Nonmarital Fertility, Union History, and Women's Wealth

by

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ABSTRACT

Previous studies make clear that nonmarial births are associated with significant economic disadvantages for mothers, including greater vulnerability to poverty and job loss relative to mothers whose births occur within marriage. However, it remains unclear whether mothers' subsequent union transitions and the stability of those unions offer some economic security for mothers with a nonmarital first birth. We use over twenty years of data from the National Longitudinal Survey of Youth – 1979 to examine trajectories of net worth for never-married single mothers based on their subsequent union formation and the endurance of these unions by middle age. We compare mothers who cohabit, marry, or remain single after a nonmarital birth, and distinguish partners by biological parentage of the firstborn child. We find that although most mothers report similar levels of wealth as young adults, by age forty mothers who enter into stable marriages with the biological father of the firstborn child experience significant wealth advantages relative to mothers who marry a different partner, mothers who cohabit, or mothers who remain unpartnered. Overall, results indicate that marriage, biological parentage, and union stability have distinct and significant roles for single mothers' wealth accumulation.

INTRODUCTION

Nonmarital births have long been a concern for both policymakers and scholars, as women whose births occur outside of marriage are more vulnerable to poverty and job loss, and as a result children raised in these households experience poorer outcomes, primarily as a result of their socioeconomic disadvantages relative to children born to married parents (Amato 2005; McLanahan & Sandefur 1994; McLanahan & Percheski 2008). Although much is known about predictors of single motherhood (Upchurch, Lillard, and Panis 2002), the relationships between single parent households and child well-being (McLanahan & Sandefur 1994), and how these relationships vary according to race-ethnicity or child characteristics (see review by McLanahan & Percheski 2008), far less is known about long-term aspects of financial well-being for mothers with a nonmarital first birth, particularly as they later marry, cohabit, or experience the dissolution of these unions. This study addresses this significant gap in existing knowledge about single mothers as they complete childbearing and age their prime earning years by studying the wealth trajectories of mothers with a nonmarital first birth, and by comparing mothers based on their subsequent union formation, whether these unions persist over time, and whether mothers marry the biological father of their firstborn child.

Extending scholars' knowledge of the relationships between union formation, union stability, and wealth attainment among women with a nonmarital first birth is important for a number of reasons. First, most mothers with a nonmarital first birth generally do not remain single throughout adulthood (see for example Williams et al. 2011), and the wide variation evident in mothers' subsequent unions may tell us more about whether some of the negative outcomes associated with nonmarital childbearing are experienced primarily by a small group of women who either remain continually unpartnered, or who enter and exit from multiple unions

following the first birth. It may be that women with a nonmarital birth who later transition into an enduring marriage are less affected by many of the negative economic, health, and well-being outcomes that are associated with nonmarital childbearing (Johnson and Favreault 2004; Lichter, Graefe, and Brown 2003; Williams et al. 2011). Second, previous scholars have not studied change over time in financial well-being among single mothers. Extending this line of research is important because women's access to – and ability to accumulate – economic resources will change over the life cycle (see Hao 1996; see also Wilmoth and Koso 2002). If mothers are saving (or conversely, accruing debt), these economic behaviors will not be captured by measures commonly used in studies of single mothers such as income and employment status. Third and finally, few studies capitalize on panel data that allow for a detailed, longitudinal observation of single mothers from the time of a nonmarital birth into middle age, when socioeconomic variation across families is widest and as a result, the long-term economic consequences of nonmarital childbearing are at their largest. Following single mothers over time as they form and dissolve unions provides insight into how different configurations of family structure affect long-term financial well-being.

We contribute to existing research on the financial consequences of nonmarital fertility and the associations among single mothers between union formation and economic well-being by (1) examining initial wealth differences among mothers with a nonmarital first birth as they enter into young adulthood (2) describing how the wealth of single mothers varies over time between young adulthood and age forty; (3) comparing the wealth attainment of continually unpartnered mothers over time with mothers who enter into unions that endure or dissolve between a nonmarital first birth and age forty; and (4) comparing unions with the biological father versus another partner.

Union formation and wealth accumulation among single mothers

The relationships between marriage and wealth accumulation are well established and are associated both with initial differences in wealth at the time of marriage as well as increasing rates of accumulation over time (Hirschl et al. 2003; Painter and Vespa 2012; Ulker 2009; Vespa and Painter 2011; Wilmoth and Koso 2002). Several factors contribute to this marital wealth advantage. For one, the married are more likely to have checking, savings and retirement accounts (Xiao 1996). The married also benefit from economies of scale, wage premiums, financial transfers, and the potential for dual incomes (Cohen 2002; Hao 1996; Ulker 2009; Waite 1995). Married individuals further benefit from an expectation of permanence, legal and cultural parameters of the union, and numerous other codified advantages that may contribute to greater trust and commitment, thereby helping couples feel secure in making long-term financial investments together (Cherlin 2004; Heimdal and Houseknecht 2003; Pollak 1985).

