## WEALTH IN THE EXTENDED FAMILY

## An American Dilemma

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#### Abstract

This paper argues that researchers may be misgauging family resources by focusing narrowly on the nuclear family when measuring these resources. While social scientists have long been interested in the ways that families' material resources affect their ability to provide for their offspring, the traditional measures of family resources have emphasized parents' income and parents' wealth, although the interest in the latter is relatively new (Conley 2009 [1999]; Haveman et al., 2001; Oliver and Shapiro, 2006 [1995]). This paper attempts to shift the focus to the extended family, and it uses data from the Panel Study of Income Dynamics (PSID) and the Child Development Supplement (CDS) to paint a portrait of the volume of wealth that is available in the grandparent generation of a child's family tree. After theorizing about the potential ways that grandparent wealth can affect children's life chances, the research shows that there are substantial differences in extended-family wealth by race. The Black/White wealth ratio is on the order of 0.11 in the grandparent generation at the median, which indicates that the typical Black child has grandparents with only about eleven cents of wealth for every dollar that the grandparents of the typical White child possess. Some implications of this wealth gap for children and society are discussed.

Keywords: Racial Wealth Inequality, Children, The Black Family, Social Stratification

#### INTRODUCTION

In 1995 Oliver and Shapiro's *Black Wealth/White Wealth* transformed the field of inequality research by arguing that income is an insufficient measure of family resources and that researchers need to consider wealth to fully understand the nature of inequality and the structure of opportunities in U.S. society. Since that time there has been extensive empirical research conducted on the connections between parents' wealth and their children's outcomes (Conley 2009 [1999]). Researchers have found that measures of parental wealth or assets are positively associated with high school completion, college graduation, reduced risk of teen

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pregnancy, and measures of academic achievement while in school (Conley 2009 [1999]; Orr 2003).

That researchers who are interested in children routinely pose questions about parents' resources will surprise no one. While children may spring full-grown from their parents in mythology, in real life children must be nurtured into adulthood by their families. Part of the nurturing process involves paying for activities related to child-rearing, be it mundane but necessary goods and services such as food; or other items that contribute to children's development such as schooling and extracurricular activities like piano lessons. In Western society the typical conceptualization of the family today involves the nuclear family as the basic unit of operation. The research on family wealth has reflected this standard conceptualization. The vast literature spurred by Oliver and Shapiro's work has largely overlooked the possibility that wealth in the extended family also may play a role in shaping individuals' opportunities. This paper argues that when thinking about children's life chances and the benefits that family wealth bestow upon an individual, it would behoove scholars to examine grandparent wealth rather than focusing solely on parental wealth.

#### THE SIGNIFICANCE OF WEALTH INEQUALITY

Why did Oliver and Shapiro (1995) argue that it is essential to examine wealth differences across families in order to truly understand differences in well-being? As noted by these and other scholars, wealth differs from income in two fundamental ways. First, it serves as a reservoir that a family can tap into when its income flow is disrupted. For example, a family with substantial savings—which is what wealth represents—is likely to experience less disruption to its normal life during a recession and less stress than other families are. The family with savings can use its wealth to finance consumption, while other families may be forced to reduce consumption due to an inability to pay for the goods and services they normally purchase. Wealth is also special because it can be leveraged to acquire additional assets. For example, an individual with substantial financial assets, such as a large balance in a savings account, will find it easier to meet the downpayment requirement that typically is required to acquire a home (a tangible asset). Many asset markets have entry costs, requiring a person who wants to buy the asset to advance a significant sum. Individuals with substantial savings can cover such fixed costs more easily than other individuals. These special characteristics of wealth make wealth inequality different from income inequality. Studying wealth differences in the population tells one about potential differences in the stability of consumption over time, and provides a more expansive view of the differences in opportunities that different families' children will have available to them than measures of income inequality do.

Since this recognition that wealth inequality is fundamentally different from income inequality, there have been several empirical studies that document the extent of racial wealth inequality in the United States (Gittleman and Wolff, 2004; Hurst et al., 1998; Keister 2000; Leigh 2006; Scholz and Levine, 2004; and Wolff 2001, 1998, 1996). While this empirical research traditionally has examined the nuclear family (treating single or married/cohabitating pairs of adults as the measurement unit), recent research points to the possibility that other family members' wealth also may play a role in determining the opportunities that children have in life.

## THEORIZING ABOUT THE ROLE THAT GRANDPARENT WEALTH MIGHT PLAY

What have scholars normally had to say about the specific ways that family resources create opportunities for children? Answering this question can help one envisage ways that grandparent wealth might benefit children. Much of the research within economics has analyzed family resources from the standpoint of an investment framework—focusing on ways that family resources enable families to make expenditures that contribute to the well-being of children and to child development. Gary Becker's (1991) parental investment model, presented in A Treatise on the Family, represents the standard framework that economists use. In this model, parents are assumed to distribute their income across two different types of expenditures consumption goods and education for their offspring—subject to a family budget constraint. Parents with greater resources will be less constrained than other parents, and they therefore can purchase more of both items. Hence their children will be expected to enjoy a higher level of consumption, and to receive more and higher quality education than children whose parents have few resources. While there is an extensive literature exploring the parental investment hypothesis—including a lively debate about how to properly estimate the effects of parents' "money" versus other parent characteristics that may affect a child's outcomes—the general thinking guiding this research area is as laid out in Becker. The works of Black and Sufi (2002), Blau (1999), Dahl and Lochner (2005), Duncan and Brooks-Gunn (1997), and Haveman et al. (2001) provide examples of research that uses Becker's framework.

The approach to thinking about ways that family resources might matter is somewhat similar in sociology. However, the sociology literature on family resources has examined processes other than parental investment. In discussing the links between parents' resources and child outcomes, the sociology literature also has emphasized effects that low resources can have on parental stress and parents' ability to monitor their children (Mayer 1997). Psychologists, too, often emphasize the role of mechanisms related to parenting in determining child outcomes, as opposed to resources per se (Davis-Kean 2005; Parker et al., 1999). This literature argues that there may be a relationship between low income and parenting skills, parenting styles, and parents' expectations. If so, the home environment, parent behaviors, and other family processes may mediate the effects that material resources have on children's outcomes.

Much of the aforementioned research that theorizes about the connection between family resources and children's development has focused on parental income. As noted earlier, it was not until Oliver and Shapiro's path breaking *Black Wealth/White Wealth* and Dalton Conley's seminal *Being Black and Growing Up in the Red* that researchers in the social sciences began to turn their attention to parental wealth.

It is possible to use this literature on parental resources to theorize about ways that grandparent wealth might influence children's life chances. First, following the logic of Becker (1991), if parents are willing to invest in their children for altruistic reasons, then it is reasonable to posit that grandparents may be as well. The argument is particularly compelling given two demographic trends that have characterized the United States in recent years. Longer life expectancy for adults means that more individuals are living long enough to see their grandchildren grow up, and to form bonds with them (Bengtson 2001; Gauthier 2002; Silverstein and Long, 1998). Additionally, recent scholarship has noted that the length of time that it takes human offspring to transition into adulthood has increased in the past few decades (Danziger and Rouse, 2007; Fussell and Furstenberg, 2005; Schoeni and Ross, 2005;

Shanahan et al., 2005). Today's children often are dependent on their families longer than previous generations were. Putting these two trends together we theorize that if many grandparents now survive to see their grandchildren grow up, they can serve as an additional source of funds for purchases that might be needed to ensure the latter's development.<sup>2</sup>

## NEW EVIDENCE: WEALTH INEQUALITY THROUGHOUT THE EXTENDED FAMILY

With what follows we seek to spark a conversation about the way social scientists measure family resources. We present data characterizing grandparent wealth by race in order to provide a sense of the amounts of wealth held in different generations and the magnitude of the differences that exist by race within the extended family. The analysis focuses on Blacks and Whites because data limitations do not permit us to analyze other racial and ethnic subgroups separately.

