RACIAL/ETHNIC DISPARITIES IN THE INTERGENERATIONAL TRANSMISSION OF ECONOMIC SECURITY

Ryan Finnigan
University of California, Davis
rfinnigan@ucdavis.edu

ABSTRACT

Income and wealth exhibit strong intergenerational persistence in the United States, and both are highly stratified by race/ethnicity. Past research tends to examine racial/ethnic disparities in income and wealth separately. Extending that work, this study conceptualizes economic security as combinations of income and wealth. I examine the intergenerational transmission of racial/ethnic differences in economic security from childhood to young adulthood using data from the 1997 cohort of the National Longitudinal Survey of Youth. When predicting adult economic security, I find that high parental net worth compensates for low parental income for White children. There is some compensation for Black children but to a weaker degree. Latino/a children are especially upwardly mobile, but parental net worth has little association with adult economic security net of parental income. Overall, the results demonstrate that Black and Latino/a children have much lower economic security than White children, and that economic security is less likely to be reproduced in adulthood.

INTRODUCTION

The intergenerational transmission of disadvantage substantially contributes to the durability of racial/ethnic inequalities in the United States. Black and Latino/a families have much lower average incomes than White families, and racial/ethnic wealth gaps are even larger (Boshara, Emmons, and Noeth 2015; Maroto 2016; Oliver and Shapiro 2006). Relatively strong intergenerational income and wealth persistence in the United States (Fisher et al. 2016; Hout 2015; Pfeffer and Killewald 2017) implies disparities in childhood economic resources will carry over into adulthood. However, racial/ethnic disparities in income and wealth are also actively reproduced within generations, blunting the ability of high-income or high-wealth families of color to pass those advantages on to their children (Bloome 2014; Killewald 2013; Killewald and Bryan 2018; Mazumder 2014).

Although literatures on these inequalities are well developed, income and wealth are often examined separately. This paper extends past research by jointly examining racial/ethnic differences in income and wealth, as well as their intergenerational transmission. First, I conceptualize and measure economic security as combinations of income and wealth. Wealth and income are complementary resources in many ways. Income is the flow of money to a family, but wealth is the stock of resources available at a given point in time. Wealth is often measured as net worth, the value of all assets (e.g., savings, stocks, homes) minus all debts (e.g., mortgages, student loans, credit cards). Wealth can help families avoid hardship when income is low or volatile (Conley 1999; Oliver and Shapiro 2006; Rauscher and Elliott 2016b), making it an important component of economic security.

Second, I examine racial/ethnic disparities in economic security across generations. Past research has shown that parental wealth can boost children's outcomes above and beyond parental income. Wealth also enables greater parental investment in children's education (Pfeffer 2018; Rauscher 2016; Yeung and Conley 2008), in addition to the education gradient by parental income (Bailey and Dynarski 2011). Accumulation of high student loan debt discourages college completion (Dwyer, McCloud, and Hodson 2012), and loans are more necessary for students without access to parental wealth. Wealth can also be directly transmitted across generations independent of income (Pfeffer and Killewald 2017). These patterns suggest both parental income and net worth should be examined to understand adult economic attainment. I extend past studies by also examining whether parental income and net worth have interactive effects.

Overlapping racial/ethnic disparities in family income and wealth may reveal especially profound disadvantages for Black and Latino/a children compared to Whites. Even among low-income families, Whites families have greater wealth than Black families (Oliver and Shapiro 2006) and thus greater economic security. The extent to which these disadvantages are transmitted across generations may also be racially/ethnically stratified. The same processes that constrain wealth accumulation for families of color may simultaneously inhibit the benefits of parental wealth. In other words, racial/ethnic differences in downward mobility from high-income or high-wealth families may overlap.

To empirically test for such patterns, I examine data on Black, Latino/a, and White young adults with data from the 1997 cohort of the National Longitudinal Survey of Youth (NLSY97). The NLSY97 provides a nationally representative sample observed between ages 12–18 in 1997 and 30–36 in 2015 and is one of the few data sources with measures of both income and wealth

for parents and adult children. I first operationalize economic security using the joint distribution of income and net worth, and I describe racial/ethnic disparities in economic security in both childhood and young adulthood. Next, regression analyses predict adult economic security with interactions between race/ethnicity, parental income, and parental net worth to test for unequal transmission across generations. The results demonstrate the importance of considering both income and net worth for measuring racial/ethnic economic disparities and their transmission across generations.

THEORETICAL BACKGROUND

This paper attempts to contribute to the well-developed literature on the intergenerational transmission of racial/ethnic disadvantage by examining *combinations* of parental income and wealth rather than their independent associations with adult outcomes. The following subsections describe (a) patterns of combined family income and wealth and racial/ethnic differences in these combinations, and (b) intergenerational persistence of these combinations by race/ethnicity.

Economic Security as Combined Family Income and Wealth

The growing literature on wealth accumulation and inequality commonly highlights that it meaningfully differs from income (see Killewald, Pfeffer, and Schachner 2017 for a review). Income and wealth are conceptually distinct family resources (Keister 2000b); income is the flow of money received by a family over time and wealth is the accumulated stock of money and other assets possessed by a family at a given point. Wealth is also commonly measured using net worth, the combined monetary value of all assets and savings minus the total value of all debts. High income enables wealth accumulation (Killewald and Bryan 2018; Oliver and Shapiro 2006; Rauscher and Elliott 2016a), but wealth can also come from many other sources, like intergenerational transfers (i.e., inheritance or *inter vivos* transfers) and asset appreciation (i.e., home equity or the stock market). The correlation between family income and family net worth is only moderate as a result (Killewald et al. 2017).

As distinct resources, income and wealth jointly characterize households' economic standing. Oliver and Shapiro (2006:96) argued, "a middle-class standard of living rests on the twin pillars of income and wealth. The two together create a solid economic foundation that simultaneously safeguards a secure a standard of living and enhances future life chances. When

either one is lacking, middle-class status is jeopardized." Wealth provides a private safety net in the face of unexpected income disruptions or expenses (Oliver and Shapiro 2006; Rauscher and Elliott 2016b). Wealth also enables—above and beyond income—human capital and asset accumulation (e.g., higher education or homeownership) that can further enhance economic security (Conley 1999; Killewald and Bryan 2016; Pfeffer 2018; Rauscher 2016).

Oliver and Shapiro (2006) further demonstrated that the joint consideration of income and wealth provides a more complete picture of racial inequality than income alone. Even among the traditionally defined middle class (i.e., by income, education, or occupation), net worth was profoundly lower for Black households than Whites in the 1980s. About twice as many Black households as Whites lacked sufficient financial assets to weather three months of poverty-level expenses in the absence of income. Latino/a-White wealth gaps are comparable (Campbell and Kaufman 2006), and these disparities remained similar more than 20 years later (Boshara et al. 2015; Maroto 2016).

Figure 1 provides a stylized depiction of families' economic security as their combined income and wealth, where most but not all families are on the diagonal. Many families have both low income and low wealth, which I describe as insecure (A). Another portion of families has both high income and high wealth, which I call economically secure (B). Research consistently demonstrates durable racial differences, with Black and Latino/a families disproportionately in group A and White families disproportionately in group B.

