The Evolving Role of Marriage: 1950–2010

Shelly Lundberg and Robert A. Pollak

Summary

Since 1950, marriage behavior in the United States has changed dramatically. Though most men and women still marry at some point in their lives, they now do so later and are more likely to divorce. Cohabitation has become commonplace as either a precursor or an alternative to marriage, and a growing fraction of births take place outside marriage.

We've seen a retreat from marriage within all racial and ethnic groups and across the socioeconomic spectrum. But the decoupling of marriage and parenthood has been much less prevalent among college graduates. Why are college graduates such a prominent exception?

Some scholars argue that marriage has declined furthest in low-income communities because men with less education have seen their economic prospects steadily diminish, and because welfare and other social programs have let women rear children on their own. Others contend that poor women have adopted middle-class aspirations for marriage, leading them to establish unrealistic economic prerequisites. The problem with these explanations, write Shelly Lundberg and Robert Pollak, is that they focus on barriers to marriage only in very poor communities. Yet we've seen a retreat from marriage among a much broader swath of the population.

Lundberg and Pollak argue that the sources of gains from marriage have changed in such a way that families with high incomes and high levels of education have the greatest incentives to maintain long-term relationships. As women's educational attainment has overtaken that of men, and as the ratio of men's to women's wages has fallen, they write, traditional patterns of gender specialization in household and market work have weakened. The primary source of gains from marriage has shifted from production of household services to investment in children. For couples whose resources allow them to invest intensively in their children, marriage provides a commitment mechanism that supports such investment. For couples who lack the resources to invest intensively in their children, on the other hand, marriage may not be worth the cost of limited independence and potential mismatch.

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A "quiet revolution" in American women's careers, education, and family arrangements began in the 1970s.[2] During the prosperous years of the post-war baby boom, couples married after leaving school, and most young mothers stayed at home with their children. Many mothers returned to the labor force when their children were grown, but their educational and career aspirations were shaped by domestic responsibilities. As fertility rates fell and women's intermittent employment turned into lifetime commitments to market work and careers, the terms of the marital agreement changed. People increasingly delayed marriage to attend college or because they expected smaller families, and divorce rates rose. Marriage as a social institution appeared to be endangered.

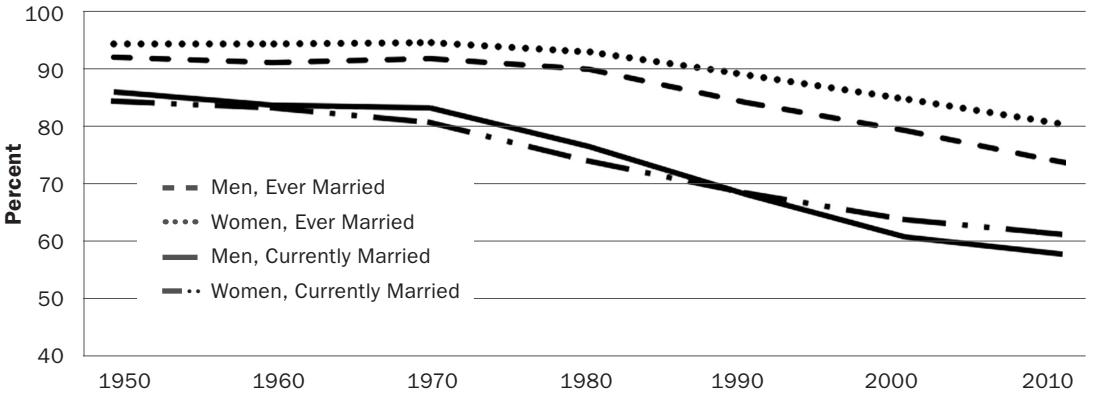
By the turn of the century, the state and future of marriage in the United States had become the focus of considerable scholarly and public attention. More men and women than ever, though still a small minority, do not marry at all. Cohabitation, both as a precursor and an alternative to marriage, has become commonplace. A growing fraction of births take place outside marriage. Though this overall retreat from marriage can be observed among all major racial and ethnic groups and across the socioeconomic spectrum, there has been a pronounced divergence between marriage and childbearing trends at the top and the bottom of the income distribution. In particular, the apparent decoupling of marriage and parenthood that has caused so much concern among policy makers and the public has been much less prevalent among college graduates.

The median age at first marriage hit a historic low during the height of the baby boom in the 1950s—just over 20 for women, and about 23 for men. A modest delay in first marriages during the 1960s was followed by a rapid increase in marriage age that continued for the next four decades.[3] Additional years in school explain part of this delay: among both young men and women, college attendance rose steadily until the 1980s, when improvements in men's educational attainment stalled while women's continued to rise. The proportion of young adult women with college degrees equaled, and then exceeded, that of men in the 1990s.[4] Beginning in the 1980s, increases in premarital cohabitation by young couples became another important force behind marriage timing; the age at which households were first formed remained roughly constant while first marriages were further delayed.[5]