Individuals who enter into marriage also differ significantly from those who do not, and many of the characteristics distinguish the married from the nonmarried are associated with greater wealth-earning capacity. Increasing marital homogamy, particularly among college-educated spouses in dual-earner households, contributes to wealth disparities between the married and nonmarried by concentrating high-skilled earners into the same households. Married, dual-earner households where at least one member has a college degree experience less frequent job loss, a greater capacity to save over time, greater union stability, and as such can amass greater wealth over time. Single mothers may have fewer opportunities to form these unions, as they are on average less educated than women whose first births occur within marriage (Upchurch et al. 2002), and face more restrictive marriage markets where potential spouses have less education and less stable employment (Harknett & McLanahan 2004). This

means that marriage is not only less likely for single mothers, it is also potentially less likely to be a wealth-building union than among mothers who experience marital births. Furthermore, single mothers face greater odds of divorce than mothers whose children are born within marriage, and marital disruption is independently associated with financial instability (Cherlin 2010; Williams, Sassler, & Nicholson 2008; Smock, Manning, & Gupta 1999). Thus, despite the clear wealth benefits of marriage, the unique barriers to marriage faced by single mothers lead us to expect that marriage may not offer the same wealth benefits to mothers experiencing nonmarital fertility (Painter & Shafer 2011; Painter &Vespa 2012; Vespa & Painter 2011).

The wealth accumulation of women with a nonmarital first birth may be further stratified by whether the mother cohabits rather than marries, as cohabitors do not share the same norms as marrieds regarding pooled finances, and the less stable nature of cohabiting unions may restrict a couple's ability to make long-term, shared investments (e.g. Manning & Brown 2006). Yet, cohabiting mothers gain access to resources – both financial and nonfinancial – that may not be available if they are living unpartnered. For example, cohabiting women may experience reduced expenses due to economies of scale, financial contributions from the cohabiting partner for rent, groceries, or other expenses, and/or childcare assistance. In these ways, cohabiting mothers may be advantaged relative to single mothers, but it is unlikely that they will experience wealth accumulation similar to that of marriage. The paternity status of a partner may influence wealth accumulation, as biological fathers may be more likely to supply nonfinancial resources and/or contribute to household expenses when in a coresidential union with the mother and child. Because they are investing directly in a biological child, we may observe a wealth premium for mothers who are either living with the biological father or married to him. As such, we compare

unions based not only on whether they are cohabiting or marital unions, but also by the paternity status of the father.

METHOD

Data and Sample

To explore the wealth trajectories of women with a nonmarital first birth, we used the National Longitudinal Survey of Youth 1979 (NLSY79), a longitudinal study of a nationally representative U.S. cohort born between 1957–1964. Respondents were interviewed annually from 1979 until 1994 and biennially thereafter. Mothers provided full fertility and relationship histories beginning at the baseline interview in 1979 and continued through their most recent interview (2008 for this study). Questions assessing wealth attainment are first asked in 1985 when the sample was 20-27 years old and were consistently asked through the most recent round of data collection.

We limit our sample to the 1,188 women who were not part of the NLSY79 oversamples, were never-married at the time of their first birth, and who were not missing information on their union status at or near age forty. This sample restriction excludes 108 never-married mothers from our sample. Of our 1,188 respondents, each woman contributes data for our outcome variable at each interview between 1985 (the first year of wealth data) and 2004 (the last round for which we have data), resulting in in 17,820 person-years of data on wealth and time-varying explanatory variables.

Outcome Variable

The outcome variable was net worth (value of assets less debts) measured in U.S. dollars for each survey year in the sample.[1] Assets included the value of financial investments, such as checking and savings accounts, retirement accounts, and stocks. It included the value of

[1] We adjust for inflation to 2004 dollars using the Consumer Price Index.

nonfinancial holdings such as homes, automobiles, and other valuable possessions. We weighed the value of these assets against total debts (credit cards, hospitals bills, student loans, mortgages, liens). To correct for skew, we added a constant and then logged net worth.

** Table 1 **

Explanatory Variables

Table 1 details mothers' relationship histories between her first birth and age forty and also includes the sample size both in terms of the number of respondents and the person-years. Our reference category was single mothers who never married or cohabited (20% of our sample of never-married mothers). Of the remaining women, 11% never marry by age forty but cohabit with the biological father of her first child; 5% never marry but cohabit with someone else; 22% marry the biological father and remain married by age forty; 12% marry the biological father after the first birth but divorce by age forty; 17% marry a different partner and remain married by age forty; and 12% marry a different partner and divorce by age forty. Thus, our sample allows for sufficient variation and adequate sample size to examine wealth differences across single mothers based on their subsequent union formation and the stability of those unions.

Other explanatory variables include a time-invariant continuous measure for mothers' age (in years) at first birth and dichotomous variables for race/ethnicity: nonLatino black, Latino, and nonLatino white (reference category). We also included a series of dichotomous variables for women's educational attainment, measured at baseline (1985): no high school degree (reference category), high school degree, and some college or higher.

For growth curve analyses, time is an important explanatory variable. Because we measure changes in wealth over time beginning when mothers are in their twenties and extending through age forty, we measure changes in wealth over time using age in years rather than waves

of survey data. To provide a theoretically meaningful estimate of baseline wealth, we subtract the youngest age in our sample (age 21) in 1985, the first year for which we have measures of wealth. Thus, our use of age rather than wave as a time metric allows us to draw inferences about initial differences in wealth centered on a shared age in the sample, rather than the less theoretically meaningful use of wave of data as a time metric.