[Figure 1 here]

Off the diagonal in Figure 1, many families have high income but low wealth, or marginal economic security (low wealth). As found by Oliver and Shapiro (2006), among others, middle- and high-income Black families are far less likely than Whites with similar incomes to have high or even moderate levels of wealth. Though less research has examined wealth inequality between Latino/a and White families, many patterns are similar to Black-White differences (Boshara et al. 2015; Campbell and Kaufman 2006). Given that Black-White and Latino/a-White wealth disparities are greatest at the highest end of the wealth distribution (Maroto 2016), middle/high-income families of color are much more likely to fall into group C rather than group B. Black families in group C have often been described as the "fragile Black

middle-class" (Addo, Houle, and Simon 2016; Landry and Marsh 2011; Oliver and Shapiro 2006; Pattillo 1999).

Finally, a relatively small fraction of low-income families may have moderate to high wealth. Though this group may conjure mental images of the top one percent—families with such substantial wealth that income is unnecessary—this group more likely largely represents low-income families with some moderate amount of assets, commonly inherited from more advantaged older generations (Pfeffer and Killewald 2017). Although extremely wealthy families may not rely on earned income, they commonly have high income from sources like the stock market, business ownership, and asset appreciation (Keister and Lee 2017). Additionally, "high" net worth need not require an extremely high threshold. For example, median net worth for families in 2013 was just over $80,000 (Boshara et al. 2015). An inherited home without mortgage debt, or assistance buying a home from wealthier relatives, could put a low-income family into the top half of the wealth distribution, and thus in group D. Though this modest wealth is surely beneficial, I describe this family as marginally economically secure.

(Re)Production of Racial/Ethnic Disparities in Economic Security

Profound racial/ethnic disparities in income and wealth are both passed down across generations and reproduced with them. Relatively strong intergenerational income persistence in the United States (Fisher et al. 2016) implies durable racial/ethnic income disparities across generations. Black-White income differences are further reinforced within generations, however. Compared to White children, Black children have lower levels of upward mobility from low-income families and higher levels of downward mobility from high-income families (Bloome 2014). Parental income indirectly benefits children's eventual income through many channels, including access to education and other forms of human capital (Bloome, Dyer, and Zhou 2018; Hout 2015; Torche 2011). Racial/ethnic stratification across these domains, both through and in addition to parental income differences, cumulatively exacerbates racial/ethnic income inequalities (Reskin 2012).

Racial/ethnic wealth gaps are even more strongly transmitted across generations, which Oliver and Shapiro (2006) call the "sedimentation of inequality." Unlike income, wealth is directly transmissible between generations through inheritance and *inter vivos* transfers. Intergenerational transfers can have cumulative effects on younger generation's later life wealth when received early in life to support educational attainment or homeownership (Pfeffer and

Killewald 2017). Analyzing racial/ethnic disparities in wealth accumulation throughout adulthood, Killewald and Bryan (2018) find that around half of the Black-White difference and 40 percent of the Latino/a-White difference are attributable to social origins. Similar to patterns of intergenerational income mobility, Black children are also more downwardly mobile from wealthy parents than their White peers (Pfeffer and Killewald 2017). Intragenerational inequalities in education, earnings, family formation, homeownership, and other asset ownership further contribute to racial/ethnic wealth gaps (Addo et al. 2016; Flippen 2004; L. Keister 2000a; Killewald 2013; Oliver and Shapiro 2006).

I extend these literatures by examining the persistence of combinations of family income and wealth across generations for White, Black, and Latino/a young adults. Though research has documented the additive effects of parental income and wealth for children's adult outcomes, particularly education (Addo et al. 2016; Pfeffer 2018; Rauscher 2016), no studies to the author's knowledge have examined their potentially interactive effects. The layering of racial/ethnic disparities in the long-run benefits of parental income and wealth imply substantial differences across groups.

Returning to Figure 1, studies showing additive effects of parental income and wealth for adult children's outcomes suggests adult economic security will be greater for those in group D than group A, and greater for those in group B than group C. If the associations are truly additive, the difference in adult economic security will be of the same magnitude between groups D and A and groups B and C. However, I examine whether these effects are interactive. Past literature has emphasized that wealth may compensate for low income (Oliver and Shapiro 2006), suggesting parental wealth is more important among low-income families than high-income families. If so, we should observe greater adult economic security from children in group D than group A; adult economic security will be similar for children of all high-income families (groups B and C).

Parental wealth and income may also be complementary resources. Although high parental income provides access to higher education and other opportunities, parental wealth further enables higher education without recourse to student loans, access to homeownership, and so forth. The compounding privileges of high parental income and wealth may lead to higher adult economic security for group B than group C. Meanwhile, parental wealth may be less beneficial for children of low-income families if they generally tend not to obtain higher education, homeownership, or other characteristics boosting economic security.

Finally, the substitution or complementarity of parental income and wealth may vary by race/ethnicity. The relatively greater downward mobility for children of color with high-income or high-wealth parents implies less possible complementarity between the two. Conversely, intersecting race and class disadvantage may overwhelm any substitution effect of high parental wealth for parental income.

DATA & METHODS

The NLSY97 began with a nationally representative sample of 12–18-year-olds in 1997, interviewing them annually through 2011 then biennially thereafter. The most recent wave available was collected in 2015 when respondents were 30–36 years-old. The NLSY97 provides contemporary observations of both parent and child characteristics, including parental income and net worth. The survey also oversampled low-income and Black and Latino/a children, providing sampling weights to represent the population. The units of analysis are Black, Latino/a, and White adults (around age 30), with parents' and adult children's characteristics included as separate variables.

Parental Characteristics

Parents reported their own household income from 1997 to 2003 while living with the focal children. Household income includes pre-tax earnings from all household members, along with income from rental properties, inheritance, interest and dividends, child support, and public benefits. I average all available observations of parental income to reduce measurement error and transitory income variance. I also divide income by the square root of household size to adjust for need (Bloome et al. 2018; Brady et al. 2018).

Parents also reported their net worth in 1997. Parental net worth included the value of all assets (real estate, vehicles, furnishings, businesses, savings, stocks/bonds, pensions/retirement plans) minus all debts (mortgages and other loans, credit cards). As an alternative measure, I also examine a binary variable for whether respondents' parents owned their home in 1997.

I transform both parental income and net worth to percentile ranks, ranging 0–100. Researchers often use the log transformation to adjust for skew in the income distribution, but the log transformation does not preserve the numerous and meaningful negative values of net worth (Killewald 2013; Killewald et al. 2017). Percentile ranks preserve the relative income and

wealth differences without excluding or bottom-coding non-positive values. Additionally, relative measures like percentile ranks standardize distributions across generations, which in this case vary by both period (i.e., inequality increased over time) and age (i.e., the children are observed at younger ages than their parents) (Bloome 2014; Bloome et al. 2018).

Additional analyses apply the log transformation to parental income and the inverse hyperbolic sine transformation (Killewald et al. 2017), which retains non-positive values as well as the magnitudes of income and wealth differences.

Child Characteristics

Adult income is the average of household income (divided by the square root of household size) for all observations when the respondent is at least 28 years-old (Bloome et al. 2018). As with parents' income, I transform adult income into percentile ranks. The NLSY97 cohort is still younger than the ages when permanent income is typically measured, from the mid-thirties through the forties or fifties (Brady et al. 2018). Chetty et al. (2014) argue income persistence estimates for income ranks stabilize by the late 20s, although that may be less true for highly educated young adults than the less educated (Bloome et al. 2018).

The NLSY97 measures net worth in the survey wave following ages 20, 25, 30, and 25. I examine net worth at age 30, the oldest age reached by the entire sample in the most recent wave. Children's net worth is measured similarly to parents' net worth, and I transform children's net worth into percentile ranks.