#### Data

There are few nationally representative datasets containing information about children, families, wealth, and different generations all in one place. The Panel Study of Income Dynamics (PSID) is unique for this reason.<sup>3</sup> It began in 1968 and has followed both the original families in the sample and their offspring over time, surveying them annually until 1997 and biennially since 1997. Accordingly, the PSID has adults and their parents as respondents. Moreover, in 1997 the PSID added a special supplement designed to provide detailed information about the children in PSID families. Data for this supplement, the "Child Development Supplement (CDS)" are collected every five years. In what follows, we analyze data from both the CDS and the PSID core to determine how much wealth exists in different generations of a child's family. The analysis uses children from the 2002 CDS as the focal point, and it identifies the wealth held by the families in which they reside using the 2001 wealth data. Then, making use of the PSID's multigenerational structure, we identified the grandparents of the CDS children, and obtained their wealth in 2001 as well. These data allow us to provide a snapshot of wealth differences throughout the family tree. The 2002 CDS contains information about 2907 children age five to eighteen. It was possible to obtain grandparent wealth information for 1668 of these children.5

# A Portrait of Extended Family Wealth: Children, Parental Wealth, and Grandparent Wealth

Two measures of family wealth are available in the PSID. Both are net worth measures that are created by taking the value of a family's assets and subtracting the value of the family's debts. However, one measure tracks net worth excluding home equity. The second reports net worth including home equity. The latter is the broadest measure of wealth available, as most U.S. families traditionally have held the majority of their wealth as equity in their homes.

Table 1 reports mean and median values for wealth in the different generations of the family tree for the average child using both PSID wealth measures.<sup>6</sup> Examining family wealth including home equity one finds there is about \$219,790 in wealth in the parent generation of a child's family tree at the mean, while the median nuclear

Table 1. Wealth throughout the Different Generations of a Child's Family Tree

	Mean	Mean for Families with Positive Wealth	Median	Medians for Families with Positive Wealth
Parental wealth				
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Wealth not including home equity	\$153,842	\$192,549	\$17,880	\$28,500
	(36,220)	(44,637)		
Wealth including home equity	\$219,790	\$251,531	\$52,400	\$72,000
	(38,454)	(43,605)		
Grandparent wealth				
Wealth not including home equity	\$352,718	\$391,645	\$76,000	\$104,700
	(32,284)	(38,810)		
Wealth including home equity	\$454,388	\$477,734	\$174,500	\$198,250
3 1 ,	(37,540)	(39,278)		

Notes: All values are weighted. N = 1668. Standard errors in parenthesis. All dollar values are in 2001 dollars.

family only has about one-quarter of this amount (\$52,400). There is more wealth in the grandparent generation than there is among parents: mean wealth in the grandparent generation is about \$454,388 when wealth including home equity is considered, and the median is \$174,500. That wealth is higher in the grandparent generation is not surprising however, because grandparents are older and therefore will have had more time to accumulate wealth. Additionally, as one might expect, wealth-based measures of family resources indicate that families have more resources at their disposal than income data suggest. Mean (nuclear) family income was only \$79,233 in our sample, which is much lower than the mean value of wealth reported above.

Table 2 compares extended-family wealth by race. As shown in the table, the average White child has more wealth in his extended family than the average Black child. When examining net worth including home equity, one finds that the average Black child lives in a family with less than ten percent of the wealth of the average

**Table 2.** Wealth throughout the Different Generations of the Family Tree by Race (in dollars)

	Me	ean	Me	edian
	Black	White	Black	White
Parental wealth				
Wealth excluding home equity	7,926	178,592	1,000	24,700
	(2,074)	(42,308)		
Wealth including home equity	18,002	253,808	2,160	72,000
	(2,978)	(44,859)		
Grandparent wealth				
Wealth excluding home equity	38,249	402,177	6,000	115,200
	(11,976)	(40,766)		
Wealth including home equity	63,526	516,083	24,375	227,000
	(12,867)	(43,244)		·

Notes: All values are weighted. N = 1668. Standard errors in parenthesis. All dollar values are in 2001 dollars

White child's family (about \$18,000 compared to \$254,000). The actual Black/ White wealth ratio in the parent generation is 0.07 at the mean, and 0.03 at the median. The average White child also has wealthier grandparents than the average Black child does—about eight times as wealthy using wealth including home equity as the measure of net worth. This corresponds to a Black/White wealth ratio of 0.12 in the grandparent generation at the mean, and a corresponding figure of 0.11 for the median. These data reveal that the inequities that are typically noted in the extant literature on nuclear family resources persist throughout the extended family. More specifically, the typical Black child's grandparents have only about eleven cents for every dollar of net worth that the typical White child's grandparents have.

Table 3 divides children into two groups: those whose elders have some wealth and those whose elders have no wealth. Almost twenty percent of children live in nuclear families with no wealth, i.e., zero or negative net worth, if home equity is excluded from the net worth measure; while about twelve percent of children reside in families with no wealth according to the net worth with home equity measure. These families can be considered to be asset poor. Previous research has noted that asset poverty exposes families to risk of hardship because savings represent funds that can be used to tide a family over when there are shocks to income (Caner and Wolff, 2004; Haveman and Wolff, 2004, 2005). The standard definition of asset poverty within economics defines households as asset poor if they do not have sufficient savings to finance at least three months of consumption expenditures (Caner and Wolff, 2004; Haveman and Wolff, 2004, 2005). Families with no wealth certainly meet this criterion.<sup>10</sup>

Table 3 also reveals that almost ten percent of children have grandparents with no wealth using the net worth measure that excludes home equity. Only about five percent have grandparents without wealth if one uses the net worth with home equity variable to gauge wealth, however. Accordingly, the proportion of children with grandparents who have some savings is greater than the proportion whose parents do.

One also can use Table 3 to examine race differences in lack of wealth throughout the family tree. While only about nine percent of White children have parents with no wealth (using the net worth with home equity measure), about thirty-four percent of Black children have parents with zero or negative wealth. In the grandparent generation, only about four percent of White children have grandparents with no wealth when housing wealth is included in the wealth measure, and about ten percent of Black children do. However, when considering the prospect of grandparents contributing funds to assist in the rearing of the grandchildren, net worth excluding home equity is arguably the better net worth measure to examine because it indicates the amount of savings that grandparents have that is not tied up in their

Table 3.	Percentage	of Children	with	Wealth in	Different	Generations	of the	Family	7 Tree

		arental alth		Parental alth	No Grandparent Wealth		Some Grandparent Wealth		
	Wealth1	Wealth2	Wealth1	Wealth2	Wealth1	Wealth2	Wealth1	Wealth2	
All children White children Black children	19% 16% 39%	12% 9% 34%	81% 84% 61%	88% 91% 66%	10% 7% 27%	5% 4% 10%	90% 93% 73%	95% 96% 90%	

Notes: All values are weighted. N = 1668. The term "Wealth1" refers to the PSID wealth measure that excludes home equity. "Wealth2" indicates calculations involving the net worth including home equity measure.

home. Because grandparents still need somewhere to live during retirement, one might consider this variable the best indication of the amount of funds that grandparents would have available to spend on their grandchildren. As shown in the table, using wealth without home equity as the measure of grandparents' savings we find that about seven percent of White children have grandparents with no wealth, and ninety-three percent have grandparents with positive wealth. However, only about seventy-three percent of Black children have grandparents with positive wealth. The findings suggest that, for some children, the advantage of growing up in a family of means may extend beyond simply having parents with resources; there may be additional privilege conferred to some due to their being fortunate enough to have wealthy grandparents. African American children are less likely to have such an advantage than White children are.

