

PARENTAL WEALTH AND THE BLACK–WHITE MOBILITY GAP IN THE U.S.

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Utilizing longitudinal data from the Panel Study of Income Dynamics (PSID), this paper examines the relationship between parental wealth and intergenerational income mobility for black and white families. I find that total parental wealth is positively associated with upward mobility for low-income white families, but is not associated with reduced likelihood of downward mobility for white families from the top half of the income distribution. Conversely, I find that total parental wealth does not have the same positive association for low-income black families, while home ownership may have *negative* associations with the likelihood of upward mobility for these families. However, for black families from the top half of the income distribution, home equity is associated with a decreased likelihood of downward mobility, suggesting a heterogeneous relationship between home ownership and mobility for black families.

JEL Codes: D31, J15, J62

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1. INTRODUCTION

Wealth is a crucial component of a family's economic well-being. In times of economic distress, wealth can be used to smooth consumption, or it can be borrowed against as a source of credit. Having several months of income in savings can mean the difference between losing one's home or not during a period of unemployment or unexpected medical expenditures. Wealth can also be used to invest in education and human capital for future generations as well as to start one's own business.

In the United States, wealth disparities between black and white families are extreme, and notwithstanding reduction in other forms of inequality and discrimination (Wolff, 2002), the black–white wealth gap is at its greatest level in over 25 years. The median white family held 22 times more wealth than the median black family in 2009. Despite the importance wealth plays in the economic lives of families, it has largely been ignored by the intergenerational income mobility literature as a potential factor in explaining the black–white mobility gap.

This paper is an expansion of previous work studying how wealth perpetuates inequality (Conley, 1999; Wolff, 2002; Shapiro, 2004; Oliver and Shapiro, 2006), but unlike earlier work, I take an intergenerational approach to explore the long-term consequences of racial wealth inequality to examine differences in the role of parental wealth in income mobility by race. Specifically, I investigate: (1) the

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relationship between parental wealth and the likelihood of upward mobility for low-income families; and (2) whether parental wealth is associated with a decreased likelihood of downward mobility among families in the top half of the income distribution.

My central argument is as follows: Parental wealth serves both an insurance and investment function, allowing individuals to pursue risks and make investments with the potential to result in improved labor market outcomes. As such, we would expect that increased parental wealth would be associated with more favorable intergenerational income mobility prospects (i.e., greater upward mobility and less downward mobility). Wealth holdings are extremely unequal by race in the United States; therefore, if wealth matters to intergenerational mobility and wealth is unequally distributed by race, then it would stand to reason that wealth could account for part of the unexplained black–white income mobility gap.

First, I will describe the empirical and theoretical research that supports my central argument in the “Background” section. Next, I will provide new empirical evidence on how disparities in parental wealth account for part of the black–white income mobility gap in the “Results” section. In addition to predicting rates of upward/downward mobility at various points in the income and wealth distributions by race, I will decompose the relationship between wealth and upward mobility to examine the extent to which upward mobility differences by race are due to differences in total net worth versus differential returns to wealth by race. These estimates are intended to provide a descriptive, not casual, estimation of the relationship between parental wealth and children’s intergenerational mobility prospects by race.

2. BACKGROUND

2.1. *Theoretical Framework: Role of Wealth*

It is important to note that wealth, in itself, does not necessarily cause income persistence or mobility. Wealthier people could have different attitudes toward risk or time discounting and pass those attitudes on to their children. In addition to these potentially unobservable characteristics, previous empirical research has found that wealthier families have greater educational access (such as better school districts, tutors, and private schools), greater occupational networks, and more neighborhood choices (Conley, 1999; Grawe, 2008), all of which promote better child outcomes. While the goal of this analysis is not to specify the mechanisms through which wealth impacts economic mobility, but rather it is to examine the potential total relationship between parental wealth and rates of upward and downward mobility, a review of potential mechanisms through which wealth could impact intergenerational mobility is in order.

Theory suggests two primary ways through which wealth could impact individual labor market outcomes and therefore intergenerational mobility: an insurance function and an investment function (Pfeffer, 2011; Pfeffer and Hällsten, 2012). Starting with the investment function, prior theoretical research has noted that it may be linked with intergenerational mobility in two ways: first, parental wealth could be used to directly purchase access to educational resources (e.g., a

direct financial transfer from parents to children to finance higher education); or second, parental wealth could be used to purchase access to neighborhoods and school districts that would provide greater educational outcomes for children.

In addition to the investment function, parental wealth could also serve an insurance function. Spilerman (2000) posits that the mere presence of parental wealth or its “consumption potential” allows individuals to take risks and pursue opportunities regardless of whether wealth is actually transferred to children or used to smooth consumption. In this way, parental wealth serves an insurance function, allowing children to pursue educational and entrepreneurial ventures with greater returns as well as greater short-term risk.

2.2. *Wealth Inequality*

Previous research has found that the black–white wealth gap is due to both historical and contemporaneous wealth policies, including policies that have impaired the ability of many black Americans to accumulate wealth (including barriers to certain occupations, welfare policies that discouraged wealth accumulation, and historical exclusion of blacks from governmental wealth-creation policies) as well as through the cumulative effects of intergenerational transmission of wealth (Sherraden, 1991; Conley, 1999; Wolff, 2002; Oliver and Shapiro, 2006). Oliver and Shapiro (2006) find that asset poverty (and wealth) is passed between generations, regardless of occupational and educational mobility. Investigations of the wealth gap have attributed the bulk of the gap to differences in inheritances and intergenerational transfers between black and white families, rather than to differences in rates of savings or returns on assets (Gittleman and Wolff, 2004). This finding was reinforced by Scholz and Levine (2004), who found that wealth differences across race are large and cannot be accounted for by age or educational attainment. Recent research suggests that young black individuals continue to face an asset accumulation disadvantage of around 20 percent compared with similar white individuals that cannot be explained by income, education, or family background characteristics (Killewald, 2013).

