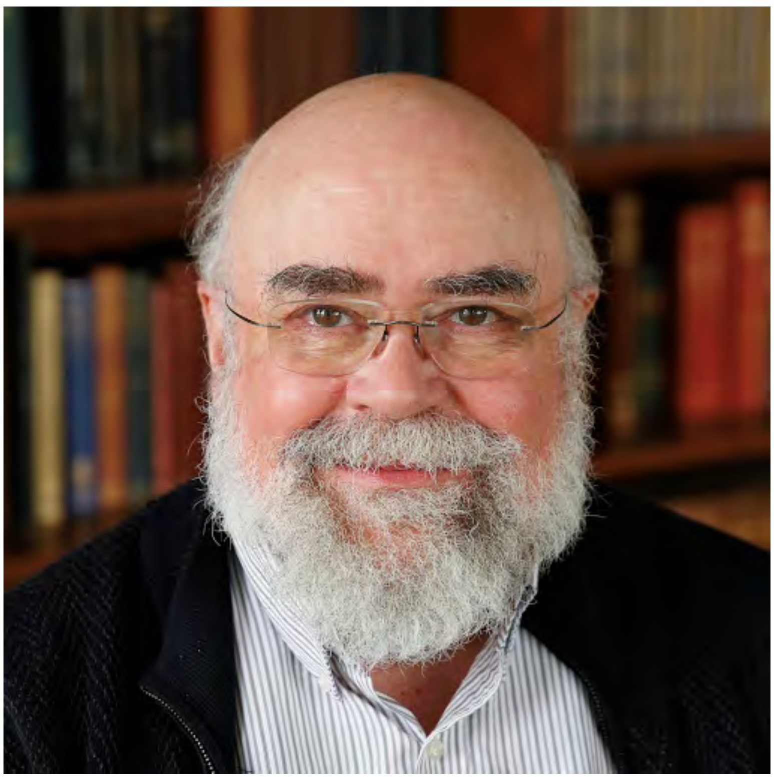
DEMOGRAPHIC DESTINIES

Interviews with Presidents of the Population Association of America

Interview with Steven Ruggles
PAA President in 2015



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STEVEN RUGGLES

PAA President in 2015 (No. 78)

WE DO NOT YET HAVE AN INTERVIEW WITH DR. RUGGLES

STAY TUNED!

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Patriarchy, Power, and Pay: The Transformation of American Families, 1800–2015

Steven Ruggles[1]

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Abstract This article proposes explanations for the transformation of American families over the past two centuries. I describe the impact on families of the rise of male wage labor beginning in the nineteenth century and the rise of female wage labor in the twentieth century. I then examine the effects of decline in wage labor opportunities for young men and women during the past four decades. I present new estimates of a precipitous decline in the relative income of young men and assess its implications for the decline for marriage. Finally, I discuss explanations for the deterioration of economic opportunity and speculate on the impact of technological change on the future of work and families.

Keywords Marriage · Family · Wage labor · Relative income

Introduction

Before the nineteenth century, most families were organized according to patriarchal tradition. Household heads owned and controlled the means of production, and their wives and children were obliged to provide the unpaid labor needed to sustain family enterprises. Masters of the household had a legal right to command the obedience of their wives and children—as well as any servants or slaves—and to use corporal punishment to correct disobedience (Coontz 2005; Cott 2009; Hartog 2000; Mintz and Kellogg 1988; Shammas 2002; Siegel 1996; Stanley 2002). Over the past two centuries, this patriarchal family system collapsed, as household heads lost control over their sons, wives, and servants.

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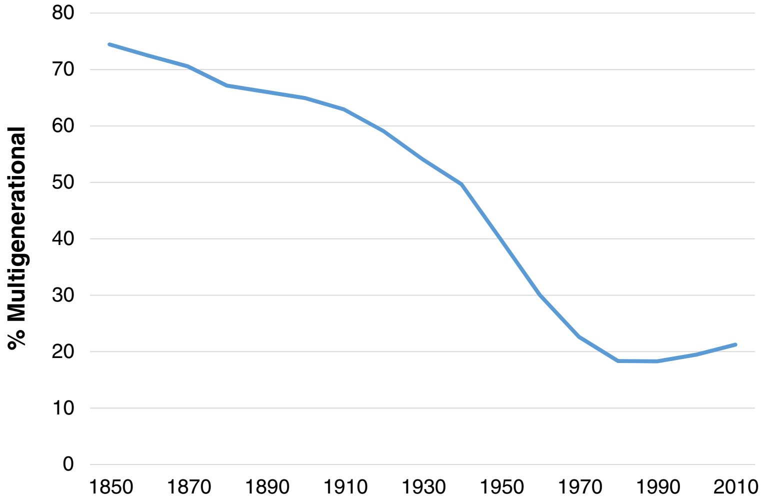

Fig. 1 Percentage of persons aged 65 or older residing in multigenerational families: United States, 1850–2013. Multigenerational families defined according to the IPUMS MULTGEN variable. *Source:* Ruggles et al. (2015)

The waning of patriarchy was accompanied by a shift toward simpler and more unstable families. Intergenerational coresidence, once a standard phase of the life course, is now rare (Ruggles 1994, 2007). As shown in Fig. 1, in the mid-nineteenth century, 74 % of persons aged 65 or older resided in multigenerational families. Coresidence declined continuously from 1850 to 1990, reaching a low point of 18 % before recovering slightly during the past few decades.[1] After the Civil War, divorce rates began to climb. Except for a temporary spike at the end of World War II, divorce has increased almost continuously for 150 years. New estimates controlling for age composition presented in Fig. 2 show that the standardized divorce rate leveled off only briefly in the early 1980s and has climbed rapidly since (Kennedy and Ruggles 2014).

In the past half-century, the long-run trend toward atomization of families has accelerated. A broad retreat from marriage began after 1960. It is likely that about one-third of persons now in their early 20s will never marry, and this trend shows no sign of slowing (Martin et al. 2014; Ruggles forthcoming).[2] This is unprecedented; as shown in Fig. 3, among all prior cohorts, at least 90 % of women married. Cohabitation is growing rapidly, and cohabiting unions are more unstable than marriages (Kennedy and Bumpass 2008; Kennedy and Ruggles 2015). Increasingly, however, young adults are forgoing partners altogether. In 2014, 54 % of persons aged 25 to 29 had no coresiding partner of any kind, up from 48 % in 2007 and about 23 % in 1970.[3]

[1] Except where otherwise specified, statistics in this article derive from the Integrated Public Use Microdata Series (Flood et al. 2015; Ruggles et al. 2015). In many cases, the analyses also appear in Ruggles (forthcoming), which includes additional documentation of sources and methods.

