract Resources						Y
Adjusted R-squared	0.144	0.695	0.881	0.881	0.882	0.882
Observations	81278	368862	368862	368862	368862	368862

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

	Individual Income Percentile					
	(1)	(2)	(3)	(4)	(5)	(6)
Hispanic	-5.738***	0.258***	0.001	0.965***	1.540***	1.867***
	(0.048)	(0.043)	(0.060)	(0.179)	(0.178)	(0.185)
Parent Income Percentile		0.277***	0.227***	0.227***	0.227***	0.227***
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Racial Capital: Mean Earnings Percentile				0.038***	-0.180***	-0.171***
				(0.008)	(0.015)	(0.015)
Tract Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific Tract Resources						Y
Adjusted R-squared	0.060	0.630	0.849	0.849	0.850	0.850
Observations	81278	368862	368862	368862	368862	368862

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	-0.014***	0.022***	0.031***	0.014***	0.018***	0.017***
	(0.000)	(0.001)	(0.001)	(0.003)	(0.003)	(0.003)
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***	-0.002***	-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	0.006	0.245	0.473	0.473	0.473	0.473
Observations	81278	368862	368862	368862	368862	368862

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	0.006***	-0.001***	-0.004***	-0.001	-0.003*	-0.004**
	(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	0.020	0.084	0.275	0.275	0.276	0.277
Observations	78793	363396	363396	363396	363396	363396

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	-0.240***	-0.079***	-0.111***	-0.005	0.012	0.022***
	(0.008)	(0.008)	(0.008)	(0.011)	(0.009)	(0.008)
Parent Income Percentile		0.006***	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	-0.001
				(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	0.321	0.717	0.862	0.865	0.867	0.868
Observations	1251	7124	7124	7124	7124	7124

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	-0.122***	-0.063***	-0.076***	-0.050***	-0.047***	-0.037***
	(0.004)	(0.003)	(0.003)	(0.008)	(0.008)	(0.010)
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	0.597	0.787	0.861	0.861	0.863	0.864
Observations	1318	7319	7319	7319	7319	7319

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	6.040***	8.060***	6.307***	6.486***	4.840***	4.421***
	(0.140)	(0.174)	(0.156)	(0.309)	(0.655)	(0.651)
Parent Income Percentile		0.344***	0.281***	0.281***	0.281***	0.282***
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Racial Capital: Mean Earnings Percentile				0.015	-0.109**	-0.089*
				(0.025)	(0.048)	(0.048)
Tract Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific Tract Resources						Y
Adjusted R-squared	0.011	0.709	0.907	0.907	0.907	0.907
Observations	47230	230663	230663	230663	230663	230663

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	7.784***	9.480***	7.170***	7.225***	6.175***	5.979***
	(0.127)	(0.143)	(0.152)	(0.312)	(0.566)	(0.576)
Parent Income Percentile		0.295***	0.237***	0.237***	0.237***	0.237***
		(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Racial Capital: Mean Earnings Percentile				0.005	-0.093**	-0.074*
				(0.025)	(0.042)	(0.042)
Tract Fixed Effects			Y	Y	Y	Y
All Racial Capital Measures					Y	Y
Race-Specific Tract Resources						Y
Adjusted R-squared	0.022	0.669	0.889	0.889	0.889	0.889
Observations	47230	230663	230663	230663	230663	230663

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	0.014***	0.021***	0.027***	0.025***	0.046***	0.048***
	(0.001)	(0.002)	(0.002)	(0.004)	(0.007)	(0.007)
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	0.264	0.517	0.517	0.518	0.518
Observations	47230	230663	230663	230663	230663	230663

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***	-0.007***	-0.006***	-0.007***	-0.008***	-0.008***
	(0.000)	(0.001)	(0.001)	(0.001)	(0.002)	(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				-0.000	-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	0.007	0.125	0.378	0.378	0.378	0.379
Observations	45857	227880	227880	227880	227880	227880

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	0.136***	0.207***	0.188***	0.200***	0.124***	0.138***
	(0.022)	(0.026)	(0.013)	(0.027)	(0.020)	(0.022)
Parent Income Percentile		0.006***	0.006***	0.006***	0.006***	0.006***
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Racial Capital: Mean Earnings Percentile				0.001	-0.001	-0.002
				(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	0.032	0.740	0.862	0.862	0.864	0.865
Observations	918	5345	5345	5345	5345	5345

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	0.016***	0.039***	0.029***	0.019***	0.003	0.006
	(0.004)	(0.003)	(0.003)	(0.005)	(0.008)	(0.008)
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	0.005	0.758	0.842	0.842	0.843	0.843
Observations	986	5601	5601	5601	5601	5601