In an analysis of changes in wealth holdings in the recent recession, I found that black–white wealth inequality reached its 25-year high in 2009, with the median white family holding 22 times more wealth than the median black family, up from a ratio of 12 to 1 in 2007. Looking at cross-sectional Panel Study of Income Dynamics (PSID) data (see Appendix, Figure A1), the median black family net worth declined by over 50 percent (from \$10,345 to \$4,500) during the recent recession, while the median white net worth declined 20 percent (\$124,138 to \$98,200). Black families have experienced declining median net worth since 2001, suggesting that they never fully recovered from the previous recession in 2001. A slightly different picture emerges when the dramatic increases and subsequent decline in home equity values are excluded (see Appendix, Figure A2). For the median white family, non-housing wealth has been declining since 1999. Exclusive of home equity, median white wealth peaked in 1999 at \$42,481 and black wealth peaked in 2003 at \$3,505. In other words, non-housing wealth had been in a pattern of decline long before the current recession. Furthermore, the non-housing wealth disparities between blacks and whites in 2009 were similar to the wealth ratios in 1984–94.

2.3. *Wealth and Intergenerational Mobility*

Based on previously found positive associations between parental wealth and children's educational outcomes, it seems possible that increased parental wealth would have additional benefits for children, even controlling for parental income. However, while several researchers have attempted to empirically estimate the relationship between wealth and intergenerational mobility, the results are not definitive and often do not examine race.

Pfeffer and Hällsten (2012) use PSID data to examine the role of parental wealth on status attainment, educational attainment, and social mobility in the U.S. as compared with Germany and Sweden. They find that, in the U.S., parental wealth promotes upward occupational mobility and protects against downward mobility. While indicative of the potential role of parental wealth on intergenerational *income* mobility, the study did not directly examine this relationship.

In an analysis of PSID data, Mulligan (1997) finds no difference in the intergenerational income elasticities of individuals based on whether or not they anticipated receiving an inheritance in the future. As a result, he concludes that borrowing constraints (as proxied by anticipation of future wealth) are not a significant determinant of mobility. Using much more robust wealth data in the Survey of Income and Program Participation matched with Social Security earnings data (SIPP-SSA), Mazumder (2005) finds that the intergenerational earnings elasticity for families with above-median net worth is about 33 percent lower than for families with below-median net worth, meaning that high-wealth families have more mobility than low-wealth families. However, both of these studies examine overall intergenerational elasticity conditional on a dichotomized wealth variable, which provides limited interpretation and cannot differentiate between the direction of mobility (upward or downward), only that there is less of a relationship between parent and child earnings in high wealth families.

Only a small literature exists looking at the relationship between wealth and mobility using a definition of mobility other than an intergenerational elasticity. Cramer *et al.* (2009) use PSID data to find that greater parental savings (although still conditional on a dichotomous wealth value) increases the likelihood of upward intergenerational mobility, but they do not disentangle race from the analysis. Using a new method (described below) developed in Bhattacharya and Mazumder (2011), Mazumder (2011) examined net worth as a potential explanation for the black–white mobility gap, using both the National Longitudinal Survey of Youth (NLSY) and SIPP-SSA. He found that cognitive scores explain much of the mobility gap, but that family structure, educational attainment, and parental wealth all account for some of the gap. Mazumder found that low levels of parental wealth for both white and black children decrease the likelihood of upward mobility out of the bottom income quintile, but that black children face steeper penalties to low wealth than white children. Mazumder focused on total net worth and did not examine specific types of asset ownership.

While parental wealth has been shown both theoretically and empirically to matter for children's economic outcomes, research on its role as a mechanism in intergenerational mobility is limited. Furthermore, despite ample evidence of a racial wealth gap, only a single study (Mazumder, 2011) has attempted to test

wealth as a source of racial inequality in intergenerational mobility. Until recently, methodological limitations made it difficult to conduct these types of analyses. By focusing on intergenerational income elasticities and controlling for parental wealth, researchers are only able to compare rates of intergenerational volatility between two (or possibly more) wealth groups, which does not provide much information. Quantile regression would allow for comparisons of elasticities at different points in the income distribution, but not for different wealth levels at different points in the income distribution; quantile regression also fails to provide the direction of mobility. As a result of these limitations, I utilize a new conceptual framework created by Bhattacharya and Mazumder (2011) for examining directional mobility, which can be extended to be conditional on a continuous variable such as wealth.

This paper will build on Mazumder's (2011) previous work, utilizing a different dataset and examining detailed components of net worth (home equity, financial assets, tangible assets, and debt) to further explore the relationship between parental wealth in the black–white mobility gap. As the intergenerational mobility literature is largely descriptive due to the difficulty of finding instruments that would allow for causal analysis, this analysis is also descriptive. Despite this limitation, this paper provides suggestive evidence as to one potential underlying driver of differences in income persistence by race in the United States. Additionally, it presents the first examination (to my knowledge) of the relationship between specific asset types (housing wealth, financial assets, tangible assets, debt) and intergenerational mobility.