[2] Martin et al. (2014) projected that assuming current marriage rates remain unchanged, 31 % of women and 35 % of men born in 1990 will not have married by age 40.

[3] The 2014 and 2007 estimates come from the Current Population Survey (CPS), adjusted to account for group quarters (Flood et al. 2015). The 1970 estimate derives from the census microdata, adjusted to account for cohabitation (Fitch et al. 2005).

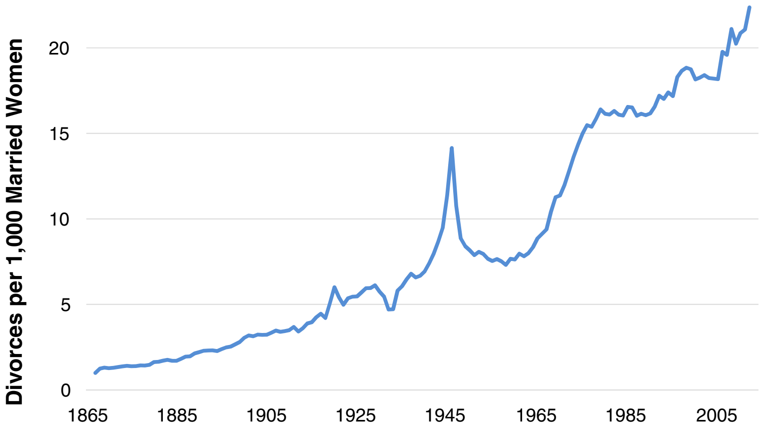

Fig. 2 Annual divorces per 1,000 married women, standardized by age: United States, 1867–2013. *Source:* Ruggles (forthcoming)

This article presents an interpretation of the transformation of American families over the past two centuries. I argue that more than anything else, the changes in families reflect changes in work. An upheaval in the economic organization of families had profound implications for gender and generational relations. The economic revolution was responsible for revolutions in family composition, divorce, and marriage.[4]

I begin with a broad overview of changes in family economies over the past 200 years. I then describe the rise of male wage labor beginning in the nineteenth century and the rise of female wage labor in the twentieth century, and examine the implications of those changes for family relations. The second half of this article explores a decline in wage labor opportunities for young men and women during the past four decades. I present new estimates of the precipitous decline in the relative income of young men and assess its implications for the decline of marriage. Finally, I discuss explanations for the deterioration of economic opportunity and speculate on the impact of technological change on the future of work and families.

Family Economies

For most of the nineteenth century, production was carried out by families. In 1800, three-quarters of the workforce was engaged in agricultural work, and a majority of the population lived on farms until 1850 (Ruggles et al. 2015; Weiss 1992). Farms could not operate without family labor; all family members who were old enough contributed to farm production. Among the one-quarter of the population who did not work on farms at the beginning of the nineteenth century, most still made their living through the family economy. Most nonfarm production was carried out by family businesses, with occupations such as shopkeeper, shoemaker, tailor, physician, or tavern keeper. In most such enterprises, the family resided on the same premises as the shop, and the whole

[4] This analysis is confined to the United States because it is presently the only country with a suitable long-run data series. Similar processes, however, occurred in Northern Europe and now seem to be occurring in some East Asian and Latin American countries (Ruggles 2009; Stanfors and Goldscheider 2015).

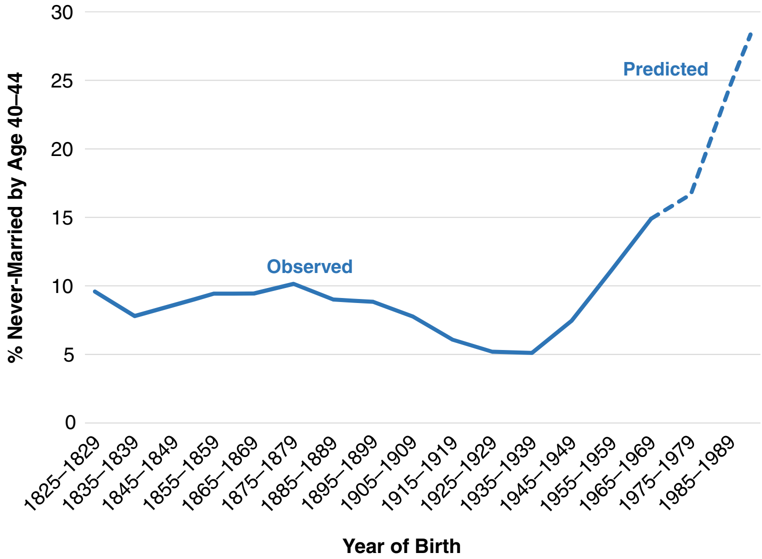

Fig. 3 Percentage of women never married by age 40–44 by birth cohort: U.S. women born 1825–1994. *Source:* Ruggles (forthcoming)

family worked for the business. Like farms, these family businesses were usually handed down from generation to generation.

Figure 4 describes the major transformations in the economic organization of married-couple households over the past two centuries.[5] In the nineteenth century, corporate families predominated. I define corporate families to include all married couple households with self-employed heads, except for those in which the wife had an occupation outside the family business. Most corporate families were farm families. In addition to kin, corporate families often included farmhands, servants, slaves, and sometimes apprentices. Corporate families were in the majority throughout the nineteenth century and remained important through the first half of the twentieth century.

Corporate families were replaced by male breadwinner families in the early twentieth century. Male breadwinner families are defined as those in which the husband works for wages or salary and the wife has no occupation listed in the census. By 1920, the number of male-breadwinner families exceeded the number of corporate families, and this percentage continued to grow until World War II. This change was driven by expanding wage labor opportunities for men. The male breadwinner category represented a majority of marriages for just four decades—from 1920 to 1960—reaching a peak of 57 % in 1940.

Male breadwinner families were replaced by dual-earner families in the mid-twentieth century. In the early decades of the twentieth century, the number of married women working for wages began to increase, and the pace of change accelerated in the middle decades of the century. Dual-earner families have now predominated for almost a half-century. Over the past several decades, female-breadwinner families—shown in

[5] This graph was inspired by a similar illustration that appears in Stanfors and Goldscheider (2015). The term "Corporate Family Economy" was coined by Ryan (1981), and my characterization of change was informed by Mintz (1998).