Marriage delay reduced the fraction of young men and women who were currently married (or ever married) while in their twenties. But in the 1970s, the prevalence of marriage began to decline even for older men and women. Figure 1 shows this decline for men and women ages 30 to 44, much of it accounted for by an increase in cohabitation. Data from the National Survey of Family Growth, which has conducted in-home interviews with national samples of 15- to 44-year-old women since 1973, show an eight percentage point drop in the fraction of women who were currently married between 1982 and the most recent wave of data collection, in 2006–10. That decline, from 44 to 36 percent, was exactly offset by the increase in the proportion who were cohabiting, which rose from 3 to 11 percent, leaving the prevalence of all coresidential unions (that is, marriage and cohabitation combined) unchanged.[6]

The gap between the proportion of 30- to 44-year-olds currently married (now about

Figure 1. Proportion of Men and Women Ever Married and Currently Married, Ages 30–44



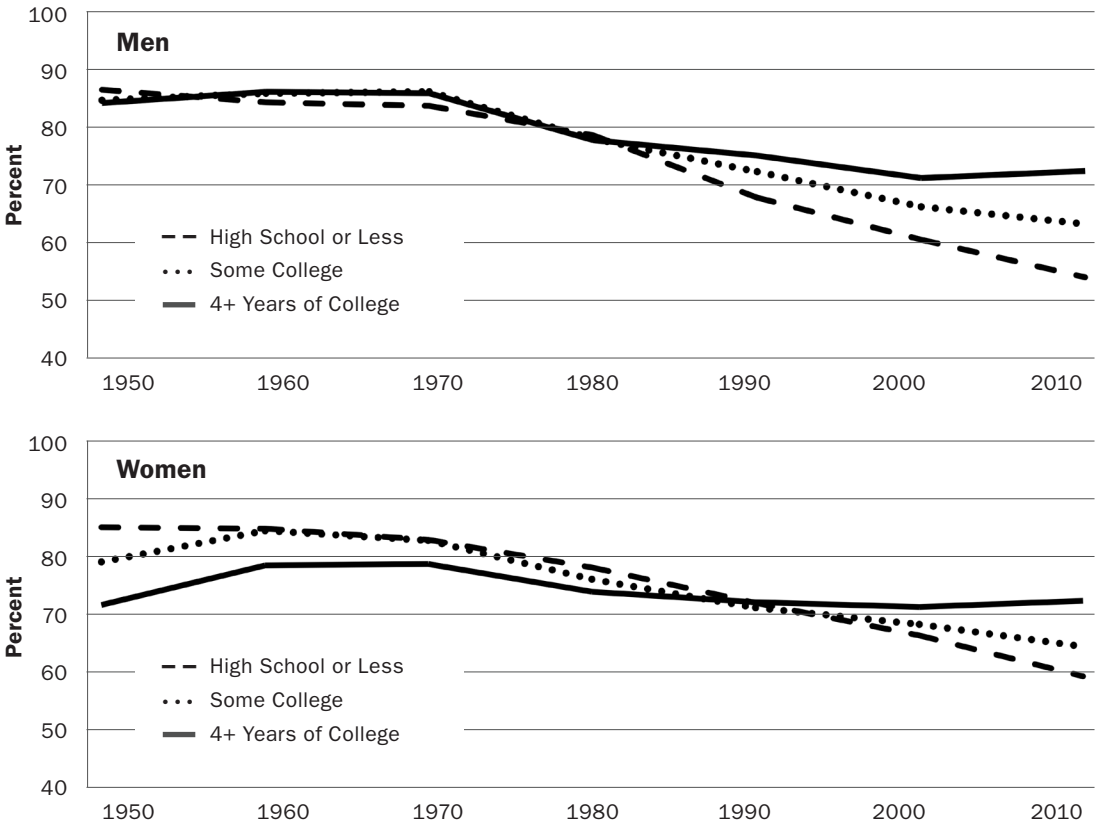
Sources: U.S. Census 1950–2000, American Community Survey 2010.

60 percent) and the proportion who have ever been married (80 percent for women, 74 percent for men) has widened due to increases in divorce (figure 1). The annual divorce rate (the number of divorces per thousand married couples) more than doubled between 1960 and 1980, from less than 10 to more than 20. The divorce rate stabilized after 1980, though it continued to rise among certain age groups.[7]

In recent decades, the social and legal significance of marriage has eroded. The costs of exiting marriage fell as unilateral divorce regimes, in one form or another, were adopted across the United States. Children born out of wedlock acquired greater rights to financial support and inheritance through a series of Supreme Court decisions in the 1960s and 1970s.[8] Marriage also became less important for determining fathers' child support obligations when, during the 1990s, the states (following a federal mandate) introduced in-hospital, voluntary programs that reduced the costs of establishing legal paternity.[9] Changes in social norms have also played a role: the stigmas associated with nonmarital sex, cohabitation, nonmarital fertility, and divorce have declined dramatically.[10] As the boundaries blurred, spells of cohabitation became longer and more likely to involve children.[11]

Rising rates of nonmarital fertility in the United States have received a great deal of attention from researchers and policy makers. The median age at first marriage for women has been rising more rapidly than the median age at first birth. In 1991, the two trends crossed, and they continue to diverge. In 2010, the median age at first birth (25.3) was nearly one year lower than the median age of women at first marriage (26.1).[12] The circumstances in which nonmarital births take place have been changing. For women who reached childbearing age in the 1950s through the mid-1960s, the primary cause of rising premarital births was an increase in premarital pregnancies that were brought to term (and, in all probability, an increase in premarital sex). During the following two decades, the principal factor driving the upward trend in premarital childbearing was that people became less likely to marry following a premarital conception—that is, the prevalence of so-called "shotgun