3. DATA

This analysis utilizes the PSID, a longitudinal survey that follows individuals and their offspring from 1968 to the present. The survey has been conducted annually from 1968 to 1997, and biannually between 1997 and 2009. The PSID has the advantage of following a nationally representative sample over time, while also having information about the income and wealth of two subsequent generations. The PSID includes rich data on labor earnings, family income, hours worked, employment status, and family relationships, and is one of the most widely used datasets for studying intergenerational income and earnings elasticities in the United States. Using this dataset it is also possible to link supplemental wealth data to the main survey in the following years: 1984, 1989, 1994, 1999, 2001, 2003, 2005, 2007, and 2009. The frequent collection of wealth data in recent years allows researchers to track changes in wealth holdings both longitudinally and cross-sectionally for the current generation of PSID members. However, while the PSID is nationally representative, it was not initially designed to be a wealth survey and therefore does not over-sample the wealthiest households, which is necessary to obtain precise estimates for this group.

3.1. *Terms*

Wealth is primarily defined as *total net worth* (total assets minus total liabilities/debts). Net worth is broken into the following four categories: financial assets, tangible assets, home equity, and uncollateralized debt.

- *Financial assets* are defined as the sum of assets from checking/savings accounts (including money market funds, certificates of deposit, government savings bonds, or treasury bills and IRAs), stocks/mutual funds or investment trusts, and any other savings or assets (such as bonds, rights in a trust or estate, cash value in a life insurance policy, or a valuable collection for investment purposes). Pension and social security are not included in PSID wealth calculations.
- *Tangible assets* are defined as the sum of assets from vehicles (including motor homes, trailers, and boats), equity in farm/business ownership, and real estate other than the main home.
- *Home equity* is primary home equity—home value net of mortgage debt (could be a negative value).
- *Uncollateralized debt* (elsewhere simply referred to as “debt”) includes all other debt—credit card debt, student loans, medical or legal bills, personal loans, loans from relatives, etc.). This does not include a mortgage on the main home or farm/business debt (which is already factored into net equity values above).
- *Race*: The race measure is based on the head of the household’s reported race and Hispanic ethnicity in 1985 (and, if missing, in subsequent years up to 2009). This paper only provides information on white, non-Hispanic and black, non-Hispanic families. To simplify, the terms “black” and “white” are used throughout this paper, although they always refer to non-Hispanic individuals.
- *Income*: Income is defined as the sum of total family income for all family unit members in the previous year. Family income includes labor income from wages and salaries, bonuses, overtime, tips, commissions, and other job-related income, as well as transfers and social security income. Income can be zero or positive.

4. METHODS

This analysis utilizes the PSID to examine the relationship between parental wealth and intergenerational income mobility. To be included in the sample, children must be present (and aged 5–21 years) in the parents’ household for at least three years when parents report income and wealth data between 1984 and 1989 (the first available years the wealth supplement is collected), and children must report at least three years of income from 1997 to 2009 when they are either the head or spouse of their own family. In each generation, income for every available year is first adjusted to 2009 dollars, logged, averaged and then age-adjusted. Following previous research (Bratberg *et al.*, 2007), I first subtract the mean value of log earnings in each generation from each observation to suppress the constant term and then regress log earnings on age and age-squared. The residuals from these equations are then grouped into percentiles to estimate percentile rankings in each generation. Income is only collected in years when the head of household is below age 65. The average number of years of income data for the parent generation is 5.4 years, and 5.9 years for the child generation. For the main conditional mobility analyses, wealth is transformed into a percentile rank based on real values of wealth relative

to other parents with children at given points of the income distribution (e.g., relative to other families in the bottom quintile of the income distribution). For the analyses of wealth sub-categories in Table 2, wealth is transformed by the inverse hyperbolic sine transformation, which essentially creates a logged transformation for a distribution which includes negative and zero values (Pence, 2006). The total sample size is 1,777, with 1,172 white families and 605 black families (see Appendix Table A1 for full demographics).

Economists and sociologists have been attempting to measure intergenerational mobility for decades, but new methods continue to challenge previous findings (Solon, 1999; Black and Devereux, 2010). Previous research has highlighted the importance of using permanent income measures rather than single-year income measures (Grawe, 2006; Haider and Solon, 2006). Similarly, due to life-cycle variation in income, the age at which income is observed matters quite a bit, and ideally should be measured from both generations while they are in their 30s–40s (Solon, 1999; Black and Devereux, 2010), and age-adjusted to account for age differences within a sample (Solon, 1992; Bratberg *et al.*, 2007). Additionally, more recent work has focused on non-linearities in mobility, with both the lowest and highest income families experiencing a greater deal of “stickiness” than do middle income families (Eide and Showalter, 1999; Grawe, 2004; Hertz, 2005).

Using a new method developed by Bhattacharya and Mazumder (2011) to calculate rates of upward and downward intergenerational income mobility by race, I estimate directional rank probabilities conditional on parental wealth while the child was living at home between ages 5 and 21. Measuring parental wealth and income in this age range provides the best model for an estimation of the effect of capital constraints on intergenerational income mobility as these are the ages when most investments in education are undertaken. This estimate gives the likelihood of a child exceeding (or falling below) their parents’ place in the income distribution by a certain number of percentile points, conditional on their parents beginning at or below a given percentile (e.g., given that a child grew up in the bottom quintile of the income distribution, there is a 20 percent probability of that child moving at least 30 percentage points above their parents’ income). Borrowing notation directly from Mazumder (2011), the estimating equation is:

$$(1) \quad URM_{\tau,s} = \Pr(Y_1 - Y_0 > \tau | Y_0 \leq s),$$

where *URM* stands for upward rank mobility, *s* is a given percentile in the income distribution, and τ is the amount that children’s income percentile (Y_1) exceeds their parents’ income percentile (Y_0). When $\tau = 0$, this equation estimates the likelihood that a child’s income rank exceeds their parents’. The downward rank mobility (*DRM*) equation is a slight modification of the above equation:

$$(2) \quad DRM_{\tau,s} = \Pr(Y_0 - Y_1 > \tau | Y_0 \geq s).$$

This method differs in an important way from simply looking at transition matrices—in addition to allowing flexibility in the thresholds and cut-points used to define upward or downward mobility, this method overcomes potential bias in previous estimates of the racial mobility gap by addressing differences in location

in the income distribution. As black families are disproportionately concentrated at the bottom of the income distribution, any transition matrix would require them to have higher mobility than white families in that same quantile to reach the next quantile. For example, if one were examining the probability of moving up from the bottom income decile to the second decile, on average, black families would have to move a greater distance than the average white family. Bhattacharya and Mazumder's method equalizes the minimum distance all families must move to be classified as upwardly or downwardly mobile.