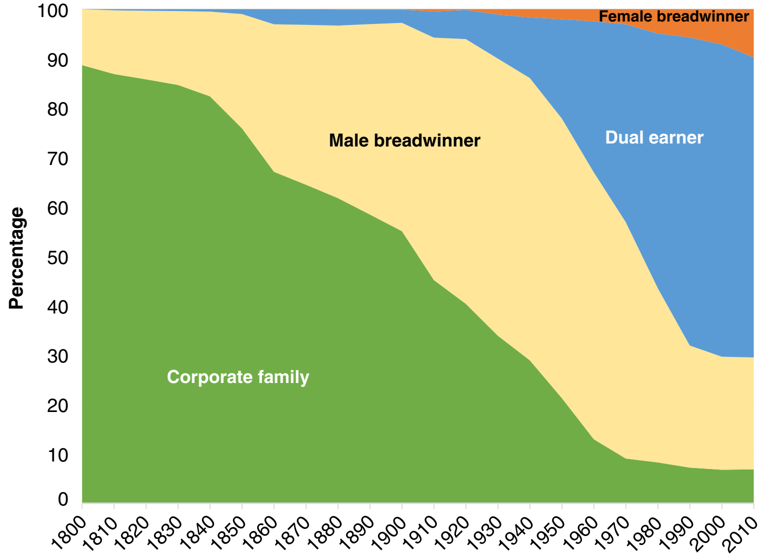

Fig. 4 Family economies of U.S. couples aged 18–64: United States, 1800–2010. *Source:* Ruggles (forthcoming)

the top right of Fig. 4—have emerged as a significant new form, and they now account for one-tenth of marriages.

The Rise of Male Wage Labor

> How to keep boys on the farm and induce them cheerfully to choose farming as their occupation for life is a question of deep interest to many parents. The stampede of young men from the country to cities and large towns is not an evil which finds its limit in the domestic circles which they leave, but is one which extends through society and makes its depressing influence felt everywhere. How to check this evil is a question of great importance and is well worthy of consideration. (Read 1884:848)

Corporate families predominated in the nineteenth century because before the Industrial Revolution, people did not have many other options. The earliest data showing the full male occupational distribution come from the 1850 census, when the transformation of the economy as already well underway. As shown in Fig. 5, wage labor jobs that paid enough to support a family were still scarce in 1850. At that time, about two-thirds of men were self-employed farmers or proprietors, unpaid sons on farms or in family businesses, or slaves. Another 15 % were unskilled workers, who were mostly farmhands and were paid mainly in the form of room and board. Such laborers usually did not get paid enough to get married. In 1850, the biggest groups of skilled workers and operatives were miners and sailors. They were paid better than farmhands, but most worked in places where there were few women available to marry.

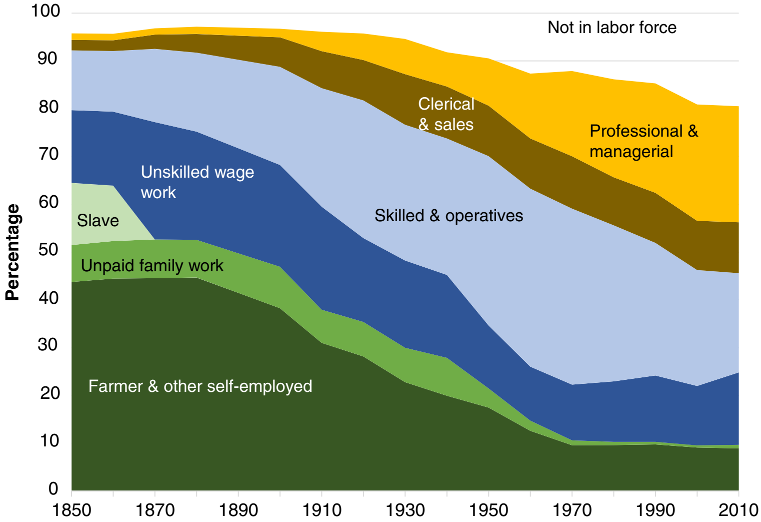

Fig. 5 Occupations of men aged 18–64: United States, 1850–2010. *Source:* Ruggles (forthcoming)

If a young man wanted to marry, his best prospect was still to inherit the family farm or business. Accordingly, in most families, one child remained in the parental household under the control of the patriarch, with the expectation of eventual succession.

As the century progressed, new high-paying opportunities arose in factories. The number of factory jobs grew 600 % between 1850 and 1900, and there were rapidly expanding opportunities in clerical, sales, and professional occupations (Lebergott 1984). The growth of well-paying wage labor jobs for men undermined the economic underpinnings of patriarchal authority. As young men took jobs off the farm, they moved away from home and out of the control of the patriarch. Figure 6 compares the percentage of men in agriculture with the

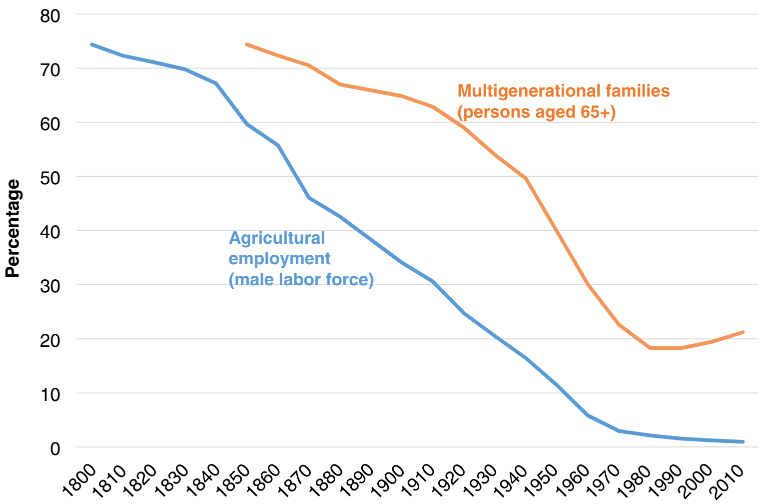

Fig. 6 Agricultural employment and multigenerational families: United States, 1800–2010. *Sources:* Ruggles et al. (2015) and Weiss (1992)

percentage of elderly residing in multigenerational families. A generation after agricultural employment began to decline, multigenerational coresidence followed suit.

The decline of multigenerational families occurred mainly because of increasing wage labor opportunities for the young (Ruggles 2003, 2007). When young men could obtain well-paying employment for wages, they no longer had as much incentive to remain at home under the control of their fathers. As wage earners grew old, the incentives for intergenerational coresidence declined further. Under the wage labor system, patriarchs no longer needed the labor that their sons and daughters once provided. Moreover, retired wage earners could no longer offer the younger generation employment and eventual inheritance of the family farm or business.