The relatively young age for this measurement is an unfortunate limitation. Net worth grows substantially between ages 30 and 50, as do racial/ethnic wealth gaps (Killewald and Bryan 2018). Net worth at age 30 may also be distorted by student debt, which is particularly pronounced in the NLSY97 relative to earlier cohorts (Houle 2014). Additionally, debt at least partially reflects beneficial access to credit rather than a liability, further altering the interpretation of any racial/ethnic differences (Killewald 2013). As a robustness check, I also examine wealth (total assets, not accounting for debt) rather than net worth, although wealth accumulation may still be stymied by debt.

Economic Security

Combinations of income and net worth can easily be accommodated as predictors in regression analyses through interaction terms. However, creating an outcome variable that

combines two continuous variables is less straightforward. To do so, I create a categorical outcome variable combining terciles of adult income and net worth, similar to Figure 1. Table 1 illustrates the outcome categories and their correspondence to income and net worth terciles. Those in the bottom third of both income and net worth are *insecure*. Similar to Oliver and Shapiro (2006) and the discussion of Figure 1 above, I characterize the presence of either low income or low net worth as *marginal*. Finally, those who do not have either low income or low net worth are economically *secure*.

[Table 1 here]

As a robustness check, I also create the categories in Table 1 using absolute adult income and net worth, both adjusted for household size. Following the poverty literature (Brady 2009), I use half of the median as the threshold for low income or low net worth.

Controls

The analyses also control for background characteristics that may confound the association between childhood and adult economic security: sex (female = 1); nativity (foreign-born = 1); family structure at age 12 (two biological parents = 1); mother's age at respondent's birth (mean imputed for a small number who did not know their mother); number of siblings; region in 1997 (Northeast, Midwest, South, West); rural residence in 1997; average age at parental income observations; number of parental income observations; average age at adult income observations; number of adult income observations.

Analytic Strategy

The analyses proceed in stages. First, I describe the joint distribution of income and net worth by race/ethnicity in both childhood and adulthood.

Second, a multinomial logistic regression predicts the adult economic security categories in Table 1. This model includes race/ethnicity, parental income, parental net worth, all two-way interactions, and their three-way interaction. The model also includes all control variables. Given the complications of interactions in non-linear models (Breen, Karlson, and Holm 2018), I present the results with predicted probabilities of each economic security category by race/ethnicity, parental income, and parental net worth. I also assess statistical significance of the differences with average marginal effects (AMEs) of each predictor variable at relevant levels of the other interacted variables (Mize 2019). Tables in the appendix present the AMEs of parental

income by parental net worth and race/ethnicity, the AMEs of parental net worth by parental income and race/ethnicity, and the AMEs of race/ethnicity by parental income and net worth. I calculated the predicted probabilities and marginal effects using the "margins" post-estimation command in Stata.

RESULTS

Racial/Ethnic Differences in Economic Security

Table 2 presents the means and standard deviations of key variables by race/ethnicity, demonstrating substantial racial/ethnic differences in average parental income and net worth. Compared to Whites, average parental income was 26 percentile ranks lower for Black respondents and 22 ranks lower for Latino/a respondents. Racial/ethnic differences in parental net worth were similar, with lower average net worth by 23 percentile ranks for Black compared to White respondents and 21 ranks for Latinos/as compared to Whites. Black-White differences in income and net worth in adulthood were similar to those in childhood—19 ranks for adult income and 15 ranks for net worth. However, Latino/a-White differences substantially declined by adulthood—eight ranks for income and six ranks for net worth.

[Table 2 here]

There are also substantial racial/ethnic net worth disparities *within* income levels. The correlation between parental income and wealth ranks is high, r=0.68, but leaves room for meaningful variation. The correlation between adult income and wealth is lower, r=0.45. Table 3 presents the joint distribution of income and wealth in each generation for each racial/ethnic group.[1] Note that the terciles are created across the total sample, not within each racial/ethnic group. As expected, substantial fractions of each group are off the diagonals of income and net worth. For example, nearly two-fifths of the total sample was off the diagonal of the parental income and net worth terciles.

[1] The thresholds for the second and third terciles of equivalized parental income were $21,275 and $41,862. The corresponding thresholds for parental net worth were $10,681 and $52,539. The thresholds for the second and third terciles of equivalized adult income were $27,100 and $49,468. The corresponding thresholds for adult net worth were $3,176 and $27,250.

[Table 3 here]

Patterns differed sharply by race/ethnicity. Strikingly, nearly half of Black and Latino/a children grew up in the bottom third of the parental income distribution and net worth distribution, the *insecure* category of Table 1. In comparison, about one-in-seven White children were insecure. Two-thirds of White children were secure (upper two-thirds of parental income and parental net worth), compared to only one-quarter of Black children and about three-in-ten Latino/a children.

The patterns of economic security were similar in childhood and adulthood for Black and White adults, but there was clear upward mobility for Latinos/as. Over one-third of Black adults was insecure, compared to fewer than one-fifth of Latinos/as and one-seventh of Whites. Over half of White adults and 45 percent of Latinos/as were secure, compared to only about one-quarter of Blacks.

Much of these racial/ethnic wealth differences within income groups are driven by homeownership. As shown in Table 1, 68 percent of Whites' parents owned their homes compared to around half of Latinos' parents and a third of Blacks' parents. In the total sample, half of homeowning families were in the upper third of the net worth distribution compared to only seven percent of non-homeowner families. Racial/ethnic net worth disparities were also smaller within homeownership groups, particularly among low-income families. For those in the bottom third of the income distribution without homeownership, 85 percent of White families had low net worth compared to 88 percent of Black families and 92 percent of Latino/a families.

In summary, Black and Latino/a children were vastly more economically insecure than White children. The modal Black or Latino/a child grew up with both low parental income and low parental net worth; the modal White child grew up with high parental income and high parental net worth. These patterns were generally reproduced among these children in adulthood for Whites and Blacks, but economic insecurity notably improved for Latinos/as across generations.

Regression Results

The next analysis estimates the associations between childhood and adult economic security with the multinomial regression model described above. Figure 2 presents the predicted

probabilities of each economic security category for Black, Latino/a, and White adults by parental income and net worth. The probabilities are calculated across the parental income distribution and at zero (percentile 5.8) and high (percentile 80) parental net worth.

[Figure 2 here]

In general, the probability of insecurity in adulthood is greatest for those with low parental income and zero net worth. The probability of economic security is greatest for those with high parental income and net worth. Parental income is negatively associated with insecurity in adulthood and positively associated with security, but the association is stronger in the absence of parental net worth than with high net worth. Similarly, parental net worth is negatively associated with insecurity in adulthood and positively associated with security, but the association is stronger at low parental income than high income. Parental net worth seems to substitute for low parental income and is less salient among high-income families. However, high parental net worth still exhibits a complementary association with high parental income when predicting economic security. These patterns vary by race/ethnicity. I describe these patterns for each racial/ethnic group in the following subsections, then compare across groups.

Regression Results 1: Economic Security among Black Adults

The probability of insecurity is nearly 50 percent for Black adults with zero parental net worth and very low parental income, as shown in the left-most graph of Figure 2. However, this probability is sharply lower with either high parental income or high parental wealth. The probability of insecurity in adulthood is similar for Black adults with low parental income and high net worth (17.4 percent) or high parental income (80^{th} percentile) and zero net worth (21.1 percent). Table A in the appendix shows the AME of parental income is statistically significant for Black adults with zero parental net worth but not for those with high parental net worth (these estimated AMEs are significantly different from each other in a Wald test). Conversely, the AME of parental net worth is statistically significant at low levels of parental income but not at high parental income for Blacks (appendix Table B).

