

Saving, Sharing, or Spending? The Wealth Consequences of Raising Children

Michelle Maroto 1

Published online: 8 October 2018

© Population Association of America 2018

Abstract

This study uses 1986–2012 National Longitudinal Survey of Youth 1979 cohort data to investigate the relationship between raising children and net worth among younger Baby Boomer parents. I combine fixed-effects and unconditional quantile regression models to estimate changes in net worth associated with having children in different age groups across the wealth distribution. This allows me to test whether standard economic models for savings and consumption over the life course hold for families at different wealth levels. My findings show that the wealth effects of children vary throughout the distribution. Among families at or below the median, children of all ages were associated with wealth declines, likely due to the costs of child-rearing. However, at the 75th percentile and above, wealth increased with the presence of younger children but decreased after those children reached age 18. My results, therefore, provide evidence for a saving and investment model of child-rearing among wealthier families but not among families at or below median wealth levels. For these families, the costs of raising children largely outweighed motivations for saving.

Keywords Children · Families · Wealth · Intergenerational transfers · Life course

Introduction

As almost any parent will attest, raising children is costly for families. For 2015, the U.S. Department of Agriculture (USDA; Lino et al. 2017) estimated that supporting a child within a two-child married-couple family costs, on average, \$12,350–\$13,900 per year. These expenses, which vary across households and regions, have also

Electronic supplementary material The online version of this article (https://doi.org/10.1007/s13524-018-0716-1) contains supplementary material, which is available to authorized users.

Michelle Maroto maroto@ualberta.ca

Department of Sociology, University of Alberta, 6-23 Tory Building, Edmonton, AB T6G 2H4, Canada



dramatically increased over time (Kornrich and Furstenberg 2013). Parents now face greater pressure to prepare their children for adulthood and provide them with the best opportunities available, which often requires increased spending on goods, activities, and education (Lareau 2002; Stearns 2003). Combined with a context of rising economic insecurity and a contracting social safety net, this presents a tough situation for parents, many of whom must decide between saving for retirement and supporting their children (Leicht and Fitzgerald 2014). It also leads to broader questions regarding the relationship between raising children and parental wealth.

Addressing this relationship, the *life cycle hypothesis* posits a saving and spending model wherein parents accumulate wealth through the child's younger years to potentially invest in that child later (Modigliani 1986). Through increased savings motivations, the simplest version of this model predicts a positive relationship between children and wealth. However, although parenthood can increase the motivation to save, becoming a parent also changes consumption patterns when income flows are redirected to children (Love 2010; Tin 2000). Rising costs that limit parents' abilities to build wealth and save for the future then imply a negative relationship between these variables, which has been present in certain studies (Grinstein-Weiss et al. 2006; Land and Russell 1996).

What do these contradictory motivations and constraints mean for the effects of children on wealth? Does parenthood promote saving, sharing, or spending? Studies on the relationship between children and wealth have reported mixed results, with the wealth effects of parenthood largely depending on the ages and number of children (Grinstein-Weiss et al. 2008; Schmidt and Sevak 2006; Scholz and Seshadri 2007). More importantly, parents' abilities to invest in their children further rely on their backgrounds and earlier wealth levels, which is why the basic life cycle savings model primarily applies to wealthier households (Wolff 1981). Revised models stress the need to consider family situations, demographic characteristics, and age trajectories (Land and Russell 1996; Love 2010)—concepts that more often appear in the life course literature (O'Rand and Krecker 1990).

I use longitudinal data from the 1979 cohort of the National Longitudinal Survey of Youth (NLSY79) to capture how support for children at different ages might influence the wealth of younger Baby Boomer parents, born after WWII between 1946 and 1964. With most members transitioning into parenthood across survey waves and being on the verge of retirement in the latest waves, the NLSY79 covers a key cohort for studying the relationship between children and wealth over the life course. In my analyses, I combine fixed-effects and unconditional quantile regression models to estimate changes in household net worth associated with parenthood for families throughout the wealth distribution. This further allows me to test whether standard economic models for savings and consumption over the life course hold for families at different wealth levels.

I situate this analysis within a theoretical framework that incorporates economic and sociological perspectives regarding the life cycle hypothesis (Modigliani 1986; Wolff 1981), life course transitions (Elder 1985; Macmillan and Copher 2005), and intergenerational wealth transfers (Albertini and Radl 2012; Mare 2011; Spilerman 2000). My findings show that parental choices about consumption and the consequences for wealth are determined by broader wealth constraints. Among families at or below the median, children of all ages were associated with wealth declines, likely due to the



costs of child-rearing. However, at the 75th percentile and above, wealth increased with the presence of younger children but decreased after those children reached age 18. This provides evidence for a saving and spending model among wealthier families that is not present for those with wealth levels below the median.

My broader findings contribute to research on intergenerational inequality and wealth by demonstrating how the costs of child-rearing limit parental resources among certain households but encourage wealth accumulation in others, resulting in a growing wealth divide across households with children. The comparisons throughout the wealth distribution further highlight multiple components of wealth inequality and demonstrate the need to move beyond analyses at the mean. Raising and supporting children may motivate some households to build wealth, but not all households have the same resources available to transfer to children or the same access to credit. For these families, the costs of raising children greatly outweigh motivations for saving with continuing consequences for overall wealth inequality.

The Wealth Effects of Children

Wealth provides numerous advantages, including access to better neighborhoods as well as educational opportunities and economic stability for parents and their children (Keister 2000; Keister and Moller 2000). Although parental wealth clearly benefits children in many ways, the findings surrounding the relationship between children and wealth have been mixed. Some studies have found no significant association between children and wealth outcomes (Lupton and Smith 2003; Ozawa and Lee 2006), others have found negative effects (Dockery and Bawa 2015; Grinstein-Weiss et al. 2006; Land and Russell 1996; Scholz and Seshadri 2007; Smith and Ward 1980; Tin 2000), and still others have shown positive associations (Grinstein-Weiss et al. 2008; Yamokoski and Keister 2006). For instance, Scholz and Seshadri (2007) found that having children increased household expenditures and decreased retirement wealth using 1992-2004 Health and Retirement Study (HRS) data, and Tin (2000) showed that parents saved less than individuals without children in 1995 Survey of Income and Program Participation (SIPP) data. However, Yamokoski and Keister (2006) demonstrated net worth increases using NLSY79 data, and Schmidt and Sevak (2006) found similar results with the Panel Study of Income Dynamics (PSID). In many of these studies, the effects also varied with the ages and number of children as well as with the parents' marital status, duration of marriage, and race/ethnicity (Painter and Shafer 2011; Schmidt and Sevak 2006; Smith and Ward 1980).

Considering the mixed findings in previous research, this study incorporates life cycle and life course perspectives and addresses three research questions. How do children influence parental wealth across years? Do these wealth effects vary with the ages of children, as predicted by life cycle and savings models? And, finally, how are the effects influenced by larger wealth constraints, as indicated by parents' locations across the wealth distribution?

Life Cycle Hypothesis for Saving

Most studies on the relationship between children and wealth have incorporated perspectives extending from the life cycle hypothesis (LCH) in economics. The LHC



for saving, which originated with the work of Modigliani and Brumberg (1954) and draws on Keynes (1936), posits that rational actors will accumulate wealth until retirement and then move into a period of dissaving as they seek to maximize their expected lifetime utility by equating the marginal utility of expenditures throughout their life spans. Despite the simplicity of the LCH, it has received limited support in the literature, with many studies showing that saving among households continues well after retirement (DeNardi et al. 2016; Keister and Moller 2000). The LCH also relies on the belief that the vast amount of savings is accumulated and spent within a single generation, even though much wealth is passed on to subsequent generations through bequests and ongoing financial support (Dynan et al. 2002).

In light of the limited support for the simple LHC in the early literature, researchers have since reformulated the hypothesis to stress variation in savings patterns. On a broader level, this perspective includes a "focus on those systematic variations in income and in 'needs' which occur over the life cycle, as a result of maturing and retiring, and of changes in family size" (Modigliani 1986:300). According to this perspective, wealth varies over time and depends on an individual's age and income, but it also differs in regard to demographic characteristics and family situations, which include the birth of a child (Land and Russell 1996; Love 2010; Tin 2000; Wolff 1981).