Control Variables

For control variables, we used a number of variables that captured both parental background characteristics in 1978, including parental education (the highest level of education among a respondent's parents, coded as no high school degree, high school degree, some college, and college degree or higher), employment status (1=one parent worked full time), and household income (logged). We also account for the respondent's financial resources, including family income (logged), a dichotomous variable for receipt of any inheritance (1=yes), and a time-varying variable for amount of any inheritance (logged). We used a time-varying continuous measure to capture the number of children in the household over time. Last, we used a series of time-varying dichotomous variables for region: northeast (reference category), Midwest, south, and west. We also included a time-varying dichotomous variable for urban residence (1=yes).

Analytical Strategy

We model wealth accumulation using multilevel growth curves (Raudenbush and Bryk 2002; Singer and Willett 2003). Growth curves use a hierarchical specification and nest time (age) within households. This method lets us assess how time-varying associations between both time-varying (age) and time-constant (relationship history) variables related to wealth trajectories as women age. We interact relationship histories with age to assess (1) the association between

relationship histories and wealth *at the beginning of our observation period* in 1985 (other covariates controlled), and (2) the association between relationship histories and wealth *over time* between 1985 and the late 2000s (other covariates controlled). To correct for heteroskedastic and correlated measurement errors across time, we use robust standard errors and assume a first-order autoregressive structure.

We specify four models (Table 3). Model 1 shows the baseline association between relationship histories and wealth for women with a nonmarital first birth. Model 2 adds explanatory variables (detailed above and listed in Table 2). Model 3 adds interactions between our measure of time (age) and relationship histories. Model 4 adds control variables. Results for logged wealth are interpreted in terms of percent change (Wooldridge 2012). To provide a sense of effect size, we also generate predicted values in real dollars using group-means and an antilog or exponential transformation. To better describe the association between relationship history and wealth accumulation over time, Figure 2 graphs predicted values from Model 4 in Table 3.

** Table 2 **

RESULTS

Descriptive Statistics

Table 2 contains descriptive statistics for the explanatory and control variables. Several patterns emerge that warrant closer examination. First, turning to the relationship histories, the two categories with the largest proportion of mothers with a nonmarital first birth are the women who neither cohabited nor married following the birth and the women who married the biological father of her child and stayed married. The smallest relationship history is the category for women who never married, but cohabited with someone other than the biological father of her child. Second, since time is central to our analysis of wealth trajectories, we include means and

standard deviations for women's age in 1985 (the beginning of our data) and their age over time. Third, there is relatively wide variation in women's age at first birth across the relationship histories. The oldest women at first birth are those who never married and cohabited with the biological father (23 years) while the youngest are women who marry the biological father of their child following a nonmarital birth and later divorce (18.5 years). For the total sample, the average age at first birth is slightly more than 20 years, approximately three years younger than the average age of first birth for women in this cohort (Mathews & Brady 2002). Fourth, there is significant race-ethnic variation in union formation and stability. In this sample, the largest proportion of mothers with a nonmarital birth are nonLatino blacks, a pattern that holds across the relationship histories. This group is most prevalent among single mothers who neither cohabit nor marry and least prevalent among women who marry the biological father and later divorce. Last, most single mothers have a high school degree and relatively few complete at least one year of college.

Figure 1 presents means for both the beginning of our data and over time by relationship history. At baseline, there is no clear pattern between the relationship histories and net worth. Women who never marry or cohabit, cohabit with a non-biological father, or marry the biological father are all associated with similar levels of wealth, approximately $7,000. In contrast, women who cohabit with the biological father and women who marry someone other than the biological father and stay married are also associated with a similar level of wealth ($2,000). Women who marry someone other than the biological father and later divorce are associated with the least wealth ($1,000) in 1985. These patterns vary over time as women enter middle age. Mothers who cohabit with someone other than the biological father and mothers who are stably married to the biological father of the first child report similar wealth attainment by

age forty (approximately $30,500). Women who neither cohabit nor marry by age forty and women who cohabit with the biological father of their child by age forty also report similar levels of wealth ($19,500). As with the amount of wealth at baseline, women who marry someone other than the biological father and later divorce are associated with the lowest amount of wealth accumulation. In sum, Figure 1 provides evidence that the relationship histories are associated with differential patterns of wealth accumulation; however, there are not consistent patterns across these categories.

** Table 3 **

Regression Results

Model 1 presents differences in initial wealth attainment (when the youngest respondents are 21 years old) by relationship history and the rate of wealth accumulation over time for these groups. For change over time, the coefficient for age is positive and significant, suggesting that each year of age is associated with an increase of .25 percent [$=e^{0.0025} - 1$] or $1,003 in real dollars in wealth accumulation.