Both the upward and downward rank measures can be estimated to examine rank conditional on parental wealth in 1984–89 in order to explore the role that wealth plays as a mechanism in accounting for the black–white mobility gap. These measures are calculated separately for black and white families and used to estimate the black–white mobility gap at varying points in the parental wealth distribution. I also estimate mobility conditional on values and presence of the four main subcategories of wealth (financial assets, tangible assets, home equity, and debt) to investigate whether ownership of certain types of assets or the value of a given asset has a significant relationship with the likelihood of upward or downward mobility. Finally, wealth was allowed to have both a parametric and non-parametric relationship with income mobility. In addition to estimating upward and downward rank mobility based on probit models, kernel regression models are also used to examine the non-parametric nature of the relationship between wealth and mobility, as previous research has found non-monotonic associations between wealth and economic outcomes (Killewald, 2013). For both upward and downward mobility, I examine the unconditional model, a probit model, and a lowess non-parametric regression model. Lpoly models were examined as well since they allow for weighted kernel regression, but the results between lowess and lpoly were similar so only the lowess models were included.

Previous literature has been mixed with regard to whether (Hertz, 2005) or not (Bhattacharya and Mazumder, 2011) family income should be adjusted for family size and composition prior to measuring intergenerational mobility. The main results presented use unadjusted income. However, I also test the sensitivity of all results by adjusting family income by family size and adult/child composition. Results of these sensitivity analyses are presented in the appendix tables, but discussed in the text as relevant.

Finally, I examine the extent to which differences in upward mobility by race are due to differences in total net worth versus differential returns to wealth by race. Previous research (Charles and Hurst, 2002; Oliver and Shapiro, 2006) has found that differential returns to wealth (and lower returns on housing investments for blacks in particular) may account for part of the racial wealth gap, so it follows that differential returns to wealth rather than just absolute differences in wealth levels could account for the intergenerational mobility gap as well.

I use a Blinder–Oaxaca decomposition to explore this relationship:

$$(3) \quad D = \Pr(\widehat{URM})_w - \Pr(\widehat{URM})_b,$$

where D is the difference in the likelihood of upward mobility for whites versus blacks. Using a three-fold decomposition to divide this difference into endowments

(wealth levels), coefficients (returns to wealth), and an interaction between the two, I obtain the following identifying equation (derivation in Jann, 2008):

$$(4) \quad D = [E(X_w) - E(X_B)]' \beta_B + E(X_B)' (\beta_w - \beta_B) + [E(X_w) - E(X_B)]' (\beta_w - \beta_B),$$

which uses black wealth levels and returns to predict white upward mobility. This decomposition is also conducted in reverse by switching the notation above to predict black mobility.

5. RESULTS

5.1. Upward Mobility

Focusing on substantial upward mobility of at least 20 percentile points, this analysis finds a significant upward mobility gap, with white children experiencing greater rates of upward mobility than similar black children throughout the bottom half of the income distribution (Figure 1). Nearly two-thirds (62.1 percent) of white children who grew up in the bottom 20th percentile of the income distribution are estimated to exceed their parents' position by at least 20 percentile points, compared with 42.4 percent of similarly-situated black children. The difference in these two estimates (62.1 – 42.4 = 19.7) is the black–white mobility gap. These results are consistent with Bhattacharya and Mazumder (2011), who find that 59.2 percent of white children and 38.7 percent of black children who grow up in the bottom quintile exceed their parents' position by at least 20 percentile points.

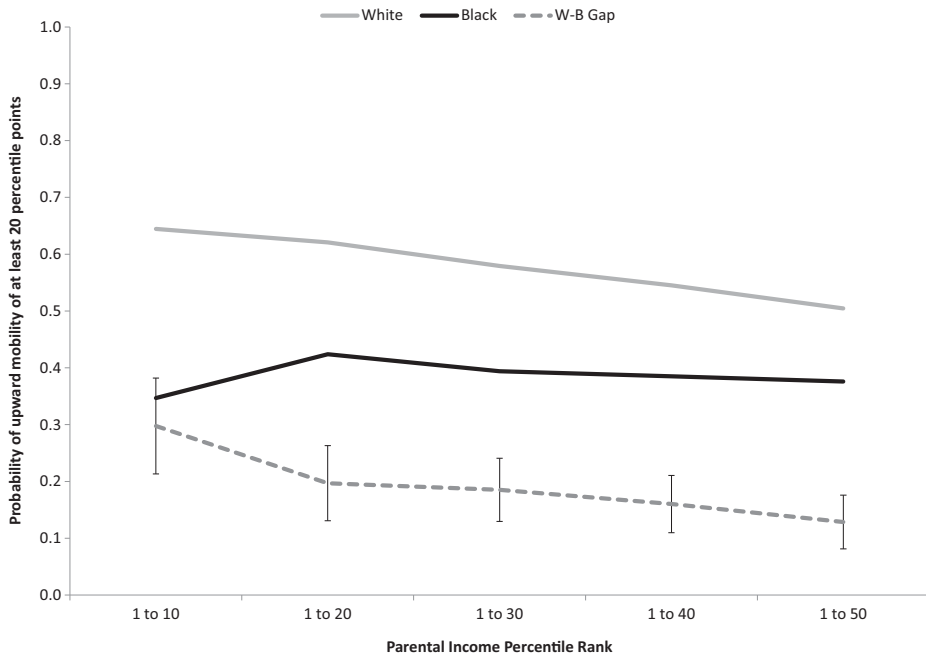


Figure 1. Likelihood of Upward Rank Mobility by Race ($\tau = 0.20$)