Figure 2. White Men and Women Ages 30–44 Currently Married, by Education



Sources: U.S. Census 1950–2000, American Community Survey 2010.

weddings" has declined.[13] At the same time, the proportion of nonmarital births to lone mothers has also been decreasing: 52 percent of nonmarital births now occur within cohabiting unions, many of them "shotgun cohabitations."[14]

Compared with other wealthy countries, the United States is an outlier in many dimensions of family dynamics. The level of fertility that occurs outside any union—marital or cohabiting—is relatively high here, and both marital and cohabiting unions are very unstable.[15] In many northern European countries, cohabitation has progressed further in the direction of becoming a replacement for marriage: a much smaller proportion of the population ever marries, rates of cohabitation and proportions of births within cohabiting unions are much higher, and these unions are much more durable.[16] Like the United States, most countries in Europe show a socioeconomic gradient in family structure—people with less education are more likely both to cohabit and to have children outside of marriage—but these discrepancies are less pronounced there.[17]

The different trends in marriage behavior across socioeconomic groups are most easily seen by focusing on a single racial group. Among whites, the retreat from marriage has been much more rapid for men and

women with less education (figure 2). We place people into three groups: college graduates, those with some college, and those with a high school education or less. The proportion of men ages 30 to 44 who are currently married (reflecting both marriage and divorce behavior) has decreased for men with a college degree, but it has declined substantially more for men with less education. Until 1990, women without college degrees were more likely to be married than were female college graduates, but since then the opposite has been true. Rates of both marriage and remarriage have risen for women with college degrees relative to women with less education.[18] Long-term marital stability has a steep education gradient: the predicted probability that a first marriage will remain intact for 15 years is sharply higher for white women with a college degree (80 percent) than for white women with some college (57 percent) or those with a high school diploma (53 percent).[19]

The prevalence of cohabitation sharply decreases as education rises (table 1), and cohabitation tends to play different roles for women with high and low levels of education. For highly educated women, cohabitation usually precedes marriage—a part of courtship or a trial marriage that rarely includes childbearing. Serial cohabitation (that is, multiple premarital cohabiting relationships) is much more prevalent among economically disadvantaged men and women. And, among poorer and less-educated people, cohabiting unions are more likely to end in dissolution than in marriage.[20]

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The growing divergence in marriage, cohabitation, and fertility behavior across educational groups may have important implications for inequality and the intergenerational transmission of economic advantage and disadvantage. In her presidential address to the Population Association of America in 2004, Princeton sociologist Sara McLanahan (the editor-in-chief of *Future of Children*) showed how the rise in single-parent families, along with widening gaps in divorce rates and the age at which women have children,

Table 1. Current Union Status by Percentage among Women Aged 15–44 Years, 2006–10

	First marriage	Second marriage or higher	Cohabiting	Never in a union	Formerly married
No high school diploma or GED	36.6	7.7	20.2	19.1	16.5
High school diploma or GED	39.5	9.2	15.5	20.3	15.6
Some college	42.1	7.4	11.6	26.4	12.6
Bachelor's degree	58.3	3.3	6.8	25.5	6.1
Master's degree or higher	63.0	4.4	5.5	20.1	7.0

Source: Casey E. Copen, Kimberly Daniels, Jonathan Vespa, and William D. Mosher, "First Marriages in the United States: Data from the 2006–10 National Survey of Family Growth," National Health Statistics Reports 49 (2012): 1–22.

were leading to growing disparities in the parental resources, both time and money, that children of more- and less-educated mothers receive.[21] Young men and women today whose mothers attended college are more than twice as likely to graduate from college as are children with less-educated mothers.[22] Johns Hopkins sociologist Andrew Cherlin has emphasized the costs to children, and particularly the children of people without a college education, of the instability in living arrangements and parental ties inherent in what he calls the American "marriage-go-round."[23]

Understanding the Retreat from Marriage

Social scientists examining the general decline in the prevalence and stability of legal marriage have focused on two forces: decreasing economic opportunities for many men and increasing economic opportunities for women. Steady employment and high earnings are strongly correlated with men's marital status, probably because a stable income lets them fulfill a traditional role as family breadwinner. Since the 1970s, many young men, particularly those with low levels of education, have found it increasingly hard to establish a stable career with earnings above the poverty line, and this seems to have been an important factor in delaying marriage.[24] Proponents of an alternative "independence hypothesis" have argued that, as women get more education and work and earn more, their increased economic independence should reduce their need for marriage. But most studies have found that women who earn more are more likely to marry, so empirical support for the independence hypothesis is limited.[25] (See the article in this issue by Daniel Schneider for further discussion of the independence hypothesis.) Changing social norms about divorce, cohabitation, and gender roles have clearly reinforced the retreat from marriage, but the evolution of these norms has also been shaped by behavioral responses to market forces.[26]

Since the 1970s, many young men, particularly those with low levels of education, have found it increasingly hard to establish a stable career with earnings above the poverty line, and this seems to have been an important factor in delaying marriage.

