Racial Differences in Family Transfers: Positive vs Negative Social Tax

Sara Canilang
University of Minnesota

November 2026

Preliminary and Incomplete: Please do not cite or quote

Abstract

Racial differences in intervivos transfers between family members, including differences in timing, direction, and magnitude, have been considered a significant contributor to the racial wealth gap. Middle and upper-income Black households are more likely than their white counterparts to have extended family members in poverty, leading to what sociologists call the "Black Tax", the claim that successful Black households assume financial responsibility for relatives who more frequently face negative shocks. Using the PSID and its 2013 Family Rosters and Transfers supplement, I measure three family-transfer channels together: parental education transfers at enrollment, the recurring intervivos transfers given and received thereafter, and large one-time gifts. The measurement demonstrates that the transfer asymmetry is driven not only by level, but by life-cycle timing and directional flow. White households receive larger amounts during the years when resources compound, while Black households are the more likely givers in those same years, and among heads with a college degree Black households support parents at nearly three times the white rate. The channels are also linked for the same individuals. Having received help with college raises the probability of receiving recurring support later in life by 4.57 percentage points for white and 12.10 percentage points for Black heads, although the Black estimate rests on 56 helped observations. This is consistent with a persistent family type. The racial difference is also not on the same margin in every channel. Recurring support differs in amount while participation among the young is similar, and large gifts and student debt differ mainly in participation, which may help explain why studies comparing participation rates have found small racial differences while studies comparing dollars have found large ones. I estimate race-specific transfer functions in which the probability and size of a transfer vary with age, non-asset income, asset income, family background, and education, then use them to discipline a life-cycle model of saving, college enrollment, and both transfer channels, linked so that help at enrollment seeds later receipt. That model is still being calibrated and I report no results from it in this paper.

1 Introduction

Intervivos transfers between family members can have real financial consequences on those giving and those receiving. On the one hand, receiving a transfer helps mitigate negative shocks, such as a job loss, buffers against hardship, creates an extra layer of insurance that enables more risk-taking, and can help build wealth. On the other hand, these benefits can be partially offset if the expectation of support reduces the incentive to save. For those giving, while there are many reasons why someone may want to provide support, largely grouped into three motivation categories (altruistic, insurance, and exchange), providing transfers results in not only a direct reduction in savings and consumption, but also a missed opportunity to invest in wealth-producing assets.

Transfers also have implications for human capital investment. If a young adult expects to provide financial support to family members, this may reduce the expected return to investing in a costly two-year or four-year degree and push toward entry into the labor force earlier. On the other hand, the expectation of future family obligations may itself motivate greater educational investment, as higher earnings from a college degree increase one's capacity to support relatives. The net effect on college enrollment is therefore theoretically ambiguous and depends on the relative strength of the income and substitution effects. Furthermore, if parental education transfers are available, they can alleviate borrowing constraints and make college financially feasible. White households receive help in early adulthood, when they are most financially constrained, while Black households give in those same years.

Past studies have shown that a substantial share of the racial wealth gap can be explained by the fact that middle and upper-income Black households are more likely to have extended family members in poverty than their white counterparts. This line of literature is based on the assumption that Black households that have achieved success assume some financial responsibility for their less fortunate relatives. In sociology, this is known as the "Black Tax" or "Negative Social Capital." In addition to family obligation, these transfers can reflect institutional shortcomings, borrowing constraints, and a lack of generational wealth, leading more Black households to turn to friends and family for financial support during hard times. Not only are middle and upper-income Black families more likely to provide transfers, middle and upper-income white families may additionally be receiving more transfers due to differences in the level and distribution of wealth among Black families compared to white families. Wealth differences in family networks lead to differences in family transfers which in turn lead to differences in wealth accumulation and savings decisions.

While previous research has documented racial differences in providing informal financial support, less has been done on additionally receiving support and on how the different forms of family support relate to each other over the life cycle. Using the PSID and the 2013 Family Rosters and Transfers supplement, I measure three distinct family-transfer channels: parental payment for college, which arrives once at the start of adult life, the recurring financial support that flows between related households thereafter, and large one-time gifts. The measurement is the contribution of my paper, and it demonstrates that the transfer asymmetry is driven not only by level, but by life-cycle timing and directional flow. I estimate race-specific transfer functions in which the probability and size of a transfer vary with age, income, wealth, family background, and education, then use them to discipline a life-cycle model of saving, college

enrollment, and both transfer channels, linked so that help at enrollment seeds later receipt. Calibration and counterfactual results from that model are in progress and are not reported in this paper.

I find three patterns in the data. First, two of the channels are linked. Linking the children observed in the 2013 Family Rosters and Transfers supplement to their own later records as household heads, I find that having received help with college raises the probability of receiving recurring support decades later, conditional on income, assets, age, family size, education, marital status, family background, past receipt and past provision, cohort and year. Second, the racial difference is not on the same margin in every channel. While the proportion of white and Black households receiving recurring support at young ages is similar, white households receive larger amounts, by a factor of two to three, and the pattern reverses for large gifts and for student debt, where participation differs sharply and amounts among participants do not. Third, the timing and the direction differ. Consistent with existing research, I find that Black households are more likely to provide upstream support and provide at younger ages. Black households are the more likely givers from 18 through 45, and the support they provide runs upstream to parents and laterally to siblings and other relatives, while white giving is concentrated after 45 and runs downstream to children and grandchildren. This difference in timing is important because of the particular challenge of providing at young ages when savings and earnings are lower. The asymmetry is therefore concentrated in the period when a household has the longest horizon over which resources can accumulate. The racial difference in upstream support also rises with the head's own education. Among heads with no college, 1.41 percent of Black and 1.77 percent of white heads provide support to a parent or grandparent in a given year, while among heads with a college degree the shares are 7.17 and 2.46 percent. The Black-to-white ratio rises from 0.80 to 2.91 across education groups.

1.1 Contribution relative to existing measurement

I cite previous research for several of the individual facts below. The racial gap in parental payment for college is documented by Nam (2021), Nam (2022), Rauscher (2016) and Amorim and Deming (2022), several of them on the same supplement used here. The giving-side facts are established by O'Brien (2012), Chiteji and Hamilton (2002), Toney and Hamilton (2022) and Francis and Weller (2021). The levels of student debt by race are from Scott-Clayton and Li (2016) and Neelakantan (2023). Finally, Hotz et al. (2023), also using the 2013 supplement, show that parental financing of college raises the *parent's* subsequent indebtedness without reducing the child's.