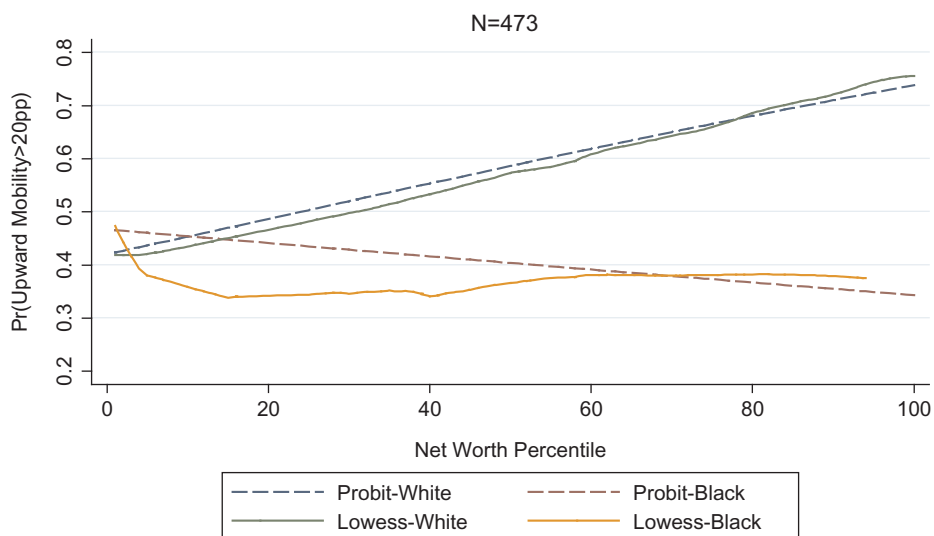


Figure 2. Upward Mobility from Bottom Quintile by Race

Figure 1 shows the range of the mobility gap at various places in the bottom half of the parental income distribution. The mobility gap is largest in the bottom decile of the parental income distribution, and narrows throughout the bottom half. As this is a cumulative sample, the standard errors decrease as larger segments of the sample are included in the analysis. Appendix Table A3 shows the upward mobility gap at the full range of thresholds and cut-points. The magnitude of the black–white gap remains relatively constant across model choice.

Controlling for parental wealth, I find that higher wealth is associated with an increased likelihood of upward mobility for white families, but not black families. Figure 2 shows the likelihood of upward mobility at various points in the parental net worth distribution for children growing up in the bottom income quintile by race. Among children growing up in the bottom income quintile, white children whose parents had higher net worth were increasingly more likely to achieve upward mobility than similar black children. As parental net worth increases, the likelihood of upward mobility for white children increases. However, the same relationship between parental wealth and the likelihood of upward mobility does not exist for black children. There does not appear to be a positive association between parental wealth and the likelihood of upward mobility for black children. As a result, the black–white mobility gap actually increases as wealth increases (see Appendix Figure 5). At low levels of wealth, the likelihood of upward mobility for both black and white children is essentially the same.¹

¹The difference in predicted likelihood of upward mobility for families in the bottom quintile with \$0 or less in total net worth by race is not statistically significant, but the comparison is based on a very small sample of families. Appendix Figure A1 shows the distribution of black and white children by parental wealth rank. Caution should be exercised in making inferences in the bottom decile and top quintile of the parental wealth distribution due to small sample sizes in those areas.

One potential concern raised by this analysis is whether there may alternatively (or additionally) be a threshold effect, rather than a continuous relationship between wealth and upward mobility. To explore this possibility, I experimented with a number of alternative model specifications based on ownership (or absence) of certain types of wealth (see Table 1) as well as the level of wealth held in certain types of assets (see Table 2). As previous research (Mazumder, 2005) has looked at median wealth as a cutoff when looking at the entire income distribution, I tested this specification as well (see Table 1). I find that the likelihood of upward mobility is higher for both black and white children above the median than below, but I still find significant intergenerational black–white mobility gaps both above and below median wealth. Among children who grew up in families who were in debt (i.e., had negative wealth), black children are more likely to experience upward mobility than white children, but this difference is not statistically significant. This finding is in line with research such as Killewald (2013), which suggests that access to credit (and therefore debt) among low income black families is a positive indication of financial well-being and that negative wealth should be examined separately from zero wealth.

Examining specific asset ownership (Table 1) and values (Table 2), I find that low-income white families are helped by ownership and value of almost any type of wealth: total net worth, total net worth excluding home equity, financial assets, tangible assets, and debt. The greater the level of each of those asset types, the greater the likelihood of upward mobility (see Table 2). The only asset that does not have a statistically significant positive relationship with upward mobility is home equity, which has a positive but insignificant association.