Economists view marriage as a choice made by individuals who evaluate the expected gains from a specific marriage compared with other marriages or with living alone. The potential gains from marriage fall into two broad categories: joint production and joint consumption. Production gains arise in a household that produces domestic goods such as home-cooked meals and child care. The advantages of a two-adult household come either from economies of scale (cooking meals for two people is usually cheaper, on a per capita basis, than cooking separately) or from a division of labor that allows one partner to specialize in market work and the other in domestic labor. Consumption gains come from the joint consumption of household public goods—goods that can be consumed by one person without diminishing the enjoyment of these goods by another. Housing and children are the standard examples of public goods in a family context. University of Michigan economists Betsey Stevenson and Justin Wolfers expanded

the joint consumption category to include shared leisure activities as well as household public goods. They coined the phrase "hedonic marriage" to describe modern marriages in which there is little gender-based division of labor and consumption benefits are paramount.[27] Children can enhance the gains to marriage in two ways: because children provide joint consumption benefits to their parents, they are themselves household public goods, and coresidence lets their parents efficiently coordinate child care and investment in children.[28]

Though the most recent increases in age at first marriage can largely be attributed to increases in premarital cohabitation, the pronounced delay in marriage between 1970 and 1990 was associated with an extended period of living alone. In this earlier period, then, marriage became less attractive and living alone became more attractive. Advances in contraceptive technology, changes in state laws in the 1970s regarding access to oral contraceptives, and the legalization of abortion made reliable fertility control readily available to young single women.[29] These changes in technology and law, together with the weakening of norms that stigmatized premarital sex, reduced the risk and increased the availability of sex outside marriage or cohabiting unions. As a result, delaying "union formation" no longer required choosing between abstinence and the risk of an unplanned pregnancy. These changes in technology and law accelerated women's entry into the labor force and particularly into careers that required extended periods of postsecondary education.[30]

Greater availability of market substitutes for goods and services that used to be produced in the household, as well as improvements in household technology, also made living alone more attractive. Market substitutes let people outsource functions such as cooking and child care that had traditionally been regarded as central to the family. Improvements in household technology, such as electric washing machines and microwaves, reduced not only the time people needed to perform household tasks but also the level of skill they required to clothe and feed themselves.[31] These market substitutes and household technologies were, to a considerable extent, a market response to the growing number of single-person households as well as to increased market work by women.

As the potential quality of life for one-adult households improved and women entered the work force, the value of specialization and exchange in two-person households fell. Gender specialization in married couple households has decreased dramatically during the past 60 years.[32] The labor force participation rate for women ages 25 to 54 increased from 37 percent to 75 percent between 1950 and 2010, while the participation rate for prime-age men fell from 97 percent to 89 percent. Though married women still spend more time than married men doing housework, women's housework time has fallen by 10 hours per week since 1965 and men's has increased by about four hours per week.[33] As women's educational attainment, wages, and hours of market work have risen relative to men's, the opportunities for gains from trade within a household, which depend to a large extent on the segregation of men and women in separate home and market sectors, have diminished—and so have the potential gains to marriage.

The increased social acceptance of cohabitation, with or without children, has substantially changed the state of marriage. Since 1987, the proportion of women

who are currently cohabiting has more than doubled, and the increase has been particularly rapid among women with a high school education or some college.[34] Indeed, much of the decline in marriage during the past two decades involved substitution of cohabitation for legal marriage. Cohabitation provides many of the economic benefits of marriage, since a cohabiting couple can benefit from both joint production (for example, specialization and the division of labor, and economies of scale) and joint consumption (for example, shared leisure and household public goods, including children). What distinguishes marriage from cohabitation in an economically meaningful way?

For one thing, marriage is more costly to exit than cohabitation, and the costs of divorce are legal, social and, for most people, psychological. The legal costs of divorce have fallen as states have replaced fault-based or mutual-consent grounds for divorce with laws permitting unilateral divorce, and the social costs have also fallen as divorce has become commonplace. However, many sociologists note that people have come to see divorce as a terrible personal failure to be avoided, if necessary by delaying or avoiding marriage.[35] The institution of marriage retains considerable cultural significance in America, and the public commitment to a permanent and exclusive relationship that marriage entails distinguishes it from cohabitation, which often begins informally and without an explicit discussion of terms or intentions.[36]

These costs of divorce mean that marriage serves as a commitment mechanism that fosters cooperation and encourages marriage-specific investments, and economic models of marriage emphasize the relatively high cost of exit.[37] Commitment devices let people lock themselves into courses of action that are desirable in the long term, but from which they may be tempted to deviate in the short term. Willingness to enter into a marriage from which it is costly to exit also signals to a mate a desire for long-term commitment. A plausible theory of marriage, however, must explain why such a long-term marital commitment is valuable, and this requires that we specify the types of gains that long-term commitment can foster.

In a traditional marriage, in which the wife works exclusively in the household and the husband works exclusively in the market, long-term commitments support the production benefits of specialization and exchange.[38] This pattern of specialization leaves the wife vulnerable because she fails to accumulate market skills that would increase her wages if she were to enter the labor market. Marriage and, in particular, the costs of divorce protect her. Specialization and vulnerability plausibly described most marriages in the 19th and early 20th centuries, but they are less and less plausible as a rationale for contemporary American marriage in the face of men's and women's converging economic lives. With the production gains attributable to marriage declining, why do couples continue to marry?