Although women's wealth appears to increase over time, not all mothers with a nonmarital first birth report the same level of wealth at the initial point of data collection. Indeed, only one category of relationship history is not statistically significant, indicating that single mothers who remain never married, but cohabit with a partner other than the biological father are associated with similar levels of wealth at baseline as mothers who neither cohabit nor marry. In contrast, single mothers who cohabit with the biological father of their child (but remain never married at age forty) and mothers who marry a partner other than the biological father and do not divorce by age forty are associated with approximately .8 percent [$=e^{0.0079} - 1$] less wealth than the reference category of stably nonmarried an noncohabiting mothers. In real

dollars, this difference is approximately $1,008. Single mothers who marry a partner other than the biological father but later divorce are more advantaged than continually unpartnered mothers, with a 1.3 percent ([=$e^{0.0129}$ – 1]; $1,013) difference in initial wealth and single mothers who marry the biological father of the first child and remain married report a wealth advantage of about 1.64 percent ([=$e^{0.0163}$ – 1]; $1,016). For mothers who marry the biological father and later divorce, wealth increases by about 2.18 percent ([=$e^{0.0216}$ – 1]; $1,022).

Model 2 adds the explanatory variables that may drive part of the relationship between union status and wealth accumulation. Age at first birth, racial/ethnic status, and completion of at least one year of college are important predictors of initial wealth attainment. There is some evidence an older age at first birth is associated with higher initial wealth and that Latinos are associated with less initial wealth than nonLatino whites. At conventional levels of significance, nonLatino blacks are associated with less initial wealth than nonLatino whites and mothers with at least some college are associated with more initial wealth than mothers without a high school degree. Adding these variables to Model 2 leave the coefficient for age and many of the union history coefficients largely unchanged. Notably, only the initial wealth value for single mothers who marry a nonbiological father and remain married is no longer significant at conventional levels.

Model 3 adds interactions between the relationship histories and age, which distinguishes baseline wealth differences during young adulthood from the relationships between wealth accumulation and union history over time, as women age. Single mothers who marry the biological father of their first child and remain married are associated with 1.85 percent [=$e^{-0.0186}$ – 1]; less wealth ($982 in real dollars) than the reference group while single mothers who marry

a nonbiological father and stay married are associated with less 1 percent ([=$e^{-0.0098}$ – 1]; $990) lower wealth attainment than continually unpartnered mothers.

With the interactions included, the coefficient for age now represents the rate of growth for single mothers who neither cohabit nor marry. This group is associated with an annual rate of wealth accumulation of .07 percent ([=$e^{-0.0098}$ – 1]; $1,001 per year). Further, since the slope coefficient for single mothers who only cohabit with a nonbiological father is not significant, this group is associated with the same rate of wealth accumulation. In contrast, the other relationship histories are associated with a greater rate of wealth accumulation than these two groups. This advantage ranges from .12 percent ([=$e^{0.0012}$ – 1]) for single mothers who cohabit with the biological father of their child to .36 percent ([=$e^{0.0035}$ – 1]) for single mothers who eventually marry and stay married to the biological father of their child. For single mothers, then, their total rate of wealth accumulation, per year, is .19 percent ([=$e^{0.0007+0.0012}$ – 1]; $2,002 in real dollars) for women who cohabit with the biological father; .21 percent ([=$e^{0.0007+0.0014}$ – 1]; $2,002 in real dollars) for women who marry and divorce a nonbiological father; .24 percent ([=$e^{0.0007+0.0017}$ – 1]; $2,002 in real dollars) for women who marry and divorce a biological father; .25 percent ([=$e^{0.0007+0.0018}$ – 1]; $2,003 in real dollars) for women who marry and stay married to a nonbiological father; and .42 percent ([=$e^{0.0007+0.0035}$ – 1]; $2,004 in real dollars) for women who marry and stay married to a biological father.

** Figure 2 **

Models 4 adds the control variables and shows that the pattern of results remains largely similar. To interpret this final model, it is helpful to graph both the initial values of wealth attainment and wealth accumulation over time. Since neither the intercept nor the rate of change for single mothers who cohabit with a nonbiological father is significantly different from those

for single mothers who do not cohabit or marry, we omit this group from further discussion. As Figure 2 shows, there are several distinct intercepts and slopes by relationship history. First, in reference to women who do not cohabit or marry (solid black line), there is some evidence ($p<.1$) that women who cohabit with the biological father and those who marry and stay married to the nonbiological father are associated with less initial wealth. In contrast, only one group – women who marry and stay married to the biological father – are associated with less initial wealth at conventional levels of significance. From Model 4 in Table 3, this inequality is approximately 1.62% or $12,434 less wealth than the reference category. For the other relationship histories, the nonsigificant intercept terms suggest that these groups have statistically equivalent levels of initial wealth as women who do not cohabit or marry.

Alongside these varied starting points, all the relationship histories depicted in Figure 2 are associated with different rates of wealth accumulation over time. In reference to women who do not cohabit or marry (solid black line), there is some evidence of differential wealth accumulation for women who cohabit with the biological father and for women who marry and later divorce the nonbiological father. The largest rates of wealth accumulation, as well as the only coefficients statistically significant at conventional levels, are for: women who marry and stay married to a non-biological father (.3% or $2,291 per year); women who marry and later the divorce the biological father (.27% or $2,045 per year); and women who marry and stay married to the biological father (.41% or $3,096 per year). This last group is particularly notable as these women have the least initial wealth, but accumulate the most wealth over time. Indeed, at the end of the observation period, these women are associated with $15,287 more wealth than the next wealthiest group, women who marry and then divorce the biological father. Further, among women who marry and stay married, women who marry the biological father are associated with

$20,208 more wealth at the end of the observational period than women who marry a non-biological father. This wealth inequality is notable because the only difference between these households, *ceteris paribus*, is the biological relationship between the husband and the child.