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	-15.902***	-35.295***	-28.716***	-10.655***	-30.358***	-22.845***
	(1.508)	(7.320)	(7.435)	(1.486)	(7.307)	(7.381)
Black × Residential Segregation	12.918***		12.276***	12.821***		11.733***
	(2.138)		(2.276)	(2.116)		(2.241)
Black × Marriage Segregation		30.791***	14.447*		31.630***	14.378*
		(8.208)	(8.718)		(8.136)	(8.571)
Black × Racial Share	17.571***	7.478*	17.005***	22.619***	12.479***	18.919***
	(3.338)	(4.160)	(4.543)	(3.202)	(3.974)	(4.284)
Parent Income Percentile	0.303***	0.191***	0.194***	0.242***	0.166***	0.167***
	(0.004)	(0.016)	(0.016)	(0.004)	(0.015)	(0.015)
Parent × Residential Segregation	-0.042***		-0.052***	-0.016***		-0.023***
	(0.006)		(0.006)	(0.006)		(0.006)
Parent × Marriage Segregation		0.097***	0.133***		0.075***	0.091***
		(0.018)	(0.018)		(0.017)	(0.017)
Parent × Racial Share	-0.015**	-0.060***	-0.068***	0.033***	-0.000	-0.004
	(0.007)	(0.010)	(0.010)	(0.007)	(0.010)	(0.010)
Racial Capital: Mean Earnings Percentile	-0.249***	-1.585***	-1.291***	-0.344***	-1.317***	-1.004***
	(0.074)	(0.359)	(0.364)	(0.073)	(0.363)	(0.366)
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)
RC × Racial Share	0.696***	0.118	0.520***	0.632***	0.117	0.438**
	(0.148)	(0.187)	(0.200)	(0.142)	(0.179)	(0.189)
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

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	-9.209***	-0.157	-8.541***	-6.781***	0.727*	-6.541***
	(0.755)	(0.443)	(0.770)	(0.760)	(0.431)	(0.779)
Hispanic × Residential Segregation	17.782***		20.163***	17.172***		18.121***
	(1.971)		(1.982)	(2.018)		(2.020)
Hispanic × Marriage Segregation		1.490	-5.840***		4.143***	-2.231
		(1.446)	(1.450)		(1.411)	(1.397)
Hispanic × Racial Share	-9.327***	-5.051**	-0.720	-7.457***	-8.415***	-4.244*
	(1.681)	(2.506)	(2.433)	(1.688)	(2.454)	(2.373)
Parent Income Percentile	0.304***	0.291***	0.305***	0.240***	0.246***	0.242***
	(0.003)	(0.001)	(0.003)	(0.003)	(0.001)	(0.003)
Parent × Residential Segregation	-0.053***		-0.038***	-0.007		0.012*
	(0.007)		(0.007)	(0.007)		(0.007)
Parent × Marriage Segregation		-0.043***	-0.032***		-0.040***	-0.043***
		(0.005)	(0.005)		(0.005)	(0.005)
Parent × Racial Share	-0.157***	-0.104***	-0.122***	-0.122***	-0.079***	-0.075***
	(0.006)	(0.009)	(0.009)	(0.006)	(0.008)	(0.009)
Racial Capital: Mean Earnings Percentile	-0.529***	0.060***	-0.506***	-0.447***	0.023	-0.438***
	(0.041)	(0.022)	(0.041)	(0.041)	(0.021)	(0.041)
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)
RC × Racial Share	-0.234***	-0.542***	-0.051	-0.199***	-0.538***	-0.134
	(0.069)	(0.096)	(0.096)	(0.067)	(0.094)	(0.092)
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

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	-3.009	7.977***	-0.433	-2.319	6.332***	-2.367
	(3.416)	(1.829)	(4.590)	(3.153)	(1.733)	(4.047)
Asian × Residential Segregation	26.006***		19.875**	24.833***		20.826**
	(8.407)		(8.955)	(7.921)		(8.164)
Asian × Marriage Segregation		-0.233	-0.554		6.183	5.291
		(5.660)	(6.259)		(5.440)	(5.897)
Asian × Racial Share	-4.864**	-9.943**	-8.613**	-3.399	-12.024***	-10.328**
	(2.313)	(4.141)	(4.304)	(2.407)	(4.269)	(4.409)
Parent Income Percentile	0.206***	0.295***	0.241***	0.144***	0.237***	0.163***
	(0.009)	(0.005)	(0.011)	(0.009)	(0.005)	(0.011)
Parent × Residential Segregation	0.125***		0.132***	0.175***		0.178***
	(0.021)		(0.021)	(0.022)		(0.021)
Parent × Marriage Segregation		-0.141***	-0.144***		-0.072***	-0.076***
		(0.020)	(0.019)		(0.020)	(0.020)
Parent × Racial Share	-0.132***	0.010	0.021	-0.052**	0.014	0.029
	(0.022)	(0.028)	(0.028)	(0.021)	(0.027)	(0.027)
Racial Capital: Mean Earnings Percentile	-0.860***	0.011	-0.766**	-0.969***	-0.161	-0.999***
	(0.272)	(0.126)	(0.313)	(0.253)	(0.123)	(0.283)
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)
RC × Racial Share	-1.288***	-2.805***	-2.697***	-1.243***	-2.988***	-2.858***
	(0.386)	(0.617)	(0.623)	(0.379)	(0.628)	(0.633)
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 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.