The Path to Marriage: Cohabitation and Wealth Accumulation\*

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### **ABSTRACT**

Although wealth inequality has stagnated in recent years, considerable financial disparities remain. Researchers have begun to examine important processes that influence wealth accumulation, but relatively little research has focused on events in the adult life cycle. The existing research in this area has shown that marriage increases wealth accumulation. Yet, due to the growing prevalence of cohabitation, we ask whether all marriages share this relationship. We argue that cohabitation prior to marriage affects adult wealth accumulation differently compared to households that did not cohabit prior to marriage. Although selection forces differentially sort individuals into cohabitation, we argue that the process of cohabitation reinforces individualist attitudes and financial behaviors that reduce wealth accumulation. In turn, individuals who cohabited carry these behaviors and attitudes into their marriages, net of selectivity. We draw our sample from the National Longitudinal Survey of Youth 1979 and use linear growth curve models to examine household wealth trajectories across time. Importantly, we use educational attainment to empirically account for selection into cohabitation. We expect to find that though marriage is a wealth building institution, each additional year of cohabitation prior to marriage will reduce marital wealth accumulation across all educational categories compared to those who marry without prior cohabitation.

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#### INTRODUCTION

Although Americans witnessed considerable financial turbulence in the 1990s, there is evidence that the entire wealth distribution shifted upward (Wolff 2006). Importantly, the less wealthy did not lose ground as wealth inequality stagnated from 1989 to 2004 (Wolff 2007). Yet, substantial wealth inequality remains. Across the wealth distribution, the wealthiest 1 percent, the next 9 percent, and the remaining 90 percent each holds approximately one-third of total household wealth (Kennickell 2006). At the bottom of the wealth distribution, nearly 17 percent of Americans in 2004 had zero or negative net worth (Wolff 2007). Furthermore, if individuals in this wealth-poor group did own assets, such as a home or car, they were more likely to carry large amounts of debt (Kennickell 2006). Thus, although financial well-being of most Americans improved during the 1990s, considerable wealth inequality remains.

Many studies have examined the social processes that underlie American wealth inequality. This research has focused mainly on personal and family background traits, such as family structure (Keister 2004), race (Campbell and Kaufmann 2006; Conley 1999; Oliver and Shapiro 1995), siblings (Keister 2003), and gender (Yamokowski and Keister 2006). Yet, little research has examined the effect of life course transitions, such as marriage, on wealth accumulation (for notable exceptions, see Lupton and Smith 2003; Wilmoth and Koso 2002). This research suggests that married households experience advantages in wealth accumulation because marriage is associated with advantages such as dual incomes, economies of scale, and homeownership. These potential benefits allow married households opportunities to save at higher rates than non-married households and, consequently, have more money available for investment.

Although research has found that marriage is an important factor in wealth accumulation, do all marriages share this relationship? Since the 1960s, the path to marriage has increasingly involved cohabitation. Today, roughly one-half of all marriages begin as cohabiting unions (Raley 2001). Thus, cohabitation may shape a household's attitudes, behaviors, and financial habits so that the resulting marriage is qualitatively different from one between people who did not cohabit prior to marrying. In this way, cohabitation influences wealth accumulation. For example, cohabiting couples are less likely than married couples to share household finances or to jointly own or purchase a home (Brines and Joyner 1999; Winkler 1997; Rindfuss and VandenHeuvel 1990).

With pre-marital cohabitation becoming increasingly common for many households, and with little research on the relationship between marriage and wealth accumulation, we build upon existing literature by examining the relationship between the path to marriage and wealth accumulation during marriage. Using data from the National Longitudinal Survey of Youth, 1979, we explore whether individuals who cohabit prior to marriage accumulate less wealth over time than those who directly marry without prior cohabitation. To examine these relationships, we use multi-level linear growth models to assess changes in household wealth trajectories across time.

## Selection Effects: Cohabitation and Wealth Accumulation in Marriage

The growing prevalence of cohabitation has changed the path to marriage. This has led researchers to consider selection factors that influence some individuals to cohabit prior to marriage while others do not. For example, individuals who cohabit prior to marriage largely do so because they hold more favorable attitudes toward personal freedom and view unions as fragile (Smock 2000, 2004; Seltzer 2004; Axinn and Barber 1997; Axinn and Thornton 1992). Additionally, cohabitors are more likely to value an "individualist" mentality that emphasizes independence and self-reliance (Bumpass, Sweet, and Cherlin 1991). Consequently, this mentality contributes to cohabitors' view that marriage is fragile and temporary (Brines and Joyner 1999; Clarkberg, Stoltzenberg, and Waite 1995; Axinn and Thornton 1992; Rindfuss and VandenHeuvel 1990). In contrast, a "collectivist" mentality is more common among households that did not cohabit prior to marrying. This notion emphasizes shared household goals such as joint financial investment in the household's future (Clarkberg et al. 1995). In other words, individuals who cohabit prior to marrying are more likely to see themselves as "two individuals sharing . . . the