Hedonic/consumption theories of marriage focus on shared leisure and household public goods. Although two-person living arrangements may have advantages over living alone, they don't provide a rationale for long-term commitment unless they require investments in physical capital or in the stock of skills that economists call human capital. Shared leisure may involve the purchase of physical capital (for example, ski equipment) or investment

in activity-specific human capital (for example, skiing lessons), but this seems too insubstantial to provide a plausible account of marriage in the absence of production gains from specialization. In this sense, children differ from other household public goods both because parents tend to be extremely attached to their own children, whether defined by birth or adoption, and because stability and consistency in parenting enhances children's wellbeing. Among its many functions, marriage is a legal and social institution that can help parents make a long-term commitment to invest in their children.

One of the most striking aspects of the trends in marriage behavior is the relative stability of traditional patterns of marriage and childbearing among the highly educated.

One of the most striking aspects of the trends in marriage behavior is the relative stability of traditional patterns of marriage and childbearing among the highly educated, compared with the pronounced retreat from marriage and marital childbearing among men and women with a high-school diploma or less and, to a lesser extent, among those with some college. Social scientists have identified three factors that may contribute to or cause the unevenness of the retreat from marriage: a decline in the marriageability of men with low levels of education; incentives created by government policies (for example, welfare benefits and the Earned Income Tax Credit); and the increasing cultural significance of marriage to women in low-income communities.

The marriageability explanation attributes the decline in marriage to a pronounced deterioration in the economic prospects of men with low levels of education. This hypothesis is related to the relative wage hypothesis that we have already discussed (that is, the decline in the ratio of men's wages to women's wages, which drastically reduced the gains from the traditional pattern of gender specialization). But unlike the change in relative wages, the decline in marriageability applies only to men at the bottom of the earnings distribution. Many men who live in inner cities earn so little that they are likely to be a net drain on household resources.[39] Harvard sociologist William Julius Wilson argues that the decline in inner-city industrial jobs has caused a shortage of marriageable men; among blacks, this shortage has been exacerbated by rising incarceration rates.[40] Falling wages and employability made these men less able to contribute to a joint household and, hence, reduced their attractiveness as cohabiting partners or husbands. Marriage to or cohabitation with less-employable men may carry additional costs, to the extent that these men are at risk for incarceration or prone to substance abuse or violence. Outside of extremely disadvantaged groups, however, income-pooling by unmarried mothers and the unmarried fathers of their children would lift many families above the poverty line.[41]

In two books published almost three decades apart, American Enterprise Institute political scientist Charles Murray has argued that government welfare benefits and welfare policy caused the retreat from marriage.[42] In the first, he contended

that both the value of welfare benefits and the fact that receiving benefits was conditioned on not having a man in the house caused poor women to substitute welfare dependency for marriage to provide for their children. More recently, he argued that welfare benefits have sapped the moral fiber of the working poor and triggered a cascade of bad behaviors. Murray's socio-psychological version of the marriageability hypothesis, however, applies only to those eligible or almost eligible for welfare benefits, and so it does not account for the breadth of the retreat from marriage.

Studies of how government tax and transfer programs affect marriage, cohabitation, and lone parenthood generally focus on the incentives created by a particular means-tested program (for example, the Earned Income Tax Credit, food stamps, or Temporary Assistance for Needy Families) and how individuals and couples respond to these incentives. Most empirical studies find that, individually, these programs have had little or no effect.[43] A study of how all means-tested programs taken together affect family structure and incentives to marry and cohabit would need to take into account state-specific rules and the complex interactions among the various programs.[44] One of the few studies to investigate the effect of the marriage penalties and bonuses in the tax system on marriage and cohabitation by couples not eligible or almost eligible for welfare found that cohabiting couples are more likely to marry when they have positive tax incentives for doing so, but that the size of the effect is small.[45]

Based on their ethnographic work, sociologists Kathryn Edin and Maria Kefalas offer a cultural explanation of the decline in marriage among women in low-income communities, arguing that these women have unrealistically high aspirations for marriage.[46] In these communities, they write, marriage is no longer closely connected to parenting. Rather, it's about "the white picket fence dream": good stable jobs and maturity are prerequisites. They focus, however, on severely disadvantaged women; thus, like the marriageability explanation, their work can't account for the breadth of the retreat from marriage. Cherlin asserts more broadly that as the "practical significance" of marriage has diminished, its "cultural significance" has grown.[47]

Culture does a better job explaining persistent similarities or differences in behavior across groups than it does explaining change. The rapid changes in cohabitation, marriage, and nonmarital fertility since 1960 are more easily explained as responses to changing incentives, rather than as responses to cultural changes in the significance of marriage. One could argue that the continuity in family life among white college-graduate men and women reflects their commitment to traditional cultural norms and values, but this argument assumes that college-graduate men and women are more committed to traditional norms and values than those with less education. We think it is more likely that the persistence of marriage patterns among this better-off group results from offsetting changes in incentives—specifically, the decrease in returns to traditional patterns of gender specialization and the increase in the returns to investment in children's skills and capabilities, perhaps reinforced by a cultural script that emphasizes intensive investments in children.