Life Cycle Hypothesis and Children

As a central transition within the life course, the birth of a child presents a key change in household structure and dynamics that influences both parents' motivations for saving and their consumption patterns (Elder 1985; Love 2010; O'Rand and Krecker 1990). Bequest motives and expected educational expenses are important factors for saving that often lead parents to continue to build wealth at older ages (Browning and Lusardi 1996; Land and Russell 1996). However, expenditure studies have identified considerable direct and indirect expenses associated with raising children that directly affect parents' marginal utility of consumption (Comanor et al. 2015; Kornrich and Furstenberg 2013; Lino et al. 2017), which likely factors into why multiple studies have found a negative relationship between children and wealth.

These changes in household structure imply two potentially contradictory outcomes, driven by different mechanisms, regarding the association between parenthood and wealth. First, children could encourage greater wealth accumulation when parents expand their savings to manage the expected increases in consumption costs and to eventually transfer wealth to the next generation. This situation implies an investment or *saving and spending model* among families. Second, children could decrease wealth as part of a *constant costs model*. When parents increase their spending to support their children, this limits their ability to save and might even result in increased borrowing and debt. The additional effects of parenthood on income, especially among women, can further lead to wealth declines associated with children (Budig and England 2001).

Several studies testing the relationship between the LCH and children have highlighted these conflicting mechanisms. Within Love's (2010) research based on 1999–2006 PSID and HRS data, families with children accumulated less in savings during their working years than those without children, but they also drew down wealth more slowly after retirement. Land and Russell's (1996) study of 1984–1991 SIPP data presented similar results. According to their findings, the peak age of median household



wealth accumulation occurred much later for families with a larger number of children under age 18, indicating continued attempts at wealth building through older ages and a deviation from the basic LCH.

Love (2010) and Land and Russell (1996) provided evidence for increasing consumption costs and savings motivations, and results of both studies lead to the expectation that children will be associated with wealth. However, the direction of this relationship is less clear, primarily because these studies did not consider the larger constraints placed on families. When constraints are combined with a broader understanding of life course trajectories and transitions, the wealth effects of parenthood will likely depend on how parents manage their resources within a context of larger barriers. For instance, among low-income families, Grinstein-Weiss et al. (2006) found that the number of children was negatively associated with average monthly savings deposits, but children were positively associated with wealth in a later study that focused on a broader distribution of families using SIPP data (Grinstein-Weiss et al. 2008). These findings indicate that the relationship between children and wealth varies with parents' available resources and, potentially, their place within the wealth distribution.

Variation Across the Wealth Distribution

Wealth is extremely concentrated in the United States. In 2013, the top 20 % of households controlled at least 87 % of the total net worth, leaving approximately 1.1 % for the bottom half of households to share (Pfeffer and Schoeni 2016; Wolff 2016). Within such an unequal wealth distribution—in which many households have zero assets and negative net worth—the factors that influence wealth outcomes can vary greatly for households with different wealth levels (Killewald et al. 2017; Maroto 2016). This calls into question whether standard wealth models, such as the LCH, apply to all households regardless of their place within the wealth distribution.

As Wolff (1981:94) noted, the life cycle savings model primarily pertains to "the white, urban, educated middle class accumulation of the standard forms of middle class wealth—housing, durables, and cash." In addressing this limitation, Wolff (1981) identified a three-class model: (1) a capitalist class that generates wealth through investments, (2) a primary working class whose wealth is based on savings from labor earnings, and (3) a secondary working class with low earnings and limited wealth accumulation. Following these groups, I investigate the relationship between children and wealth for low-, median-, and high-wealth households. Because of the larger constraints on certain households, I posit two models in which the effects of children on wealth vary across the wealth distribution.

Most families face similar financial costs with parenthood and seek to invest in their children, but many have very different resources to attend to these costs (Albertini and Radl 2012; Fingerman et al. 2015; Folbre 2008). Because families with greater wealth are better able to invest in their children while also continuing to save for their futures (Keister and Moller 2000), I expect that among high-wealth households, parenthood and children will be associated with increased net worth levels (Hypothesis 1). Among those who have the ability to save money, parenthood should increase motivations to build assets, resulting in higher wealth levels, even as household consumption costs increase. This fits within a saving and spending model for parental investment in children and the more conventional LCH, which better applies to high-wealth households (Wolff 1981).



Although higher-income families tend to spend more money on their children in absolute dollars (Hao and Yeung 2015), lower-income households spend a greater proportion of their income on their children, which indicates a spending floor for general needs (Kornrich and Furstenberg 2013; Lino et al. 2017). As articulated within a constant costs model, I expect that *among low- and median-wealth households, children will be associated with decreases in net worth* (Hypothesis 2). Because parents with limited resources often provide support at a cost to their own financial well-being (Settersen and Ray 2010; Swartz et al. 2011), spending to care for children will further restrict savings and overall wealth for these families. The costs of child-rearing and the consumption needs of children will outweigh any savings motivations among these households.

Variation With Age of the Child

Because the specific costs of child-rearing vary with the age of the child as needs change throughout the life course (Kornrich and Furstenberg 2013; Lino et al. 2017), both the constant costs and saving and spending models present additional expectations for parental wealth related to the child's age. As highlighted in life course studies, children have different needs at different ages, which holds consequences for parental well-being and finances over time given that parents and children's situations are linked (Elder 1985; Macmillan and Copher 2005). Spending tends to be highest when children are young (stemming from childcare costs) and when children are in their early 20s (when education costs increase for most families) (Lino et al. 2017). With the ties between individual life trajectories, it follows that the costs of parenthood would change as children age and move through life course stages.

The changing costs of parenthood as children age are reflected in multiple wealth studies. In their analysis of PSID data, Schmidt and Sevak (2006) found evidence for a saving and spending model for families with children. Having children under age 6 was associated with small wealth increases, and having children aged 6–18 had increasingly positive effects on wealth. However, having children aged 18–24 was associated with wealth declines. This finding corresponds with studies showing that the financial costs associated with parenthood remain after children enter adulthood (Maroto 2017; Rauscher 2016; Schoeni and Ross 2005; Seltzer and Bianchi 2013).

Changing costs, along with earlier studies on children and wealth, indicate that the relationship between children and wealth will likely vary with the ages of children. However, whether families experience constant child-rearing costs or engage in a saving and spending model also depends on their wealth levels. As part of an investment model among wealthier parents, I expect that wealth will increase with the ages of children in high-wealth households until the children reach age 18, when wealth will then start to decline (Hypothesis 3). Life cycle perspectives support a saving, spending, and investing model wherein savings motivations result in wealth increases early on, but bequest motivations predict additional wealth declines associated with adult children (Love 2010). Consequently, among high-wealth households with greater resources, young children will be associated with increased net worth as parents save for their children's futures and invest in family wealth, especially through housing. After these children reach adulthood, high-wealth parents will likely begin to make planned transfers for certain life events and to pay for higher education for their young adult children.



Family expenditure models predict varying but continuing costs associated with children that should be highest among families with very young and older children (Lino et al. 2017). As part of a constant costs model among less-wealthy parents, I expect that the presence of children of all ages will be negatively associated with wealth in low- and median-wealth households, but the effects will be stronger (most negative) among those with children age 18 and older (Hypothesis 4). These families will likely experience some of the same costs as the high-wealth households (Fingerman et al. 2015; Kornrich and Furstenberg 2013); however, their limited resources will restrict their ability to build wealth and save for their children.

Data and Measures

I use NLSY79 data to study the relationship between parenthood and total household net worth. The NLSY79 cohort is a stratified sample of 12,686 respondents between ages 14 and 22 when first surveyed in 1979. These respondents are members of the younger Baby Boomer generation, born between 1957 and 1964. The ongoing survey interviewed respondents annually from 1979 through 1992 and biennially from 1992 through 2012. In addition to containing ample information on demographics, family transitions, employment, and education, the survey also collected detailed asset and debt information from respondents yearly from 1985 through 1993, biennially from 1994 through 2000, and at four-year intervals since then.

Because I focus on wealth with a lagged outcome variable, I rely on data from 1986 through 2012 for my analyses. Removing data from certain oversamples and missing data leaves a sample of 10,364 individuals (or cases) and 90,863 observations (or person-years). My data, therefore, take the form of an unbalanced panel sample in which the number of periods may differ across individuals. Per-individual observations in the data range from 2 to 14, with a mean of 8.8 observations across individuals.