## Wealth throughout the Extended Family for Special Sub-groups of the Population

What about the situation of the middle class? "Middle class" is a status imbued with particular meaning in the United States. The term conjures images of a situation in which a family is doing well and has achieved some measure of success. Advancing into the ranks of the middle class has long been considered a symbol of progress for African Americans. How do African American children in middle-class families fare compared to their White counterparts? Tables 4 and 5 show mean and median wealth throughout the extended family for children living in middle-income families and in families whose heads have attended college.<sup>12</sup>

#### Children from Middle-Income Families

Table 4 indicates that middle-class status does not guarantee equal resources for Black and White families or their children. When one examines wealth excluding home equity one finds that the typical (or median) middle-class Black child resides in a nuclear family that has only about twelve cents of wealth for every dollar held by the family of the typical (or median) White child. The Black/White ratio is similar at the median when wealth including parents' home equity is used to measure household savings. These data indicate that there is no parity among middle-class children.

Table 4 also shows that there are wealth differences in the grandparent generation for middle-class children. The typical (or median) Black child from a middle-income family has grandparents who have about twelve cents of wealth for every dollar that the typical (or median) middle-income White child's grandparents possess, when grandparent wealth is measured excluding home equity. Upon including home equity, one finds that the typical middle-income Black child's grandparents have about fifteen cents of wealth for every dollar held by the grandparents of typical middle-income White child.

## Children from Families with Post-Secondary Schooling

It is also common to use indices of educational attainment to identify middle-class households, as an alternative to relying solely on income-based measures of class (Oliver and Shapiro, 1995; Shapiro 2004). While it is ideal to use having a college degree to identify households that can be considered middle class by educational standards, sample size limitations prevent us from providing data covering the wealth

**Table 4.** Wealth throughout Different Generations of the Family Tree for Children from Middle-Income Families

	M	ean	$M\epsilon$	edian
	Black	White	Black	White
Panel A—Mean and A	Median Wealt	h Levels (in d	ollars)	
Parental wealth				
Wealth excluding home equity	9,802	65,428	2,500	20,400
	(3,097)	(7,189)		
Wealth including home equity	24,001	119,747	8,000	63,000
	(5,085)	(9,238)		
Grandparent wealth				
Wealth excluding home equity	24,807	398,725	12,350	104,200
	(4,516)	(53,093)		
Wealth including home equity	49,755	508,701	29,490	202,100
	(6,394)	(55,527)		
Panel B—Per	centages with	n No Wealth		
Parent generation				
Percent with no wealth (Wealth 1)	31.2%	16.4%		
Percent with no wealth (Wealth 2)	25.4%	8.6%		
Grandparent generation				
Percent with no wealth (Wealth 1)	18.3%	7.2%		
Percent with no wealth (Wealth 2)	7.4%	3.5%		

Notes: N = 927. Wealth-1 is wealth without home equity. Wealth-2 is wealth including home equity. Standard errors are in parenthesis. All dollar values are in 2001 dollars.

of Black and White families with college degrees. Instead, we grouped households that acquired some post-secondary schooling together and present data for these families in Table 5.

Among children residing in families where parents have some college education, we find substantial differences in the amount of wealth that the families and their children have access to, both in the nuclear family and in the extended family. The typical Black child in a family with some college has parents who have about \$2,400 of wealth when home equity is excluded, and \$5,000 in wealth if home equity is included. This represents only a small fraction of the amount of wealth that the typical White child whose parents have attended college has access to. For the latter, median nuclear family wealth is \$42,500 when measured by wealth excluding home equity, and \$114,000 when home equity is included. These figures translate into Black/White wealth ratios of about 0.05 or 0.06, indicating that the typical Black child's nuclear family has only about five or six cents of wealth for every dollar that is held by the typical White child's parents.

The differences persist in the grandparent generation. The grandparents of White children from college-going families have about twelve to fifteen times more wealth than the grandparents of the typical Black child, at the median. These data suggest that being the offspring of parents who have attended college does not guarantee that Black children have the same level of resources in the extended family as White children.

Table 5. Wealth in Different Generations for Children in Families with Some College

	М	ean	Me	edian
	Black	White	Black	White
Panel A—Mean and M	Imedian Wea	lth Levels (in	dollars)	
Parental wealth				
Wealth excluding home equity	6,693	275,562	2,400	42,500
	(4,230)	(73,185)		
Wealth including home equity	18,772	376,662	5,000	114,000
	(5,695)	(77,344)		
Grandparent wealth				
Wealth excluding home equity	61,894	533,904	12,350	192,000
	(34,972)	(64,843)		
Wealth including home equity	98,126	673,470	27,200	329,000
	(37,245)	(68,409)		
Panel B—Per	centages with	n No Wealth		
Parent generation				
Percent with no wealth (Wealth 1)	29.9%	15.6%		
Percent with no wealth (Wealth 2)	26.9%	7.3%		
Grandparent generation				
Percent with no wealth (Wealth 1)	17.7%	6.1%		
Percent with no wealth (Wealth 2)	8.7%	3.8%		

Notes: N = 765. College attendance is measured for the household head's years of schooling; any family whose head has more than twelve years of schooling is classified as having "some college." Wealth-1 is wealth without home equity. Wealth-2 is wealth including home equity. Standard errors are in parenthesis. All dollar values are in 2001 dollars.

## GRANDPARENT WEALTH AND GRANDCHILDREN'S SCHOOLING: CASE STUDIES ON THE POTENTIAL IMPORTANCE OF GRANDPARENT WEALTH

Why care about wealth differences by race throughout the family tree? Emerging evidence from qualitative sociological research suggests that some adults rely on their parents for financial assistance when they reach a point in the lifecycle in which they have to make schooling-related choices for their own children. For example, ethnographic research discussed in Shapiro's (2004) The Hidden Cost of Being African American indicates that parents with wealth sometimes help their adult children secure quality schooling for the latter's offspring, either by assisting with home purchases in good neighborhoods or by paying for private school tuition for the grandchildren in instances in which the adult children (the grandchild's parents) are unable to afford to do such independently. Shapiro's qualitative research examines middle-class families and working-class families. His findings are underscored by sociologist Heather Beth Johnson's (2006) findings in The American Dream and the Power of Wealth. In this text Johnson presents results from a qualitative study of middle- and upper-class families in the United States that was conducted in 2003, juxtaposed with qualitative evidence collected from an ethnographic study of families across the income distribution in the late 1990s. Johnson finds that many of the parents in the sample of wealthy families were able to identify numerous instances in

which they had received financial transfers from their own parents, particularly transfers directed at allowing them to make sure that their children were able to attend 'good' schools. Johnson notes that while all parents expressed strong educational aspirations for their children, it was the middle- and upper-class White parents that were particularly effective at securing the schooling environment that they coveted for their children, and that many of these parents acknowledged the role of the child's grandparents in making this possible. That some parents relied on their own parents in order to avoid schools in which they believed that their children would not be challenged or be safe is illustrated by the story of the Haynes family of Hermosa Beach, California (Johnson 2006).<sup>13</sup> The Haynes family decided to live in Hermosa Beach because they wanted to avoid the LA Unified School District. When asked how they came to own their home in Hermosa Beach, the couple explained that the wife's father came up with a sizeable downpayment for the home and allowed them to put the mortgage in his name because the couple would not have been able to buy into this community on their own. Melanie and Troy Haynes explained that their child's grandfather wanted his grandchild in the 'right' schools just as they did. Interviews with other parents revealed a similar theme; Johnson writes that reports of help with downpayments were common among the White parents in her middleand upper-class sample, and that when speaking of their parents' help most couples reported it to be 'only natural to want to help out your kids and grandkids' (Johnson 2006, p. 63).