My paper adds to this literature in four ways. First, I measure the link across channels for the same individuals, by following children in the 2013 supplement into their own later records as household heads. Haider and McGarry (2018) examine the parent's side in the Health and Retirement Study and find that differential spending on a child's college is not offset by later cash transfers, which is consistent with the link I find from the child's side. To my knowledge, no existing paper measures the flows jointly and links them for the same individuals. Second, I provide an explicit account of why the channels do not double count in Section 3.2, which measuring both directions in one framework requires. Previous studies measure one channel at a time and so have not needed one. Third, separating participation from amounts may help explain why studies comparing rates and studies comparing dollars reach different

conclusions. Fourth, I report the estimated transfer functions in full, with the retransformation, so that other researchers can use them as inputs.

Some of these patterns are based on smaller samples than others. The gift measures are built on 63 Black transfer events and the home-purchase margin on seven, and the student-debt stock is available for four survey waves. In comparison, the age profiles are based on tens of thousands of person-years, the cross-channel link on 3,359 heads observed over ages 22–34, and the Black estimate of the link on 56 helped observations.

2 Related Literature

Past research has highlighted the importance of transfers in building wealth. Gale and Scholz (1994) use the Survey of Consumer Finances to show that intended transfers and bequests account for at least 20 and 31 percent of net worth, respectively. De Nardi (2004) focuses on bequests and finds that voluntary bequests and earnings persistence within families increase wealth concentration.

Past research has also counted payment for college as a transfer. Kotlikoff and Summers (1981) count college expenses paid by parents in the flow of intergenerational transfers, and Gale and Scholz (1994) do the same, finding that such payments are more than half as large as all other intended transfers and account for roughly twelve percent of net worth. On the one hand, a payment to an enrolled dependent can be read as consumption within the household and not as a transfer between generations. On the other hand, a dollar spent on a twenty-one year old's tuition relaxes that young adult's budget whatever form it takes. I follow this literature and treat payment for college as a transfer.

While a substantial portion of the literature on family transfers focuses on transfer motives (see, for example, Attanasio, Meghir, and Mommaerts (2015) and Schaller and Eck (2021)), more relevant research for my paper focuses on racial differences in transfers. Chiteji and Hamilton (2002) and Toney and Hamilton (2022) find that households of color are more likely to have extended family members in poverty, which can create these obligations. Francis and Weller (2021) characterize differences in informal financial support using the US Census Household Pulse Survey, finding that Black households are more likely to provide to a broader range of family members across generations and are less likely to be repaid. O'Brien (2012) uses the SCF and PSID to conclude that middle and upper-income Black families are more likely to provide support, and that the amount of support can account for racial differences in relative wealth holdings. Many of these studies focus on transfers provided, ignoring transfers received and thus only capturing half of the story. In addition, without a life cycle model, we cannot see the full implications of the differences in timing of these transfers.

On the receiving side, Nam (2022) measures the racial gap in parental payment for college in the same supplement used here and finds that parents' economic and social resources account for nearly all of it, with Black children slightly *more* likely to receive conditional on resources. Nam (2021) relates that component to household wealth and attributes roughly nine percent of the Black-white wealth disparity to it. Rauscher (2016) documents that education transfers have become more common and more dependent on parental wealth over time, and Amorim and Deming (2022) link the racial gap to family structure.

These studies document the gap and its association with later outcomes, but without a life cycle model, and the model in Section 7 is designed to add this.

On the education side, Caucutt and Lochner (2020) relate human capital investments, earnings, and intergenerational mobility in a life-cycle model. They show that parental resources and early investments shape attainment, while finding that credit constraints bind less at college age than they do earlier in childhood. Johnson (2013) estimates a structural model of the schooling choice with borrowing constraints in which parental transfers are a reduced-form process that depends on the child's enrollment, on past receipt and on race, and the model in my paper follows this specification. His model ends with a terminal value at age 40, and the later working years over which the racial wealth gap is measured fall outside of it. On the determinants of the racial enrollment gap itself, Cameron and Heckman (2001) find that long-run family background accounts for nearly all of it, and Carneiro and Heckman (2002) find that few students are constrained by short-run credit at the point of enrollment. My paper builds on this framework by measuring both parental education transfers and recurring intervivos transfers with racial heterogeneity, and by documenting the link between them.

3 Data

3.1 PSID Main Sample

The PSID began in 1968, ran annually through 1997, and has run biennially since 1999. I begin my study using the 1985 wave, when the survey began to explicitly ask about alimony and child support given, and end using the most recent wave. I focus on non-Hispanic white and Black household heads aged 18–85 who are either married, cohabitating, or single, treating cohabitators as married. I intentionally include single households to capture the broader range of family structures among Black households, particularly the large proportion of single Black households with children.

Family background is the head's own retrospective report of whether their parents were poor, of average means, or pretty well off while they were growing up, with parental education used where that item is missing. The variable is therefore a recalled and self-rated category rather than a measured resource. Its distribution is low, middle and high at 0.279, 0.475 and 0.246 for white heads and 0.450, 0.276 and 0.274 for Black heads, so Black heads report the two extremes more often and the middle category much less often, and the variable does not order by race at the top. Section 6 returns to what this implies.

Intervivos transfers are defined as financial support given or received by the head or spouse to or from relatives outside the family unit, net of child support and alimony. Household income includes wages and salaries, asset income, public transfers, unemployment and workers' compensation, and retirement income, minus alimony and child support given. All dollar amounts are deflated to 2010 dollars using the CPI-Urban deflator.

For the intervivos regressions I additionally drop household heads who are enrolled in school and under age 25. An undergraduate-age enrolled head is receiving family support that belongs to the college channel, and including those observations would let the same dollars enter both the education transfer function and the intervivos transfer function. Enrolled heads aged 25 and over are retained and treated as

ordinary intervivos recipients, since the model has no graduate schooling. Observations with missing enrollment status are treated as not enrolled.

3.2 Transfer Channels and Double Counting

The measurement has three distinct family-transfer channels. These are separately recorded variables rather than partitions of a single total.

(i) **Parental education transfers** are the 2013 supplement's measure of help with tuition, room and board, and books since age 18. These are intra-household while the student is enrolled, the student is typically still in the parent's family unit, which is why they cannot be recovered from the head-level intervivos variables at all.

(ii) **Intervivos transfers** are the PSID received-from-family and corresponding given-support variables: recurring financial support to or from relatives *outside* the family unit, excluding alimony and child support. This is the recurring-support concept.

(iii) **Large one-time gifts** are the wealth module's report of a gift or inheritance worth $10,000 or more received since the last interview, and the 2013 supplement's retrospective report of help with a home purchase or another large financial need since the child turned 18.

Adding the channels does not double count. The one place where overlap could arise is the college window, and that is handled by the sample restriction described above. The restriction is not only a precaution. Without it, coming from a high-background family appears to raise the probability that a white head receives recurring support, with a coefficient of 0.050 and a p-value of 0.04. Dropping the undergraduate-age enrolled heads leaves 0.033 with a p-value of 0.18, while the effect of background on the amount received is almost unchanged at 0.403. What the unrestricted sample picks up is that high-background families are more likely to have a child enrolled in college and receiving support for it, which belongs to the education channel. In addition, the wealth-module item pools a gift with an inheritance, and the two cannot be separated before 2015. I return to this in Section 8.