relationship" compared to those who did not cohabit beforehand "who view themselves as two halves of a couple" (Thomson and Colella 1992:260). Thus, selection is an important factor to consider in union formation (Smock 2000, 2004; Seltzer 2004; Axinn and Barber 1997; Axinn and Thornton 1992; Bumpass et al. 1991).

Due to selection forces, one potential hypothesis is that any observed relationship between cohabitation and wealth accumulation is spurious. Unobserved characteristics may select individuals into cohabitation and these same unobserved traits may then lead these households to have lower levels of future wealth. For example, individuals with lower education are more likely to cohabit than marry (Bumpass et al. 1991). Because education is especially important for wealth accumulation (Keister 2005; Loh 1996), cohabitors may have less wealth due to their lower educational attainment and not the experience of cohabitation, *per se*. We expect, however, that the process and experience of cohabitation reinforce cohabitors' individualist mentalities toward union fragility. Furthermore, because cohabitors tend to view their relationship in terms of two individuals temporarily sharing a household, they may be less likely to invest financially in a union (Thomas and Colella 1992; Clarkberg et al. 1995). If cohabitors transition to marriage, they may carry these attitudes with them. Thus, the process of cohabitation reinforces attitudes that decrease wealth accumulation during marriage, net of selectivity.

# Prior Cohabitation and Wealth Accumulation in Marriage

How does cohabiting prior to marriage affect wealth accumulation during marriage? First, individuals who cohabit have different financial behaviors from those who do not. They are less likely to jointly own or purchase homes, or open savings accounts (Brines and Joyner 1999; Winkler 1997; Rindfuss and VandenHeuvel 1990). In cohabitations, expectations about financial responsibilities and roles are less clear (Clarkberg et al. 1995). Furthermore, because cohabiting unions have "an unspecified time horizon" and an "absence of a reliably enforceable [legal] contract" (Brines and Joyner 1999:351), cohabitors tend to avoid joint financial investment. Due to insecurity about unions' long term stability, individuals who cohabit may accumulate less wealth if they transition to marriage because they carry these financial behaviors from cohabitation into the marriage (see also Wilmoth and Koso 2002; Axinn and Thornton 1992).

Second, individuals who cohabit differ in their attitudes toward unions. They are less likely to view marriage as a stable and permanent union (Clarkberg et al. 1995; Axinn and Thornton 1992; Rindfuss and VandenHeuvel 1990); they espouse more favorable attitudes toward personal freedom and individualism (Smock 2004; Clarkberg et al. 1995; Thomson and Colella 1992); and they tend to view their relationships as trial courtships, "wait-and-see" periods that test mate compatibility (Seltzer 2004; Tanfer 1987). If cohabitors do transition to marriage, they are more likely to hold favorable views toward divorce than couples who did not cohabit prior to marrying (Axinn and Barber 1997; Thomson and Colella 1992).

These behaviors and attitudes differentiate individuals who have cohabited from those who have not. Thus, although selection forces differentially sort individuals into cohabitation, we argue that the process and experience of cohabitation reinforces these behaviors and attitudes (Axinn and Thornton 1992; Clarkberg 1999; Axinn and Barber 1997). When cohabitors transition into marriage, they carry these behaviors and attitudes with them. By extension then, the process of cohabitation may affect wealth accumulation in marriage, net of selectivity (Clarkberg 1999; Axinn and Barber 1997; Axinn and Thornton 1992; Thomas and Colella 1992). In other words, cohabitors may accumulate less wealth over time compared to those who did not cohabit prior to marriage because of their financial behaviors and individualist mentalities that view marriage as fragile.