We used nationally representative data from the PSID's Transition to Adulthood Supplement to explore the themes that emerge in Shapiro (2004) and Johnson (2006). Specifically, we followed the children from the 2002 wave of the CDS into adulthood. The PSID re-surveyed many of these 'children' in its Transition to Adulthood ("TA") module in 2005. The TA supplement gathers data on individuals as they reach the critical life point at which they are moving from being minors who are dependent on their families to adults who act and live independently. Respondents in the 2005 wave are former CDS kids who have reached the age of eighteen and who have completed high school or dropped out. For ease of exposition, we call these individuals "young adults." The young adults in the TA supplement may be living at home or away at college for part of the year, or they may be individuals who have set up their own households. Because of the connection between the TA and the CDS, the data are ideal for investigating the effect—if any—of grandparent wealth on the educational prospects of the children described in Tables 1-5. Moreover, because the PSID data are nationally representative, they can serve as a check on the degree to which the processes that the Shapiro (2004) and Johnson (2006) families recounted reflect broader societal trends rather than the isolated experiences of a few.

Table 6 shows the results of multivariate probit regressions that analyze the association between grandparent wealth and two educational outcomes: (a) whether the young adult ever attended college and (b) whether the young adult currently is enrolled in college. The table reports results from the analyses that use wealth-2 as the measure of family wealth. The results when using wealth-1 were qualitatively similar.

Does grandparent wealth appear to affect their grandchildren's circumstances? Consider first the models that measure college attendance as ever having attended college. This measure is broad enough to include young adults who currently are enrolled, along with those who are old enough to have completed their degrees. As shown in the table, the association between grandparent wealth and college attendance is positive and statistically significant. Examining the marginal effects reveals

Table 6. Results from the Probit Regression Analysis

	Mode is E	l A: Dependate Attend	Model A: Dependent Variable is Ever Attended College	Mode	l B: Dependent Va is in College Now	Model B: Dependent Variable is in College Now
	B	SE	Marginal Effect (t-stat)	В	SE	Marginal Effect (t-stat)
Regressor Male	.0916	1931	.0263	.2022	.2091	.0637
Black	0960.	.2551	(0.47) .0268	.1295	.2736	(0.97)
Mother's education	.2203	.0612	(0.38)	.2521	9290.	(0.47) .0796***
Number of children in the nuclear family	1733	.1123	(3.60)0499	1305	.1143	(3.84) —.0412
Average Jabor income of parents (measured in thousands)	2900.	.0039	(-1.54) .0019	9900.	.0039	(-1.14) $.0021*$
Parental wealth (measured in hundred-thousand dollar units)	.093	.051	$(1.68)^*$ $.0143^*$	.094	.048	(1.67) $.0030*$
Grandparent wealth (measured in hundred-thousand dollar units)	.067	.036	(1.81)	.072	.036	(1.95)
Wald spatietic			(1.86)			(2.00)
Pseudo R-square			.2451			.2870
$\mathbf{z}$			319			277

Notes: All regressions use weighted data and robust standard errors that are corrected for clustering. All regressions include a constant. The marginal effect column gives the change in probability of college attendance associated with a one unit change in the independent variable.  $\beta$  is the accompanying coefficient estimate and "SE" denotes the standard error of the coefficient. \*p < 0.00; \*\*\*p < 0.05; \*\*\*p < 0.01

that a \$100,000 increase in grandparent wealth is associated with a 1.9% increase in the probability of attending college when wealth including home equity is used to measure wealth.<sup>14</sup> The coefficient is statistically significant at the ten percent level not the five percent level.<sup>15</sup> This positive association exists although parental income and parental wealth have been taken into account, indicating that grandparent wealth appears to matter for grandchildren's outcomes in addition to nuclear family income and wealth. Table 6 also shows that one's mother's education is positively associated with college attendance, and that parental income and parental wealth have a positive and statistically significant association with entering college.

For the second dependent variable—whether one is in college now or not—Table 6 shows that a \$100,000 increase in grandparent wealth is associated with a 2.3% increase in the probability of college attendance when wealth-2 is used to measure grandparent wealth. As with the first measure of college attendance, maternal education, parental income, and parental wealth also are positively associated with college attendance.

The regression output reported in Table 6 indicates that grandparent wealth is positively associated with grandchildren's educational outcomes at the national level. This finding supports the hypothesis that grandparent wealth can be viewed as an additional resource that is sometimes used to support a family's youngest generation. The results also suggest that the inferences that Shapiro (2004) and Johnson (2006) drew from their qualitative studies likely apply to the national population. While the ethnographies both explored the connection between grandparent wealth and education at the elementary and secondary school levels, our study of post-secondary schooling certainly complements theirs.

#### DISCUSSION

In this section we discuss the implications of our findings and situate them in the context of existing multigenerational research. We also offer some caveats and ideas for future research.

## The Dilemma that Extended Family Wealth Creates

The Nobel-prize winning economist Milton Friedman once wrote that equality of opportunity reflects the ideal that, "Not birth, nationality, color, religion, sex, nor any other irrelevant characteristic should determine the opportunities that are open to a person—only his abilities" (Friedman and Friedman, 1979, p. 132, emphasis added). In a nation in which the myth of the self-made man persists and Horatio Alger-style imagery dominates thinking and discourse about individual outcomes, African Americans often find themselves put in a position in which they have to explain any apparent lack of success relative to other groups. The rhetoric of the United States as a land where opportunity is equal and bountiful is so pervasive that citizens sometimes forget that many opportunities are endogenous to the family, that is to say that the family serves as a space where opportunities get created. While a careful reading of the Friedmans' text reveals that their primary concern was that there be no "arbitrary obstacles" put in an individual's path, it is unclear how much equality of opportunity a nation can have if some families provide boosts to their offspring that others cannot provide.<sup>17</sup> Shapiro (2004) has noted that Americans cherish the notion of equality of opportunity but often are equally fierce in their defense of the right to pass advantages on to one's children. Because society holds two ideals that are in conflict with one another, a dilemma exists. Until the dilemma is resolved the "racial patterning of opportunities" that Shapiro warns of, which arises as White families use their substantial wealth to create advantages for their offspring, is likely to continue.

## Contextualizing the Findings in the Existing Literature on Extended Families and Intra-Family Transfers

We should note that our study is not the first to raise questions about the extended family and transfers within it. There is a large literature within the social sciences on kin networks and exchanges within families (Hofferth 1984; Raley 1995; Schoeni 1992; Stack 1974; Taylor et al., 1988). Carol Stack's *All Our Kin* is a classic text in this field. It documents ties among relatives and is part of a larger literature on ways that individuals within families often provide social and financial support to one another. Our research can be viewed as adding to this literature. By painting a portrait of the wealth that exists in different branches of the family tree we learn more about the characteristics of kin networks. By examining the association between grandparent wealth and grandchildren's educational outcomes we contribute to the body of research detailing specific ways that participation in kin networks can benefit families.

Our discussion of the role of the extended family and its wealth has ignored the possibility that flows within the extended family may move in a number of different directions. As such, it should be considered just one part of an inquiry into wealth and the extended family. For example, Heflin and Pattillo (2002, 2006) and Chiteji and Hamilton (2005) argue that both the levels of wealth that middle-class families have and their probability of owning specific assets, such as a home, stocks or a bank account, are influenced by the number of poor kin that the middle-class family has. This suggests that some families may be making transfers outward rather than receiving transfers from their parents, which would reduce the amount of wealth that they have. Because Heflin and Pattillo (2006) have shown that middle-class Blacks are more likely to have poor relatives than middle-class Whites are, it is likely that middle-class Black families are more likely to have members of the extended family calling on them for help than Whites do, leaving the former with fewer resources for their children. Accordingly, the extended family may not always be a potential source of funds for all families, but may serve as a drain on funds for some nuclear families with children, providing an additional reason that some White children have advantages that some Black children do not have.