3.3 2013 Family Rosters and Transfers

The 2013 Family Rosters and Transfers supplement provides retrospective information on financial transfers from parents to adult children since age 18, including help paying for school (tuition, room and board, and books), help with a home purchase, and other large financial help. I use this supplement to measure parental education transfers and large gifts. The transfer is intervivos by construction, since the donor is alive and is the respondent.

For each child in the supplement, I identify the degree type (two-year against four-year) and enrollment timing using education progression in the PSID individual file. I merge parent characteristics, including income, education, marital status, and family background, at the year closest to the child's enrollment start. Where a direct match is unavailable, I use the parent's closest observed year as a fallback,

or estimate enrollment year from the child's age at the time of the supplement. Transfer amounts are deflated to 2010 dollars using the CPI at the midpoint of the enrollment window. For children still enrolled at the 2012 reference year, I scale the reported cumulative amount to the projected total using the expected degree length. My measure of school transfers is comparable to previous research. Rauscher (2016) reports that 75 percent of families in this module give nothing for school, compared to 73.1 percent of white children receiving nothing in my sample.

3.4 Transition into Adulthood

I measure student debt using the PSID's Transition into Adulthood supplement, which follows young adults who were children in the main survey. The stock of student debt outstanding is available in the 2005, 2007, 2009 and 2011 waves. I do not use a separate item in the later waves that records loan payments and not balances. I measure debt early in the career and not over the lifetime, since the supplement follows respondents to roughly age 28, and these are also the ages most relevant for the transfer channels in this paper.

4 Six Facts

Using the PSID data, I document six patterns in family transfers by race.

1. Black households give earlier and upstream, while white households give later, downstream and in larger amounts. At younger ages, Black households are more likely to provide compared to white households. Black heads are the more likely givers from age 18 through 45, with a Black-to-white ratio of 1.4 at 18–25 and 1.8 at 26–35 that narrows to 1.2 by 36–45. The proportion of white households providing is flat until the mid-forties and then roughly doubles, so that white households are the more likely givers at 46–59 (Figure 1). Since households at younger ages have less savings and smaller incomes, providing transfers is especially costly early in the life cycle. Although a larger share of younger Black households provide transfers, from age 26 onward they provide at smaller amounts compared to white households.

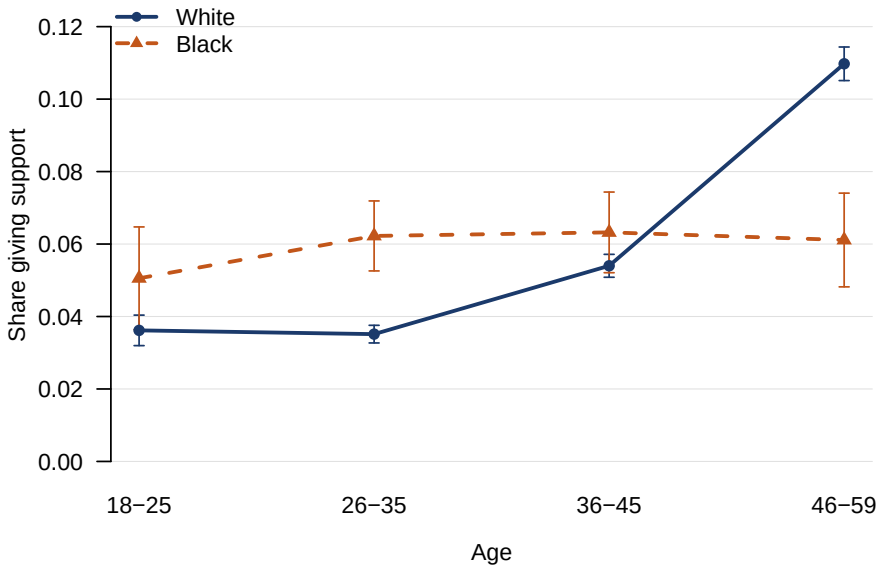


Figure 1: Share of household heads providing financial support to relatives outside the family unit, by race and age. PSID, 1985–2023. Bars are 95 percent confidence intervals.

Consistent with previous research, I find racial differences in the direction of family transfers. Among households that provided support, white households provided more downstream support from parent to child or grandparent to grandchild. Black households provided more upstream support from child to parent or grandchild to grandparent, and were more likely to report providing support to other relatives including siblings, aunts, uncles, and cousins.

Table 1: Direction of intervivos transfers provided, 1984–2020, among household heads with a positive family transfer net of child support and alimony. A household can give to more than one recipient, and the columns do not sum to 100. The 1996 wave is excluded, since the recipient roster is recorded as all zeros that year.

Support given to	**% of white givers**	**% of Black givers**
Children and grandchildren	**54**	38
Parents and grandparents	31	**38**
Other relatives	22	**35**
Number of givers	5,165	427

These differences in transfer direction translate into differences in timing over the life cycle. In addition, a single indicator for providing support pools these three directions and cannot separate support provided upstream to a parent from support provided downstream to a child. The two have opposite implications for the giver's balance sheet at the age the transfer is made, and this may be one reason why estimates of a net drain in this literature are difficult to compare across papers.

2. Receipt participation is nearly identical among the young, while the dollar amounts are not. Although at younger ages the proportion of Black households receiving transfers is comparable to the

proportion of white households, white households are additionally receiving at larger amounts. The proportion receiving at ages 18–25 is 0.243 for white and 0.241 for Black heads, a difference of two tenths of a percentage point, while the median amounts received at those ages are $1,150 for white heads compared to $454 for Black heads. The ratio widens monotonically with age to roughly six to one by 46–59 (Figure 2 and Table 2). This may help explain why studies comparing participation rates find small racial differences while studies comparing dollars find large ones, since the two measure different margins of the same flow. However, my measure covers support from any relative, and studies that limit to transfers from parent to child find that white households are also more likely to receive.