The probability of marginal economic security (low income) in adulthood is lower with higher parental income. For both high and zero parental net worth, the AME of parental income is statistically significantly negative (Table A). The probability of marginal security (low

income) is slightly higher with high parental net worth at low levels of parental income, though not statistically significantly so (Table B). Substantively, it appears parental net worth among low-income Black families moves adults out of the insecure category and partially into the marginal (low income) category.

In contrast to the marginal category with low adult income, the probability of marginal security with low adult net worth is significantly greater with higher parental income. However, the AME for parental income is only statistically significant for those with zero parental net worth (Table A). The AME for parental income is not significantly different from zero for those with high parental net worth, but it is also not significantly different from those with zero parental net worth in a Wald test.

Finally, the probability of economic security for Black adults is greater with higher parental income, as shown in the right-most graph of Figure 2. Parental net worth has relatively little association. The AME for parental income is statistically significantly positive at both high and zero parental net worth (Table A), and the estimates are not statistically significantly different from each other in a Wald test. The AME for parental net worth is also not statistically significant at any level of parental income.

In summary, parental income and net worth strongly interact for economic insecurity in adulthood but less so for other categories of economic security. The probability of adult insecurity is substantially lower with either high parental income or high parental net worth, but the two resources do not complement each other. Black children are especially likely to have both low parental income and low parental net worth, and this economic insecurity is strongly reproduced in adulthood.

Regression Results 2: Economic Security among Latino/a Adults

Similar to other groups, parental income is positively associated with economic security among Latino/a adults. Unlike other groups, there is little evidence that high parental net worth is associated with adult economic security, net of parental income.

In the left-most graph of Figure 2, the predicted probability of being insecure in adulthood is lower with higher parental income, but it does not differ between those with zero or high parental net worth. The AME of parental income is statistically significant for those with zero parental net worth but not for those with high net worth (Table A). However, the AMEs are

not significantly different from each other in a Wald test. The AME of net worth is also not statistically significant at any level of parental income (Table B).

Parental income and net worth do interact when predicting marginal economic security (low income) in adulthood. The probability is significantly lower with greater parental income among at zero parental net worth, but there is no association among those with high parental net worth. Among Latino/a adults with the lowest parental income, the probability of marginal security (low income) is significantly greater for those with high parental net worth than for those with zero parental net worth.

Neither parental income nor parental net worth are significantly associated with the probability of marginal economic security (low net worth) for Latino/a adults.

In the right-most graph of Figure 2, the probability of being economically secure in adulthood is strongly positively associated with parental income for those with zero parental net worth. The association is much weaker for those with high parental net worth. Contradicting expectations that high parental income and net worth are complementary, the probability of security is lower for Latino/a adults with high parental income and net worth compared to those with high parental income and zero net worth. These estimates are imprecise, however, indicated by their large confidence intervals in Figure 2. The AME for parental income is statistically significant for those with zero parental net worth and not significant for those with high parental net worth (Table A). However, the AMEs are not distinguishable from each other in a Wald test. The AME of parental net worth is also not statistically significant at any level of parental income (Table B).

In summary, parental net worth appears less strongly associated with economic security for Latino/a adults than for Black or White adults. The association between parental income and adult economic security is stronger in the absence of parental net worth than in its presence, but almost none of these differences is statistically significant. Finally, upward mobility from low or marginal security in childhood, particularly from low net worth, is common for Latino/a adults. For example, those with marginal security in childhood (median parental income, zero parental net worth) have around a sixty percent probability of being secure as adults.

Regression Results 3: Economic Security among White Adults

Economic security among White adults is strongly associated with parental income and net worth, and the two significantly interact. Across economic security categories, there is clear

evidence that high parental net worth can compensate for low parental income. The pattern among Whites in the left-most graph of Figure 2 is similar to the pattern for Black adults. The predicted probability of being insecure is lower with higher parental income for those with zero parental net worth. The association is weaker and not statistically significant for those with high parental net worth (Table A); the AME is significantly different between those with high and zero parental net worth in a Wald test. Among those with low parental income, high parental net worth is negatively associated with the probability of being insecure (Table B). The probability of being insecure is about 30 percent for White adults with very low parental income (fifth percentile) and zero parental net worth, compared to only 11 percent for those with very low parental income and high net worth.

The associations between parental income and net worth and marginal economic security (low income) in adulthood are similar to the previous category. Again, high parental net worth can compensate for low parental income. The probability of marginal security (low income) is significantly lower with greater parental income but only for those with zero parental net worth (Table A). The probability is significantly lower for those with greater parental net worth but only for those with low parental income (Table B).

The probability of marginal security (low net worth) is positively associated with parental income among those with zero parental net worth, but not for those with high parental net worth (Table A). The two AMEs for parental net worth are significantly different in a Wald test. In contrast to the previous two categories, parental net worth is most relevant among those from high-income parents. The probability of marginal security (low net worth) for White adults is significantly higher for those with zero net worth compared to those with high parental net worth. It seems high parental net worth moves high-income White children from the marginal security (low net worth) category to the secure category.

In the right-most graph of Figure 2, Whites are the only group for whom high parental net worth clearly offsets low parental income when predicting being economically secure in adulthood. The predicted probability of being secure among those with very low parental income (fifth percentile) is twice as high for those with high parental net worth compared to those with zero parental net worth. There is also some evidence that high parental net worth complements high parental income. Among White adults with high parental income, the predicted probability of being secure is twenty percentage points greater for those with high parental net worth compared to those with zero parental net worth. However, the interaction between parental

income and net worth is not statistically significant. In Wald tests, the AME for parental income is not statistically significantly different by parental net worth (Table A), and the AME for parental net worth is not statistically significantly different by parental income (Table B).

In summary, both parental net worth and parental income strongly predict economic security for White adults. High parental net worth offsets low parental income for moving White adults out of economic insecurity and marginal security (low income). High parental net worth also complements high parental income for moving White adults out of marginal security (low net worth) and into security.

Regression Results 4: Racial/Ethnic Differences in Adult Economic Security

Racial/ethnic differences in the associations above contribute to inequalities in adult economic security, even net of compositional differences in parental economic security. The Black-White and Latino/a-White differences in the predicted probabilities of the adult economic security categories by parental income and net worth are presented in Table C in the appendix. There are no significant Latino/a-White differences in the probability of adult insecurity, conditional on parental income and net worth. Though not statistically significant, there is a disadvantage for low-income and high-net-worth Latino/a children and an advantage among those with zero net worth. This pattern is due to the compensation of high parental net worth for low parental income among Whites but not Latinos/as.

Most strikingly, the probability of insecurity is statistically significantly greater for Blacks from low-income and zero-net-worth families compared to Whites from similar families (Table C). At the 5th percentile of parental income and zero parental net worth, the probability of economic insecurity is 16.9 percentage points greater for Black adults than White adults. The Black-White difference is much smaller and not statistically significant with either higher parental income or net worth. These patterns show economic insecurity is both more common for Black children than White children and it is more likely to be reproduced across generations.

There are also Black-White disparities in the probability of marginal economic security (low income) at low parental income. The difference is especially pronounced with high parental net worth, largely due to the relatively high probability of White adults with high parental income being economically secure. Finally, among those with very low parental income and high parental net worth, Black adults are 28 percentage points less likely to be economically secure

than White adults. Aside from racially stratified access to parental net worth, Black children are further disadvantaged by stratified returns across generations.