While discussing the existing scholarship covering transfers within extended families, it seems useful to offer commentary on how our work relates to the literature on inheritances. Of all the possible types of inter-family transfers that exist, inheritances probably have received the most attention in the scholarly literature. Within economics, the term "inheritance" typically is reserved for transfers made after an individual is deceased. Economists use the term "inter-vivos transfers" to describe gifts or transfers that are made while one is alive. Accordingly, in our analysis inheritances will show up in the wealth of the recipient generation once the inheritance has been given. Estimates suggest that over seventy percent of inheritances are received by individuals who are age forty or older, and that fewer than one percent are received by individuals under the age of twenty-five (Wilhelm 2001). This implies dependent minors are not likely to be the recipients of inheritances. Instead, inheritances are likely to be reflected in the wealth that their parents have. We acknowledge, however, that inheritances represent another way that children may benefit from being in extended families that are wealthy. 18

## Characterizing the Extended Family

We would be remiss if we failed to note that we have talked throughout the paper about the "extended family" even though our wealth data only characterize the wealth of parents and grandparents. We recognize that this leaves the circumstances of other kin, such as aunts and uncles, unexamined, making our characterization of wealth within the extended family incomplete. Accordingly, our work should be considered a starting point—hopefully a useful one for sparking further conversation about the role that private family wealth plays in U.S. society. Future work will want to fill in blanks about other branches of the family tree, such as wealth that children's aunts and uncles have.

Another line of possible inquiry for future research is whether extended family wealth may be viewed differently in different family dynasties. Shapiro (2004) has argued that families from different classes hold different perceptions about wealth. Specifically Shapiro states that middle-class families view it as device for creating opportunities, especially for children; while working class families are more likely to view wealth as a rainy day fund to be tapped into when some extended family member experiences a hardship. While Shapiro's argument seems inconsistent with the findings in Heflin and Pattillo (2002), it does offer food for thought. Knowing whether there are differences in the way that grandparent wealth is perceived by different families would benefit the scholarly community. Future research may want to conduct multivariate analyses by class to see if the effects of grandparent wealth vary across the socioeconomic spectrum.

#### CONCLUSION

The analysis presented in this paper reveals that there are some children who have grandparents who possess significant amounts of wealth, but that African-American children do not tend to be in this group. It also underscores Oliver and Shapiro's finding that the wealth divide across American families is deep. While most researchers recognize that individuals do not achieve the outcomes that they attain without some help from their family, most of the existing literature examining how children benefit from their families' economic circumstances highlights the resources of the nuclear family. Our analysis reveals that a narrow focus on parental resources misses wealth available elsewhere in the family tree. Looking beyond the nuclear family into the extended family reveals further gaps between families' resources. This observation has implications for studies of the family, and for studying inequality. The research suggests that a focus on parental wealth may understate the degree to which White children are advantaged, on average, relative to African American children. A decade ago Warren and Hauser (1997) expressed concern that specifying an individual's "family of origin" in terms of the characteristics of the individual's parents might amount to taking a limited approach. The research in this paper suggests that such concern is warranted.

The research also has implications for public policy discussions. The findings suggest that public discourse and our assessments of one another as citizens should be couched in a recognition of the fact that many of our opportunities are created by our elders. Such thinking about ways that family wealth may create opportunities for individuals and the vastness of the racial wealth divide provides an opportunity for all Americans to refresh their collective understanding of the structure of U.S. society so that individuals whose outcomes lag behind others' are not judged unfairly. Concomitantly, the findings underscore Thomas Shapiro's observation that it is

possible to obtain a unique perspective on advantage and disadvantage if wealth is used as the marker of racial inequality (Shapiro 2004).

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#### **NOTES**

- 1. The education effects can be both in the form of formal schooling and informal learning at home that is made possible by books that parents buy, or tutoring services and other enrichment activities.
- 2. There are other ways that grandparents may help their grandchildren. For example, research suggests that grandparents may provide childcare services for their grandchildren, and that some grandchildren live with their grandparents (Bachman and Chase-Landsdale, 2005; Mutchler and Baker, 2004). A discussion of these ways that some grandparents may help their grandchildren is outside the scope of this paper.
- 3. The PSID collects data on a wide range of economic and socio-demographic variables, and contains data on wealth holdings, asset ownership and debt; and extensive information about the children of PSID families and their activities. The dataset is unique in that it contains information about different generations of any given family, and offers the ability to match different households with their relatives—both within and across generations—which means it can be used to construct multi-generational extended families.
- 4. The wealth data are available biannually only.
- 5. There were some children for whom no grandparent wealth information could be found in the 2001 PSID wealth file. The absence of grandparent wealth information can be attributable to the grandparents being deceased, or to their having dropped out of the PSID in the year in which the wealth data was collected. There also were a few children excluded because they lived with their grandparents, meaning that we cannot consider their grandparents as an additional source of resources for them because their grandparents are the ones raising them.
- 6. All data are weighted.
- 7. In this literature it is standard to measure the "wealth gap" by comparing the ratio of Black wealth to White wealth. The resulting quotient can be interpreted as an indication of how much wealth a Black family has for every dollar of wealth that a white family has.
- 8. Mean wealth in the grandparent generation is about \$63,526 for Black children and \$516,083 for White children.
- 9. Researchers normally deem the median to be the statistic that best reflects the situation of the 'typical' individual or family because the distribution of wealth is highly skewed.
- 10. The definition of asset poverty used here is less restrictive than that of Caner and Wolff (2004), and Haveman and Wolff (2004, 2005). Each of these studies defines a family as asset poor if it cannot sustain a consumption level that meets its basic needs for more than three months with its savings. More specifically, the authors use the poverty thresh-

olds recommended by the National Academy of Science to define the minimum level of consumption that a family should be able to sustain. As Haveman and Wolff (2004) note, this means a family of four would be considered asset poor if it had less than \$4,413 of savings, while a one-person family would need more than \$2,303 of savings to avoid asset poverty, when measured in dollars from the year 2001. Accordingly, a family with positive wealth could still be considered asset poor. Our data therefore can be viewed as a lower bound on the proportion of children who live in families that are asset poor. The sociologist Thomas Shapiro (2004) also uses a three-months-ability- to-meet-the-poverty-line definition of asset poverty. He uses the official U.S. poverty line for his calculations. Shapiro (2004) even formalizes the concept by using language such as "the asset poverty line," which parallels the standard discourse about the income poverty line. See Figure 1.1 of Shapiro (2004) for example.