Marriage and Investments in Children

We've seen that the dramatic changes in women's economic status since 1950 have led to wholesale redefinitions of men's and women's roles in the household, rendering obsolete the commitments between wage-earning men and their stay-at-home wives that were central to marriage in the first half of the 20th century.[48] Changes in family law and social norms weakened the marriage commitment by making divorce easier to obtain and blurring the social distinction between cohabitation and marriage. Once cohabitation became a legally and socially acceptable way to achieve the benefits of coresidential intimacy and economic cooperation, the advantages of living in a two-adult household no longer provided a rationale for marriage.

In our view, long-term commitment is valuable in early 21st century America primarily because it promotes investment in children. Thus differences across socioeconomic groups in how people perceive the returns to the joint project of investing in children can explain the unevenness of the retreat from marriage over the past three decades. This explanation is speculative, but it is consistent with emerging evidence on patterns of parental investment, and we find competing explanations unpersuasive.

Investment in children is clearly not the only reason couples have ever made long-term commitments, nor do we claim it is the only reason couples do so now. In particular, not all women of childbearing age who marry intend to have children, and women who marry after menopause generally don't intend to have additional children. For many older couples, the marital commitment may be to provide care for each other in old age. The debate over same-sex marriage is best understood as a contest over social recognition and acceptability, where considerations involving children play a secondary role. Despite these caveats, however, the link between marriage and childrearing remains fundamental.

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Couples may be much less likely than they were in the past to need marital commitment to support a sharply gender-specialized division of labor, but, among college-graduate couples, marriage has persisted as the standard context for childrearing. Among the well-educated and well-off, intensive investment in children is a characteristic parenting pattern, and their investments have been increasing both in absolute terms and relative to the investments made by those with less education and fewer resources. Couples with low levels of education are more likely to choose cohabitation or lone parenthood as a context for rearing children, and their parenting practices are systematically different.

Table 2. Nonmarital Births as a Proportion of All Births by Mother's Education, 2010

	Non-Hispanic White	Black	Hispanic
High School or Less	53.6	83.5	59.6
Some College	31.0	68.7	45.3
College Graduate or More	5.9	32.0	17.4

Sources: Centers for Disease Control and Prevention, National Center for Health Statistics, VitalStats (http://www.cdc.gov/nchs/vitalstats.htm).

Rising returns to human capital have contributed to increasing inequality and have increased parental incentives for intensive investment in children. Parents with limited resources and lower levels of skill, however, may expect the returns from early investments in children to be low, particularly if they are uncertain about their ability to make later investments that foster upward mobility. Poverty and/or uncertain employment prospects may also hamper investments in children through the demands they impose on parents' mental and emotional resources. Finally, high-income, high-education parents may have better access to information about the payoffs to early child enrichment activities, and their actions may be reinforced by evolving class-specific social norms.

For the best-off women, the decoupling of marriage and childbearing has simply not occurred. Single or cohabiting motherhood remains uncommon among non-Hispanic white college graduates, although these are the women most likely to have the earnings and employment benefits that would let them support a child alone (see table 2). Patterns of marriage, childbearing, and childrearing across education and income groups are consistent with the existence of a close connection between the decision to marry and childrearing practices. Within each racial and ethnic group, the rate of nonmarital childbearing declines sharply as mothers' educational attainment rises. Vital statistics data reveal additional evidence that highly educated women postpone childbearing and wait for marriage until the biological clock has almost run out—for college-graduate women in their early 40s, the rate of nonmarital childbearing rises to 10 percent.

Direct evidence on parental investments in children also shows pronounced and increasing inequality, and one key reason that parenting practices are diverging is likely to be the dramatic divergence in the resources of high- and low-income families since 1980. Data indicate that parents with more education spend more time with children and that parents with more income spend more money on children. The time parents spend with children has increased in recent decades despite rising rates of maternal employment.[49] And despite their higher rates of employment, mothers with a college education spend about 4.5 hours more per week with their children than do mothers with a high-school degree or less.[50] Our own analysis shows that, among parents whose youngest child is under five, the widening gap in child-care time by parents' education is particularly pronounced for fathers.[51]

Inflation-adjusted expenditures on children have increased over time, and these increases have been especially pronounced for high-income households.[52] To a large

extent, spending inequality across income groups has been driven by the increase in income inequality. But expenditures on children as a percentage of income have also been rising overall, particularly in the 1990s and especially for people in the top 20 percent of the income distribution. A study of expenditures on child "enrichment items" by income finds that parents' spending on education and child care, trips and recreation, and books and computers rises with total expenditures, and that many such expenditures rise more rapidly than income, particularly for parents of older children.[53]

The differences in time and money that parents spend on childrearing are reflected in parenting practices and attitudes. In her ethnographic research, University of Pennsylvania sociologist Annette Lareau documented pronounced class differences in childrearing practices that reflect parents' "cultural repertories" for childrearing.[54] The "concerted cultivation" of middle-class children, consistent with the advice their parents receive from experts, is designed to foster children's cognitive and social skills. This intensive investment includes parental involvement in recreational and leisure activities as well as school and schoolwork, and it is one source of the large gaps in skills and behavior that we see when children enter school.[55] Psychologists have found significant differences in both vocabulary and language processing at 18 months. By 24 months, toddlers from better-off families are six months ahead of more disadvantaged children. Infants' exposure to what psychologists call child-directed speech is associated with early language acquisition.[56] In Lareau's framework, working-class and poor families see successful parenting as consistently providing food, shelter, and other basic support, but not as the concerted cultivation practiced by middle-class parents. Edin and Kefalas conclude that in the face of economic hardship, poor mothers "adopt an approach to childrearing that values survival, not achievement."[57]