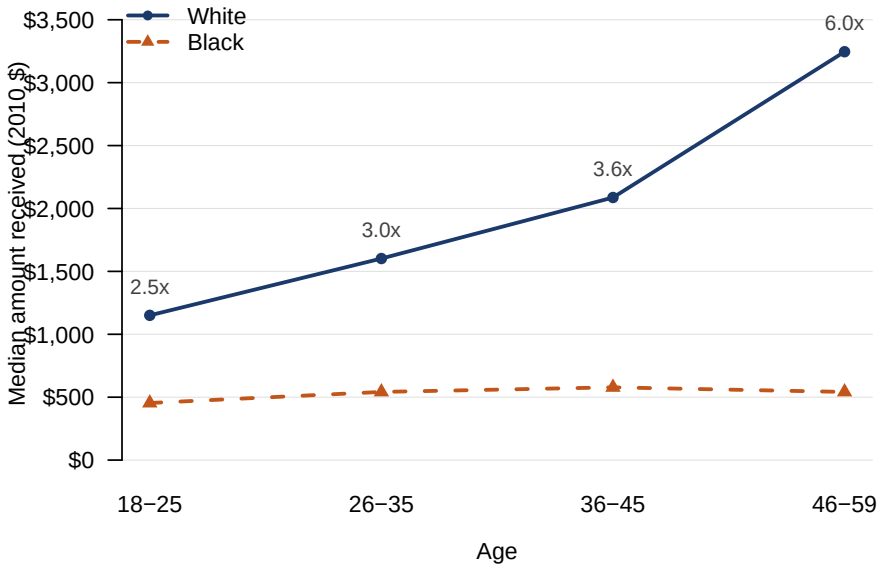


Figure 2: Median amount received among heads receiving support, by race and age, 2010 dollars. PSID, 1985–2023. Labels give the white-to-Black ratio.

Table 2: Transfer participation and amounts by race and age. PSID, 1985–2023, 2010 dollars. Median received is conditional on receiving.

	P(gives)		P(receives)		Median received	
Age	White	Black	White	Black	White	Black
18–25	0.036	**0.051**	0.243	0.241	$1,150	$454
26–35	0.035	**0.062**	0.106	0.141	$1,602	$542
36–45	0.054	**0.063**	0.058	0.066	$2,087	$578
46–59	**0.110**	0.061	0.037	0.046	$3,246	$542

3. Parental payment for college is the largest racial gap in family dollars. For parental education transfers, I find large racial disparities in both receipt rates and amounts. Among children who attended a four-year college, white children are substantially more likely to receive any parental education support, and conditional on receiving, the amounts are considerably larger. In the supplement, 49.1 percent of white four-year students received parental help compared to 19.5 percent of Black four-year students, and

the median amount among those helped was $28,859 compared to $10,128. A Black four-year student is about 40 percent as likely to receive parental support and receives about a third as much conditional on receiving. Combining the two margins, expected parental support is roughly $25,000 for a white four-year student and $3,000 for a Black four-year student. If I instead measure across all children in the supplement, unconditional on four-year enrollment, expected payment for school is $8,051 per white child and $814 per Black child. These two sets of numbers are on different bases and are not directly comparable. The conditional numbers are in 2010 dollars and scale up amounts for children still enrolled at the 2012 reference year, while the unconditional number is a raw cumulative total and includes two-year and never-enrolled children, who also receive help.

These gaps persist even after conditioning on parental income and education. In a probit and an amount regression controlling for parental income, assets and education, the race coefficient is large and significant in both, on the order of 0.45 on receipt and 0.75 on the log amount, both with standard errors well under half the coefficient. These gaps are not fully explained by income, wealth, education, or family type. Figures 3 and 4 show the share receiving and the mean amount conditional on receiving by parental income quartile and by parental education. I condition on education because more educated parents may have stronger preferences for their children to attend college or have better knowledge of the college process, reflecting the higher probability and higher amount of education transfers.

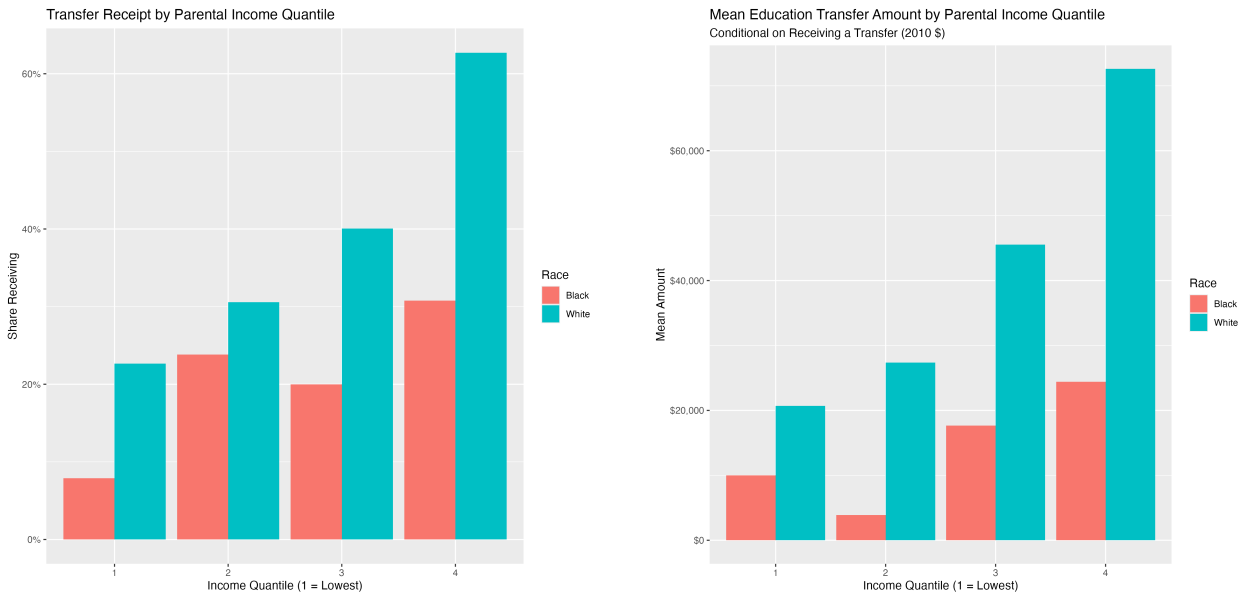


Figure 3: Share of students receiving parental help with college (left) and mean amount among those helped (right), by parental income quartile and race. 2013 supplement, 2010 dollars.