- 11. Research suggests that few households opt to liquidate their housing wealth during old age (Venti and Wise, 2001).
- 12. We define a child's nuclear family as middle income if it falls within the middle sixtieth percentile of the income distribution, that is to say families who are not in the bottom or top quintiles. This classification mirrors that used in Shapiro (2004). For our analysis, it corresponds to a range of family income of about \$29,900 to \$102,592 in 2001 dollars.
- As is standard in qualitative research, Johnson (2006) altered the names of her respondents to protect their anonymity.
- 14. The same increase in wealth is associated with a 2.3% increase in the probability when wealth-1 is used. A \$100,000 increase is equivalent to about a thirty percent increase in grandparent wealth at the mean.
- 15. In the second regression, discussed below, the coefficient for grandparent wealth is statistically significant at the 0.05 level.
- 16. When the PSID's wealth-1 variable is used to measure grandparent wealth the results are qualitatively similar. A \$100,000 increase in grandparent wealth is associated with a 2.8% increase in the probability of college attendance, and the effect is statistically significant.
- 17. Swift (2005) notes that the fact that the family serves to stifle the realization of equality of opportunity is widely recognized by political and moral philosophers, and that unpacking the moral issues raised by families' behavior is a complicated process.
- 18. There is wide disagreement about the degree to which any individual's measured wealth reflects his or her own saving, rather than inherited wealth. In fact, it is estimated that, on average, inheritances and inter-vivos transfers can make up anywhere from twenty percent to eighty percent of an individual's wealth (Arrondel et al., 1997; Blinder 1988; Gale and Potter, 2003; Kotlikoff and Summers, 1981, 1988; Modigliani 1988). The difference in estimated size depends largely on the methodology that is used. For good summaries of this debate see Arrondel et al. (1997), Wilhelm (2001), and Gale and Potter (2003). What can be said with certainty, however, is that if grandparents use their wealth to leave an inheritance to a dependent minor or to the child's parent, the budget constraint for the receiving family would be eased. Existing research indicates that Blacks are less likely to inherit than Whites (Menchik and Jianakoplos, 1997; Wilhelm 2001). Accordingly, we suspect that inheritances may present another way that White children become advantaged relative to Black children, on average.

#### **REFERENCES**

Arrondel, Luc, Andre Masson, and Pierre Pestieau (1997). Bequest and Inheritance: Empirical Issues and France-U.S. Comparison. In Guido Errygers and Toon Vandevelde (Eds.), Is Inheritance Legitimate? Ethical and Economic Aspects of Wealth Transfers, pp. 89–125. New York: Springer.

Bachman, Heather and Lindsay Chase-Landsdale (2005). Custodial Grandmothers' Physical, Mental and Economic Well-being. Family Relations, 54(4): 475–487.

Becker, Gary (1991). A Treatise on the Family, 2ed. Cambridge, MA: Harvard University Press. Bengtson, Vern (2001). Beyond the Nuclear Family: The Increasing Importance of Multigenerational Bonds. *Journal of Marriage and the Family*, 63 (1): 1–16.

erational Bonds. *Journal of Marriage and the Family*, 63 (1): 1–16. Black, Sandra and Amir Sufi (2002). Who Goes to College? Differential Enrollment by Race and Family Background. NBER Working Paper No. 7249.

Blau, David (1999). The Effect of Income on Child Development. Review of Economics and Statistics, 81(2): 261–276.

- Blinder, Alan (1988). Comments on Chapters 1 and 2. In Denis Kessler and Andre Masson (Eds.), *Modeling the Accumulation and Distribution of Wealth*, pp. 68–76. Oxford, United Kingdom: Clarendon Press.
- Caner, Asena and Edward Wolff (2004). Asset Poverty in the United States. *Review of Income and Wealth*, 50(4): 493–518.
- Chiteji, Ngina and Darrick Hamilton (2005). Family matters: Kin networks and asset accumulation. In Michael Sherraden (Ed.), *Inclusion in the American Dream: Assets, Poverty and Public Policy*, pp. 87–111. New York: Oxford University Press.
- Conley, Dalton (2009 [1999]). Being Black, Living in the Red: Race, Wealth and Social Policy in America. Berkeley, CA: University of California Press.
- Dahl, Gordon and Lance Lochner (2005). The Impact of Family Income on Child Achievement. NBER Working Paper No. 11279.
- Danziger, Sheldon and Čecilia Rouse (2007). The Price of Independence: The Economics of Early Adulthood. New York: Russell Sage Foundation.
- Davis-Kean, Pamela (2005). The Influence of Parent Education and Family Income on Child Achievement: The Indirect Role of Parental Expectations and the Home Environment. *Journal of Family Psychology*, 19(2): 294–304.
- Duncan, Greg and Jeannie Brooks-Gunn (1997). Consequences of Growing up Poor. New York: Russell Sage Foundation.
- Friedman, Milton and Rose Friedman (1979). Free to Choose. New York: Hartcourt Brace Jovanovich, Inc.
- Fussell, Elizabeth and Frank Furstenberg (2005). The Transition to Adulthood During the Twentieth Century. In Richard Settersten, Frank Furstenberg, and Ruben Rumbaut (Eds.), On the Frontier of Adulthood: Theory, Research and Public Policy, pp. 29–75. Chicago, IL: University of Chicago Press.
- Gale, William and Samara Potter (2003). The Impact of Gifts and Bequests on Aggregate Saving and Capital Accumulation. In Alicia Munnell and Annika Sunden (Eds.), *Death and Dollars: The Role of Gifts and Bequests in America*, pp. 319–344. Washington, DC: Brookings Institution Press.
- Gauthier, Anne (2002). The Role of Grandparents. Current Sociology, 50(2): 295-307.
- Gittleman, Maury and Edward Wolff (2004). Racial Differences in Patterns of Wealth Accumulation. *Journal of Human Resources*, 39(1): 193–227.
- Greene, William (1997). Econometric Analysis, 3rd edition. Upper Saddle River, NJ: Prentice-Hall.
- Haveman, Robert, Gary Sandefur, Barbara Wolfe, and Andrea Voyer (2001). Inequality of Family and Community Characteristics in Relation to Children's Attainments. Paper prepared for the University of Wisconsin Russell Sage Working Group on Inequality, December 11, 2001.
- Haveman, Robert and Edward Wolff (2004). The Concept and Measurement of Asset Poverty. *Journal of Economic Inequality*, 2(2): 145–169.
- Haveman, Robert, and Edward Wolff (2005). Who are the Asset Poor? Levels, Trends, and Composition, 1983–1998. In Michael Sherraden (Ed.), *Inclusion in the American Dream: Assets, Poverty, and Public Policy*, pp. 61–86. New York: Oxford University Press.
- Heflin, Colleen and Mary Pattillo (2006). Poverty in the Family: Race, Siblings and Socio-economic Heterogeneity. *Social Science Research*, 35 (4): 804–822.
- Heflin, Colleen and Mary Pattillo-McCoy (2002). Kin Effects on Black-White Account and Home Ownership. *Sociological Inquiry*, 72(2): 220–239.
- Hofferth, Sandra (1984). Kin Networks, Race, and Family Structure. *Journal of Marriage and the Family*, 46: 791–806.
- Hurst, Erik, Ming Ching Luoh, and Frank Stafford (1998). The Wealth Dynamics of American Families, 1984 to 1994. *Brookings Papers on Economic Activity*, 1: 267–337.
- Johnson, Heather (2006). The American Dream and the Power of Wealth: Choosing Schools and Inheriting Inequality in the Land of Opportunity. New York: Routledge.
- Keister, Lisa (2000). Wealth in America: Trends in Wealth Inequality. New York: Cambridge University Press.
- Kotlikoff, Laurence and Lawrence Summers (1981). The Role of Intergenerational Transfers in Aggregate Capital Accumulation. *Journal of Political Economy*, 89(4): 706–32.
- Kotlikoff, Laurence and Lawrence Summers (1988). The Contribution of Intergenerational Transfers to Total Wealth: A Reply. In Denis Kessler, and Andre Masson (Eds.), *Modeling the Accumulation and the Distribution of Wealth*, pp. 53–67. Oxford, United Kingdom: Clarendon Press.