Outcome Variable

My outcome variable is the respondent's *total household net worth* in 2012 U.S. dollars. The survey calculates net worth by subtracting total debts from the total value of all assets for the respondent and the respondent's spouse (if present in the household). Total assets include property, vehicles, businesses, pensions, and other types of financial and nonfinancial assets. Total debt includes balances on credit cards, mortgages, lines of credit, vehicle debt, education debt, and other types of loans.

Figure 1 depicts the percentage of net worth and average net worth for each quintile of NLSY79 person-years between 1986 and 2012. The top quintile of person-years held approximately 80 % of the total net worth, with decreasing amounts going to each of the lower quintiles. Among person-years in the top quintile, the average reported net worth was \$669,000, followed (respectively) by averages of \$120,000, \$44,000,

¹ In addition to a cross-sectional sample of 6,111 respondents, the NLSY79 originally included supplemental oversamples of 5,295 low-income, Hispanic, Latino, or black respondents as well as 1,280 respondents serving in the military. Because the survey dropped most of the military subsample in 1985, I do not include these respondents in my analyses.



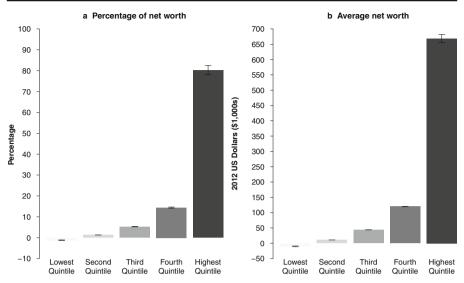


Fig. 1 Net worth by quintile, NLSY person-years, 1986–2012: Estimates and 95 % confidence intervals for the percentage of total net worth (panel A) and the average net worth (panel B) by quintile for NLSY person-years from 1986–2012 in 2012 USD. N = 90,863 observations (person-years). *Source:* NLSY79, 1986–2012

\$11,000, and -\$10,000 among the next four quintiles. Notably, the average net worth for the top quintiles in the NLSY is lower than the averages for the Survey of Consumer Finances (SCF), which is considered to be one of the strongest wealth data sets in the United States.² Thus, this analysis likely misses the highest wealth households that are present only in surveys like the SCF that specifically target these households, but results will still apply to most U.S. households with members of the Baby Boomer cohort (Kennickell 2000; Kennickell and Woodburn 1992).

To account for potential skewness in net worth, I transform this variable using the inverse hyperbolic sine (IHS) function, as proposed by Johnson (1949). Although studies of income inequality generally use a log transformed outcome variable, the many negative and zero values of net worth limit the usefulness of this transformation. Logging this variable would require either adding a constant to remove the negative values or dropping these cases entirely, which creates a truncated distribution. Instead, the IHS transformation retains all negative and zero values while still dampening the effect of outliers in a skewed distribution (Burbidge et al. 1988; Pence 2006). The IHS transformation takes the following form in Eq. (1):

$$sinh^{-1}(\theta y_{it}) = \ln(\theta y_{it} + (\theta^2 y_{it}^2 + 1)^{1/2})/\theta,$$
 (1)

where θ is a scaling parameter that can be estimated via maximum likelihood, and y_{it} refers to total net worth for individual i at time t. Following Pence (2006), I use maximum likelihood estimation to obtain a scaling parameter (θ) of approximately 0.0003397, which I apply in all models. Because the IHS transformation behaves like a log transformation for large enough values, this allows for a similar interpretation of results as a percentage change in the dependent variable, after multiplying by θ .

² Please see the online appendix (section S5) for a detailed comparison of SCF and NLSY79 wealth data.



Predictor Variables

I incorporate two predictor variables related to the presence and age of the respondents' children. First, my primary predictor variable measures whether the respondent has *any children* living within or outside the household. The measure includes biological and adopted children. This allows me to discuss how wealth varies for individuals in the years prior to and after becoming parents. Second, I incorporate a measure to account for the *age of first child*, which estimates how parental wealth fluctuates over the life course of the oldest child. This measure includes the following categories: no child (reference), oldest child age 0–5 years, 6–11 years, 12–17 years, and 18 or older.³ I constructed these variables using information on the age and status of household members, the respondent's relationship to these household members, and the reported ages of the respondents' children at each survey wave.

Table 1 presents weighted descriptive statistics for the total observations or personyears broken down by parental status. As shown in Table 1, 73 % of person-years from 1986 to 2012 had children present. On average, person-years with children reported higher net worth and employment income than those without. However, individuals were also more likely to be older and married during the person-years after parenthood, which likely accounts for much of this positive association.

Control Variables

Because prior wealth levels are strongly associated with later wealth, I include a *lagged net worth* variable within all models (Keister 2000; Killewald et al. 2017). This variable represents the respondent's total net worth in the previous period, allowing me to control for wealth stability over time. Across models, its coefficient can therefore be interpreted as a stability parameter.

I include time-varying covariates for demographic, employment, health, family, and regional variables to account for different explanations of wealth inequality. Savings behavior and portfolio choices strongly influence a household's ability to accumulate wealth, which varies with age (Keister 2000; Keister and Moller 2000; Spilerman 2000). Because wealth accumulation also varies with marital status, family size, and household structure (Lupton and Smith 2003; Maroto and Aylsworth 2017), I control for the respondent's reported age, marital status, and number of adults present. I measure age in years and include a quadratic age-squared term in order to account for any nonlinear relationships with net worth. Marital status indicates whether the respondent was married (the reference category), never married, or formerly married (separated, divorced, or widowed). Number of adults refers to the number of family members over age 17 living in the household. I also include controls for the respondent's residence in a rural area and the presence of any health limitations that affected the amount or kind of work a respondent could do.

Beyond demographic factors, education and income have generally shown a positive association with assets, wealth, and debt across studies (Bricker et al. 2014; Semyonov



³ To assess heterogeneity in family structures, I also tested models with measures for the *ages of any children*. Results from these models appear in the online appendix (section S3).

⁴ Unweighted descriptive statistics are presented in the online appendix (section S1).

Table 1 Weighted descriptive statistics of NLSY79 variables by parental status

	Total ^a		No Childre	n	Any Childa	ren
	Estimate	SE	Estimate	SE	Estimate	SE
Household Net Worth (dollars) ^b						
25th percentile	5,629	114	5,096	169	5,974	152
Mean	166,613	1,785	132,748	2,745	181,564	2,264
Median	42,381	448	28,768	587	50,564	675
75th percentile	146,627	1,350	107,716	1,744	164,897	1,766
Any Children	69.37	0.19	_	_	_	_
Number of Children	1.46	0.01	_	_	_	_
Any Children by Age Group			_	_		
Under age 6	29.37	0.18	_	_	_	_
6-11 years old	32.47	0.19	_	_	_	_
12-17 years old	22.68	0.17	_	_	_	_
18+ years old	17.34	0.15	_	_	_	_
Oldest Child by Age Group			_	_	_	_
Under age 6	14.75	0.14	_	_	_	_
6–11 years old	21.05	0.16	_	_	_	_
12–17 years old	15.91	0.14	_	_	_	_
18+ years old	17.34	0.15	_	_	_	_
Current Marital Status						
Married	64.26	0.19	41.02	0.37	74.51	0.20
Never married	20.13	0.16	47.80	0.37	7.92	0.10
Formerly married	15.61	0.14	11.17	0.23	17.57	0.18
Mean Number of Adults Present	1.97	0.00	1.81	0.01	2.04	0.00
Mean Household Employment Income (dollars) ^b	63,859	239	57,775	383	66,546	299
Mean Weeks Worked	42.21	0.07	46.12	0.10	40.48	0.09
Employment Status						
Employed	84.63	0.14	92.57	0.19	81.13	0.18
Out of the labor force	13.93	0.14	6.27	0.18	17.31	0.18
Unemployed	1.44	0.04	1.16	0.07	1.56	0.05
Self-employed	6.89	0.10	6.00	0.18	7.28	0.13
Job Gaps Since Age 20						
No job gaps	49.67	0.20	57.61	0.37	46.17	0.24
Single job gap	24.73	0.17	24.83	0.32	24.68	0.21
Two+ job gaps	25.60	0.17	17.57	0.28	29.15	0.21
Mean Years of Schooling Completed	13.41	0.01	14.18	0.02	13.07	0.01
Currently Enrolled in School	5.57	0.09	9.43	0.22	3.86	0.09
Mean Age (years)	34.43	0.03	31.72	0.05	35.63	0.04
Health Limitation	6.10	0.09	4.88	0.16	6.64	0.12
Rural	24.48	0.17	17.78	0.28	27.43	0.22
Female	52.96	0.20	45.71	0.37	56.16	0.24



Table 1 (continued)

	Totala		No Children		Any Children	1
	Estimate	SE	Estimate	SE	Estimate	SE
Non-Hispanic White	81.56	0.11	87.10	0.16	79.11	0.14
Non-Hispanic Black	12.49	0.09	8.81	0.14	14.11	0.12
Hispanic Origin	5.96	0.05	4.09	0.08	6.78	0.07

Notes: N = 90,863 observations; 10,364 individuals weighted using NLSY sample survey weights.