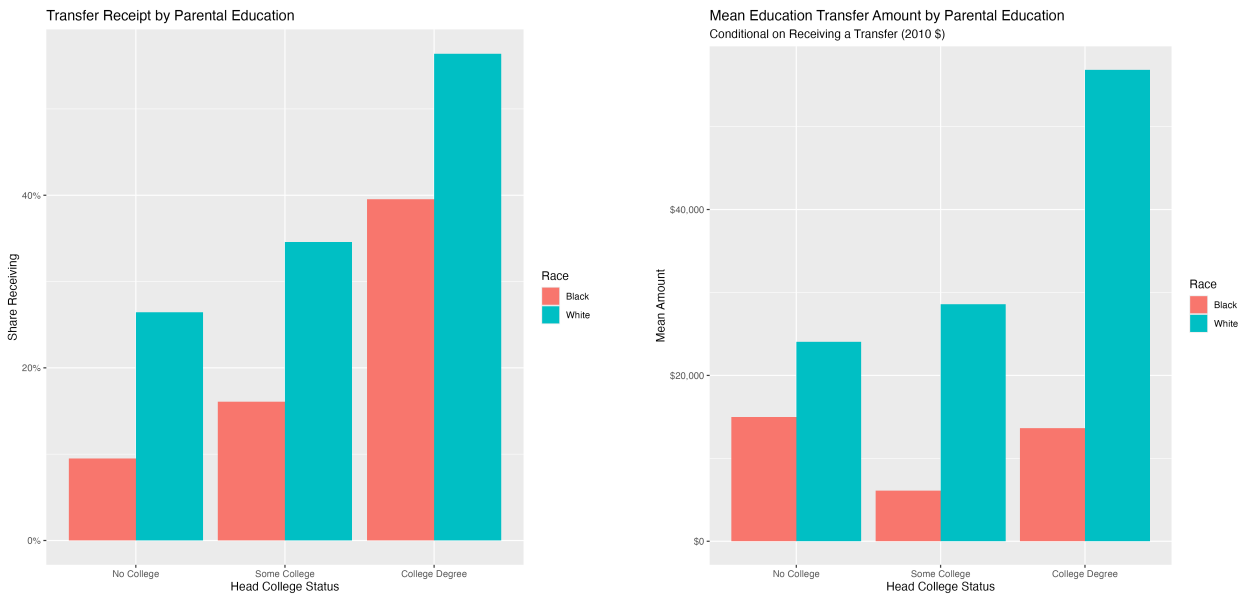


Figure 4: The same two margins by parental education and race. 2013 supplement, 2010 dollars.

4. The two channels are linked, and the link is measurable. A parental education transfer is a family transfer, and households that receive one are more likely to receive support later in life. The receipt probit of Section 5 carries an indicator for having received support in the past, and its coefficient is among the largest in the specification, 1.303 for white and 1.373 for Black heads on the probit index (Table 5). To measure whether an education transfer feeds that history, I link the children observed in the supplement to their own later records as household heads in the PSID and estimate the receipt probit on the receipt function's own controls (non-asset income, asset income, age, family size, education, marital status, family background, past receipt and past provision, cohort and year) plus an indicator for having received help with college. Over ages 22–34 the controlled average marginal effect of education help on the probability of receiving support is 4.57 percentage points for white heads ($z = 3.05$, $n = 2{,}907$, of whom 45.0 percent were helped) and 12.10 percentage points for Black heads ($z = 2.08$, $n = 452$, of whom 12.4 percent were helped). Bootstrap 90 percent intervals, clustering on the head, are $[+1.50, +7.38]$ for white and $[+1.80, +25.16]$ for Black heads. Table 3 reports the full specification ladder. The coefficient is stable for white heads across every specification, and for Black heads it is largest and only significant once past receipt and past provision are conditioned on, which is the control that would absorb the link if a persistent propensity to receive were all that drove it. The Black estimate rests on 56 helped observations, which is why its interval is so wide, and it should be read as establishing the sign and not the magnitude. Education help therefore raises later intervivos receipt *conditional on* the past-receipt indicator, by an amount that is a fraction of that indicator's own effect. Previous research finds this association when comparing between families and not within them, suggesting that a persistent family type may explain the link and that the first transfer may not cause the later ones.

5. Large one-time gifts differ sharply in participation. In the PSID wealth module, 6.25 percent of white heads per wave report receiving a gift or inheritance worth $10,000 or more compared to 1.29

Table 3: The cross-channel link: recurring receipt on having received help with college. Probit, PSID heads aged 22–34 observed from 2013 onward and linked to the 2013 supplement. Column (5) is the preferred specification and reproduces the average marginal effects reported in the text. Standard errors are conventional probit standard errors; the bootstrap intervals in the text cluster on the head and are wider.

	(1)	(2)	(3)	(4)	(5)
White heads					
Received help with college	0.219***	0.303***	0.246***	0.258***	0.216***
standard error	(0.055)	(0.058)	(0.066)	(0.067)	(0.071)
marginal effect (pp)	5.59	7.42	5.93	6.20	4.57
Black heads					
Received help with college	0.253	0.362*	0.284	0.291	0.503**
standard error	(0.197)	(0.202)	(0.215)	(0.215)	(0.242)
marginal effect (pp)	7.32	10.50	7.92	8.09	12.10
Income controls		Yes	Yes	Yes	Yes
Demographics, background			Yes	Yes	Yes
Cohort, year				Yes	Yes
Past receipt, past provision					**Yes**
Observations (White / Black)			2907 / 452		
Received help (White / Black)			1309 / 56		

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

percent of Black heads, with a median near $30,000 for both. The wealth-module question pools a gift with an inheritance and the two cannot be separated before 2015, so I also use the 2013 supplement, where the donor is alive and is the respondent and the transfer is intervivos by construction. In the supplement, expected help with a home purchase or another large financial need is $2,783 per child for white families compared to $465 for Black families, a factor of six. This reflects both a difference in participation, 15.97 compared to 9.55 percent, and a difference in the median among recipients, $5,000 compared to $1,000. The gap is largest for help with a home purchase, where no Black parent among 659 reports giving $10,000 or more. These are cumulative nominal amounts reported since the child turned 18, for which no single deflator applies, and the racial ratios hold only to the extent that the timing of giving is similar across races. These measures are also based on a small number of events for Black families, with 919 gift events for white families and 63 for Black families, and seven home-purchase events among Black parents.

6. Black students are more likely to carry student debt, and the amounts among borrowers are similar. Among students who attended a four-year college, 74.7 percent of Black students carry student debt compared to 58.7 percent of white students. Among borrowers, the median is $15,000 for both, and the conditional mean is slightly lower for Black students ($22,417 compared to $25,707). These numbers are based on 257 Black and 491 white respondents. Consistent with this pattern, Neelakantan (2023) reports the same shape in the Beginning Postsecondary Students survey, 85.7 percent compared to 65.5 percent with comparable amounts among borrowers, and Scott-Clayton and Li (2016) report $23,420 compared to $16,046 at graduation. On the other hand, Johnson (2013) reports Black youth slightly less likely to borrow in a cohort of men from an earlier survey, 33.9 compared to 37.0 percent, and the sign is

not the same across data sources and definitions of borrowing. In my sample, Black students are more likely to borrow but do not borrow larger amounts. This is consistent with the gap in parental payment for college, although I do not interpret it as evidence that parental help replaces borrowing, since Hotz et al. (2023) find that parental financing does not reduce the child's own debt.

Together, these patterns show that the racial difference is not on the same margin in every channel, and a single summary statistic may not capture all of them. Recurring support differs in amount while participation among the young is nearly identical. Student debt differs in participation while the amounts among borrowers are similar, and large gifts differ mainly in participation, with the comparison of amounts depending on which measure is used.