- Leigh, Wilhelmina (2006). Wealth Measurement: Issues for People of Color in the United States. In Jessica Gordon Nembhard, and Ngina Chiteji (Eds.), Wealth Accumulation and Communities of Color, pp. 23–66. Ann Arbor, MI: University of Michigan Press.
- Magnuson, Katherine (2007). Maternal Education and Children's Academic Achievement during Middle Childhood. *Developmental Psychology*, 43 (6): 1497–1512.
- Mayer, Susan (1997). What Money Can't Buy: Family Income and Children's Life Chances. Cambridge, MA: Harvard University Press.
- Menchik, Paul and Nancy Jianakoplos (1997). Black-White Wealth Inequality: Is Inheritance the Reason? *Economic Inquiry*, 35(2): 428–442.
- Modigliani, Franco (1988). Measuring the Contribution of Intergenerational Transfers to Total Wealth: Conceptual Issues and Empirical Findings. In Denis Kessler and Andre Masson (Eds.), *Modeling the Accumulation and the Distribution of Wealth*, pp. 21–52. Oxford, United Kingdom: Clarendon Press.
- Mutchler, Jan and Lindsay Baker (2004). A Demographic Examination of Grandparent Caregivers in the Census 2000 Supplementary Survey. *Population Research and Policy Review*, 23 (4): 359–377.
- Oliver, Melvin and Thomas Shapiro (2006 [1995]). Black Wealth/White Wealth: A New Perspective on Racial Inequality. Tenth anniversary edition. New York: Routledge Press.
- Orr, Amy (2003). Black-White Differences in Achievement: The Importance of Wealth. *Sociology of Education*, 76(4): 281–304.
- Parker, Faith, Alison Boak, Kenneth Griffin, Carol Ripple, and Lenore Peay (1999). Parent-Child Relationship, Home Learning Environment and School Readiness. School Psychology Review, 28(3): 413–425.
- Raley, R. Kelly (1995). Black-White Differences in Kin Contact and Exchange among Never Married Adults. *Journal of Family Issues*, 16(1): 77–103.
- Schoeni, Robert (1992). Essays on Private Interhousehold Transfers and the Family. PhD Dissertation, Department of Economics, University of Michigan.
- Schoeni, Robert and Karen Ross (2005). Material Assistance from Families During the Transition to Adulthood. In Richard Settersten, Frank Furstenberg, and Ruben Rumbaut (Eds.), On the Frontier of Adulthood: Theory, Research and Public Policy, pp. 396–416. Chicago, IL: University of Chicago Press.
- Scholz, John Karl and Kara Levine (2004). U.S. Black-White Inequality. In Kathryn Neckerman (Ed.), *Social Inequality*, pp. 895–929. New York: Russell Sage Foundation.
- Shanahan, Michael, Erik Porfeli, Jeylan Mortimer, and Lance Erickson (2005). Subjective Age Identity and the Transition to Adulthood: When do Adolescents Become Adults? In Richard Settersten, Frank Furstenberg, and Ruben Rumbaut (Eds.), On the Frontier of Adulthood: Theory, Research and Public Policy, pp. 225–255. Chicago, IL: University of Chicago Press.
- Shapiro, Thomas (2004). The Hidden Cost of Being African American: How Wealth Perpetuates Inequality. New York: Oxford University Press.
- Silverstein, Merril and Jeffrey Long (1998). Trajectories of Grandparents' Perceived Solidarity with Adult Children. *Journal of Marriage and the Family*, 60(4): 912–923.
- Solon, Gary (1992). Intergenerational Income Mobility in the United States. *American Economic Review*, 82 (3): 393–408.
- Stack, Carol (1974). All Our Kin: Strategies for Survival in a Black Community. New York: Harper and Row.
- Swift, Adam (2005). Justice, Luck and the Family: The Intergenerational Transmission of Economic Advantage from a Normative Perspective. In Samuel Bowles, Herbert Gintis & Melissa Groves (Eds.), *Unequal Chances: Family Background and Economic Success*, pp. 256– 276. New York: Russell Sage Foundation.
- Taylor, Robert J., Linda M. Chatters, and Vicki M. Mays (1988). Parents, Children, Siblings, In-laws and Non-kin as Sources of Emergency Assistance to Black Americans. *Family Relations*, 37 (3): 298–304.
- Venti, Steven and David Wise (2001). *Aging and Housing Equity*. NBER Working Paper Series, No. 8608.
- Warren, John and Robert Hauser (1997). Social Stratification Across Three Generations: New Evidence from the Wisconsin Longitudinal Study. *American Sociological Review*, 62 (4): 561–572.
- Wilhelm, Mark (2001). The Role of Intergenerational Transfers in Spreading Asset Ownership. In Thomas Shapiro, and Edward Wolff (Eds.), *Assets for the Poor*, pp. 132–161. New York: Russell Sage Foundation.

Wolff, Edward (1996). Top Heavy: A Study of Increasing Inequality of Wealth in America. New York: Free Press.

Wolff, Edward (1998). Recent Trends in the Size Distribution of Wealth. *Journal of Economic Perspectives*, 12(3): 131–150.

Wolff, Edward (2001). Recent Trends in Wealth Ownership, from 1983 to 1988. In Thomas Shapiro, and Edward Wolff (Eds.), *Assets for the Poor*, pp. 34–73. New York: Russell Sage Foundation.

### **DATA AND METHODOLOGY APPENDIX**

## THE PANEL STUDY OF INCOME DYNAMICS

The PSID collects a wide range of economic and socio-demographic data, including information covering family composition and family wealth, along with the labor force participation status, income, occupation, education, and the health of individual adults. The PSID began in 1968 with a sample of about 5000 families, and it has followed both the original families and their offspring over time, including the new households formed when the offspring are old enough to set up their own households. Because of this unique design, the dataset contains adults and their parents as respondents. While the survey collects data about the race and ethnicity of its respondents, the sample sizes for groups other than Blacks and Whites are typically small. Accordingly, researchers do not normally use these data to discuss the circumstances of Asian Americans, Hispanics, or Native Americans. The sample size for African Americans is sufficiently large to allow separate analyses of this group because the PSID oversamples African American families. Despite this oversampling, the dataset is representative of the U.S population as long as the PSID's statistical weights are incorporated in one's analysis.

The PSID's core survey focuses its data collection efforts on heads of household and wives, and on household-level characteristics such as income and family size. However, the PSID also has two special supplements that were designed to allow researchers to study the characteristics and circumstances of children and young adults. The first is the Child Development Supplement (CDS). The second is the Transition to Adulthood (TA) module. These datafiles include information about children's schooling, their time use, and their experiences during the transition to adulthood, concomitant with a wide range of other data. The empirical research discussed in this paper analyzes data from both supplements while also incorporating data from the PSID core.

Further information about the PSID can be found at the survey's website: http://psidonline.isr.umich.edu/. Additionally, readers can access the on-line Data Center to download data at https://simba.isr.umich.edu/.

### The CDS-based Sample

The first phase of our empirical work examines children from the 2002 wave of the Child Development Supplement. There were 2907 children in this wave of the CDS. The CDS was begun in 1997, and collects data in five-year intervals, making the 2002 data wave-2 of the supplement. In its inaugural year, the CDS interviewed children from a subset of PSID families that the CDS randomly selected from the PSID core. The first wave of the survey restricted itself to children age zero to twelve. The CDS-2 then followed these children over time; the children were age

five to eighteen when reinterviewed in 2002. At the time of writing of this paper, the CDS-2 data were the most recent data available.

Because the PSID currently contains many generations of any given extended family, many of the children in the CDS can be traced back not just to their parents but also to their grandparents, allowing a researcher to examine the economic circumstances of the elders at the same time that children are studied. We use this advantageous feature of the dataset in order to present descriptive information that paints a portrait of the amount of wealth that is available throughout the different generations of the family tree for the typical child in the United States. This descriptive analysis incorporates all CDS children for whom we are able to identify grandparents—1668 children. There were some children for whom no grandparent wealth information could be found. The absence of grandparent wealth information can be attributable to the grandparents being deceased, or to their having dropped out of the PSID in the year in which the wealth data was collected. There also were a few children excluded because they lived with their grandparents, meaning that we cannot consider their grandparents as an additional source of resources for them because their grandparents are the ones raising them. Failure to locate a child's grandparent wealth information also could be due to a child's having been born to parents who had children late in life. Given the age range in the CDS, it is possible for some children to have been born to individuals who were adults that were surveyed as part of the original PSID sample, implying that there are only 2 generations present in the PSID by the year 2002.