A second major consequence of the rise of well-paying male jobs was a long-run decline in marriage age, especially among men. Under the corporate family system, young men had to wait until they either inherited a farm or built up sufficient resources to establish an independent household. Under the wage labor system, men could achieve high earnings early in life. As jobs paying good wages began to open up in the late nineteenth and early twentieth centuries, men could increasingly afford to marry at an earlier age. Accordingly, between 1890 and 1960, median age at first marriage declined 3.6 years among men and 2.2 years among women (Ruggles forthcoming).

The rise of male-breadwinner families empowered young men, but it did not do much for women. Even though first-wave feminists obtained the vote in 1920, in most respects patriarchal gender norms remained firmly entrenched. In the mid-twentieth century, women still could not get a bank account or a loan without their husband's signature, husbands had the right to determine where the family lived, and patriarchal authority was still enforced through violence (Coontz 1992, 2005; May 1990).

In 1959, the *New York Mirror*—then the second-largest circulation newspaper in the nation—featured man-in-the street interviews asking the question, "If a woman needs it, should she be spanked?" All four of the men interviewed affirmed that the spanking of wives was necessary to enforce discipline. Teddy Gallei, a parking lot attendant, explained, "It teaches them who's boss. A lot of women tend to forget this is a man's world." William Davis, a toy factory owner, concurred: "Most of them have it coming to them anyway. If they don't it will remind them how well off they are . . . An ounce of prevention is worth a pound of cure" (Aidala 1959).

The Rise of Female Wage Labor

Patriarchal control over women began to erode with the rise of female wage labor. Wage labor opportunities for men were highly limited in the mid-nineteenth century, but the opportunities for women were virtually nonexistent (Kessler-Harris 1982). Figure 7 shows the occupational distribution for women since 1850.[6] In the mid-

[6] The white space at the top—labeled "Not in the labor force"—identifies women without identifiable economic activities, whose effort was probably devoted mainly to housework and childcare. Housework and childcare clearly have economic value (Folbre and Nelson 2000), but do not enable economic independence.

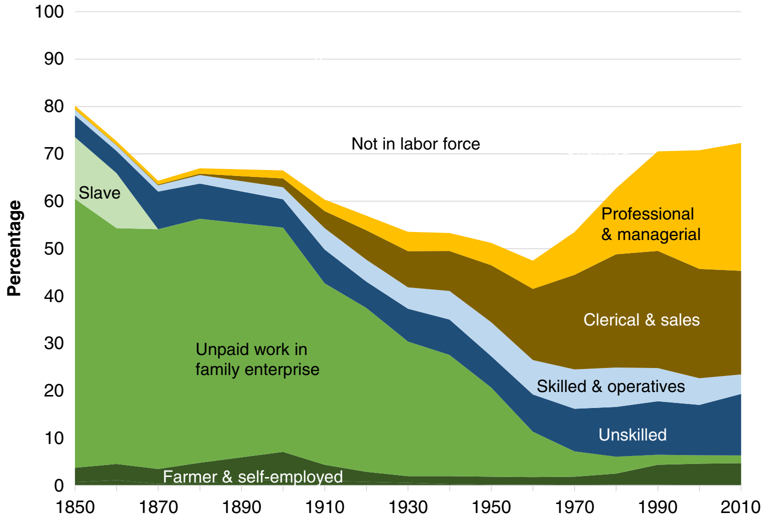

Fig. 7 Occupations of women aged 18–64: United States, 1850–1910. *Source:* Ruggles (forthcoming)

nineteenth century, the great majority of working women were unpaid workers in family enterprises, mostly farm wives and daughters and slaves. The next largest category—unskilled workers—was almost entirely domestic servants in 1850. The best jobs available for women were in factories, which employed 1.3 % of women. The tiny professional and managerial category—accounting for less than 1 % of adult women in the mid-nineteenth century—consisted almost entirely of teachers. The growth of better-paying jobs for women began around 1900 and expanded rapidly after World War II.

The long-run pattern of women's employment shown in Fig. 7 is U-shaped, and the low point of the U was at the peak period for male-breadwinner families (Goldin 1995). Although the great majority of women engaged in economically productive work in the nineteenth century, that economic role did not afford them independence or power. In all but a tiny fraction of cases, nineteenth-century women worked in corporate families under the direction and control of their husbands, fathers, or masters.

The twentieth-century rise of wage labor for women undermined the authority of husbands and fathers. New economic opportunities enabled some women to delay or forgo marriage, and the availability of paid work also provided a means of escape from bad marriages. From 1880 to 1990, there was a strong spatiotemporal association between the availability of jobs for women and the prevalence of divorce and separation (Ruggles 1997). In times and places where women had no means of subsistence outside corporate families, they usually remained married even if they were unhappy.

Figure 8 shows the wage labor participation rate for women aged 25–29, a group old enough that few were still in school, but they were still of marrying age. By 1920, most young single women had wage-paying jobs. The percentage of young married women with such jobs grew gradually from 1900 until 1962 and then took off.

Before the 1950s, women generally left wage labor employment when they married, partly because most employers barred married women from working for wages (Goldin

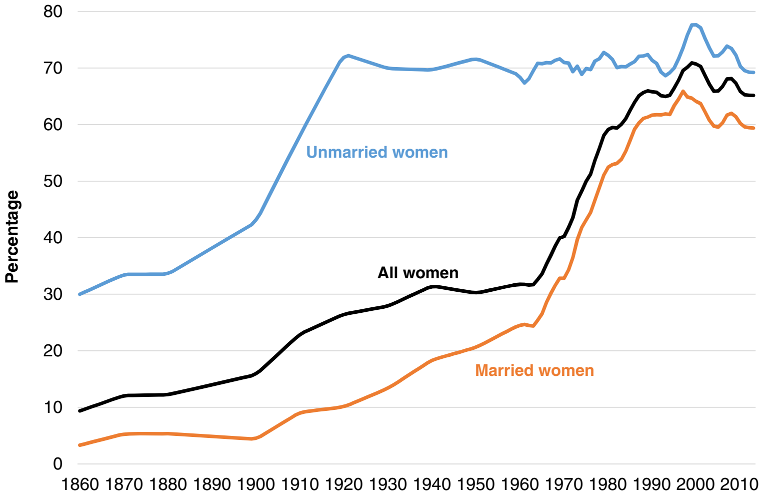

Fig. 8 Percentage of women aged 25–29 engaged in wage labor, by marital status: United States, 1860–2013. *Source:* Ruggles (forthcoming)

1991a). Despite the symbolic resonance of Rosie the Riveter, emergency work experience during World War II had little impact on employment after the war (Goldin 1991b). Most economic historians agree that the main reason for the sharp rise of married women's employment in the 1950s was the extraordinary demand for labor, which created pressure to overcome institutional barriers to change. The economy heated up just as the marriage boom reduced the supply of single women, so the rules against hiring married women disappeared (Costa 2000; Cotter et al. 2001; Goldin 1990; Oppenheimer 1970).