5 Estimated Transfer Functions

I estimate transfer functions separately for Black and white households in two steps. In the first step, I estimate the probability of providing (receiving) a transfer using a probit model. I regress an indicator for whether transfers over the period were positive on log non-asset income y, log asset income y_a, age j and j^2, family unit size n, marital status m, parental background t, education e, indicators for whether a transfer was received or provided in the past (I_{in} and I_{out}), birth cohort bins C, and year bins D:

$$\begin{aligned} Z = {} & \beta_0 + \beta_1 \log y + \beta_2 \log y_a + \beta_3 j + \beta_4 j^2 + \beta_5 n \\ & + \beta_6 m + \beta_7 e + \beta_8 t + \beta_9 I_{in} + \beta_{10} I_{out} + \beta_{11} C + \beta_{12} D \end{aligned} \tag{1}$$

$$\tau = \begin{cases} 1 & \text{with probability } \Phi(Z) \\ 0 & \text{with probability } 1 - \Phi(Z) \end{cases}$$

In the second step, I estimate log transfer amount conditional on transferring using OLS with the same regressors minus the transfer history indicators. Full regression results are reported in Tables 5 and 6.

5.1 Retransformation of Log Amounts

Transfer amounts are estimated in logs and converted back to dollars when solving the model. Taking $\exp(X\hat{\beta})$ recovers the conditional median. It understates the mean by a factor that depends on the residual distribution. Since the agent's decision problem requires the expected dollar transfer, I apply Duan's (1983) smearing estimator,

$$\widehat{E}[T \mid X, \text{transfer}] = \exp(X\hat{\beta}) \cdot \hat{S}, \qquad \hat{S} = \frac{1}{N} \sum_{i=1}^{N} \exp(\hat{u}_i), \tag{2}$$

where $\hat{u}_i$ are the residuals from the corresponding log-amount regression. Smearing is nonparametric in the residual distribution, which matters since the residuals are close to normal for Black transfers but right-skewed for white transfers. The smearing factors are economically large, roughly doubling every transfer, and, reflecting the heavier right tail of the white transfer distribution, relatively larger for white

transfers. The race-specific estimation and correction preserve the racial gap in transfer magnitudes.

Table 4: Duan smearing factors $\hat{S} = \overline{\exp(\hat{u})}$ by amount equation, estimated separately by race where the underlying regression is race-specific.

Amount equation	**White**	**Black**
Intervivos transfer out	2.202	1.740
Intervivos transfer in	2.273	2.143
Education transfer	2.224 (pooled)	

Table 5: Intervivos Transfer Functions: Probit

	Provided transfer		Received transfer	
	White	Black	White	Black
Log non-asset income	0.059^{***} (0.010)	0.083^{***} (0.030)	-0.119^{***} (0.005)	-0.074^{***} (0.011)
Log asset income	0.020^{***} (0.003)	0.018 (0.011)	-0.008^{***} (0.003)	-0.001 (0.012)
Age	0.005 (0.005)	-0.055^{***} (0.017)	-0.098^{***} (0.005)	-0.099^{***} (0.015)
Age^2	-0.0002^{***} (0.00004)	0.0004^{**} (0.00017)	0.0008^{***} (0.00005)	0.0009^{***} (0.00016)
Family size	-0.098^{***} (0.010)	-0.085^{***} (0.027)	-0.027^{***} (0.008)	-0.042^{**} (0.020)
Some college	0.025 (0.024)	0.095 (0.077)	0.101^{***} (0.021)	0.103^{*} (0.061)
College degree	0.067^{***} (0.023)	0.372^{***} (0.092)	0.109^{***} (0.022)	0.032 (0.098)
Married	0.159^{***} (0.038)	0.222^{**} (0.092)	-0.028 (0.026)	0.005 (0.068)
Background: mid	-0.091^{***} (0.022)	0.021 (0.079)	-0.048^{**} (0.023)	-0.009 (0.067)
Background: high	-0.029 (0.027)	0.060 (0.081)	0.033 (0.024)	0.086 (0.064)
Received (past)	-0.139^{***} (0.023)	-0.411^{***} (0.080)	1.303^{***} (0.018)	1.373^{***} (0.058)
Provided (past)	1.936^{***} (0.024)	1.815^{***} (0.078)	-0.148^{***} (0.024)	-0.288^{***} (0.070)
Constant	-2.693^{***} (0.153)	-1.634^{***} (0.484)	1.878^{***} (0.114)	1.074^{***} (0.360)
Observations	73,707	6,418	73,697	6,420

Notes: Birth cohort and year fixed effects not shown. Reference: no college, single, low background.
$^{*}p < 0.1$; $^{**}p < 0.05$; $^{***}p < 0.01$

5.2 What the Estimated Functions Say

Several patterns in the estimated intervivos transfer functions are notable.

First, a college degree increases the probability of providing for both races, and by more for Black households. The coefficient on a college degree in the probit for providing is 0.067 for white and 0.372 for Black heads, a factor of more than five. On the receiving side, a college degree increases the log amount received by 0.688 for white and 0.507 for Black heads, and significantly increases the probability of receiving only for white heads. A college degree is associated with a much higher probability of providing for Black households and with a higher probability of receiving for white households only, consistent with the "Black Tax" described in the literature, in which Black households that have achieved success assume some financial responsibility for their less fortunate relatives.

Second, family background matters more for white households. Coming from a high-background family increases the amount received by 0.403 for white heads, while for Black heads the same coefficient

Table 6: Intervivos Transfer Functions: OLS (Conditional on Transferring)

	Provided transfer		Received transfer	
	White	Black	White	Black
Log non-asset income	0.145*** (0.017)	0.226*** (0.052)	−0.012 (0.009)	0.002 (0.017)
Log asset income	0.066*** (0.005)	0.050*** (0.018)	0.074*** (0.006)	0.017 (0.024)
Age	0.073*** (0.008)	0.016 (0.023)	0.066*** (0.008)	0.039 (0.026)
Age^2	−0.0005*** (0.00008)	0.0001 (0.00024)	−0.0007*** (0.00010)	−0.0004 (0.00032)
Family size	−0.054*** (0.018)	−0.055 (0.048)	−0.027 (0.017)	0.032 (0.033)
Some college	0.166*** (0.047)	0.210 (0.133)	0.285*** (0.044)	0.227** (0.106)
College degree	0.455*** (0.043)	0.174 (0.150)	0.688*** (0.047)	0.507*** (0.189)
Married	−0.091 (0.077)	−0.216 (0.157)	0.362*** (0.051)	0.300** (0.122)
Background: mid	0.080** (0.041)	0.046 (0.127)	0.148*** (0.048)	0.064 (0.125)
Background: high	0.229*** (0.049)	0.056 (0.130)	0.403*** (0.050)	0.223* (0.116)
Constant	3.536*** (0.223)	3.906*** (0.651)	5.426*** (0.169)	5.057*** (0.499)
Observations	5,115	421	5,794	708
R^2	0.241	0.216	0.167	0.046

Notes: Conditional on transferring. Year fixed effects not shown. Reference: no college, single, low background.
* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

is about half the size (0.223). The coefficient on the probability of receiving is not significant for either race once undergraduate-age enrolled heads are dropped. I do not read this as weaker transmission across generations for Black households. The background variable is a recalled self-rating whose scale appears to differ by race, as the distribution in Section 3.1 shows, and a measure that means different things across groups will produce a smaller coefficient in the group whose reports are noisier. What the estimates support is the weaker claim that transfers, in direction, timing, and magnitude, depend on the wealth distribution within the family network, and that the level and distribution of wealth among Black families differs from that among white families.