Source: NLSY 1979 Cohort 1986-2012, full sample.

and Lewin-Epstein 2013). I therefore include measures for the respondent's *employment status*, *self-employment status*, *cumulative number of job gaps*, *school enrollment status*, and *education level*. Employment status is a categorical variable that indicates whether the respondent was employed (reference), out of the labor force, or unemployed during the previous calendar year. I measure a respondent's cumulative number of job gaps lasting eight weeks or more using a categorical variable with the following categories: no job gaps (reference), a single job gap, and two or more job gaps. Self-employment and school enrollment status are dichotomous variables. I measure education as the number of completed years of schooling. I also control for the *total earnings from wages and salary* from the respondent's and respondent's spouse's current or most recent jobs in 2012 U.S. dollars. This variable also includes income from tips, bonuses, and overtime pay in order to more accurately represent earnings. Finally, because homeownership is the largest component of wealth for most households (Spilerman 2000), I include a variable to indicate whether the respondent was a *homeowner*.

In addition to these covariates, I also designate the *survey wave year*. The survey-year variable is an indicator variable with 14 categories where the reference category is the most recent wave (2012). I include this variable to account for any unobserved period effects, particularly those that might correspond with the 2008 Great Recession.

Methods

I combine unconditional quantile regression (UQR) with fixed-effects (FE) models to study the effects of children on wealth over time and across the wealth distribution, not just at the mean. Because net worth is highly skewed, the mean is not the most reliable measure of central tendency for this variable. For instance, the mean (\$166,613) is actually much closer to the 75th percentile (\$146,627) than the 50th percentile (\$42,381), as shown in Table 1. In such situations, UQR models allow researchers to go beyond the mean to estimate the association between certain covariates at different levels of a household's total net worth that include the median. Additionally, unlike conditional quantile regression (CQR) models, in which control variables essentially redefine each quantile, UQR models define quantiles in relation to the unconditional wealth distribution prior to the incorporation of covariates (Firpo et al. 2009; Porter 2015).



^a Estimates refer to percentages, unless otherwise noted.

^b Earnings and net worth in 2012 dollars.

I follow Firpo et al. (2009), Borgen (2016), and Porter (2015) and estimate UQR models using the recentered influence function (RIF) and FE regression.⁵ Eq. (2) defines the RIF, which I calculate for each quantile of interest:

$$RIF(Y; q_{\tau}) = q_{\tau} + (\tau - I\{Y \le q_{\tau}\}) / f_{\nu}(q_{\tau}), \tag{2}$$

where τ is the given quantile, which in this case is a range of values from 0.10 through 0.90; q_{τ} is the value of the outcome variable, net worth (Y) at the τ th quantile; $f_y(q_{\tau})$ is the density of Y at q_{τ} ; and $I\{Y \leq q_{\tau}\}$ indicates whether the outcome variable falls at or below the specified quantile. The resulting RIF, which becomes the outcome variable for the specified quantiles, holds values of $q_{\tau} + \{\tau/f_y(q_{\tau})\}$ for cases above the specified quantile and $q_{\tau} - \{(1 - \tau/f_y(q_{\tau})\}$ for cases at or below the quantile. At the 75th percentile, for example, the RIF for cases above the percentile would be $q_{0.75} + \{0.75 f_y(q_{0.75})\}$; for cases at or below that quantile, it would be $q_{0.75} + \{0.25/f_y(q_{0.75})\}$.

I then use a FE regression framework to control for unobserved, stable, time-invariant, individual-level characteristics while assessing the effects of time-varying factors across years (Allison 2009; Borgen 2016). However, instead of studying relationships at the mean net worth level, I replace the outcome, Y, with $RIF(Y; q_\tau)$ for each quantile to estimate unconditional partial effects across quantiles within a FE framework. This allows me to ascertain how net worth changes after childbirth for individuals at different points within the wealth distribution. I also incorporate bootstrap standard errors for all analyses to account for the uncertainty present in each RIF estimation.

Equation (3) represents the combined RIF and FE model for continuous data that I use to estimate an individual's net worth at time *t*. This equation also incorporates the IHS transformation of net worth discussed with Eq. (1):

$$q_{\tau}(\sinh^{-1}(y_{it})) = \mu_t + \beta \mathbf{X}_{it} + \gamma(\sinh^{-1}(y_{it-1})) + \alpha_i + \varepsilon_{it}, \tag{3}$$

where *i* indexes the individual respondent, and *t* indexes yearly observations per individual. Thus, y_{it} refers to an individual's net worth at time *t*, and $sinh^{-1}(y_{it})$ refers to the IHS transformed version of y_{it} . This is estimated for each quantile of interest (τ) using the RIF in Eq. (2). In this equation, μ_t represents the time-varying intercept, $\beta \mathbf{X}_{it}$ represents vectors of time-varying covariates and their coefficients, $\gamma(sinh^{-1}(y_{it-1}))$ represents lagged net worth and its coefficient, and ε_{it} is the error term that represents random variation for each individual at each point in time. These models assume that α_i represents a set of fixed parameters and allows for any correlations between \mathbf{X}_{it} and α_i . When β is multiplied by θ , this approximates the effect of a one-unit change in a predictor variable associated with a percentage change in the outcome variable of net worth.

For most analyses, I focus on the 10th, 25th, 50th, 75th, and 90th percentiles to discuss results for low-wealth (10th and 25th percentile), median-wealth (50th percentile), and high-wealth (75th and 90th percentile), following Wolff's (1981) three-class LCH model. I include two percentiles for the low- and high-wealth groups to account for potential measurement error at the very ends of the distribution. *Groups* at different points of the distribution refer to groups of person-years defined by their similar net

⁵ For STATA functions for RIF procedures, please see Nicole Fortin's website (http://faculty.arts.ubc.ca/nfortin/datahead.html).



worth levels, as described by England et al. (2016) and further discussed in the online appendix (section S2).

When combining UQR and FE models, it is important to ascertain how the percentile rank of different individuals varies over time and the level of rank-invariance within the data. Even though individuals' wealth levels changed across years, most individuals remained in a wealth percentile that was similar to their average percentile over time (see the online appendix, section S2), which indicates that the percentile rank within the distribution was relatively stable for most respondents. However, because a greater proportion of high-wealth cases occurred in later years of the survey, I also control for age, age squared, and year within each model.

Results

My results show that net of key family, education, and employment variables, along with prior wealth levels, parenthood was associated with net worth, but the magnitude and the direction of the relationship varied with the family's wealth level and the children's ages. Children of all ages were associated with wealth declines among low-to median-wealth families. However, high-wealth families tended to increase their wealth while their children were young and then experienced wealth declines after those children reached early adulthood. These results support my four hypotheses built on Wolff's (1981) three-class LCH model.

Children and Wealth

Figure 2 depicts the results from FE UQR models predicting changes in total household net worth in relation to parental status across the entire wealth distribution, and Table 2 presents more detailed results at the 10th, 25th, 50th, 75th, and 90th wealth percentiles. As shown in Fig. 2, the relationship between children and net worth varied with the family's wealth level. Among the least-wealthy households, few significant wealth changes occurred in the years after childbirth compared with the years before. Children resulted in wealth declines for low-to median-wealth households, but for those with wealth above the 60th percentile, children were associated with wealth increases that grew throughout the rest of the distribution. This is indicative of a constant costs model for families with less wealth and a saving and spending model for wealthier families, as discussed in Hypotheses 1 and 2.

Table 2 elaborates on the results in Fig. 2. Among the lowest-wealth families at the 10th percentile, children were associated with a wealth decline of 5 %, net of earlier wealth levels. Parents at the 25th percentile experienced wealth declines of 38 % in the years after childbirth, but those at the median experienced smaller decreases of 21 %. High-wealth families, however, saw their wealth increase in the years after childbirth. Parents at the 75th percentile experienced an increase of 52 % after their children were born, and parents at the 90th percentile held approximately 2.24 times as much wealth after having children compared with the years before childbirth. Thus, these results

⁶ Because many of these coefficients exceed 0.1, after multiplying by θ, I determine the percentage change in net worth for a one-unit change in each predictor variable using the formula $\%\Delta(y) = 100 \times (e^b - 1)$ (Wooldridge 2009).