As more and more married women began to work for wages, the balance of power within marriages shifted. Many men and some women were alarmed by the rise of the dual-earner family. A 1958 *New York Mirror* man-in-the-street interview asked, "Is Father Losing his Place as Head of Family?" Charles Cogswell, a bank guard, responded:

> Yes. Too many wives are getting independent. They go to work and begin feeling they have more to say than the father. The old-fashioned way—when father was THE boss—kept families happier. Not so many divorces, separations, and juvenile delinquents, then.

Simon Golos, an attorney, agreed that there was a "confusion of authority" and "a gradual usurpation of power by the lady of the house." Two women were also queried by the *Mirror*. Harriett Weisman, a housewife, agreed with Cogswell and Golos, but felt that the decline in the power of the father was a good thing because the wife "copes with all the family problems." Only Mrs. Lillian Ciarvino—a housewife and secretary—disagreed, saying that "a majority [of fathers] are still heads of their homes." Even Ciarvino, however, recognized that a fundamental change in gender relations was underway, but she saw it as an issue of character: "The father who gives up his place as head is either weak or doesn't care to assume the responsibility" (Aidala 1958:27).

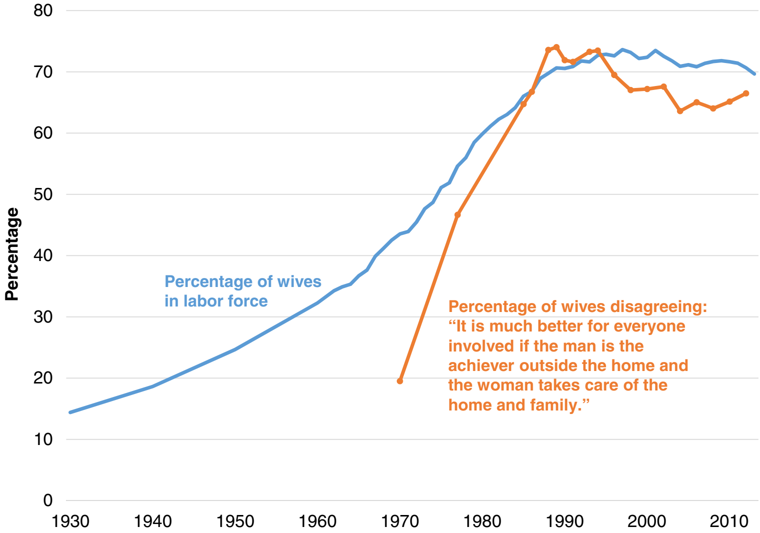

Fig. 9 Labor force participation and attitudes toward labor force participation for married women under age 45: United States, 1930–2013. *Sources:* Ruggles et al. (2015), Flood et al. (2015), Westoff and Ryder (n.d.), and Smith et al. (2013)

Attitudes

Attitudes toward married women's work shifted rapidly during the 1970s. The evidence on the timing of change suggests that the transformation of attitudes represented an accommodation to the new reality of married women's wage labor (Rinfduss et al. 1996). Figure 9 compares the percentage of married women who were in the labor force with the percentage of married women who disagreed with the idea that women should stay home. In 1970, when the series of attitudinal surveys began, 44 % of wives were already in the workforce, but less than 20 % of wives thought that women *should* work outside the home. Among working wives in 1970, 70 % thought that it would be "much better for everyone involved if the man is the achiever and the woman takes care of the home and family" (Westoff and Ryder n.d.). The great majority of working wives felt that wives ought to stay at home. The cognitive dissonance between behavior and attitudes was soon resolved, however. As married women flooded into the paid workforce, the stigma that had surrounded married women's participation in wage labor quickly disappeared. By 1980, most married women approved of married women's work (Smith et al. 2013).

When behavior changes, attitudes adjust. As divorce became more common, for example, it lost much of its stigma. This mechanism operates at the individual level; in a study of divorce in the Detroit area between 1962 and 1977, Thornton (1985) found that when people get divorced, they become much more accepting of divorce. Likewise, Axinn and Thornton (1993) found that young people's cohabitation experience in the Detroit Area Study had dramatic effects on their approval of cohabitation, and also positively affected their mothers' approval of cohabitation.

Changing attitudes are a crucial part of the process of family change. There is a feedback loop: as family attitudes shift, they allow still more family change (Axinn and Thornton

2000). Changing attitudes can have especially powerful effects on family behavior through their impact on institutional change (Bumpass 1990). Over the past 150 years, for example, shifting attitudes permitted progressive loosening of once-formidable legal barriers to divorce (Cherlin 2009; Hartog 2000; May 1980; Mintz 1998). Similarly, shifting attitudes helped eliminate legal barriers to contraception and abortion in the 1960s and early 1970s (May 2010). Women's control of their own fertility led to a marked decline in unplanned pregnancies, which in turn contributed to delayed marriage and childbearing, increased educational attainment among women, and rising female labor force participation (Akerlof et al. 1996; Bailey 2006; Goldin and Katz 2002; Myers 2012). Thus, attitudinal change enables institutional change, which in turn affects family behavior. The massive long-run changes in family behavior of the past 200 years could never have occurred without fundamental changes in attitudes about family behavior.

We should not, however, view attitudinal change as the initial stimulus of family change. For family change to occur, traditional values must be overcome. Attitudes are ordinarily a barrier to change, not a cause of change: there must be a source of exogenous pressure for people to reject the values with which they were raised. Between 1800 and 2000, that pressure was exerted by an economic revolution. The rise of wage labor, first among men and then among women, catalyzed family change by disrupting traditional patterns of authority. When families began to change, attitudes followed. The decline in multigenerational families occurred a generation after the rise of wage labor for men. The shift in attitudes about married women's work outside the family occurred significantly after the rapid ascent of married women's wage labor. In both cases, rise of wage labor undercut the economic control of the patriarch, shifting power from old to young and from men to women.[7]

Change in the U.S. Census reflected the transformation of family relations. In 1970, patriarchy was embedded in the census: the form asked each respondent to identify the household head, just as it had for the 18 previous censuses. The household head was always the man, and the spouse of the head was always the wife. Thanks to the coordinated efforts of feminist social scientists, by 1980 the household head was decapitated and replaced by the gender-neutral "householder" concept (Presser 1998). Either husband or wife could be listed as the householder, and either could be listed as the spouse of the householder (Ruggles and Brower 2003). Initially, all but a few respondents maintained the traditional order of enumeration even though the rules had changed; in 1980, just 4 % of married householders were female. That percentage has grown steadily, and by 2013, women represented 39 % of married householders (Ruggles et al. 2015).