Robustness Analyses

Several alternative analyses assess the robustness of the results above, as mentioned in the Data & Methods section. First, I tested alternative measures for the adult economic security categories in Table 1: using adult wealth (excluding debt) rather than net worth; using half of the median income and net worth to define "low" values rather than terciles; and using the half median and wealth instead of net worth. The general results are consistent for all measures and are available upon request.

I also predicted adult income, net worth, and wealth ranks as outcome variables. These analyses are more directly comparable to past research that examines income and net worth separately. Figure A in the appendix presents predicted values for linear models predicting each outcome. These models include the same variables and interactions as the multinomial logistic regression that generated the values in Figure 2. To allow for potentially relevant non-linearities, I also included squared terms (main effects and interactions) for parental income when predicting adult income and for parental net worth when predicting adult net worth or wealth. These results for adult income further demonstrate that high parental net worth compensates for low parental income among Whites. However, this substitution between parental income and net worth is not evident among Blacks or Latinos/as.

The associations between parental net worth and adult net worth or wealth are less strong, but there is some evidence that high parental income can substitute for parental net worth. The sample may be too young for clear evidence on these patterns, though. Children of high net worth parents may outpace their less advantaged peers in wealth accumulation as they age, revealing a stronger intergenerational association.

DISCUSSION

Income and wealth are distinct economic resources that jointly characterize economic security. Although a vast literature has documented intergenerational income transmission and a growing literature has examined intergenerational wealth transmission, their combined transmission has not been explored as thoroughly. This strategy is particularly important for

understanding the intergenerational reproduction of racial/ethnic inequality, given profound racial/ethnic wealth gaps even within income levels.

To address this gap, I examined longitudinal data on a cohort of Black, Latino/a, and White young adults. I conceptualized and measured economic security in both childhood and adulthood using combinations of income and net worth. Racial/ethnic disparities in childhood economic security were profound. Nearly half of Black and Latino/a children grew up with both low parental income and low parental net worth. In contrast, the modal White child grew up with both high parental income and high parental net worth. Latino/a adults exhibited high upward mobility, with much higher economic security in adulthood than in childhood. The patterns of economic security were more strongly reproduced across generations for Black and White adults.

Beyond disparities in childhood economic security, I also find racial/ethnic differences in the interactions between parental income and net worth. High parental net worth substituted for high parental income when predicting economic security among Black and White adults. This substitution was not evident for Latino/a adults. Moreover, high parental net worth appeared to move low-income Black children from economic insecurity into marginal security. However, high parental net worth moved White children from economic insecurity to security.

Next Steps

These results provide clear evidence for the importance of jointly examining income and wealth. However, they do not explain how or why economic security is intergenerationally transmitted, or why it differs by race/ethnicity. Following Killewald and Bryan (2018), future analyses will examine three pathways through which parental income and net worth have interactive associations: educational attainment, family formation, and homeownership. Particularly for people with low-income parents, parental net worth may be crucial for obtaining a college degree or buying a home. College degrees substantially increase income, but they can depress net worth in young adulthood through student loan debt (Addo et al. 2016; Houle 2014). In contrast, homeownership would not yield income gains but constitutes the majority of most households' wealth.

I also plan to reproduce the analyses above with data from the Panel Study of Income Dynamics (PSID), which includes older respondents than the NLSY97. As mentioned, members of the NLSY97 cohort have just begun their trajectories of wealth accumulation. Not only have

their levels of net worth not yet stabilized, their relative differences will also likely change as the cohort ages.

REFERENCES

Addo, Fenaba R., Jason N. Houle, and Daniel Simon. 2016. "Young, Black, and (Still) in the Red: Parental Wealth, Race, and Student Loan Debt." *Race and Social Problems* 8(1):64–76.

Bailey, Martha J. and Susan M. Dynarski. 2011. "Gains and Gaps: Changing Inequality in U.S. College Entry and Completion." *NBER Working Paper Series* No. 17633.

Bloome, Deirdre. 2014. "Racial Inequality Trends and the Intergenerational Persistence of Income and Family Structure." *American Sociological Review* 79(6):1196–1225.

Bloome, Deirdre, Shauna Dyer, and Xiang Zhou. 2018. "Educational Inequality, Educational Expansion, and Intergenerational Income Persistence in the United States." *American Sociological Review* 83(6):1215–53.

Boshara, Ray, William Emmons, and Bryan Noeth. 2015. *The Demographics of Wealth: How Age, Education and Race Separate Thrivers from Strugglers in Today's Economy*. Federal Reserve Bank of St. Louis.

Brady, David. 2009. *Rich Democracies, Poor People: How Politics Explain Poverty*. New York: Oxford University Press.

Brady, David, Marco Giesselmann, Ulrich Kohler, and Anke Radenacker. 2018. "How to Measure and Proxy Permanent Income: Evidence from Germany and the U.S." *Journal of Economic Inequality* 16(3):321–34.

Breen, Richard, Kristian Bernt Karlson, and Anders Holm. 2018. "Interpreting and Understanding Logits, Probits, and Other Nonlinear Probability Models." *Annual Review of Sociology* 44(1):39–54.

Campbell, Lori Ann and Robert L. Kaufman. 2006. "Racial Differences in Household Wealth: Beyond Black and White." *Research in Social Stratification and Mobility* 24(2):131–52.

Chetty, R., N. Hendren, P. Kline, and others. 2014. "Where Is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States." *The Quarterly Journal of Economics*.

Conley, Dalton. 1999. *Being Black, Living in the Red: Race, Wealth, and Social Policy in America*. Berkeley, CA: University of California Press.

Dwyer, Rachel E., Laura McCloud, and Randy Hodson. 2012. "Debt and Graduation from American Universities." *Social Forces* 90(4):1133–55.

Fisher, Jonathan, David Johnson, Jonathan Latner, Timothy Smeeding, and Jeffery Thompson. 2016. "Inequality and Mobility Using Income, Consumption, and Wealth for the Same Individuals." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 2(6):44–58.

Flippen, Chenoa. 2004. "Unequal Returns to Housing Investments? A Study of Real Housing Appreciation among Black, White, and Hispanic Households." *Social Forces* 82:1527–55.

Houle, Jason N. 2014. "A Generation Indebted: Young Adult Debt across Three Cohorts." *Social Problems* 61(3):448–65.

Hout, Michael. 2015. "A Summary of What We Know about Social Mobility." *The ANNALS of the American Academy of Political and Social Science* 657(1):27–36.

Keister, Lisa. 2000a. "Race and Wealth Inequality: The Impact of Racial Differences in Asset Ownership on the Distribution of Household Wealth." *Social Science Research* 29(4):477–502.

Keister, Lisa. 2000b. *Wealth in America: Trends in Wealth Inequality*. Cambridge, MA: Cambridge University Press.

Keister, Lisa and Hang Young Lee. 2017. "The Double One Percent: Identifying an Elite and a Super-Elite Using the Joint Distribution of Income and Net Worth." *Research in Social Stratification and Mobility* 50:1–12.

Killewald, Alexandra. 2013. "Return to 'Being Black, Living in the Red': A Race Gap in Wealth That Goes Beyond Social Origins." *Demography* 50(4):1177–95.

Killewald, Alexandra and Brielle Bryan. 2016. "Does Your Home Make You Wealthy?" *RSF: The Russell Sage Foundation Journal of the Social Sciences* 2(6):110–28.

Killewald, Alexandra and Brielle Bryan. 2018. "Falling Behind: The Role of Inter- and Intragenerational Processes in Widening Racial and Ethnic Wealth Gaps through Early and Middle Adulthood." *Social Forces* 97(2):705–40.