# Marriage and Wealth Accumulation

Although couples may take different paths to marriage, marriage itself remains a wealth building institution (Hao 1996). Married households are more likely to accumulate wealth than non-married households for several reasons including a joining of assets, dual incomes, lowered expenses from economies of scale, and homeownership (Hao 1996; Waite and Gallagher 2000; Wilmoth and Koso

2002). Dual incomes allow for larger monthly mortgage payments, purchasing more expensive cars, investing in real estate, and funding financial investments such as stocks and bonds. Families in which only one spouse works in the labor force may still benefit from savings in child care, home care, and economies of scale. Furthermore, the families of both spouses may provide assistance via financial transfers (Hao 1996; Waite and Gallagher 2000). Finally, mortgage payments and retirement funds, such as Individual Retirement Accounts (IRAs) and 401Ks, are tax-deductible. Not only do these deductions reduce taxable income, but they free money for additional investments. These advantages allow married households to build wealth more quickly than non-married households. Additionally, marital duration also affects wealth accumulation as transitions into and out of marriage during the life course have significant financial implications (Oppenheimer, Kalmijn, and Lim 1997; Wilmoth and Koso 2002). For example, couples married at younger ages have more time to accumulate wealth than couples married at older ages (Hao 1996; Waite and Gallagher 2000; Wilmoth and Koso 2002).

### **DATA AND METHODS**

#### Data

To examine our research questions, we use data from the National Longitudinal Survey of Youth 1979 (NLSY79). The NLSY79 is a nationally representative panel survey that began in 1979 with 12,686 men and women aged 14-22. We use information from all waves of the NLSY79 until the most recent wave in 2004. Until 1994, the survey interviewed respondents annually, after which it has interviewed them biennially. Due to the longitudinal structure as well as the depth and breadth of questions, the NLSY79 are excellent data for studying the effect of marriage and cohabitation on wealth accumulation. These data allow us to follow the respondents across important life events such as education, marriage, and childbirth as well as observe essential financial indicators such as income, assets, and employment. Central to our study, wealth questions entered the survey in 1985 when all respondents were at least 20 years old. The wealth questions follow the general collection pattern except for 1991 and 2002 when asset or debt questions were not included.

#### Sample

The focus of our research is the effect of cohabiting prior to marriage on wealth accumulation during marriage. We analyze all married households who took one of two paths into marriage: cohabitation prior to marriage or marriage without prior cohabitation. We do not include the never married or cohabitors who do not transition into marriage. Using multiple waves of data, we construct a person-year dataset containing the years spent in cohabitation leading to marriage as well as the years spent in marriage. Respondents contribute cohabitation-years and marital-years to the sample in two ways. First, if respondents cohabited with their future spouses prior to marriage, they contribute cohabitation-years from the first year of cohabitation until the first year of marriage. Second, each year of marriage contributes a marital-year. For example, if a respondent cohabits for three years with her future spouse and then is married for five years, she contributes eight total person-years to the sample. Respondents stay in the sample until they transition out of marriage (i.e., from separation, divorce, or widowhood).

Our total sample size is 4,205 households with 1,109 cohabiting prior to marriage (3,186 marry without cohabitating). In terms of person-years, households contribute 2,357 cohabitation-years and 32,295 marital-years (for 34,652 total person-years). Because the NLSY79 does not begin collecting wealth data until 1985, we exclude cohabitations and marriages prior to that year for causal ordering. This necessary sample restriction reduces the sample by 3,470 respondents. In supplementary analyses, we will explore these cohabitations and marriages to assess potential differences between the pre-1985 and post-1985 unions.

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<sup>&</sup>lt;sup>1</sup> If respondents cohabit prior to cohabiting with their spouse, we account for these years by including a duration measure that accounts for the number of years cohabiting without the future spouse.

<sup>&</sup>lt;sup>2</sup> We only focus on first marriages. Subsequent marriages are excluded from the analysis.

#### Outcome Variable

Our outcome variable is net worth. In our analyses, we allow net worth to vary between 1985 and 2004. This allows us to model the accumulation or loss of wealth over time. We measure net worth as the total value of assets less the total value of debts. Assets include automobiles, the primary residence, investment real estate, checking and savings accounts, Individual Retirement Accounts (IRAs), 401Ks, trusts, tax-deferred accounts, stocks, mutual funds, bonds, Certificates of Deposit, insurance policies, and valuable possessions and collections. For debts, we include personal debt from outstanding bills and credit cards, student loan debts, mortgages against the primary residence and other real estate property, liens against any real estate, and balances remaining on automobiles.

### **Explanatory and Control Variables**

We use several explanatory variables to measure the influence of cohabitation and marriage on wealth accumulation. First, because all respondents in our sample eventually marry, it is important to account for marital duration. Therefore, we include a duration variable that counts the number of continuously married years. Second, for respondents who cohabited with their future spouse prior to marriage, we include a similarly structured duration variable for the number of cohabitation-years. This variable applies only to the years of cohabitation prior to marriage with one's future spouse. Finally, we include a duration variable that measures the duration of any cohabitation with a person other than a future spouse. With two variables accounting for cohabitations, both with and without future spouses, we are able to account for the total cohabitation time prior to marriage. Following sociological research on wealth (e.g. Keister 2005) and cohabitation (Smock 2000; Clarkberg et al. 1995; Manning and Smock 1995; Axinn and Thornton 1992), we include an extensive set of control variables. These capture personal and family background characteristics, educational attainment, adult family traits, inheritances, religiosity, and attitudes toward egalitarian gender roles.