In contrast, low-income black families do not experience a monotonically increasing likelihood of upward mobility with increases in total net worth (see Table 1). Children from low-income black families with positive or non-zero

TABLE 1
LIKELIHOOD OF UPWARD AND DOWNWARD MOBILITY, CONDITIONAL ON PARENTAL WEALTH ATTRIBUTES

	Upward Mobility			Downward Mobility		
	White	Black	Gap	White	Black	Gap
Overall	62.1%	42.4%	19.7%***	34.5%	45.2%	-10.7%
Negative wealth	44.5%	52.1%	-7.7%	–	–	–
Zero wealth	–	35.6%	–	–	–	–
Positive wealth	64.0%	41.0%	23.0%***	34.5%	43.6%	-9.1%
Positive, but less than median wealth	57.3%	40.8%	16.6%**	36.4%	47.6%	-11.2%
Positive, and greater than median wealth	72.8%	44.9%	27.9%*	34.1%	40.1%	-6.0%
Own home	68.6%	30.6%	38.0%***	34.0%	39.2%	-5.2%
Don't own home	50.1%	47.8%	2.3%	43.1%	67.1%	-24.0%
Own financial assets	65.3%	48.0%	17.3%*	34.5%	45.0%	-10.4%
Don't own financial assets	51.6%	38.0%	13.6%	–	–	–
Own tangible assets	63.2%	43.9%	19.3%**	34.6%	45.0%	-10.4%
Don't own tangible assets	–	39.9%	–	–	–	–
Have debt	67.4%	44.1%	23.3%***	34.3%	42.2%	-7.9%
Don't have debt	53.7%	40.2%	13.5%	35.0%	64.1%	-29.1%**

Notes: Results omitted for cells of less than 10. ***p < 0.01, **p < 0.05, *p < 0.1.

Source: Author's analysis of PSID data.

TABLE 2
 BIVARIATE PROBIT ASSOCIATIONS BETWEEN WEALTH SUB-CATEGORY VALUES AND MOBILITY LIKELIHOOD BY RACE

	Including 0's						Conditional on Ownership			
	Upward Mobility		Downward Mobility		Upward Mobility		Downward Mobility			
	White	Black	White	Black	White	Black	White	Black	White	Black
Total net worth	0.0318* (0.017)	-0.0128 (0.014)	-0.0064 (0.034)	-0.1282 (0.121)	0.0318* (0.017)	-0.0128 (0.014)	-0.0064 (0.034)	-0.1282 (0.121)	0.0318* (0.017)	-0.0128 (0.014)
Financial assets (savings, stocks, and other assets)	0.0690** (0.027)	0.0427** (0.020)	0.0226 (0.028)	0.0104 (0.098)	0.1734*** (0.063)	0.0912 (0.068)	0.0246 (0.039)	0.0908 (0.125)	0.1734*** (0.063)	0.0912 (0.068)
Tangible assets (vehicles, farm and other real estate)	0.0921** (0.036)	0.0108 (0.023)	0.0265 (0.034)	-0.2473 (0.227)	0.1375** (0.064)	0.0129 (0.090)	0.0122 (0.037)	-0.0342 (0.210)	0.1375** (0.064)	0.0129 (0.090)
Home equity	0.0284 (0.020)	-0.0391** (0.017)	-0.0319 (0.021)	-0.0795** (0.037)	0.0289 (0.035)	-0.0199 (0.029)	-0.1207*** (0.042)	-0.1477 (0.092)	0.0289 (0.035)	-0.0199 (0.029)
Debt	0.0536* (0.027)	0.0161 (0.021)	-0.0000 (0.015)	-0.0863* (0.052)	0.2128** (0.089)	0.0651 (0.106)	0.0026 (0.052)	-0.2391 (0.162)	0.2128** (0.089)	0.0651 (0.106)
Observations	148	325	654	115	94-148	117-325	509-654	90-115	94-148	117-325

Note: Wealth values transformed by inverse hyperbolic sine transformation.
 Robust standard errors in parentheses, ***p < 0.01, **p < 0.05, *p < 0.1.
 Source: Author's analysis of PSID data.

net worth are no more likely to have upward mobility than similar children with negative net worth. The only asset type that has a positive (and significant) relationship with black upward mobility is financial assets (savings, stocks, and other assets). Approximately 40 percent of low-income black families own a financial asset compared with three-fourths of low-income white families (see Appendix Table A1). Ownership of a financial asset alone does not predict upward mobility, but rather the likelihood of upward mobility increases as the value of financial assets increases (see Table 2). Furthermore, owning a home is *negatively* associated with black children's likelihood of upward mobility in the next generation.² Low-income black children who grow up in a home owned by their parents have a 30.6 percent chance of upward mobility, compared with a 47.8 percent likelihood of upward mobility if their parents do not own a home. The black–white upward mobility gap is almost completely eliminated (2.3 percentage point gap, $p > 0.1$) among families that do not own a home. Conversely, the black–white mobility gap is largest among low-income home owners (38.0 percentage point gap, $p < 0.01$). This finding will be investigated in detail in Section 5.4.

5.2. Downward Mobility

In an analogous model focusing on substantial downward mobility, this analysis finds that white children who grew up in the top half of the income distribution are estimated to have a 34.5 percent chance of falling below their parents' rank by at least 20 percentage points, compared with black children who have a 45.2 percent likelihood of downward mobility (see Figure 3). The difference in these two estimates ($34.5 - 45.2 = -10.7$) is the downward mobility gap, indicating that black children are more likely to experience downward mobility than white children. However, this gap is not statistically significant, likely due to the small sample of black families in the top half of the income distribution. The black–white downward mobility gap found in this analysis is somewhat smaller than the one found in Mazumder (2011), who found a gap between 14.3 and 18.4 percentage points depending on the dataset used. This difference is likely due to the small sample of black families in PSID (see Appendix Figure A4).