Third, past transfer history is among the strongest predictors of current transfers, consistent with persistent family networks. Having received a transfer in the past increases the probability of receiving, with a coefficient of 1.303 for white and 1.373 for Black heads, and having provided in the past similarly increases the probability of providing (1.936 and 1.815). Those that start providing at a young age will likely continue to provide throughout the life cycle. Likewise, those that receive may likely continue to receive throughout the life cycle. A model that treats receiving as an independent draw each period would likely understate how concentrated these transfers are.

6 What the Regressions Can and Cannot Identify

The estimates in the previous sections are descriptive. They are conditional associations in observational panel data, and there are three limits to how they can be interpreted.

First, the race coefficients cannot be interpreted as causal effects of race. They capture everything correlated with race that is not captured by the controls, including wealth held outside the measured

asset-income variable, the resources of the extended family network, local labor markets, and the history of access to credit and housing. The conditional gap in payment for college is the part of the raw gap that is not explained by these controls. Nam (2022) finds that with a fuller set of parental resource measures nearly all of the receipt gap is accounted for, and that Black children are slightly more likely to receive conditional on resources. I follow this interpretation in my paper, under which the gap reflects the economic position of Black parents and not a difference in the willingness to give.

Second, the link between the channels is an association between a transfer at 18 and a transfer decades later, and it is not evidence that the first transfer caused the second. The association is also consistent with a persistent family type that generates both flows. Separating the two would require variation in the first transfer that is unrelated to the family's standing, which I do not have in this data. The structural model in the next section does not separate them either, since it takes the measured link as given and follows its implications for the balance sheet.

Third, the transfer-history indicators capture persistence that may itself reflect unobserved heterogeneity rather than state dependence. The size of these coefficients should not be interpreted as a structural parameter, and a model that uses them needs to make an assumption on how much of that persistence comes from a household's transfer history and how much comes from a fixed family type.

7 A Life-Cycle Model for These Functions

Together, differences in timing, direction, and magnitude of family transfers can have stark implications on savings. Individuals at younger ages face more financial constraints than those at older ages. They have less savings, smaller incomes, need to be mindful about savings for older ages, and may face additional expenses such as education or caring for young children. A dollar received at 25 is therefore different from a dollar received at 55, since the first arrives when a household is most likely to be borrowing constrained and has thirty years to compound. Similarly, receiving more than providing at younger ages creates a buffer that allows greater spending and savings that can have further implications for future years. Without a life cycle model, we cannot see the full implications of the differences in timing of these transfers.

For this reason, I develop a quantitative life-cycle model with an endogenous education decision at age 18, incorporating the race-specific transfer functions estimated above. Households live for 67 annual periods, from age 18 to age 84, with constant relative risk aversion utility over consumption and incomplete markets. At age 18, the agent chooses between not attending college, enrolling in a two-year program, and enrolling in a four-year program. This choice depends on initial assets, expected parental payment for college, the price of each program, expected earnings by degree, and the expected path of future transfers in both directions. Earnings follow race-specific estimated processes with persistent and transitory components. Federal student loans are available with limits that depend on the program, the year of study and the family's measured resources, and a graduate repays over a fixed horizon.

Recurring transfers provided and received enter the budget constraint through the estimated probit and amount equations of Section 5, retransformed using equation (2). The two transfer channels are also connected in the model, so that a parental education transfer seeds the recipient's transfer history. The

link documented in fact 4 enters as a seed probability built from the estimated coefficients, the ratio of the coefficient on having received help with college to the coefficient on past receipt, which is 0.126 for white and 0.296 for Black households. A graduate whose parents paid for college therefore enters the working period already marked as a recipient with that probability, so that the average shift in the receipt index from education help matches the estimated one.

With a structural model, I can run several counterfactual experiments to isolate the impact of each source of racial heterogeneity. The first set of experiments isolates the differences in family transfers, equalizing payment for college, recurring receipt, and recurring provision across races one channel at a time while holding the others fixed. Running these experiments at several ages then separates the contribution of the timing of a transfer from the contribution of its magnitude.

I do not report the calibration or the counterfactual experiments, which are still pending. I report the inputs to the model, the transfer functions, the smearing factors and the measured link, in the previous sections so that the measurement can be read independently of the quantitative results of the model.

8 Limitations and Extensions

The measurement and the model have several limitations.

Gifts and inheritances. Although bequests are important components of the larger picture of inherited wealth and intergenerational mobility, I can only partly measure them in this paper. The wealth-module item on a gift or inheritance worth $10,000 or more is included in fact 5, where 6.25 percent of white heads compared to 1.29 percent of Black heads receive per wave, and this is among the largest racial gaps in participation that I document. Gifts and inheritances are measured in this paper, but they cannot be separated from each other before 2015, when the PSID added an item distinguishing a large gift from an inheritance and expanded the year-received question. This is a limitation, since bequests are the larger transfer in aggregate. Kotlikoff and Summers (1981) and Gale and Scholz (1994) both find bequests exceeding intervivos flows, and De Nardi (2004) shows that voluntary bequests concentrate wealth. Separating gifts from inheritances is the next step for the measurement, and it is now feasible. Five waves with the new item are available, which is enough to estimate a pooled gift share even if the Black subsample will not support a race-specific split. The model has a related limitation. Most notably, the model excludes inheritance. Its decomposition captures life-cycle transfers rather than the full contribution of family wealth. In the model, a bequest requires a terminal value on wealth and a recipient inside the model. With no recipient inside the model, a terminal value on wealth would be a free parameter, and for this reason I leave bequests in the model for future work.

Housing. The model has a single asset and no home ownership. A gift toward a down payment is measured in the data but treated as cash in the model, and this may understate its importance since a down payment allows a household to borrow to purchase a home. As shown in fact 5, help with a home purchase is where the racial gap in gifts is largest.