DISCUSSION

Single mothers are often discussed as a homogeneous group, one that is created with a nonmarital birth and persists over time as these mothers do not form enduring unions. As such, single mothers and their children are often described as economically impoverished and lacking in stable social ties relative to married mothers. Our study recognizes that there are important differences across single mothers in their economic stability, their union formation patterns, and in the point at which they become a single parent. We focus in on a specific group of single mothers – mothers who are never married at the time of their first birth – and demonstrate that a significant proportion of these women do later form stable marital unions, which appear to be associated with greater gains in wealth attainment relative to mothers who do not form stable unions or who do not live with a romantic partner by age forty. We find that both paternity status of the partner and the type of union – marital versus cohabiting – differentiate the wealth accumulation of this group of single mothers.

There are a number of limitations to our study. First, we are unable to compare mothers' wealth prior to 1985, the first year for which wealth data is collected. This means that for some women, the baseline level of wealth may be measured prior to or a number of years following the transition to first birth. As such, it cannot be drawn from our study that the wealth trajectories experienced by mothers are also experienced similarly by the children in the household. Children in this sample are born anywhere from 1977 to the mid 1990s, meaning that for some we may be over- or under-estimating the economic impact of union formation and wealth accumulation on

children's lives. However, these estimates do remain reliable for understanding economic disparities across mothers in the sample as they form and in some cases dissolve unions between the first birth and age forty.

Our study is also limited in that we do not take into account the number of cohabitations that a small number of women may experience. Although serial cohabitation in this cohort of women is relatively uncommon (Quian, Lichter, & Mellott 2005), single mothers are more likely to experience serial cohabitation than mothers whose first birth occurs within marriage. Thus, our models may not account for the economic instability experienced by mothers who repeatedly enter and exit from cohabitations and the role this may play in wealth accumulation.

Despite these limitations, our study remains the first to consider how mothers fare economically following a nonmarital first birth, an increasingly common event in the lives of women. Although less common in the 1970s and 1980s, when our data were collected, in 2010, fully 40% of all births were to nonmarried mothers, making it important to understand the long-term relationships between single parenthood and economic well-being for an older cohort of women who have had the opportunity to form unions, enter and exit from work, and complete childbearing as they enter into their forties and fifties. Future studies should continue to consider not only how mothers with a nonmarital birth fare over time, but also married or divorced mothers who later form stable or unstable unions with partners who may differently contribute to family financial status.

REFERENCES

Amato, Paul R. "The Impact of Family Formation Change on the Cognitive, Social, and Emotional Well-Being of the Next Generation." *Future of Children* (2005).

Cherlin, Andrew J. "Demographic Trends in the United States: A Review of Research in the 2000s." *Journal of Marriage and Family* 72, no. 3 (June 1, 2010): 403–419.

Cherlin, Andrew J. "The Deinstitutionalization of American Marriage." *Journal of Marriage and Family* 66, no. 4 (2004): 848–861.

Cohen, Philip N. "Cohabitation and the Declining Marriage Premium for Men." *Work and Occupations* 29, no. 3 (August 1, 2002): 346–363.

Hao, Lingxin. "Family Structure, Private Transfers, and the Economic Well-Being of Families with Children." *Social Forces* 75, no. 1 (September 1, 1996): 269–292.

Harknett, K. and S. McLanahan. "Racial and Ethnic Differences in Marriage After the Birth of a Child." *American Sociological Review* 69, no. 6 (2004): 790–811.

Heimdal, Kristen R., and Sharon K. Houseknecht. "Cohabiting and Married Couples' Income Organization: Approaches in Sweden and the United States." *Journal of Marriage and Family* 65, no. 3 (2003): 525–538.

Hirschl, Thomas A., Joyce Altobelli, and Mark R. Rank. "Does Marriage Increase the Odds of Affluence? Exploring the Life Course Probabilities." *Journal of Marriage and Family* 65, no. 4 (2003): 927–938.

Johnson, Richard W., and Melissa M. Favreault. "Economic Status in Later Life Among Women Who Raised Children Outside of Marriage." *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 59, no. 6 (November 1, 2004): S315–S323.

Lichter, Daniel T., Deborah Roempke Graefe, and J. Brian Brown. "Is Marriage a Panacea? Union Formation Among Economically Disadvantaged Unwed Mothers." *Social*

Problems 50, no. 1 (2003): 60–86.

McLanahan, Sara, and Christine Percheski. 2008. "Family Structure and the Reproduction of Inequalities." *Annual Review of Sociology* 34(1): 257–276.

McLanahan, Sara and Gary Sandefur. 1994 *Growing Up with a Single Parent: What Hurts, What Helps*. Cambridge, MA: Harvard University Press.

Manning, Wendy D., and Susan Brown. "Children's Economic Well-Being in Married and Cohabiting Parent Families." *Journal of Marriage and Family* 68, no. 2 (2006): 345–362.