Killewald, Alexandra, Fabian Pfeffer, and Jared Schachner. 2017. "Wealth Inequality and Accumulation." *Annual Review of Sociology* 43:379–404.

Landry, Bart and Kris Marsh. 2011. "The Evolution of the New Black Middle Class." *Annual Review of Sociology* 37(1):373–94.

Maroto, Michelle. 2016. "Growing Farther Apart: Racial and Ethnic Inequality in Household Wealth Across the Distribution." *Sociological Science* 3(34):801–24.

Mazumder, Bhashkar. 2014. "Black–White Differences in Intergenerational Economic Mobility in the United States." *Economic Perspectives* 38(1):1–18.

Mize, Trenton D. 2019. "Best Practices for Estimating, Interpreting, and Presenting Nonlinear Interaction Effects." *Sociological Science* 6(4):81–117.

Oliver, Melvin and Thomas Shapiro. 2006. *Black Wealth/White Wealth: A New Perspective on Racial Inequality, 2nd Ed.* New York: Routledge.

Pattillo, Mary. 1999. *Black Picket Fences: Privilege and Peril among the Black Middle Class*. Chicago: University of Chicago Press.

Pfeffer, Fabian. 2018. "Growing Wealth Gaps in Education." *Demography* 55(3):1033–1068.

Pfeffer, Fabian T. and Alexandra Killewald. 2017. "Generations of Advantage. Multigenerational Correlations in Family Wealth." *Social Forces* 96(4):1411–42.

Rauscher, Emily. 2016. "Passing It On: Parent-to-Adult Child Financial Transfers for School and Socioeconomic Attainment." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 2(6):172–96.

Rauscher, Emily and William Elliott. 2016a. "The Relationship between Income and Net Worth in the United States: A Virtuous Cycle for High- but Not Low-Income Households." *Journal of Poverty* 20(4):380–95.

Rauscher, Emily and William Elliott. 2016b. "Wealth as Security: Growth Curve Analyses of Household Income and Net Worth During a Recession." *Journal of Family and Economic Issues* 37(1):29–41.

Reskin, Barbara. 2012. "The Race Discrimination System." *Annual Review of Sociology* 38:17–35.

Torche, Florencia. 2011. "Is a College Degree Still the Great Equalizer? Intergenerational Mobility across Levels of Schooling in the United States." *American Journal of Sociology* 117(3):763–807.

Yeung, W. Jean and Dalton Conley. 2008. "Black–White Achievement Gap and Family Wealth." *Child Development* 79(2):303–24.

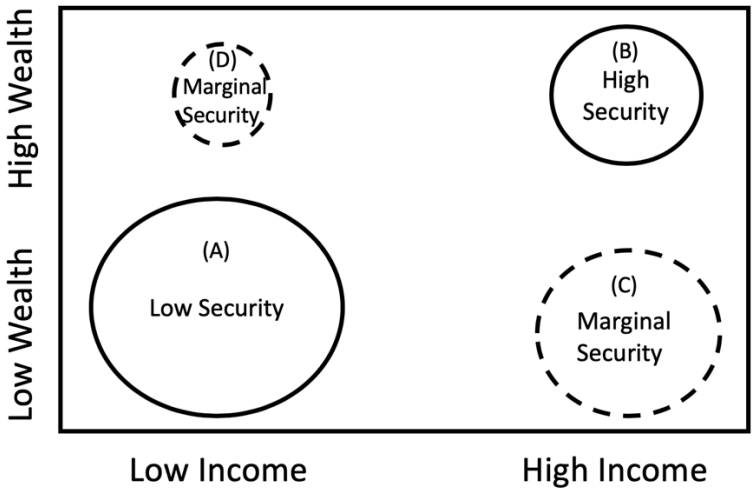

Figure 1. Conceptual diagram for family economic security as a combination of income and wealth.

Table 1. Adult economic security categories corresponding to income and net worth terciles.

Net Worth Tercile	*Income Tercile*		
	Low	Middle	High
High	Marginal (low inc.)	Secure	
Middle			
Low	Insecure	Marginal (low NW)	

Table 2. Means and (standard deviations) of key variables by race/ethnicity.

	Total Sample	Black	Latino/a	White
Adult Outcomes				
Income Rank	49.16	33.49	44.65	52.93
	(28.55)	(27.75)	(27.24)	(27.80)
Equivalized Income ($1,000s)	43.69	29.64	37.88	47.38
	(32.60)	(27.05)	(25.62)	(33.78)
Net Worth Rank	49.94	37.86	46.85	52.77
	(28.79)	(24.95)	(25.81)	(29.32)
Equivalized Net Worth ($1,000s)	35.80	13.31	23.47	42.24
	(77.62)	(45.89)	(54.77)	(84.52)
Parents' Income & Wealth				
Income Rank	49.32	29.77	33.46	55.85
	(28.80)	(25.55)	(26.56)	(26.94)
Equivalized Income ($1,000s)	36.48	20.57	23.77	41.75
	(29.48)	(18.11)	(22.04)	(30.59)
Net Worth Rank	49.47	31.98	34.62	55.42
	(28.75)	(22.85)	(25.49)	(27.99)
Equivalized Net Worth ($1,000s)	53.70	19.71	25.60	65.13
	(74.28)	(39.71)	(48.63)	(79.60)
Parents Own Home	0.61	0.35	0.47	0.68
Background				
Female	0.48	0.51	0.47	0.48
Foreign Born	0.03	0.02	0.14	0.01
Two Parents, Age 12	0.49	0.18	0.48	0.55
Mother's Age at Birth	25.60	24.19	25.29	25.92
	(5.12)	(5.24)	(5.21)	(5.03)
Number of Siblings	2.48	3.46	3.15	2.17
	(2.10)	(3.00)	(2.39)	(1.72)
Age at Parents' Income Obs.	16.32	16.17	16.26	16.35
	(1.39)	(1.51)	(1.44)	(1.36)
N	4,132	1,053	906	2,173

Notes: All estimates apply sample weights.

Table 3. Combined income and net worth distributions for parents and adult children by race/ethnicity, presented as percentages of each group in each cell.

Childhood Economic Security					**Adult Economic Security**				
Black					**Black**				
Net Worth	*Income Tercile*				*Net Worth*	*Income Tercile*			
Tercile	Low	Middle	High	Total	*Tercile*	Low	Middle	High	Total
High	1.4	2.5	4.8	8.7	High	4.0	5.6	7.1	16.8
Middle	14.8	12.4	5.2	32.4	Middle	18.7	10.3	3.2	32.2
Low	47.8	8.4	2.7	59.0	Low	35.0	9.9	6.2	51.1
Total	64.0	23.3	12.7	100.0	Total	57.7	25.8	16.5	100.0
Latino/a					**Latino/a**				
Net Worth	*Income Tercile*				*Net Worth*	*Income Tercile*			
Tercile	Low	Middle	High	Total	*Tercile*	Low	Middle	High	Total
High	2.5	4.2	7.0	13.7	High	3.1	10.5	10.9	24.4
Middle	12.3	11.7	6.5	30.5	Middle	17.5	14.1	9.5	41.0
Low	44.5	9.3	2.1	55.9	Low	18.7	11.3	4.6	34.6
Total	59.3	25.2	15.5	100.0	Total	39.2	35.9	24.9	100.0
White					**White**				
Net Worth	*Income Tercile*				*Net Worth*	*Income Tercile*			
Tercile	Low	Middle	High	Total	*Tercile*	Low	Middle	High	Total
High	2.3	11.2	27.5	41.0	High	4.0	11.1	22.6	37.7
Middle	6.3	18.1	10.0	34.4	Middle	10.8	13.5	8.2	32.5
Low	14.7	7.8	2.1	24.6	Low	14.2	10.1	5.5	29.8
Total	23.3	37.1	39.6	100.0	Total	29.0	34.7	36.3	100.0

Notes: All estimates apply sample weights. Darker shaded cells indicate higher relative frequencies.