The Decline of Marriage

The classification of family economies based on the economic activities of husbands and wives—corporate, male breadwinner, and dual-earner—makes sense for the nineteenth century and the first half of the twentieth century, when the great majority of households were headed by a married couple. In recent decades, however, the

[7] Some theorists argue the opposite, maintaining that that both family change and married women's employment resulted mainly from the rise of individualistic values (e.g., Lesthaeghe 1983, 2010; Van de Kaa 1987). I discuss this interpretation in Ruggles (forthcoming).

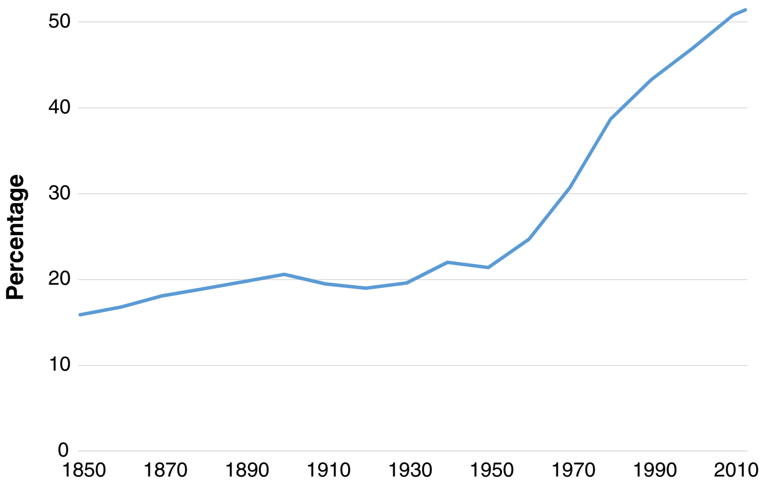

Fig. 10 Percentage of households without a married couple: United States, 1850–2013. *Source:* Ruggles et al. (2015)

dominance of the married-couple household has receded, and it makes less and less sense to classify family economies based on the economic activities of married couples. Figure 10 shows the percentage of households without a married couple from 1850 to 2013. For the first 100 years, the percentage of households with no married couple grew slowly, from 16 % in 1850 to 21 % in 1950. After 1960, young people began delaying or forgoing marriage, sometimes cohabiting but more often residing alone or with children but without a partner. Simultaneously, remarriage rates dropped, and the growing divorced and widowed populations increasingly opted for solitary residence. By 2012, the majority of households no longer included a married couple.[8]

Structural factors are responsible for the boom and bust of marriage. As shown in Fig. 11, age at first marriage declined steadily from 1890 to 1930 as well-paid male wage earners acquired the means to marry earlier in life. The Great Depression led to a slight uptick in marriage age between 1930 and 1940. After World War II, median age at marriage fell sharply to about 20 for women and 22 for men in 1960. During the past half-century, age at first marriage has increased rapidly, and today Americans are marrying at later ages than ever before. The marriage boom of the postwar period was fueled by the rapid expansion of men's wages, and the decline of young men's wages since 1975 is the main reason for the retreat from marriage in that period (Carbone and Cahn 2014; Cherlin 2014; Oppenheimer 1988, 1994).

The three decades after World War II were a golden age of wage labor for young men. The availability of labor was sharply constrained: immigration had been restricted since 1924, and fertility levels during the Great Depression were the lowest that had ever been recorded, meaning the new cohorts entering the labor force were small. The "Lucky Few" entering the labor force after the war saw a spectacular rise in wages (Carlson 2008). Figure 12 shows the median wages for 25- to 29-year-old men and women in 2013 dollars. The top panel shows the medians for full-time wage and salary workers; the lower panel is the same, but includes the entire population aged 25–29, not

[8] Rising cohabitation can account for less than one-fifth of this overall change; in 2013, 44 % of households included no couple at all, either married or cohabiting (Flood et al. 2015).

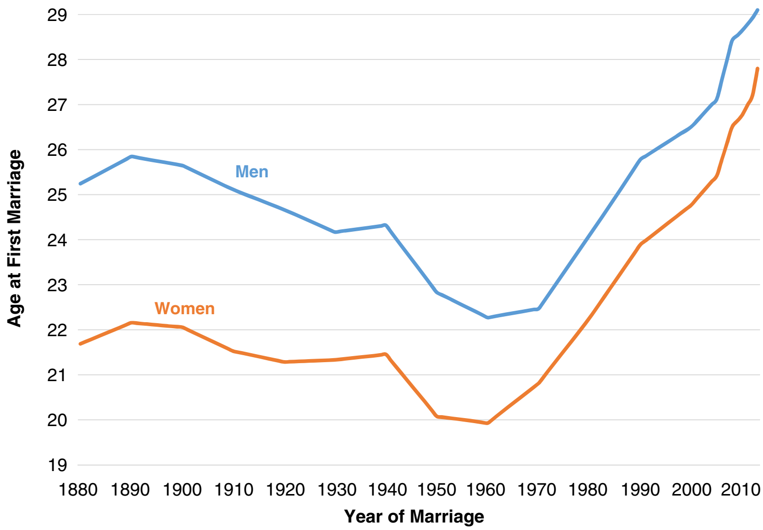

Fig. 11 Median age at first marriage, 1880–2013. *Source:* Ruggles (forthcoming)

just full-time wage earners. Median income for full-time employed young men more than doubled in the postwar era, to a peak of $48,500 in 1973. After that peak, young men's wages declined 26 % to $36,000 in 2013. Wages for full-time working women went up too, but not as rapidly. Women's wages peaked in 2004, but by 2013, they were lower than they were in 1973.[9]

Focusing on median wages for full-time wage and salary workers understates the decline in the earning power of young men. More and more young men are working part-time, and a growing percentage are not working at all. As a result, if we look at *all* men aged 25–29 shown in the lower panel of Fig. 12—not just the full-time wage earners—median wages declined 44 %, from a peak of $41,000 in 1973 to just $23,000 in 2013. Women do not register in the lower panel until 1968 because that was the first year that more than one-half of 25- to 29-year-old women were in the wage labor force. The median wages for all women age 25–29 peaked in 2001 and then fell 24 % over the next 12 years.