In the rational-choice framework that economists and many other social scientists use, parents who have full information about children's developmental needs and the relationship between parents' actions and children's outcomes might choose different child investment strategies because they have different preferences or perceived opportunities. One possible source of class differences in parenting that falls outside this framework is gaps in knowledge about children's developmental needs and the relationship between parents' actions and children's outcomes. If parents in general don't realize that talking with or reading to their children can increase their children's vocabularies, then the class gradient in children's vocabularies could be an unintended by-product of following different class-specific cultural norms, and not the result of parents deliberately choosing different investment strategies. Alternatively, highly educated parents may have better information about the returns to time and activities with children. Time-use data provide some support for the information hypothesis: highly educated mothers not only spend more time on child care than less-educated mothers do, but they also adjust time and activities as their children age in ways that are more developmentally appropriate.[58] In either of these scenarios, teaching parents about the effects of alternative parenting practices could affect their behavior and, hence, their children's development.

Preferences regarding outcomes for children or activities with children seem unlikely to differ systematically with income or

education. If all parents love and are attached to their children, then they will want their children to be happy and economically successful. One possible source of difference could be rooted in parents' desires for their children to remain emotionally (and possibly physically) close and to share their social and cultural values. For highly educated and well-off parents, these objectives are more or less consistent; economically successful children are likely to accept their family's culture and values. For less-educated and poorer parents, these objectives may conflict: children who are economically successful might reject their family's culture and values. For this reason, these parents may be ambivalent about their aspirations for their children.

Alternatively, parents may have direct preferences when it comes to childrearing practices. To the extent that they do, these preferences will affect the investments they make in their children. Preferences for engaging in some activities rather than others (called "process preferences") may also contribute to the class differences in children's outcomes.[59] Parents who enjoy reading to or verbally interacting with their children are more likely to do so than are parents who don't enjoy these activities.

Even if parents with different levels of education have identical aspirations for their children and identical process preferences, however, differences in their resources and in the productivity of their time will produce differences in parenting practices. To the extent that money makes a difference to children's wellbeing, greater household income will lead to better outcomes for children, and the growth in income and wealth inequality will accentuate the class divide in parental investments and in child outcomes. The productivity of parents' time with children may also increase with parents' education—at least for outcomes such as success in school and at work—because more-educated parents possess academic skills that they can impart to their children and may also have better information about how children learn.[60] Theory can't tell us how both higher parental wages and increased productivity of parental time would affect the amount of time parents allocate to their children. But we know that, in fact, more-educated parents spend more time with their children, and that the gaps are increasing. Moreover, although rational choice analysis seldom recognizes the problem, poverty and insecure employment can lead to levels of household stress that harm children's development.[61] The extent to which economic and other household stress has long-term effects beyond severely disadvantaged families is unclear.

Recent work on the dynamics of child development suggests another source of variation in the productivity of parental time. In a series of papers, Nobel Prize-winning economist James Heckman and his collaborators have established that early investment in children's human capital plays a crucial role in their long-term outcomes. Heckman's research has focused on estimating the relationship between parental, school, and community inputs and children's human capital, including both cognitive skills and noncognitive or socio-emotional skills, and on identifying nonfamily interventions (such as early childhood education) that can help disadvantaged children.[62] One of his key findings is that a strong positive relationship exists between younger children's stocks of human capital and the productivity of later investment in those children. That is, the returns to investments in older

children are greater if investments were made when the children were young.[63] Thus child development is a cumulative process that depends on the full history of parental, school-based, and other investments.[64] This dynamic reinforcement suggests that both later parental investments and formal schooling will be more productive for children who have early cognitive and health advantages, whether these advantages come from genetic endowments, the prenatal environment, or early childhood investments.[65] The increasing evidence that "skill begets skill" implies that even if the time highly educated, wealthier parents spend with their children is not inherently more productive, payoffs to parental investments are highest for these children.[66]

The reinforcing effect of early investments on later ones also suggests that parents' beliefs and expectations about later investments by schools, by the children, and by the parents themselves will affect the expected returns to early investments. Because the children of less-educated and less-affluent parents go to schools and live in neighborhoods that make later investments from outside the family less likely, their parents may be less likely to make early investments than parents with more education and more resources. Furthermore, compared with parents with more education, those with less education often face greater uncertainty about their own future incomes and, therefore, about their own ability to make later investments.[67]

A two-stage conceptual framework captures the essential point. In the first stage, the children are passive and the parents are the decision makers. In the second stage, the children are active decision makers exposed to an environment that includes neighborhood and school. Parents of young children understand that their authority will diminish and that nonfamily influences and the child's own choices will play an increasing and, eventually, a dominant role: adolescence marks a predictable shift in decision-making power away from parents and toward children. The returns to parental investments made in the first stage depend on the environment their children will face and the choices their children will make in the second stage, including their willingness to remain in school and limit participation in risky behaviors. It also depends on the parents' expectations of their own future income and their ability to make further investments.