Mathews, TJ, and BE Hamilton. *National Vital Statistics Reports. Mean Age of Mother, 1970-2000*. Centers for Disease Control, 2002. www.cdc.gov/nchs/data/nvsr51/nvsr51_01.pdf

Painter, Matthew, and Jonathan Vespa. 2012. "The Role of Cohabitation in Asset and Debt Accumulation During Marriage." *Journal of Family and Economic Issues* (n.d.): 1–16.

Pollak, Robert A. "A Transaction Cost Approach to Families and Households." *Journal of Economic Literature* 23, no. 2 (1985): 581–608.

Schwartz, Christine R, and Robert D Mare. "Trends in Educational Assortative Marriage from 1940 to 2003." *Demography* 42, no. 4 (November 2005): 621–646.

Smock, Pamela J., Wendy D. Manning, and Sanjiv Gupta. "The Effect of Marriage and Divorce on Women's Economic Well-Being." *American Sociological Review* 64, no. 6 (December 1999): 794–812.

Ulker, Aydogan. "Wealth Holdings and Portfolio Allocation of the Elderly: The Role of Marital History." *Journal of Family and Economic Issues* 30, no. 1 (2009): 90–108.

Upchurch, Dawn, Lee Lillard, and Constantijn Panis. 2002. "Nonmarital Childbearing: Influences of Education, Marriage, and Fertility. *Demography* 39(2): 311–329.

Vespa, Jonathan, and Matthew Painter. "Cohabitation History, Marriage, and Wealth

Accumulation." *Demography* 48, no. 3 (2011): 983–1004.

Waite, Linda J. "Does Marriage Matter?" *Demography* 32, no. 4 (1995): 483–507.

Williams, Kristi, Sharon Sassler, Adrianne Frech, Fenaba Addo, and Elizabeth Cooksey. "Nonmarital Childbearing, Union History, and Women's Health at Midlife." *American Sociological Review* 76, no. 3 (June 1, 2011): 465–486.

Williams, Kristi, Sharon Sassler, and Lisa Nicholson. 2008. "For Better or For Worse? The Consequences of Marriage and Cohabitation for Single Mothers." *Social Forces* 86(4): 1481–1511.

Wilmoth, Janet, and Gregor Koso. "Does Marital History Matter? Marital Status and Wealth Outcomes Among Preretirement Adults." *Journal of Marriage and Family* 64, no. 1 (2002): 254–268.

Wooldridge, Jeffrey M. 2012. *Introductory Econometrics: A Modern Approach*.

Xiao, J.J. (1996). Effects of family income and life cycle stages on financial asset ownership. *Financial Counseling and Planning*, 7, 21-30.

TABLES AND FIGURES

Table 1. Sample Size (with person-years) of Relationship Histories, NLSY79 (*N*=1,188)

Relationship History -- Single Mothers	N	Person-years
Never cohabits and never marries	235	3,525
Never marries, cohabits with biological father	135	2,025
Never marries, cohabits with non-biological father	54	810
Marries biological father and stays married	266	3,990
Marries biological father and divorces	147	2,595
Marries non-biological father and stays married	206	3,090
Marries non-biological father and divorces	145	2,385
	1,188	**18,420**

Table 2. Descriptive Statistics for Explanatory and Control Variables, NLSY79 (*N*=1,188)

	All women (S.D.)	Never marries and never cohabits (S.D.)	Never marries, cohabits with biological father (S.D.)	Never marries, cohabits with non-biological father (S.D.)	Marries biological father and stays married (S.D.)	Marries biological father and later divorces (S.D.)	Marries non-biological father and stays married (S.D.)	Marries non-biological father and later divorces (S.D.)
Proportion of sample	—	0.20	0.11	0.05	0.22	0.12	0.17	0.12
Age, in years (1985 mean)	24.17	24.62	23.95	23.93	24.20	24.03	24.16	23.87
	(2.16)	(2.27)	(2.05)	(2.14)	(2.10)	(2.10)	(2.17)	(2.19)
Age, in years (over time mean)	32.17	32.62	31.95	31.93	32.20	32.03	32.16	31.87
	(6.11)	(6.15)	(6.07)	(6.10)	(6.09)	(6.09)	(6.11)	(6.12)
Mother's age at first birth, in years	20.12	20.98	22.97	21.39	20.53	18.48	18.66	18.61
	(4.75)	(5.46)	(6.27)	(6.63)	(4.57)	(2.64)	(2.94)	(3.03)
Race/ethnicity								
Nonlatino black	0.63	0.86	0.58	0.74	0.57	0.47	0.65	0.55
Latino	0.18	0.09	0.24	0.09	0.21	0.20	0.19	0.18
Nonlatino white	0.19	0.06	0.19	0.17	0.22	0.33	0.16	0.27
Educational attainment								
Less than high school	0.28	0.29	0.27	0.31	0.22	0.30	0.31	0.32
High school	0.49	0.41	0.49	0.52	0.54	0.51	0.46	0.53
Some college or higher	0.22	0.28	0.24	0.17	0.23	0.18	0.22	0.14
Control Variables								
Parental educational attainment								
Less than high school	0.54	0.57	0.53	0.54	0.53	0.49	0.64	0.47
High school	0.34	0.32	0.33	0.39	0.35	0.35	0.26	0.40
Some college	0.07	0.08	0.10	0.02	0.07	0.08	0.07	0.08
Bachelor's degree or higher	0.05	0.03	0.04	0.06	0.05	0.07	0.04	0.05
Parental full-time employment	0.66	0.54	0.59	0.67	0.74	0.71	0.65	0.76
Parental family income[b]	$27,642	$23,166	$30,776	$26,293	$30,967	$25,027	$26,383	$31,167
	($29,553)	($26,856)	($31,656)	($28,131)	($27,723)	($33,850)	($26,794)	($33,686)
Respondent's characteristics								
Family income[a,b]	$33,233	$25,105	$25,768	$21,598	$45,336	$37,605	$32,016	$32,977
	($62,333)	($68,992)	($38,213)	($23,845)	($81,255)	($64,993)	($49,051)	($49,985)
Received inheritance	0.26	0.18	0.25	0.28	0.27	0.30	0.24	0.32
Amount of inheritance[a,b]	$369	$311	$57	$516	$502	$634	$231	$389
	($7,382)	($8,649)	($974)	($3,527)	($11,688)	($6,062)	($3,436)	($4,382)
Number of children[a]	1.85	1.61	1.66	1.43	2.07	2.11	1.89	1.90
	(1.24)	(1.17)	(1.42)	(1.26)	(1.23)	(1.14)	(1.26)	(1.13)
Northeast region[a]	0.15	0.15	0.24	0.17	0.15	0.09	0.15	0.11
Midwest region[a]	0.23	0.26	0.26	0.22	0.19	0.32	0.20	0.19
South region[a]	0.45	0.47	0.31	0.46	0.46	0.38	0.52	0.49
West region[a]	0.16	0.11	0.17	0.14	0.19	0.20	0.13	0.21
Urban[a]	0.80	0.80	0.85	0.82	0.77	0.75	0.79	0.83
N								