Young men's wages have been dropping rapidly for four decades. By comparison, during the Great Depression, wages declined for just a few years before they started heading back up. No such sustained decline in wages has previously occurred in the United States. The sharp decline of young men's wages provided strong incentives for married women to enter the workforce even after opportunities for women stagnated in

[9] Figures 12–14 are inflated to 2013 dollars using the Consumer Price Index Research Series (CPI-U-RS), which was designed to address concerns that the standard Consumer Price Index for all urban consumers (CPI-U) exaggerates inflation, especially in the late 1970s (Stewart and Reed 1999). If I had instead used CPI-U, the decline in young men's wages would have been even greater (32 % for full-time workers and 48 % for all men aged 25–29). Both CPI series, however, may actually understate inflation as experienced by young adults in the 1970s and 1980s: young adults spent a high proportion of their income on rent; and before 1987, the CPI seriously understated rent inflation (Crone et al. 2006; Gordon and Van Goethem 2007). CPI-U-RS is available only for the period from 1978 to the present; to inflate the earlier years, I calculated the ratio of CPI-U-RS to CPI-U in 1978, and used it to adjust the CPI-U from 1940 to 1977.

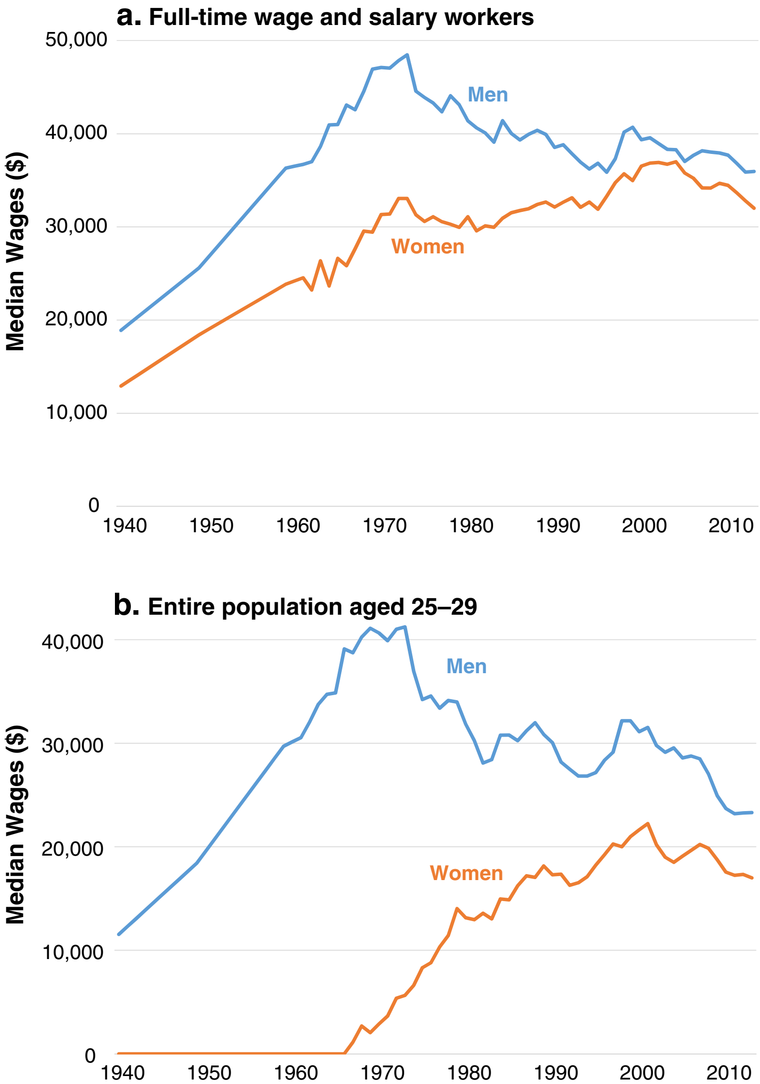

Fig. 12 Median wages for persons aged 25–29, 1940–2013. *Sources:* Ruggles et al. (2015) and Flood et al. (2015)

the mid-1970s: for many couples, two incomes were essential for economic survival (Bianchi 1995; Oppenheimer 1994).

Easterlin (1966, 1987) argued that the salient threshold in marriage decisions is not the absolute level of income but relative income, defined as the income of young men relative to expectations they formed in their parental home. Figure 13 provides a simple measure of relative income: income of young men relative to the income of men of about the same age a generation before. This number is calculated as the ratio of median total income of all men aged 25–29 to the median total income for the same age group 30 years earlier, when their fathers

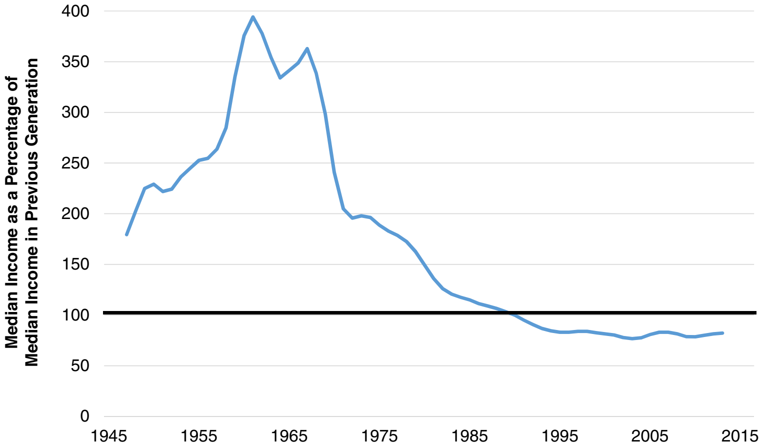

Fig. 13 Median income as a percentage of median income in the previous generation (30 years previously): U.S. men aged 25–29, 1945–2013. *Sources:* Ruggles et al. (2015), Flood et al. (2015), and Alvaredo et al. (2015)

were approximately aged 25–29.[10] The horizontal line at 100 in Fig. 13 shows the point at which the older and younger generations made the same amount. In 1961, young men were making four times what their fathers had made at about the same age. For the past three decades, the younger generation has consistently done *worse* than their fathers. Overall, generational relative income dropped a stunning 80 % since its peak in 1958.

We can also assess income of the young relative to the income of the affluent. Figure 14 compares the median income of young men with the average income of the top 1 % of the population. This measure peaked in 1970, when 25- to 29-year-old men were making about 12 % as much as the average income of the nation's elite; by 2013, this statistic was down to just 2.6 %.

Both of these measures of relative income fit the timing of the marriage boom well. In the 1950s and 1960s, when young men were doing exceptionally well in terms of relative income, marriage age was exceptionally young. For the past four decades, relative income has declined sharply, and marriage age has been rising at a record pace.