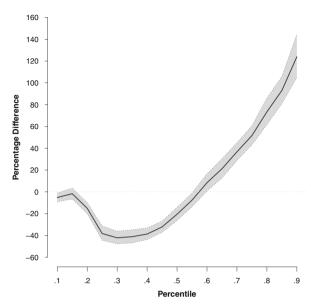


Fig. 2 Percentage difference in net worth associated with parenthood by wealth percentile: Estimates and 95 % confidence intervals for the percentage difference in net worth associated with parenthood by wealth percentile. Estimates come from FE UQR models that include all covariates. Results for selected percentiles appear in Table 2. N = 90,863 observations (person–years) and 10,364 cases (individuals). Source: NLSY79, 1986–2012

support my first and second hypotheses, which posit a positive association between children and net worth for high-wealth families (Hypothesis 1) but a negative association among low- and mid-wealth families (Hypothesis 2).

In addition to children, other control variables were also significantly associated with net worth at different points in the distribution. The stability effects of lagged net worth ranged from 0.08 for low-wealth families to 0.20 for the wealthiest families. Marital status generally presented a positive association with wealth; individuals across the distribution held 6 % to 47 % less in net worth when they were not married. Students and unemployed persons tended to hold less wealth than nonstudents and employed persons. Income was positively associated with net worth at most points in the distribution, and, as expected, homeownership was one of the strongest predictors of net worth. Among low-wealth households, homeownership increased net worth by 48 %. At the median, homeownership was associated with holding nine times as much in net worth; and among high-wealth households, it was associated with a 35 % increase in wealth. Finally, because I also include survey-year indicator variables in the models, which are correlated with respondent age in this cohort data set, age did not present a significant association with net worth in most models.

Variation With the Ages of Children

To expand on these results, I also examine how the relationship between children and wealth varied with the age of the oldest child in the family. Figure 3, which plots the wealth effects across the distribution for situations where the oldest child is under age 6 (panel A), 6–11 years of age (panel B), 12–17 years old (panel C), and age 18 or older



Table 2 Results of fixed-effects (FE) unconditional quantile regression (UQR) models predicting total net worth by parental status

	Quantile									
	0.10		0.25		0.50		0.75		06:0	
	$e^{b\theta}-1$	<i>b</i> (SE)	$e^{b\theta}-1$	<i>b</i> (SE)	$e^{b\theta}-1$	<i>b</i> (SE)	$e^{b\theta}-1$	<i>b</i> (SE)	$e^{b\theta}-1$	<i>b</i> (SE)
Intercept		-2,691.9**		3,039.5		9,646.4***		13,631.5***		14,981.0***
Any Children	052	-157.8*	382	-1,418.8**	205	(1,1,1,1,2) -676.1***	.517	1,225.8***	1.239	2,373.1***
Number of Adults Present	017	49.8	016	47.8	017	–51.7 –51.7	.054	155.7***	.053	151.2***
Never Married	062	(52.0) -187.3* (95.2)	388	(95.6) -1,446.7*** (177.9)	463	(57.5) -1,828.5*** (113.2)	170	_549.2*** (85.5)	033	(30.3) -98.6 (113.4)
Formerly Married	120	_376.8*** (90.5)	469	-1,863.9** (179.7)	384	-1,427.7*** (91.9)	296	-1,033.4**	323	-1,150.0*** (99.9)
Age	.025	72.8	.005	13.7	020	-60.3 (66.5)	024	-70.6	014	41.2
Age, Squared	000.	-1.1* -1.5)	002	-6.6***	002		000.	0.5	.002	6.1***
Years of Schooling	054	-162.3** (50.5)	014	41.8	.012	36.4	.040	115.0**	.064	181.6***
Emolled in School	080	_246.2* (105.0)	024	–70.4 (175.3)	093	_286.7* (121.1)	155	_495.3*** (101.1)	241	



Table 2 (continued)

	Quantile									
	0.10		0.25		0.50		0.75		06.0	
	$e^{b\theta}-1$	<i>b</i> (SE)	$e^{b\theta}-1$	<i>b</i> (SE)	$e^{b\theta}-1$	b (SE)	$e^{b\theta}-1$	b (SE)	$e^{b\theta}-1$	<i>b</i> (SE)
Single Job Gap	034	-102.8	056	-169.6	021	-63.3	133	419.9**	095	
Two+ Job Gaps	087	(171.9) -266.8 (171.9)	072	(237.3) -219.2 (385.9)	176	_569.5* 569.5*	368	(167.2) -1,351.1*** (167.2)	354	-1,288.3*** (732.4)
Out of the Labor Force	010		113	_353.2* _(171.2)	.060	171.3	191.	515.3***	.196	525.8***
Unemployed	106	_329.4 (168.2)	404	-1,522.6** (292.4)	141	448.7*	.038	109.6	020	-58.6 (121.6)
Self-Employed	800.	24.9 (85.1)	001	3.4 (183.8)	.243	640.9***	.268	700.0***	.404	998.0***
Logged Income	.001	2.7	.126	349.2***	.039	112.4***	.019	55.0***	.022	63.3***
Health Limitation	062	-188.2 (107.3)	.122	338.9 (196.3)	047	-142.2 (82.6)	217	_719.8*** (76.7)	281	_971.2*** (106.7)
Rural	028	-83.9	114	_356.8** (137.6)	037	-110.1	.095	267.8***	.283	734.0***
Homeowner	.483	1,159.3***	2.536	3,717.7*** (149.0)	8.932	6,757.5*** (103.8)	1.539	2,743.0*** (61.4)	.353	891.0***



Table 2 (continued)

	Quantile									
	0.10		0.25		0.50		0.75		06.0	
	$e^{b\theta} - 1$ b (<i>b</i> (SE)	$e^{b\theta} - 1$ b (SE)	b (SE)	$e^{b\theta} - 1$ b (SE)	b (SE)	$e^{b\theta} - 1$ b (SE)	b (SE)	$e^{b\theta} - 1$ b (SE)	b (SE)
Lagged Net Worth		0.078***		0.171***		0.174***		0.167***		0.196***
		(0.008)		0(.011)		(0.007)		(0.004)		(0.006)
Pseudo-R ²	.082		.270		.474		.339		.194	

0.90 quantiles with theta = 0.0003397. Referents for categorical variables of marital status, job gaps, and employment status are married, no job gaps, and employed. Continuous variables are mean-centered. Lagged net worth is also transformed using the IHS transformation. All models include a survey-year indicator variable. Standard errors, shown in Notes: N = 90,863 observations (person-years) and 10,364 cases (individuals). Results are from FE UQR models estimating IHS-transformed net worth at the 0.10, 0.25, 0.50, 0.75, and parentheses, are bootstrapped.

Source: NLSY79, 1986-2012.

 $^*p < .05; ^{**}p < .01; ^{***}p < .001$



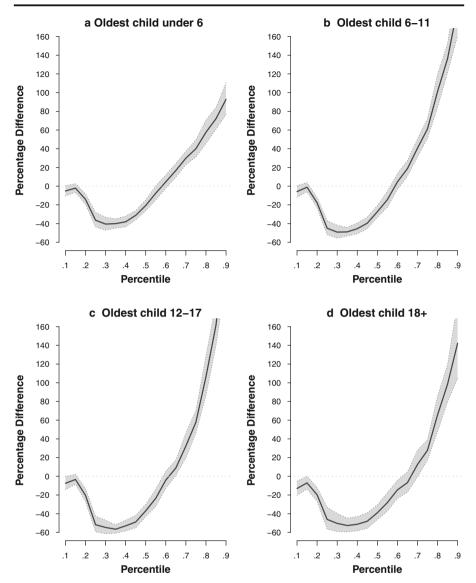


Fig. 3 Percentage difference in net worth associated with parenthood by age of the oldest child and wealth percentile: Estimates and 95 % confidence intervals for the percentage difference in net worth associated with parenthood by age of the oldest child and wealth percentile. Estimates come from FE UQR models that include all covariates. Results for selected percentiles appear in Table 3. N = 90,863 observations (personyears) and 10,364 cases (individuals). *Source:* NLSY79, 1986-2012