[a] Time-varying variable

[b] Converted to US$2004 with Consumer Price Index.

Table 3. Growth Curve Parameter Estimates of Relationship Histories on Wealth Accumulation (logged dollars), NLSY79 (*N*=1,188)

	Model 1	Model 2	Model 3	Model 4
Initial Status				
Relationship history (ref=never married, never cohabit)				
Never marries, cohabits with biological father	0.0079 *	0.0056 †	-0.0037	-0.0104 †
	(0.0033)	(0.0030)	(0.0040)	(0.0063)
Never marries, cohabits with non-biological father	0.0021	0.0022	-0.0011	0.0050
	(0.0034)	(0.0033)	(0.0031)	(0.0054)
Marries biological father and stays married	0.0163 ***	0.0081 †	-0.0186 **	-0.0164 *
	(0.0039)	(0.0047)	(0.0058)	(0.0070)
Marries biological father and later divorces	0.0216 ***	0.0160 **	0.0027	0.0027
	(0.0045)	(0.0052)	(0.0051)	(0.0073)
Marries non-biological father and stays married	0.0079 ***	0.0041	-0.0098 **	-0.0128 †
	(0.0017)	(0.0033)	(0.0038)	(0.0069)
Marries non-biological father and later divorces	0.0129 ***	0.0095 **	-0.0010	-0.0026
	(0.0030)	(0.0034)	(0.0043)	(0.0074)
Respondent's traits				
Age at first birth	—	0.0004 †	0.0005 †	0.0002
		(0.0002)	(0.0002)	(0.0003)
NonLatino black (ref= nonLatino white)	—	-0.0148 ***	-0.0148 ***	-0.0113 *
		(0.0037)	(0.0037)	(0.0048)
Latino (ref=nonLatino white)	—	-0.0114 †	-0.0114 †	-0.0077
		(0.0061)	(0.0061)	(0.0059)
Educational attainment (ref=no high school degree)				
High school degree	—	0.0003	0.0001	-0.0025
		(0.0026)	(0.0026)	(0.0026)
Some college or higher	—	0.0220 **	0.0222 **	0.0211 *
		(0.0073)	(0.0072)	(0.0091)

Table 3, continued

Rate of Change				
Age (years)[a]	0.0025 ***	0.0023 ***	0.0007 ***	0.0011 ***
	(0.0002)	(0.0002)	(0.0002)	(0.0002)
Interaction with age (ref=never married, never cohabit)[a]				
Never marries, cohabits with biological father	—	—	0.0012 *	0.0014 †
			(0.0005)	(0.0007)
Never marries, cohabits with non-biological father	—	—	0.0003	0.0007
			(0.0004)	(0.0006)
Marries biological father and stays married	—	—	0.0035 ***	0.0030 ***
			(0.0006)	(0.0006)
Marries biological father and later divorces	—	—	0.0017 ***	0.0016 *
			(0.0005)	(0.0007)
Marries non-biological father and stays married	—	—	0.0018 ***	0.0019 **
			(0.0004)	(0.0007)
Marries non-biological father and later divorces	—	—	0.0014 ***	0.0011 †
			(0.0004)	(0.0006)