Figure 3 shows the downward mobility gap at various points in the parental income distribution. While black children have a higher likelihood of downward mobility than white children across the distribution, the mobility gap is consistently indistinguishable from 0. Appendix Table A4 shows the downward mobility gap at the full range of thresholds and cut-points. Family size adjustments reduce the magnitude of both the upward and downward mobility gap (see Appendix Tables A5a–b). Furthermore, I find no conclusive evidence that parental wealth has a protective association with the likelihood of downward mobility for either black or white families (see Figure 4). Both the probit and lowess models do not predict any differences in mobility probabilities across the wealth distribution. In regard to the mobility gap, both models find the gap to be constant (and

²The value of home equity is also negatively related to upward mobility, but this finding is not robust across alternate model specifications. All other findings are robust when family size adjustments are made to income, except the relationship between home equity and upward mobility for low-income black families, which is consistently negative, but not consistently statistically significant.

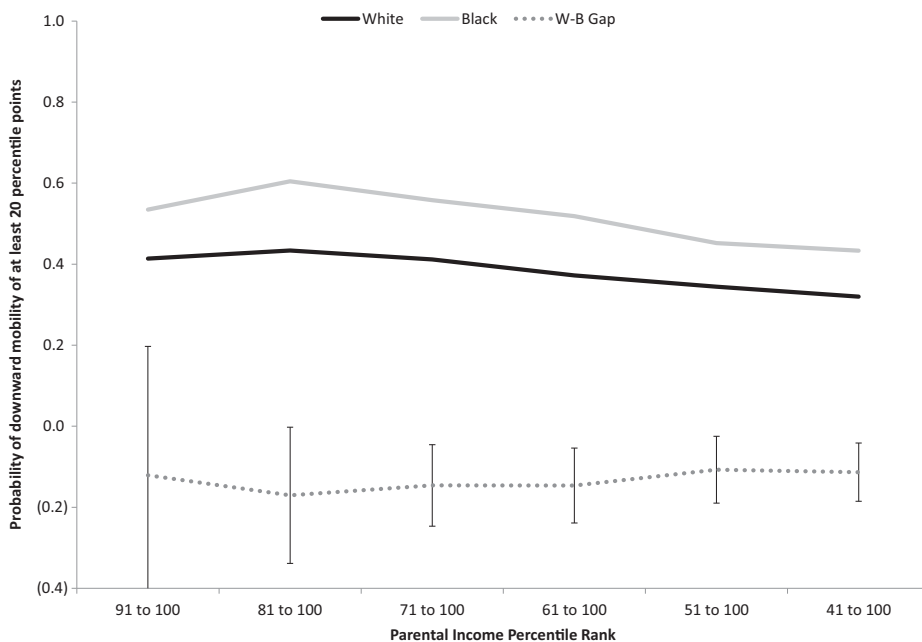


Figure 3. Likelihood of Downward Rank Mobility by Race ($\tau = 0.20$)

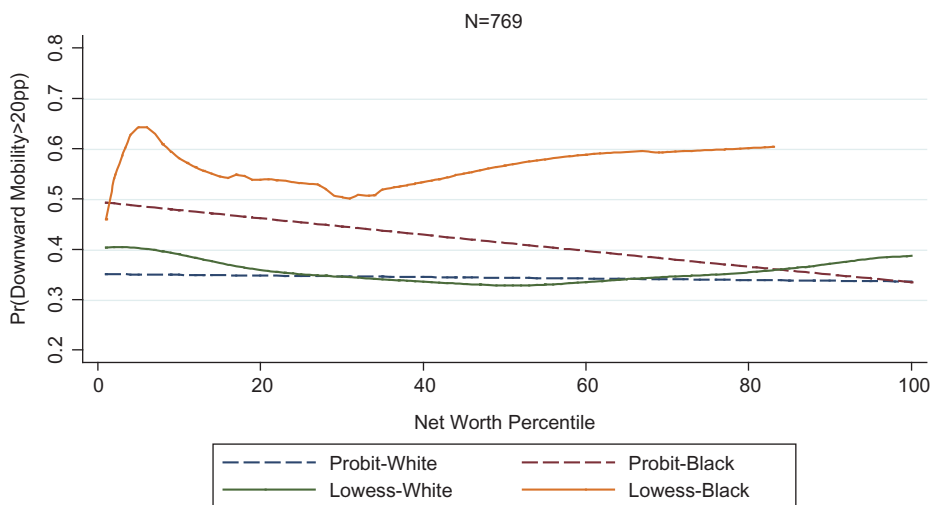


Figure 4. Downward Mobility from Top Half by Race

statistically insignificant) across levels of wealth. It is more likely that we would see a relationship between wealth and downward mobility if we restricted our analysis to the top 20th percentile versus the top half of the parental income distribution, but the sample of black families gets very small at the top of the distribution, so I follow previous research and only examine downward mobility from the top half.

Furthermore, no sub-category of wealth (either ownership or value) has a significant association with the likelihood of downward mobility for white families (see Tables 1 and 2). However, both debt and home equity levels have protective associations for black families, but ownership of these assets is only very weakly associated with a decrease in likelihood of downward mobility.

5.3. *Decomposing the Relationship between Wealth and Upward Mobility*

Using a Blinder–Oaxaca decomposition to explore the extent to which differences in upward mobility by race are due to differences in total net worth versus differential returns to wealth by race, I find that despite enormous wealth disparities between black and white families in the United States, most of the difference in mobility is due to differential returns to wealth as opposed to differences in wealth levels (see Appendix Table A6).