(panel D), depicts patterns similar to the one present in Fig. 2. When the oldest child was under age 6, low- and median-wealth households experienced wealth declines, but households above the median saw their wealth increase, as predicted in Hypotheses 3 and 4. Less-wealthy households then experienced consistent negative wealth effects as the child aged. For high-wealth households, however, the wealth effects increased when their eldest child was



between 6 and 17 years old and weakened as the child reached adulthood, although they remained positive.⁷

Table 3 and Fig. 4 present more detailed results for select percentiles. At the 25th percentile, the age of the oldest child presented a consistent negative relationship with net worth, resulting in declines of 36 % to 52 % compared with the years before childbirth. The association was also negative for mid-wealth families at the 50th percentile, although the effects grew from a 21 % decline for a child under age 6 to a 39 % decline when that child was over age 18. Compared with the years before parenthood, among the wealthier families at the 75th percentile, net worth was 40 % higher when their oldest child was under age 6, 61 % higher when their oldest was between 6 and 11 years, 58 % higher when their oldest was between 12 and 17 years, and only 28 % higher when their oldest child was over 18. For these families, the savings benefits of parenthood increased up until their child reached age 18 and then started to decline, which presents evidence for a saving and spending model among wealthier families.

The age models support Hypotheses 3 and 4. For low- to median-wealth households, children led to wealth declines regardless of their ages, which is consistent with a constant costs model (Hypothesis 4). The effects of parenthood varied more with the ages of the children for high-wealth households (Hypothesis 3). These families were generally able to increase their wealth while their children were young (saving) and then transfer that wealth to their children when they reached young adulthood (spending). Although net worth for high-wealth households with adult children did not decrease below pre-parenthood levels, levels were still much lower than for years where the child was under 18.

Discussion

Complementing studies that highlight increased parenting demands and spending on children, this research demonstrates how children influence parental net worth over time. My findings show that except in the wealthiest of households, children were negatively associated with wealth among families and this relationship varied with the ages of the children. Low- to median-wealth households faced consistent wealth declines as their children grew older, as predicted in Hypotheses 2 and 4. In contrast, high-wealth households increased their wealth while their children were young but then saw wealth reductions after their children reached young adulthood, likely in relation to planned wealth transfers, as discussed in Hypotheses 1 and 3.

Disaggregating the analyses by wealth level highlights the varying effects that children can have on outcomes for families with different wealth levels prior to childbirth. For instance, after accounting for control variables, the predicted net worth for the median household prior to having children was \$32,400.8 After children, this value decreased to \$27,600, on average, with a larger penalty over time. Corresponding net worth levels for households at the 25th and 75th percentiles were \$4,200 and

⁸ These estimates come from models with all covariates mean-centered. To transform estimates into dollar amounts, I rely on the formula $\frac{1}{2}(e^{\theta y} + e^{-\theta y})\beta \mathbf{x}$ (Pence 2006).



⁷ These results are consistent with models where I include a measure for the ages of all children (see the online appendix, section S3).

Table 3 Results of fixed effects (FE) unconditional quantile regression (UQR) models predicting total net worth by age of oldest child

	0.10		0.25		0.50		0.75		0.90	
	$e^{b\theta}-1$	<i>b</i> (SE)	$e^{b\theta}-1$	<i>b</i> (SE)	$e^{b\theta}-1$	<i>b</i> (SE)	$e^{b\theta}-1$	<i>b</i> (SE)	$e^{b\theta}-1$	<i>b</i> (SE)
Intercept		-2,506.1**		3,566.3		10,383.0***		13,869.9***		14,286.5***
Oldest Child Age 0–5 Years	051	(89 9)	364	-1,332.8*** (153.8)	207		.400	991.3***	.928	1,932.7***
Oldest Child Age 6–11 Years	058	-176.4*	449	-1,756.0***	274	_941.4***	.613	1,406.4***	1.907	3,141.4***
Oldest Child Age 12–17 Years	075	(75.8) -228.7* (95.5)	517	-2,143.8** (173.8)	369	(1353.9*** -1,353.9*** (176.9)	.579	(126.6)	2.544	3,724.5***
Oldest Child Age 18+ Years	130	410.0**	461	-1,818.0*** (199 5)	390	-1,456.5***	.278	722.3***	1.422	2,603.3***
Pseudo-R ²	.083	(7:107)	.270	(2::62)	.475		.341	(6:201)	.188	(1:51-1)

Notes: N = 90,863 observations (person-years) and 10,364 cases (individuals). Results are from FE UQR models estimating IHS-transformed net worth at the 0.10, 0.25, 0.50, 0.75, and 0.90 quantiles with theta = 0.0003397. The referent for age of oldest child is no children. All models include the same control variables present in Table 2. Standard errors, shown in parentheses, are bootstrapped.

Source: NLSY79, 1986–2012.

p < .05; **p < .01; ***p < .001



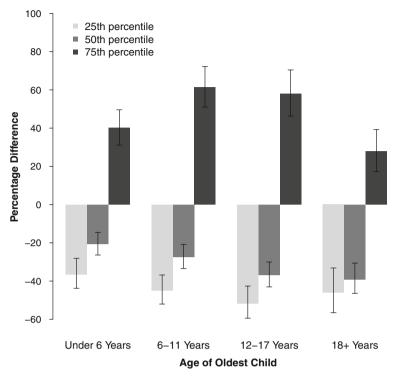


Fig. 4 Percentage difference in net worth by age of oldest child and wealth percentile: Estimates and 95 % confidence intervals for the percentage difference in net worth associated with the age of the oldest child at the 25th, 50th, and 75th wealth percentiles. Estimates come from FE UQR models that include all covariates. Results for selected percentiles appear in Table 3. N = 90,863 observations (person–years) and 10,364 cases (individuals). *Source:* NLSY79, 1986–2012

\$74,000 prior to parenthood and \$2,400 and \$120,000 after having children. In average dollar differences, parents at the 25th and 50th percentiles saw their wealth decrease by approximately \$1,800 and \$4,800 in the years after childbirth, but parents at the 75th percentile saw their wealth increase by \$46,000 in the years after having children.

The differing results for low-, median-, and high-wealth households demonstrate the importance of acknowledging constraints when investigating consumption choices. In its simplified and more complex versions, the LCH presents two contradictory mechanisms for the relationship between children and wealth: savings motivations and consumption costs. My findings show that the strength of each mechanism in explaining the relationship between children and wealth largely depended on family resources and broader wealth constraints.

Many results were similar for low- and median-wealth households; the costs of raising children restricted their ability to save, resulting in a consistent spending or constant costs model with little saving occurring. Among these households, consumption needs and broader constraints greatly outweighed any motivation to save for their

⁹ Estimates are higher for individuals at the 25th percentile and lower for individuals at the 75th percentile than would be generally expected because model coefficients are set at their means in order to compare estimates across percentiles.



children's futures. With limited wealth already, most of these families likely could not afford to put money aside on a regular basis and continue to support their children, the costs for which have been increasing (Kornrich and Furstenberg 2013). Instead of saving and investing, these families saw their wealth decline, resulting in a constant costs model with the transition to parenthood.

High-wealth households in this study stood out much more in terms of their saving and spending patterns. Households with wealth above the median were able to treat child-rearing as an investment. They saved money, invested, and increased their net worth while their children were young. After their children turned 18, they began to spend more, which eventually led to decreases in net worth. Earlier savings were likely transferred to their children to help support their transition into adulthood. Because of their greater resources, high-wealth households were better able to fit within a rational actor model promoted by the LCH for saving than those with less wealth overall.

My research expands on cross-sectional studies, such as Schmidt and Sevak's (2006) work, to assess the effects of parenthood across the distribution using longitudinal data. Although cross-sectional data sets can show differences between households with and without children, understanding changes in wealth over time requires the use of longitudinal data. Unlike cross-sectional studies, my use of FE models that controlled for all unobserved time-invariant, individual-level characteristics allowed for a better determination of the causal order of certain factors. By also combining FE with UQR models—therefore studying changes within individual wealth at different points in the wealth distribution—I was able to show that children decreased wealth for some families and increased wealth for others. However, without counterfactual cases (i.e., outcomes for identical persons who never had children) with whom to compare wealth outcomes, I cannot truly infer causality in my findings, although my results still offer strong evidence for such a relationship.