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The wage premium for people who enter the labor market with a college degree has risen substantially in the last 30 years, increasing the incentives for all parents to invest in their children's human capital. However, the returns to completing some college are substantially less than the returns to graduating from college, and the returns to attending college without receiving at least an associate degree are very low.[68] Even a

large earning premium for college graduates may have little effect on the returns that poorer, less-educated parents expect from early childhood investments if they regard the probability that their children will eventually graduate from college as small.

The differences in childrearing practices among parents at different education and income levels can be explained by differences in information, differences in parents' resources and the productivity of their time, and differences in preferences, perhaps reflecting different cultural norms. The expected returns to intensive parenting may also depend on school and neighborhood environments, and on societal investments in children. These differences affect parents' motivation to make intensive investments in their children's human capital and, hence, in their willingness to enter into the long-term, cooperative joint parenting arrangement that marriage encourages. If marriage is a mechanism by which parents support a mutual commitment to invest intensively in their children's human capital, then parents who expect low returns from their early investments will see the benefits of marriage as substantially lower than do parents who expect high returns and intend to pursue an intensive investment strategy.

Conclusions

Since 1950, the sources of gains that people can expect from marriage have changed rapidly and radically. As women's educational attainment surpassed that of men and the ratio of men's to women's wages fell, the traditional pattern of gender specialization and division of labor in the household weakened. The primary source of gains to marriage shifted from production of household services to investment in children. As a result, the gains from marriage fell sharply for some groups and, despite the weakening of traditional sources of gains from marriage, may actually have risen for others.

For some people, the decline in the male-female wage ratio and the erosion of traditional patterns of gender specialization meant that marriage was no longer worth the costs of limited independence and potential mismatch. Cohabitation became a socially and legally acceptable living arrangement for all groups, but it serves different functions among the poor and less educated than among the affluent and highly educated. The poor and less educated are much more likely to bear and rear children in cohabitating relationships. Among college graduates, marriage and parenthood remain more tightly linked. College-graduate men and women have delayed marriage and typically cohabit before marriage, but their children are seldom conceived before they marry and their marriages are relatively stable. This class divergence in patterns of marriage and parenthood is associated with class differences in childrearing, with college-graduate mothers and fathers engaged in "concerted cultivation" of their children.

How do we understand these class differences and the class divergence in marriage, parenthood, and childrearing? Over the past 50 years, rising returns to human capital combined with diverging parental resources across the education, income, and wealth distribution have increased the expected gains to investing in children, especially for more-educated, wealthier parents. The importance of joint investment in children has increased, while the importance of other reasons for making long-term marital commitments has diminished. We have argued that different patterns of childrearing are the key to

understanding class differences in marriage and parenthood, not an accidental or unintended by-product of these differences. Marriage is the commitment mechanism for the joint project of childrearing, and this implies that marriage is more valuable for parents whose resources and expectations lead them to invest intensely in their children's human capital.

Policy recommendations should reflect beliefs about causal effects. Policies to encourage marriage rely on the observed correlation between marriage and positive outcomes for children. If the only reason that marriage and positive outcomes for children are correlated, however, is that parents who marry are those with the resources, skills, and desire to make intensive investments in their children, then this correlation is not causal but entirely due to selection. To the extent that policies to promote marriage encourage parents to marry who would not otherwise have done so, these policies will have little effect on their parenting practices or on outcomes for their children.

Our argument linking marriage and parents' willingness and ability to invest in children's human capital does not let us make predictions about the future trajectory of marriage. Other wealthy countries have progressed further down a path in which nonmarital childbearing and relatively stable cohabitation have become the norm for college-graduate men and women. A future in which the tide turns and traditional links among marriage, fertility, and childrearing reassert themselves seems unlikely. We do believe that the future will depend, at least in part, on parents' willingness to invest in their children, and that their willingness to do so will depend on the expected returns to these investments.

The appropriate policy responses to increasing inequality depend on what has caused the socioeconomic divergence in child investments, and research here is at an early stage. Evidence of parenting's important role in child development and of socioeconomic gaps in cognitively stimulating caregiving has led many countries to develop intervention programs that teach parents about child development and help them build parenting skills.[69] If low-income parents are dissuaded from intensive early investments by uncertain future payoffs, then increased public investments in their children may spark the optimism that generates greater preschool investments. Children whose development is compromised by poverty and high levels of stress in early childhood may be helped by interventions that improve the incomes, health, and living situations of poor families. Improved prospects for investments in their children may, in turn, lead more parents to consider marriage.

The large and growing gulf in opportunities and outcomes that we have described is not simply between severely disadvantaged children who live below the poverty line and children who live above it. The "diverging destinies" that McLanahan has highlighted are now dividing children whose parents are college graduates from those whose parents have less education. Although the disparities in child outcomes are often partly attributed to the retreat from marriage and the rise in nonmarital fertility, we have argued that causation may run in the opposite direction: parents who are able to adopt a high-investment strategy are those most likely to get married and stay married, using marriage as a commitment device to support joint investments in their children. If our analysis is correct, equality of opportunity will be a major challenge in the 21st century.

ENDNOTES

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