Table 3, continued

Control Variables				
Parental education (ref=no high school degree)				
High school degree	—	—	—	0.0005
				(0.0025)
Some college	—	—	—	0.0114
				(0.0073)
College degree or higher	—	—	—	0.0204
				(0.0129)
Parental financial resources				
Parental full-time employment	—	—	—	0.0022
				(0.0023)
Family income (logged)	—	—	—	0.0006
				(0.0004)
Respondents's family resources				
Family income (logged)[a]	—	—	—	0.0022 ***
				(0.0006)
Ever received inheritance	—	—	—	0.0025
				(0.0032)
Amount of inheritance (logged)[a]	—	—	—	0.0036 ***
				(0.0011)
Respondent's family size[a]				
Number of children	—	—	—	0.0019 †
				(0.0011)
Respondent's Residency[a]				
Midwest (ref=northeast)	—	—	—	0.0006
				(0.0038)
South (ref=northeast)	—	—	—	0.0015
				(0.0038)
West (ref=northeast)	—	—	—	0.0095 †
				(0.0052)
Urban residence (ref=rural)	—	—	—	-0.0023
				(0.0021)
Constant	6.6256 ***	6.627 ***	6.639 ***	6.607 ***
χ^2	2056 ***	1663 ***	1639 ***	2182 ***

Note : Standard errors in parentheses.

[a] Time-varying covariate

† $p < .1$; * $p < .05$; ** $p < .01$; *** $p < .001$, two-tailed

Figure 1. Average Baseline and Over Time Net Worth (US$2004 dollars, in thousands) by Relationship History

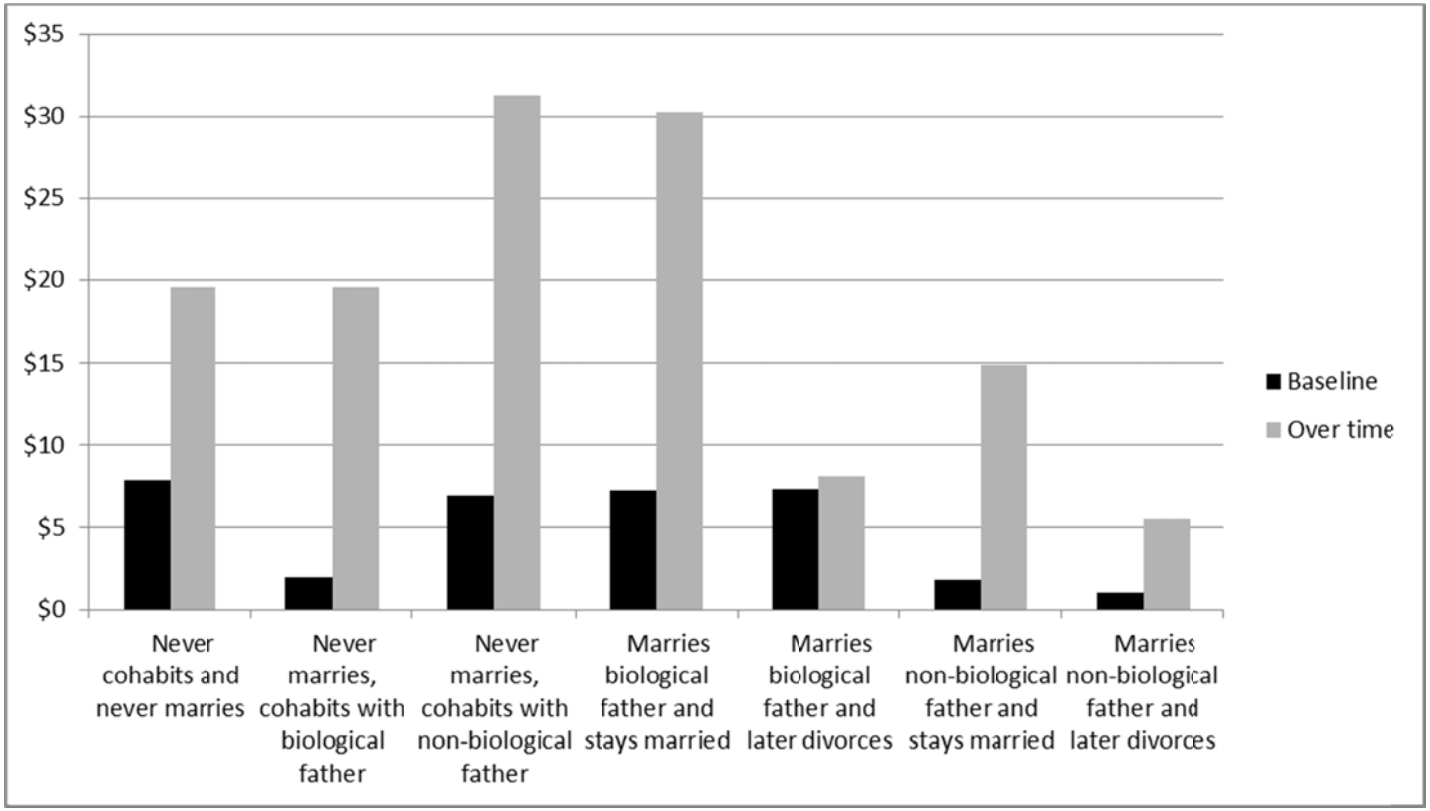

Figure 2. Predicted Values of Net Worth (Logged Dollars) by Relationship History