Through its assessment of the relationship between children and wealth across the wealth distribution, this study also offers several broader theoretical contributions, particularly in terms of where and when the LCH for savings applies. The LCH addresses individual aspirations and motivations to save, along with changes in consumption needs and requirements (Modigliani 1986; Modigliani and Brumberg 1954). It further notes, in later iterations, that the process also varies with demographics and family transitions (Land and Russell 1996; Love 2010; Tin 2000). This perspective, however, does not always explicitly consider important structural aspects that constrain a family's ability to accumulate wealth over the life course. Children do increase consumption needs within families, and they can motivate families to build their assets and save for the future, but the ability to fulfill these needs largely depends on access to credit and current wealth and income levels. My study, therefore, builds on previous research showing that the LCH fits best for high-income, high-wealth, and well-educated households and is not always applicable to lower-wealth and lower-income households (Wolff 1981).

Limitations and Additional Models

Although my use of longitudinal data and combined FE UQR models helps to better identify within-person differences and causal relationships, my analyses also have certain limitations related to data availability and modeling choices. Given my use of NLSY79 data, my results primarily apply to Baby Boomer adults who were aged 47—



56 in 2012. Most individuals in this cohort had yet to reach retirement and had children under age 30. This limits the generalizability of my findings to other adults with much older children, but it does allow for a specific discussion of the relationship between children and wealth among Baby Boomer parents. Importantly, this data set also covers individuals through their transition into adulthood and parenthood, which captures change across the transition central to this research: parents' wealth before and after childbirth.

Using wealth data as my outcome variable also created certain limitations. Wealth figures in representative surveys can be inconsistent due to the complexity of wealth and the difficulty many respondents have in estimating their wealth (Spilerman 2000). To address these limitations, I tested several sets of supplementary models that further support my results. First, I estimated a set of models using 1999–2013 SCF data to assess the relationship between children and wealth in this nationally representative, cross-sectional data set (see the online appendix, section S5). Second, to compare my results with those obtained from more common statistical models, I ran a set of basic FE regression models to estimate net worth at the mean and interacted children with average wealth levels (see the online appendix, section S6). Results from SCF models and FE generalized least squares models using NLSY79 data further support those present in Table 2. Children were negatively associated with wealth at lower net worth percentiles but presented a positive association at higher percentiles.

Third, because wealth has been linked to the number of children in the family (Grinstein-Weiss et al. 2006, 2008; Yamokoski and Keister 2006), I also tested models that incorporated number of children and its quadratic term (see the online appendix, section S4). At the lower percentiles, each additional child was associated with wealth declines, but the effects weakened as the number grew. Among wealthier households, each additional child was associated with increasing wealth, but the effects again weakened with each child. Finally, because net worth measures can be sensitive to household size, I estimated a series of models where I used household equivalent net worth as an outcome. These models (available upon request) presented results consistent with those using total net worth in terms of the sign and significance level of coefficients, but the association was slightly weaker.

Conclusion

Inheritances in the form of financial and nonfinancial intergenerational transfers directly link economic positions across generations, providing the children of wealthier parents with an advantage over other families (Avery and Rendall 2002; Mare 2011; Spilerman 2000; Wolff 2002). In addition to the direct inheritance of assets, parental wealth provides broader opportunities, aids in the development of social and cultural capital, and improves educational attainment outcomes for children (Keister 2000; Kim and Sherraden 2011). It allows parents to give more to the children. However, much inequality exists in parents' abilities to support children and transfer wealth (Fingerman et al. 2015; Hardie and Seltzer 2016; Seltzer and Bianchi 2013), a disparity that is reflected in my results.

By contrasting a constant costs model for lower-wealth families with a saving and spending model for higher-wealth families, this study highlights multiple components



of intergenerational wealth inequality within and between families. As shown by Pfeffer and Schoeni (2016), wealth inequality is higher among households with children than those without, and it has risen faster since the 1990s. Although the FE models that I apply in these analyses compare families' wealth before and after becoming parents, the results hold implications for wealth inequality between different households. Because the transition to parenthood leads to wealth increases among highwealth households and wealth decreases among households with lesser wealth, the differential effects of parenthood across high- and low-wealth households result in increasing wealth inequality between households with children, a finding that holds strong implications for policy and future research.

Parenthood is a central life course transition that most individuals eventually experience (Elder 1985). The birth of a child, especially a first child, represents a key change in household structure that influences family well-being and resources. Although more recent iterations of the LCH acknowledge these effects, few researchers have focused on how this relationship varies with broader wealth constraints. This is important because the effects are not felt equally across all households. For families with resources, transferring wealth to children is not necessarily a problem, and investments in children can lead to resource gains later on. Children can also help parents after they complete their education and (hopefully) obtain well-paying jobs. However, the drain on resources, which are already rather limited in many households, directly affects current economic security among less-wealthy households. These results are especially worrisome for low-wealth households, many of whom have negative net worth already. Persistent norms of familialism, however, indicate that parents will likely continue to extend resources to their children, even if they must do so at their own expense.

References

Albertini, M., & Radl, J. (2012). Intergenerational transfers and social class: Inter-vivos transfers as means of status reproduction. Acta Sociologica, 55, 107–123.

Allison, P. D. (2009). Fixed effects regression models. Thousand Oaks, CA: Sage.

Avery, R. B., & Rendall, M. S. (2002). Lifetime inheritances of three generations of whites and blacks. American Journal of Sociology, 107, 1300–1346.

Borgen, N. T. (2016). Fixed effects in unconditional quantile regression. Stata Journal, 16, 403-415.

Bricker, J., Dettling, L. J., Henriques, A., Hsu, J. W., Moore, K. B., Sabelhaus, J., . . . Windle, R. A. (2014). Changes in U.S. family finances from 2010 to 2013: Evidence from the Survey of Consumer Finances (Bulletin Report Vol. 100, No. 3). Washington, DC: Board of Governors of the Federal Reserve System.

Browning, M., & Lusardi, A. (1996). Household saving: Micro theories and micro facts. *Journal of Economic Literature*, 34, 1797–1855.

Budig, M. J., & England, P. (2001). The wage penalty for motherhood. American Sociological Review, 66, 204–225.
Burbidge, J. B., Magee, L., & Robb, A. L. (1988). Alternative transformations to handle extreme values of the dependent variable. Journal of the American Statistical Association, 83, 123–127.

Comanor, W. S., Sarro, M., & Rogers, M. (2015). The monetary cost of raising children. In J. Langenfeld (Ed.), Research in law and economics: Economic and legal issues in competition, intellectual property, bankruptcy, and the cost of raising children (Vol. 27, pp. 209–251). Bingley, UK: Emerald Group Publishing Limited.

DeNardi, M., French, E., & Bailey Jones, J. B. (2016). Savings after retirement: A survey. Annual Review of Economics, 8, 177–204. https://doi.org/10.1146/annurev-economics-080315-015127