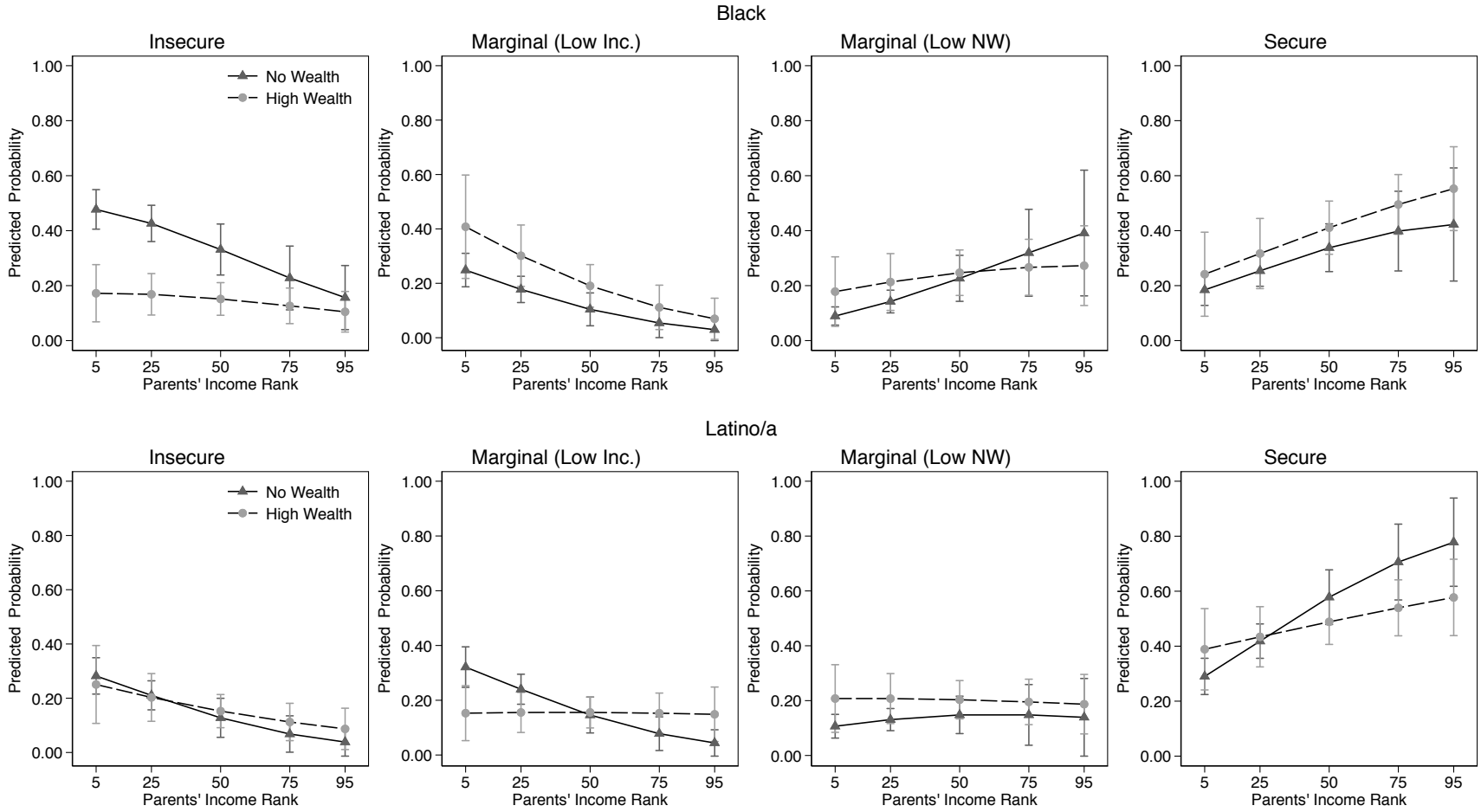

Figure 2, continued on next page

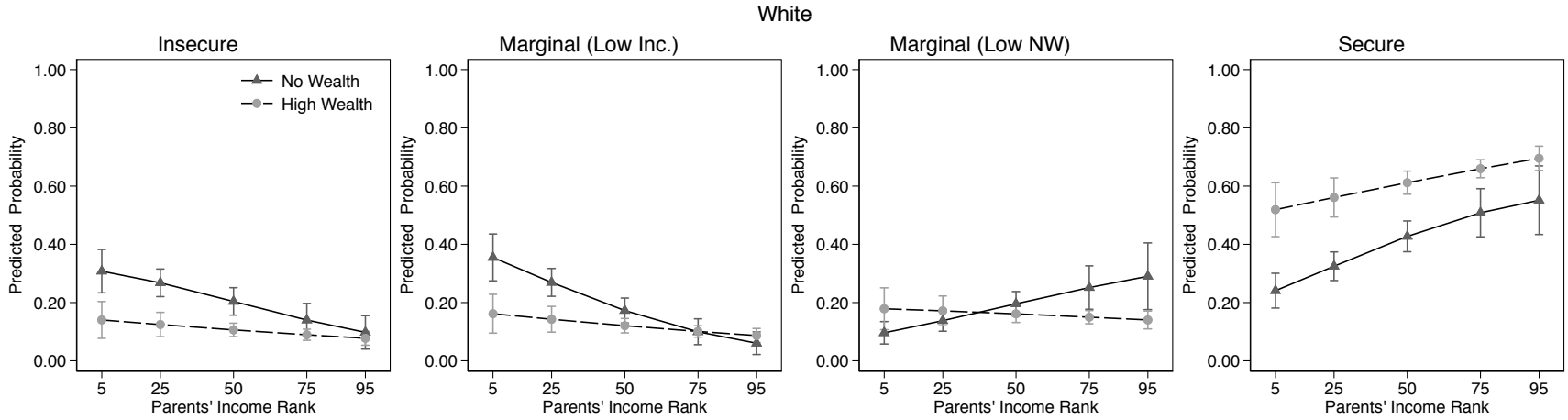

Figure 2. Predicted probabilities of adult economic security by race/ethnicity, parental income, and parental net worth.
Note: The probabilities are from a multinomial logistic regression including all variables described in the text. The vertical bars are 95% confidence intervals. High parental net worth is the 80th percentile.

APPENDIX

Table A. Average Marginal Effects of Parental Income for Adult Economic Security, by Race/Ethnicity and Parental Net Worth.

	Insecure	Marginal (low inc)	Marginal (low NW)	Secure
Black				
Zero Par NW	-0.003***	-0.002***	0.003*	0.002*
High Par NW	-0.001	-0.004**	0.001	0.003*
Latino/a				
Zero Par NW	-0.003***	-0.003***	0.000	0.005***
High Par NW	-0.002	-0.000	-0.000	0.002
White				
Zero Par NW	-0.002***	-0.003***	0.002**	0.003***
High Par NW	-0.001	-0.001	-0.000	0.002**

Note: Estimates are from a multinomial logistic regression including all variables described in the text. High parental net worth is the 80th percentile.