5.4. *Additional Analyses*

There are several possible explanations that might explain the counterintuitive finding that home ownership is negatively associated with the likelihood of upward mobility for low-income black families: differential housing stability, mortgage quality, income volatility, and home value appreciation differences between low-income blacks and whites. In exploring these, I find that low-income black homeowners were just as likely to own a home in subsequent waves of the PSID as low-income white homeowners. While information regarding mortgage interest rates or the distinction between variable and fixed rate mortgages is not available in the 1984 and 1989 wealth supplements, I was able to look at several other indicators of mortgage “quality” (the ratio of annual mortgage payments to family income, the ratio of the remaining mortgage principle to family income, the share of families with a second mortgage, and the average number of years remaining on the mortgage) and found that low-income black families appeared to have similar (or slightly better) outcomes on all measures. Low-income black families had slightly fewer remaining years on their mortgages. I also examined whether there was more income volatility among low-income black homeowners than low-income white homeowners between 1984 and 1989 using year-to-year arc percentage changes, and found no differences.

The one exception is future home equity values. Comparing home equity values from 1984 to 2009 for low-income homeowners in 1984, I find that home equity values increased much more dramatically for low-income white families than for low-income black families (results not shown). The bottom quarter of black families experienced a real decline in home equity over the period, while the upper percentiles experienced modest real growth of slightly more than 1 percent per year. In comparison, white home equity increased at much more rapid pace, with the median family experiencing a doubling of home equity from 1984 to 2009.

6. CONCLUSION

Identifying the root of racial economic inequality is important for developing policies (and determining whether policy intervention is necessary) to address it in

future generations. Persistent inequality stemming from a legacy of discriminatory wealth policies and practices should be a cause for concern for policymakers as contemporaneous policies may be insufficient. Policies that address discrimination in earnings will still not ameliorate the effect of inherited wealth on children's outcomes.

This paper aims to better understand the black–white mobility gap by taking into account parental wealth above and beyond the impact of parental income. By looking at total net worth as well as the individual components comprising a family's wealth portfolio, this analysis allows an investigation into not only the total relationship between wealth and mobility, but also the associations with specific asset types. I find that the black–white upward mobility gap grows with parental wealth and that returns to wealth ownership (and returns to home ownership in particular) are the largest explanatory factor of the gap.

Although wealth in nearly any form is associated with an increased likelihood of upward mobility for low-income white families, wealth has few positive associations for black families and housing wealth is actually associated with negative outcomes for low-income black families. Conversely, parental wealth for families from the top half of the income distribution is not associated with a decreased likelihood of downward mobility in subsequent generations, with the exception of housing wealth for black families, which does have a negative association with downward mobility.

Spurious correlation could be a factor if an underlying parental characteristic such as risk-aversion or propensity to save both contributes to parental wealth and affects children's future income. However, as discussed in Pfeffer and Hällsten (2012), these factors would have to impact both parental wealth and children's income in the same direction to result in an overestimation of these estimates. Pfeffer and Hällsten (2012) detail how many unobserved characteristics would likely affect parental wealth and children's income in opposite directions. For example, risk aversion would lead to greater parental wealth due to a desire to save more, but would also lead children to be less likely to take risks in educational and entrepreneurial ventures that could potentially result in higher future incomes.

While these findings are compelling, additional research needs to be undertaken to fully understand potential policy implications. With dramatic disparities in parental wealth by race, largely driven by differential rates of inheritance, policy has the potential to intervene in asset taxation, asset creation, and prioritization of asset ownership. However, this analysis raises some important concerns about the potential hazards of home ownership among low-income black families. The fact that home ownership also does not have a positive association with upward mobility for low-income white families (although it does not have a negative association either) suggests that perhaps asset creation programs targeted at low-income families should focus on assets other than home ownership, such as financial assets which were found to be positively associated with both black and white upward mobility. Furthermore, future research should aim to find causal evidence as to the role of parental wealth in assisting upward or preventing downward mobility, although finding valid causal instruments is a challenging endeavor.

Finally, this analysis finds that it is not only in the current economic crisis that homeownership has been problematic for low-income families. This analysis

shows that homeownership in the mid–late 1980s was also associated with negative outcomes for low-income families, especially black families. While sub-prime mortgages and predatory lending practices can be to blame for some of the housing failures in recent years, this analysis suggests that differential returns to housing investments are likely responsible for historical differences. This is consistent with previous research which found that low-income blacks had skewed access to mortgage and housing markets, which led to differential rates of housing appreciation (Charles and Hurst, 2002; Oliver and Shapiro, 2006). This earlier research has also found that homes in black neighborhoods appreciate much more slowly than homes in predominantly white neighborhoods. Alternatively it is possible that low-income black families were disproportionately denied credit to buy a new home or improve their existing one, which is why we see heterogeneous returns to home ownership. Future research should explore which is the case, and see whether policy can at least partially remedy differential returns to home ownership among low-income families. Until then, reframing the American Dream to focus less on home ownership and more on savings could potentially provide better generational returns for low-income families.

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SUPPORTING INFORMATION

Additional Supporting Information may be found in the online version of this article at the publisher’s web-site:

Appendix: Tables and Figures

Figure A1: Median Family Net Worth 1984–2009

Figure A2: Median Family Net Worth Excluding Home Equity 1984–2009

Table A1: Demographic Characteristics of Sample by Race and Parental Ranking

Table A2: Parental Wealth Holdings by Asset Type and Race, 1984–89

Figure A3: Distribution of Children with Parent Income Rank ≤ 20

Figure A4: Distribution of Children with Parent Income Rank > 50

Table A3: Likelihood of Upward Mobility by Race

Figure A5: White-Black Upward Mobility Gap

Table A4: Likelihood of Downward Mobility by Race

Table A5a: Likelihood of Upward Mobility by Race—Adjusted by Family Size

Table A5b: Likelihood of Downward Mobility by Race—Adjusted by Family Size

Table A6: Decomposition of the Effects of Wealth on White-Black Upward Mobility Gap