# Analytical Method

To explore how cohabitation and marriage influence adult wealth accumulation, we use linear growth models.<sup>3</sup> The longitudinal structure of the NLSY79 allows us to assess wealth trajectories both in terms of within-household and between-household change (Singer and Willett 2003). Specifically, linear growth models use a hierarchical strategy and nest time (Level 1) within individuals (Level 2). Time-varying variables are located in Level 1, and Level 2 contains time-invariant variables. With linear growth models, it is important to use a meaningful time dimension to underlie the data (Snijders and Bosker 1999). Because we use marital-years, Level 1 represents the change in the wealth trajectory for each household throughout the duration of marriage (Singer and Willett 2003). Accordingly, the intercept, which is allowed to vary, represents the amount of household wealth when a couple is first married (Raudenbush and Bryk 2002). Level 2 represents inter-household differences in wealth trajectories as well as time-invariant household characteristics (Singer and Willett 2003). Thus, linear growth models account for the effects of marital and cohabitation duration on household wealth, as well as household characteristics that may affect trajectories of wealth accumulation.

#### Selection Bias and Stratification by Educational Attainment

Research has identified numerous differences between individuals who cohabited prior to marriage and those who did not (Smock 2000, 2004; Seltzer 2004; Axinn and Thornton 1992; Bumpass et al. 1991). Certainly, these selection factors may themselves affect wealth accumulation. As we argue above, however, the process of cohabitation develops and entrenches these prior dispositions. Importantly, research consistently points to educational attainment as an indicator of cohabitation (e.g. Bumpass et al. 1991). Specifically, individuals who are less educated are more likely to cohabit. Thus, to

<sup>&</sup>lt;sup>3</sup> Although it is possible that a growth-curve model is more appropriate, previous research suggests that the NLSY79 respondents are too young in their life cycles to begin consuming accumulated wealth (Keister 2005).

account for selection into cohabitation, we stratify our sample by adult educational attainment. The stratified groups include: no high school degree, high school degree, some college, bachelor's degree, and advanced degree. By stratifying our sample, we are able to compare individuals who cohabited prior to marriage and those who did not by their adult educational attainment. This method certainly does not account for all selection processes, but it explicitly models a major factor in union formation. In this way, we attempt to ascertain the relationship between cohabitation and wealth accumulation in households with more similar resources.

#### **Expected Findings**

Based on prior literature and theoretical development, we test four hypotheses. First, in line with previous research, we expect that each additional year of marriage will increase wealth accumulation. Second, we hypothesize that wealth accumulation within marriage depends on the path that individuals take to marriage. We expect that those who cohabited with their future spouses prior to marrying will experience less wealth accumulation during marriage. Third, each additional year of cohabitation will reduce adult wealth accumulation because cohabitation reinforces an individualist mentality and attitudes toward union fragility; these two influences will discourage financial investment in the union. In contrast, those who married without cohabiting beforehand will experience greater wealth accumulation during marriage. They tend to view unions as stable and have a collectivist mentality toward financially investing in the union's future. Fourth, if individuals cohabit with other partners before cohabiting with or directly marrying their future spouse, they will have less adult wealth accumulation during marriage. We expect that these individuals will have the lowest levels of commitment to the marital relationship and the strongest individualistic attitudes. Finally, we expect the above hypotheses to hold within educational categories. Thus, within educational categories, households that cohabited prior to marriage will accumulate less adult wealth during marriage compared to those that married without prior cohabitation.