* $p<0.05$, ** $p<0.01$, *** $p<0.001$ (two-tailed tests)

Table B. Average Marginal Effects of Parental Net Worth for Adult Economic Security, by Race/Ethnicity and Parental Income.

	Insecure	Marginal (low inc)	Marginal (low NW)	Secure
Black				
Par. Inc. at p5	-0.004***	0.002	0.001	0.001
Par. Inc. at p25	-0.003***	0.002	0.001	0.001
Par. Inc. at p50	-0.002**	0.001	0.000	0.001
Par. Inc. at p75	-0.001	0.001	-0.001	0.001
Par. Inc. at p95	-0.001	0.001	-0.002	0.002
Latino/a				
Par. Inc. at p5	-0.000	-0.002**	0.001	0.001
Par. Inc. at p25	-0.000	-0.001	0.001	0.000
Par. Inc. at p50	0.000	0.000	0.001	-0.001
Par. Inc. at p75	0.001	0.001	0.001	-0.002
Par. Inc. at p95	0.001	0.002	0.001	-0.003
White				
Par. Inc. at p5	-0.002**	-0.002***	0.001	0.004***
Par. Inc. at p25	-0.002***	-0.002***	0.000	0.003***
Par. Inc. at p50	-0.001***	-0.001	-0.000	0.002***
Par. Inc. at p75	-0.001	0.000	-0.001*	0.002***
Par. Inc. at p95	-0.000	0.000	-0.002*	0.002*

Note: Estimates are from a multinomial logistic regression including all variables described in the text.

* $p<0.05$, ** $p<0.01$, *** $p<0.001$ (two-tailed tests)

Table C. Racial/Ethnic Differences in the Probability of Adult Economic Security, by Parental Income and Net Worth.

	Insecure		Marginal (low inc)		Marginal (low nw)		Secure	
	No Par NW	High Par NW	No Par NW	High Par NW	No Par NW	High Par NW	No Par NW	High Par NW
Black-White Difference								
Par. Inc. at p5	0.169***	0.034	-0.108*	0.246*	-0.006	-0.002	-0.056	-0.278**
Par. Inc. at p25	0.159***	0.045	-0.093**	0.159*	0.005	0.040	-0.071	-0.244***
Par. Inc. at p50	0.128*	0.045	-0.069	0.071	0.031	0.083	-0.090	-0.200***
Par. Inc. at p75	0.089	0.036	-0.046	0.012	0.068	0.114*	-0.112	-0.162**
Par. Inc. at p95	0.061	0.027	-0.031	-0.016	0.101	0.129	-0.131	-0.140
Latino/a-White Difference								
Par. Inc. at p5	-0.026	0.111	-0.035	-0.009	0.012	0.026	0.049	-0.128
Par. Inc. at p25	-0.057	0.078	-0.030	0.013	-0.006	0.034	0.093*	-0.125
Par. Inc. at p50	-0.076	0.046	-0.027	0.035	-0.047	0.041	0.150**	-0.122**
Par. Inc. at p75	-0.072	0.022	-0.022	0.052	-0.103	0.045	0.197*	-0.119*
Par. Inc. at p95	-0.059	0.009	-0.017	0.062	-0.151	0.047	0.227*	-0.118

Note: Estimates are from a multinomial logistic regression including all variables described in the text.

* $p<0.05$, ** $p<0.01$, *** $p<0.001$ (two-tailed tests)

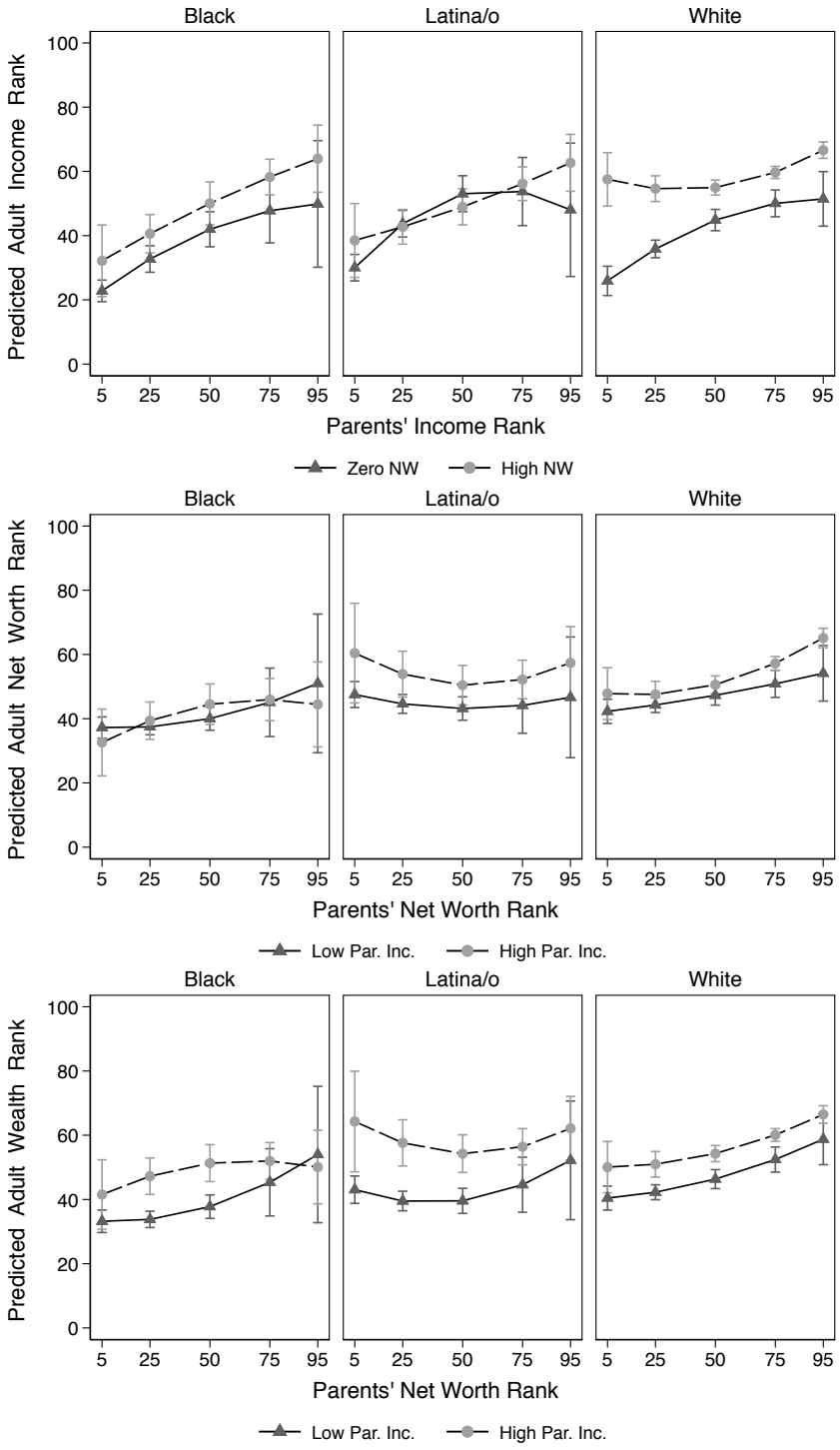

Figure A. Predicted values of adult income, net worth, and wealth by race/ethnicity, parental income, and parental net worth.

Note: The probabilities are from separate linear models for each outcome, including all variables described in the text. The vertical bars are 95% confidence intervals. High parental income and net worth are the 80th percentile. Low parental income is the 20th percentile.