## The Regression Sample

In the second phase of our empirical analysis, we conduct regression analysis that draws on data from the 2005 wave of the PSID's Transition to Adulthood (TA) supplement. The TA represents a special effort to collect data that allow scholars to study the economic, psychological, and social dimensions of youths' transitions into adulthood. This survey began in 2005. The 2005 TA surveyed 745 young adults from PSID families. The age range in this supplement is eighteen to twenty-two. The respondents are "children" who were old enough to have completed high school or to have dropped out of high school in the survey year, and all are individuals who originally were part of the 2002 CDS. Using the TA data in conjunction with data from the PSID core allows us to assign information about a TA respondent's parents and grandparents to the young adult. We were able to identify grandparents' wealth for half of our young adults. As in the case of the CDS-based analysis, having some observations for which data are missing is inevitable. Some TA respondents will have grandparents who already are deceased, and non-response also may lead to lack of grandparent information for some young adults.

#### **MEASURES**

We used data on household wealth from the 2001 wave of the PSID to construct measures of the wealth held by each CDS child's parents, and the wealth held by his or her grandparents (for Tables 1–5). This descriptive analysis for the first phase of the empirical project relies on data from the 2001 core because this is the closest date to the time at which the CDS were collected (2002). The regression phase of our analysis (Table 6) incorporates measures of college attendance from the 2005 TA module, wealth data from the 2005 wave of the PSID, and several control variables

from the TA and the PSID core. The two phases of our empirical research use data from two different years because the CDS and the TA survey were conducted in different years. Accordingly, when we use the CDS-based sample, we need extended-family wealth that corresponds to the year in which the CDS data were collected. When we use the TA sample for analysis purposes we need PSID core data from 2005 because that is the year in which the TA data were collected.

## **Extended-family Wealth for the CDS-based Analysis**

As noted in the main text, two measures of wealth are available in the PSID. Both are net worth measures created by taking the total value of a household's assets and subtracting the value of its debts. One PSID variable calculates net worth excluding home equity ("wealth-1"). The second reports net worth including home equity ("wealth-2"). Our parental wealth measures come from taking the wealth-1 and wealth-2 data for the child's natal family. Our grandparent wealth measures come from taking wealth-1 and wealth-2 as reported for the household in which the child's grandparent is either a head or wife.

## **College Attendance**

Conceptually, the regression exercise has one outcome in mind. The goal is to examine college attendance and its covariates. However, college attendance can be measured in different ways. Our analysis employs two different dependent variables as a result. The first variable is a measure of whether the young adult ever has attended college. It is a dummy variable coded as 1 for "yes" if the young adult reports that he is enrolled at the time of the interview or has attended college in the past, and 0 if the young adult has never attended college. This first variable can be thought of as a broad measure of college attendance. It has the advantage of allowing us to make maximum use of the TA supplement's sample size, since some young adults will be old enough to have completed college (if they started at age seventeen for example, or if they sought an Associate's degree). However, because the construct "ever attended college" can include individuals who attended but dropped out of college, this variable may not be the best measure to tell us whether grandparent wealth facilitates educational success. We therefore estimate models using a second dependent variable. Our second dependent variable is a dummy variable indicating whether the young adult is in college now or not. This variable allows us to compare individuals who presently are in college to those who are not. This means that individuals who have dropped out would not be in the "success" category. Individuals who are not currently in college because they already have completed their degree were excluded from this analysis.

## Grandparent Wealth Measures for the Regression Analysis

For the regressions, grandparent wealth is the independent variable that is of most interest to us. It is obtained by using information from the PSID's Family Identification Mapping System (FIMS) to match young adults to their grandparents. Once a child is matched to his or her grandparents, it is possible to obtain a measure of grandparent wealth by taking the wealth held by the grandparent's household, i.e. the family unit for which the grandparent is a head or a wife. The FIMS datafile identifies grandparents by type, i.e., by whether they are paternal or maternal grandparents. Rather than entering paternal and maternal grandparent wealth as separate

variables in instances in which a young adult could be matched to wealth data for grandparents on both sides of the family tree, we constructed a single grandparent wealth variable to avoid problems with multicollinearity. The analysis presented in the paper uses the average value of grandparent wealth as the regressor. Some young adults had grandmothers and grandfathers who were no longer married to each other. In those instances our rule for computing our grandparent wealth measure was the same. The grandparent wealth measure averages across the grandparents if they are living in different households. As is standard in the wealth literature, the regression analysis deletes the top and bottom one percent of the wealth distribution to avoid the influence of outliers (Gittleman and Wolff, 2004). In the regression sample, the cutoff points for the ninety-ninth percentile of the parental wealth distribution are \$2,426,000 for wealth-1 and \$2,989,000 for wealth-2. The bottom percentile is given by households with wealth below -\$67,000 (wealth 1) or -\$42,000 (wealth-2).

## **Control Variables for the Regression Analysis**

All models controlled for individual characteristics and family-level factors known to influence college attendance. The sex of the young adult is represented by a dummy variable (1 = male, 0 = female). We include this variable because research suggests that women are more likely to enroll in college than men, undoubtedly because young men traditionally have been able to obtain high paying jobs, in the construction industry for example, without attending college. Our regressions also include a variable indicating whether the young adult is Black (Black = 1; 0 otherwise).

Among the family background characteristics that are included in our regressions is a measure of mother's education. This variable measures years of schooling; it can take on values from zero to seventeen (where seventeen represents schooling beyond a four-year college degree). We include mother's education in the analysis because research suggests that highly-educated parents tend to have children who are also highly educated, and that it is a child's mother's education that is particularly influential in determining children's outcomes (Magnuson 2007).

A measure of parental income is also included in the regressions. As is standard in the literature we measure parental income by taking a five-year average of parents' income in order to reduce measurement error (Solon 1992). Moreover, the income measure used is a measure of families' labor income. The rationale for using an income measure that emphasizes labor income only, and not interest income and other income related to assets, is that one wants an income measure that is not likely to be correlated with wealth in order to avoid multicollinearity and problems of interpretation for the income variable.

The regressions also control for the number of kids in the young adult's family because children who come from large families may be less likely to be able to afford college due to resource dilution. As noted earlier, parental wealth is measured using the two wealth variables that are available in the PSID: wealth-1 and wealth-2.

#### ESTIMATION METHODOLOGY FOR THE REGRESSIONS

To examine the relationship between grandparents' wealth and grandchildren's educational outcomes, we estimate probit regression models using Stata 6.0. The regressions model college attendance as a function of sex of the young adult, race/ethnicity, mother's education, number of kids in the family, parental income, parental wealth, and grandparent wealth. We chose to use probit regressions rather than ordinary

least squares (OLS) because our dependent variable is a dichotomous variable, and is therefore limited in the range of values that it can take on. As noted in Greene (1997), probit models represent a common way to estimate the association between an outcome of interest and the covariates that are hypothesized to affect it when the outcome variable can take on only two values (zero and one). The probit regressions can be interpreted as estimating the probability of college attendance, that is to say they show the relationship between the different independent variables and the probability of attending college. The size of this effect, or dF/dx, is given by the "marginal effect" in a probit regression *not* the coefficient estimate  $\beta$ . All regressions incorporate the PSID weights, which are needed to make the data nationally representative. The regressions estimate robust standard errors using Stata's clustering procedure because the PSID rules allowed up to two children from any given family to be surveyed in the CDS and TA.