#### REFERENCES

- Axinn, William and Jennifer S. Barber. 1997. "Living Arrangements and Family Formation Attitudes in Early Adulthood." *Journal of Marriage and Family* 59:595-611.
- Axinn, William and Arland Thornton. 1992. "The Relationship between Cohabitation and Divorce: Selectivity or Causal Influence?" *Demography* 29:357-74.
- Brines, Julie and Kara Joyner. 1999. "The Ties that Bind: Principles of Cohesion in Cohabitation and Marriage." *American Sociological Review* 64:333-55.
- Bumpass, Larry, James Sweet, and Andrew Cherlin. 1991. "The Role of Cohabitation in Declining Rates of Marriage." *Journal of Marriage and the Family* 53:913-27.
- Campbell, Lori A. and Robert L. Kaufman. 2006. "Racial Differences in Household Wealth: Beyond Black and White." *Research in Social Stratification and Mobility* 24:131-52.
- Clarkberg, Marin. 1999. "The Price of Partnering: The Role of Economic Well-Being in Young Adults' First Union Experiences." *Social Forces* 77:945-68.
- Clarkberg, Marin, Ross Stoltzenberg, and Linda Waite. 1995. "Attitudes, Values, and Entrance into Cohabitational versus Marital Unions." *Social Forces* 74:609-32.
- Conley, Dalton. 1999. Being Black, Living in the Red. Berkeley: University of California Press.
- Oliver, Melvin L. and Thomas M. Shapiro. 2006. Black Wealth/White Wealth. New York: Routledge.
- Hao, Lingxin. 1996. "Family Structure, Private Transfers, and the Economic Well-Being of Families with Children." *Social Forces* 75(1):269-92.
- Keister, Lisa A. 2005. Getting Rich. Cambridge: Cambridge University Press.
- Keister, Lisa A. 2003. "Sharing the Wealth: The Effect of Siblings on Adults' Wealth Ownership." *Demography* 40(3):521-42.
- Keister, Lisa A. 2004. "Race, Family Structure, and Wealth: The Effect of Childhood Family on Adult Asset Ownership." *Sociological Perspectives* 47(2):161-87.
- Loh, Eng Seng. 1996. "Productivity Differences and the Marriage Wage Premium for White Males." *Journal of Human Resources* 31(3):566-89.

- Lupton, Joseph P. and James P. Smith. 2003. "Marriage, Assets, and Savings." Pp. 129-52 in Marriage and the Economy, edited by Shoshana A. Grossbard-Shechtman. Cambridge, NY: Cambridge University Press.
- Manning, W. D. and P. J. Smock. 1995. "Why Marry? Race and the Transition to Marriage among Cohabitors." *Demography* 32:509-20.
- Raley, R. K. 2001. "Increasing Fertility in Cohabiting Unions: Evidence for the Second Demographic Transition in the United States?" *Demography* 38:59-66.
- Raudenbush, Stephen W. and Anthony S. Bryk. 2002. *Hierarchical Linear Models: Applications and Data Analysis Methods*. Thousand Oaks, CA: Sage Publications.
- Rindfuss, Ronald and Audrey VandenHeuvel. 1990. "Cohabitation: A Precursor to Marriage or an Alternative to Being Single?" *Population and Development Review* 16:703-26.
- Singer, Judith D. and John B. Willett. 2003. *Applied Longitudinal Data Analysis: Modeling Change and Event Occurrence*. Oxford, UK: Oxford University Press.
- Smock, Pamela. 2004. "The Wax and Wane of Marriage: Prospects for Marriage in the 21st Century." *Journal of Marriage and Family* 66:966-74.
- Smock, Pamela. 2000. "Cohabitation in the United States: An Appraisal of Research Themes, Findings, and Implications." *Annual Review of Sociology* 26:1-20.
- Snijders, Tom and Roel Bosker. 1999. Multilevel Analysis. Thousand Oaks, CA: Sage Publications.
- Seltzer, Judith A. 2004. "Cohabitation in the United States and Britain: Demography, Kinship, and the Future." *Journal of Marriage and Family* 66:921-29.
- Tanfer. Koray. 1987. "Patterns of Premarital Cohabitation among Never-Married Women in the United States." *Journal of Marriage and the Family* 49:483-97.
- Thomson, Elizabeth and Ugo Colella. 1992. "Cohabitation and Marital Stability: Quality or Commitment?" *Journal of Marriage and Family* 39:531-40.
- Wilmoth, Janet and Gregor Koso. 2002. "Does Marital History Matter? Marital Status and Wealth Outcomes Among Preretirement Adults." *Journal of Marriage and Family* 64:254-68.
- Wolff, Edward N. 2007. "Recent Trends in Household Wealth in the United States: Rising Debt and the Middle-Class Squeeze" Working Paper #502. Levy Economics Institute of Bard College.
- Wolff, Edward N. 2006. "Changes in Household Wealth in the 1980s and 1990s in the United States." Pp. 107-50 in *International Perspectives on Household Wealth*, edited by Edward N. Wolff. Northampton, MA: Edward Elgar.
- Kennickell, Arthur B. 2006. "olling Tide: Changes in the Distribution of Wealth in the US, 1989-2001." Pp. 19-88 in *International Perspectives on Household Wealth*, edited by Edward N. Wolff. Northampton, MA: Edward Elgar.
- Yamokowski, Alexis and Lisa A. Keister. 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(1):167-94.