Graduate schooling. Neither the model nor my measure of student debt includes borrowing for graduate school, which Scott-Clayton and Li (2016) find accounts for a large share of the growth in the

racial debt gap after graduation. The patterns in student debt that I document are limited to debt early in the career.

Measurement. The retrospective amounts in the 2013 supplement are cumulative and self-reported, and no single deflator applies to them. In addition, the question on support provided in the main survey is known to capture only a fraction of the transfers that the roster records, and the absolute levels of giving are understated, although the racial ratios can still be compared. Furthermore, the stock of student debt is available for only four waves.

9 Conclusion

Using the PSID and the 2013 Family Rosters and Transfers supplement, I find that Black households compared to white households provide more upstream support and to a broader range of relatives. This pattern in the direction of transfers relates to differences in timing. At younger ages, Black households are more likely to provide compared to white households. Furthermore, although at younger ages the proportion of Black households receiving transfers is comparable to the proportion of white households, white households are additionally receiving at larger amounts. These differences at younger ages are particularly significant because households are more resource constrained, with smaller incomes and less savings than older households.

I also find that Black children receive substantially less parental education support than white children, and that this is the largest racial gap in family dollars I measure. The two channels are not independent. Linking the children observed in the supplement to their own later records as household heads, having received help with college raises the probability of receiving recurring support by 4.6 percentage points for white and 12.1 percentage points for Black heads. Help with college may therefore mark a household as one that receives, although the association is also consistent with a persistent family type that generates both flows.

A third pattern concerns which margin the racial difference sits on, and it differs across channels. Recurring support differs in amount while participation among the young is nearly identical. Large one-time gifts and student debt differ in participation while the amounts among participants are more similar. This may help explain why studies comparing participation rates have found small racial differences while studies comparing dollars have found large ones.

The estimated transfer functions reported here are the inputs to a life-cycle model with an endogenous education decision at age 18, in which the two channels are connected so that a parental education transfer seeds the recipient's transfer history. That exercise is in progress and the measurement does not depend on it. More research needs to be done to understand persistent differences in wealth including wealth building decisions such as education, occupation choices, and home ownership. Understanding the relative importance of these channels is essential for designing policies that can effectively close the racial wealth gap.

References

Amorim, Mariana and Sarah Morgan Deming (2022). "Black–White disparities in nuclear family trajectories and parents' postsecondary transfers to adult children". In: *Journal of Marriage and Family* 84.4, pp. 1024–1045. DOI: 10.1111/jomf.12845.

Attanasio, Orazio, Costas Meghir, and Corina Mommaerts (2015). *Insurance in extended family networks*. Tech. rep. National Bureau of Economic Research.

Cameron, Stephen V. and James J. Heckman (2001). "The Dynamics of Educational Attainment for Black, Hispanic, and White Males". In: *Journal of Political Economy* 109.3, pp. 455–499.

Carneiro, Pedro and James J. Heckman (2002). "The Evidence on Credit Constraints in Post-Secondary Schooling". In: *Economic Journal* 112.482, pp. 705–734.

Caucutt, Elizabeth M. and Lance Lochner (2020). "Early and Late Human Capital Investments, Borrowing Constraints, and the Family". In: *Journal of Political Economy* 128.3, pp. 1065–1147. DOI: 10.1086/704759.

Chiteji, Ngina S and Darrick Hamilton (2002). "Family connections and the black-white wealth gap among middle-class families". In: *The Review of Black Political Economy* 30.1, pp. 9–28.

De Nardi, Mariacristina (2004). "Wealth inequality and intergenerational links". In: *The Review of Economic Studies* 71.3, pp. 743–768.

Duan, Naihua (1983). "Smearing Estimate: A Nonparametric Retransformation Method". In: *Journal of the American Statistical Association* 78.383, pp. 605–610.

Francis, Dania V. and Christian E. Weller (2021). "Retirement Inequality by Race and Ethnicity". In: *Race and Ethnicity Essay Collection*. Analysis of the August–December 2020 Census Household Pulse Survey. Society of Actuaries.

Gale, William G. and John Karl Scholz (1994). "Intergenerational Transfers and the Accumulation of Wealth". In: *Journal of Economic Perspectives* 8.4, pp. 145–160.

Haider, Steven J. and Kathleen McGarry (2018). "Parental Investments in College and Later Cash Transfers". In: *Demography* 55.5, pp. 1705–1725. DOI: 10.1007/s13524-018-0703-6.

Hotz, V. Joseph, Emily E. Wiemers, Joshua Rasmussen, and Kate Maxwell Koegel (2023). "The Role of Parental Wealth and Income in Financing Children's College Attendance and Its Consequences". In: *Journal of Human Resources* 58.6, pp. 1850–1880. DOI: 10.3368/jhr.1018-9828R2.

Johnson, Matthew T. (2013). "Borrowing Constraints, College Enrollment, and Delayed Entry". In: *Journal of Labor Economics* 31.4, pp. 669–725. DOI: 10.1086/669964.

Kotlikoff, Laurence J. and Lawrence H. Summers (1981). "The Role of Intergenerational Transfers in Aggregate Capital Accumulation". In: *Journal of Political Economy* 89.4, pp. 706–732.

Nam, Yunju (2021). "Parents' financial assistance for college and black-white wealth disparity". In: *Children and Youth Services Review* 128, p. 106159. DOI: 10.1016/j.childyouth.2021.106159.

Nam, Yunju (2022). "Parental Financial Assistance for College and Persistent Black–White Income Disparity". In: *Journal of the Society for Social Work and Research* 13.3, pp. 489–509. DOI: 10.1086/712370.

Neelakantan, Urvi (2023). *Black–White Differences in Student Loan Default Rates Among College Graduates*. Economic Brief 23-12. Federal Reserve Bank of Richmond.

O'Brien, Rourke L (2012). "Depleting capital? Race, wealth and informal financial assistance". In: *Social Forces* 91.2, pp. 375–396.

Rauscher, Emily (2016). "Passing It On: Parent-to-Adult Child Financial Transfers for School and Socioeconomic Attainment". In: *RSF: The Russell Sage Foundation Journal of the Social Sciences* 2.6, pp. 172–196. DOI: 10.7758/RSF.2016.2.6.09.

Schaller, Jessamyn and Chase S Eck (2021). *Family Support in Hard Times: Dynamics of Intergenerational Exchange after Adverse Events*. Tech. rep. National Bureau of Economic Research.

Scott-Clayton, Judith and Jing Li (2016). *Black–white disparity in student loan debt more than triples after graduation*. Evidence Speaks Reports Vol. 2, No. 3. Brookings Institution.

Toney, Jermaine and Darrick Hamilton (2022). "Economic insecurity in the family tree and the racial wealth gap". In: *Review of Evolutionary Political Economy* 3.3, pp. 539–574.