- Dockery, A. M., & Bawa, S. (2015). The impact of children on Australian couples' wealth accumulation. Economic Record, 91(S1), 139–150.
- Dynan, K. E., Skinner, J., & Zeldes, S. P. (2002). The importance of bequests and life-cycle saving in capital accumulation: A new answer. American Economic Review: Papers and Proceedings, 92, 274–278.
- Elder, G. H., Jr. (1985). Life course dynamics: Trajectories and transitions, 1968–1980. Ithaca, NY: Cornell University Press.
- England, P., Bearak, J., Budig, M. J., & Hodges, M. J. (2016). Do highly paid, highly skilled women experience the largest motherhood penalty? *American Sociological Review*, 81, 1161–1189.
- Fingerman, K., Kim, K., Davis, E., Furstenberg, F., Birditt, K., & Zarit, S. (2015). I'll give you the world: Socioeconomic differences in parental support of adult children. *Journal of Marriage and Family*, 77, 844–865.
- Firpo, S., Fortin, N. M., & Lemieux, T. (2009). Unconditional quantile regressions. *Econometrica*, 77, 953–973.
 Folbre, N. (2008). Valuing children: Rethinking the economics of the family. Cambridge, MA: Harvard University Press.
- Grinstein-Weiss, M., Wages, K., & Ssewamala, F. M. (2006). Saving and asset accumulation among low-income families with children in IDAs. Children and Youth Services Review, 28, 192–211.
- Grinstein-Weiss, M., Yeo, Y. H., Zhan, M., & Charles, P. (2008). Asset holding and net worth among households with children: Differences by household type. Children and Youth Services Review, 30, 62–78.
- Hao, L., & Yeung, W. J. (2015). Parental spending on school-age children: Structural stratification and parental expectation. *Demography*, 52, 835–860.
- Hardie, J. H., & Seltzer, J. A. (2016). Parent-child relationships and the transition to adulthood: A comparison of black, Hispanic, and white immigrant and native-born youth. Social Forces, 95, 321–353.
- Johnson, N. L. (1949). Systems of frequency curves generated by methods of translation. *Biometrika*, 36, 149–176.
 Keister, L. A. (2000). Wealth in America: Trends in wealth inequality. New York, NY: Cambridge University Press.
 Keister, L. A., & Moller, S. (2000). Wealth inequality in the United States. *Annual Review of Sociology*, 26, 63–81.
- Kennickell, A. B. (2000). Wealth measurement in the Survey of Consumer Finances: Methodology and directions for future research (Working paper). Washington, DC: Board of Governors of the Federal Reserve Board. Retrieved from https://www.federalreserve.gov/econresdata/scf/files/measurement.pdf
- Kennickell, A. B., & Woodburn, R. L. (1992). Estimation of household net worth using model-based and design-based weights: Evidence from the 1989 Survey of Consumer Finances (Working paper). Washington, DC: Board of Governors of the Federal Reserve Board. Retrieved from http://www.federalreserve.gov/pubs/oss/oss2/method.html
- Keynes, J. M. (1936). The general theory of employment, interest, and money. London, UK: Palgrave MacMillan.
- Killewald, A., Pfeffer, F. T., & Schachner, J. N. (2017). Wealth inequality and accumulation. Annual Review of Sociology, 43, 379–404.
- Kim, Y., & Sherraden, M. (2011). Do parental assets matter for children's educational attainment? Evidence from mediation tests. *Children and Youth Services Review*, 33, 969–979.
- Kornrich, S., & Furstenberg, F. (2013). Investing in children: Changes in parental spending on children, 1972–2007. Demography, 50, 1–23.
- Land, K. C., & Russell, S. T. (1996). Wealth accumulation across the adult life course: Stability and change in sociodemographic covariate structures of net worth data in the survey of income and program participation, 1984–1991. Social Science Research, 25, 423–462.
- Lareau, A. (2002). Invisible inequality: Social class and childrearing in black families and white families. American Sociological Review, 67, 747–776.
- Leicht, K., & Fitzgerald, S. T. (2014). The real reason 60 is the new 30: Consumer debt and income insecurity in late middle age. *Sociological Quarterly*, 55, 236–260.
- Lino, M., Kuczynski, K., Rodriguez, N., & Schap, T. R. (2017). Expenditures on children by families, 2015 (CNPP Miscellaneous Report No. 1528-2015). Alexandria, VA: U.S. Department of Agriculture, Center for Nutrition Policy and Promotion.
- Love, D. A. (2010). The effects of marital status and children on savings and portfolio choice. Review of Financial Studies, 23, 385–432.
- Lupton, J. P., & Smith, J. P. (2003). Marriage, assets and savings. In S. A. Grossbard-Shechtman (Ed.), Marriage and the economy (pp. 129–152). Cambridge, UK: Cambridge University Press.
- Macmillan, R., & Copher, R. (2005). Families in the life course: Interdependency of roles, role configurations, and pathways. *Journal of Marriage and Family*, 67, 858–879.
- Mare, R. D. (2011). A multigenerational view of inequality. Demography, 48, 1-23.
- Maroto, M. (2016). Growing farther apart: Racial and ethnic inequality in household wealth across the distribution. Sociological Science, 3, 801–824.



Maroto, M. (2017). When the kids live at home: Coresidence, parental assets, and economic insecurity. *Journal of Marriage and Family, 79,* 1041–1059.

- Maroto, M., & Aylsworth, L. (2017). Assessing the relationship between gender, household structure, and net worth in the United States. *Journal of Family and Economic Issues*, 38, 556–571.
- Modigliani, F. (1986). Life cycle, individual thrift, and the wealth of nations. *American Economic Review, 76,* 297–313.
- Modigliani, F., & Brumberg, R. (1954). Utility analysis and the consumption function: An interpretation of cross-section data. In K. Kurihara (Ed.), *Post-Keynesian economics* (pp. 388–436). New Brunswick, NJ: Rutgers University Press.
- O'Rand, A. M., & Krecker, M. L. (1990). Concepts of the life cycle: Their history, meanings, and uses in the social sciences. *Annual Review of Sociology*, 16, 241–262.
- Ozawa, M. N., & Lee, Y. (2006). The net worth of female-headed households: A comparison to other types of households. Family Relations, 55, 132–145.
- Painter, M. A., & Shafer, K. (2011). Children, race/ethnicity, and marital wealth accumulation in black and Hispanic households. *Journal of Comparative Family Studies*, 42, 145–169.
- Pence, K. M. (2006). The role of wealth transformations: An application to estimating the effect of tax incentives on saving. B.E. Journal of Economic Analysis & Policy, 5(1), 1–24. https://doi.org/10.1515/1538-0645.1430
- Pfeffer, F. T., & Schoeni, R. F. (2016). How wealth inequality shapes our future. RSF: Russell Sage Foundation Journal of the Social Sciences, 2(6), 2–22.
- Porter, S. R. (2015). Quantile regression: Analyzing changes in distributions instead of means. In M. B. Paulsen (Ed.), Higher education, Vol. 30: Handbook of theory and research (pp. 335–381). Cham, Switzerland: Springer.
- Rauscher, E. (2016). Passing it on: Parent-to-adult child financial transfers for school and socioeconomic attainment. RSF: Russell Sage Foundation Journal of the Social Sciences, 2(6), 172–196.
- Schmidt, L., & Sevak, P. (2006). Gender, marriage, and asset accumulation in the United States. Feminist Economics, 12, 139–166.
- Schoeni, R. F., & Ross, K. E. (2005). Material assistance from families during the transition to adulthood. In R. A. Settersten, Jr., F. F. Furstenberg, Jr., & R. G. Rumbaut (Eds.), On the frontier of adulthood (pp. 396–416). Chicago, IL: University of Chicago Press.
- Scholz, J. K., & Seshadri, A. (2007). *Children and household wealth* (Working Paper No. WP 2007-158). Ann Arbor: University of Michigan Retirement Research Center.
- Seltzer, J. A., & Bianchi, S. M. (2013). Demographic change and parent-child relationships in adulthood. Annual Review of Sociology, 39, 275–290.
- Semyonov, M., & Lewin-Epstein, N. (2013). Ways to richness: Determination of household wealth in 16 countries. European Sociological Review, 29, 1134–1148.
- Settersten, R. A., Jr., & Ray, B. (2010). What's going on with young people today? The long and twisting path to adulthood. *Future of Children*, 20(1), 19–41.
- Smith, J. P., & Ward, M. P. (1980). Asset accumulation and family size. Demography, 17, 243-260.
- Spilerman, S. (2000). Wealth and stratification processes. Annual Review of Sociology, 26, 497-524.
- Stearns, P. N. (2003). Anxious parents: A history of modern childrearing in America. New York: New York University Press.
- Swartz, T. T., Kim, M., Uno, M., Mortimer, J., & Bengtson O'Brien, K. (2011). Safety nets and scaffolds: Parental support in the transition to adulthood. *Journal of Marriage and Family*, 73, 414–429.
- Tin, J. (2000). Life-cycle hypothesis, propensities to save, and demand for financial assets. *Journal of Economics and Finance*, 24, 110–121.
- Wolff, E. N. (1981). The accumulation of household wealth over the life-cycle: A microdata analysis. Review of Income and Wealth, 27, 75–96.
- Wolff, E. N. (2002). Inheritance and wealth inequality, 1989–1998. American Economic Review: Papers and Proceedings, 99, 260–264.
- Wolff, E. N. (2016). Household wealth trends in the United States 1962–2013: What happened over the Great Recession. Russell Sage Foundation Journal of the Social Sciences, 2(6), 24–43.
- Wooldridge, J. M. (2009). Introductory econometrics: A modern approach (4th ed.). Cincinnati, OH: South-Western College Publishing.
- Yamokoski, A., & Keister, L. A. (2006). The wealth of single women: Marital status and parenthood in the asset accumulation of young baby boomers in the United States. Feminist Economics, 12, 167–194.



Demography is a copyright of Springer, 2018. All Rights Reserved.