How much family change since 1960 might be explained by the drop in the relative income of young men? To address that question, I carried out a demographic decomposition, following the Das Gupta (1978) framework.[11] The dependent variable is the percentage of 25- to 29-year-old men who were currently married, with spouse present, between 1960 and 2013. This measure went from about 75 % of young men living with a spouse in 1960 down to 24 % in 2013—a drop of 50 percentage points. This dramatic change mainly reflects decisions to delay or forgo marriage, but it also is affected by the rise of divorce and separation and the decline of remarriage.

[10] Median generation length for men ranged from 27.8 in 1970 to 32.2 in 2013 (Ruggles et al. 2015). To estimate incomes before 1939, I assumed that annual changes in income for young men were proportional to annual changes in the mean income of the bottom 90 % of the population excluding capital gains, as estimated by Alvaredo et al. (2015). Accordingly, the early decades shown in Fig. 13 should be viewed as approximate.
[11] The analysis used the open-source DECOMP software (Ruggles 1989).

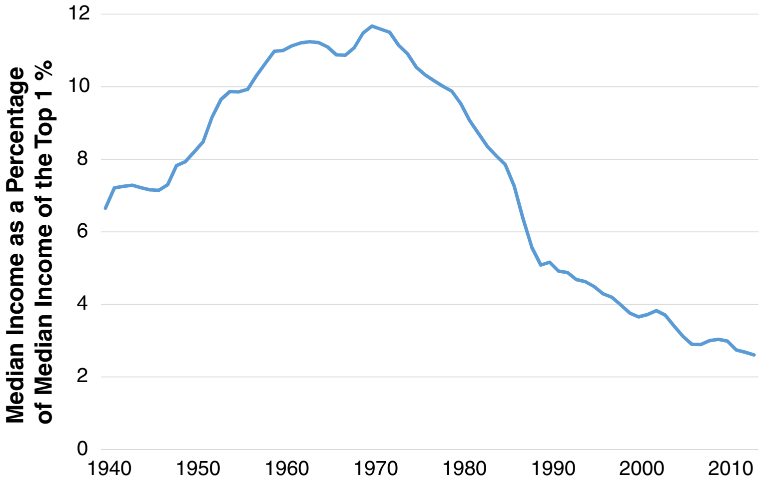

Fig. 14 Median income as a percentage of the income of the top 1 %: U.S. men aged 25–29, 1940–2013. *Sources:* Ruggles et al. (2015), Flood et al. (2015), and Alvaredo et al. (2015)

In the decomposition exercise, I analyzed four components of change, described in Table 1. The left two columns show the percentage of men aged 25–29 who were married in each category of each component. Foreign-born young men are excluded because the relative income measure is not valid for them.

The first component is relative income, defined as the income of men aged 25–29 divided by the median income of men the same age 30 years earlier. I pooled the 1960 and 2013 data sets, calculated relative income as a percentile, and classified each case into deciles of the combined data set. As shown in the left two columns of Table 1, there was a close linear association between decile of relative income and marriage in both periods, with more than four times as much marriage in the highest decile as in the lowest. The right two columns describe the sea change in the distribution of relative income during the past half-century.

The second component is occupation.[12] In both periods, the men with craft occupations were most often married. These jobs—carpenters, machinists, mechanics, painters, and plumbers—have declined dramatically since 1960. The occupational groups least often married in both periods were the service workers and laborers, and their frequency has almost doubled.

The third component is employment characteristics, combining information on class of worker and employment status. Self-employed young men were disproportionately likely to be married in both years, possibly because self-employment is still often a family enterprise. These jobs were already uncommon for young men in 1960, and by 2013, they were rare. Wage labor also declined substantially, and the percentage of young men not in the labor force—who usually were not married even in 1960—increased dramatically.

The final component is educational attainment. The relationship of education to marriage has shifted substantially (Torr 2011). In 1960, high school graduates were

[12] The occupational classification is based on the first digit of the OCC1950 variable in IPUMS; the decomposition categories correspond to OCC1950 codes 0–99; 100–399; 400–499; 500–599; 600–699; and 700–970 (Ruggles et al. 2015).

Table 1 Percentage currently married with spouse present and distribution of characteristics by selected factors: U.S.-born men aged 25–29, 1960 and 2013

	% Married		Population Distribution	
	1960	2013	1960	2013
Relative Income (percentiles of combined data sets)				
0–9	18.9	7.0	3.9	13.0
10–19	35.1	11.0	2.1	14.2
20–29	45.5	16.8	2.7	11.8
30–39	47.9	21.4	2.2	12.6
40–49	51.6	29.1	2.1	14.6
50–59	59.4	35.6	4.1	13.1
60–69	68.4	38.5	9.8	11.9
70–79	76.4	39.8	21.2	5.8
80–89	82.8	43.0	24.4	2.0
90–99	87.6	42.5	27.5	1.1
Occupation				
Professional, technical	74.2	29.7	14.2	18.4
Managers, clerical	76.4	24.0	16.7	21.2
Sales	77.2	22.7	6.0	6.0
Crafts	79.8	35.2	23.9	14.0
Operatives	79.4	27.2	22.7	11.3
Service and laborers	66.2	18.5	13.8	21.5
No occupation for 5+ years	10.6	4.9	2.6	7.7
Employment Characteristics				
Self-employed	83.3	32.7	6.6	3.0
Employed for wages	78.2	28.6	83.8	74.4
Unemployed	53.5	10.7	3.6	8.2
Not in the labor force	24.6	7.9	5.9	14.4
Education				
Less than high school	73.0	15.5	38.1	7.6
High school graduate	76.4	23.7	47.1	65.7
College graduate	73.9	26.7	8.9	21.1
Postgraduate	69.7	33.3	5.9	5.5
Total	74.5	24.2	100.0	100.0
Number of Men Aged 25–29 in Samples			46,708	74,095

more often married than any other group, and those with education beyond college were the least married. By 2013, the relationship between educational attainment and marriage was strong and positive.

The decomposition shows the amount of change in marriage between 1960 and 2013 that can be attributed to compositional changes in each component. It is based on a cross-classification of the percentage married for each combination of the four

Table 2 Components of change in the percentage married: U.S.-born men aged 25–29, 1960–2013

	Components of Change	Index of Change
Total Change in Marriage	50.3	100.0
Effects of Compositional Factors		
Relative income	20.4	40.6
Occupation	2.2	4.4
Employment characteristics	2.9	5.7
Education	1.6	3.2
Combined Effect of Factors	27.1	53.9
Rate Effect	23.2	46.1

components in each census year, a matrix of 2,240 cells. For each component, the analysis yields a composition effect representing how much of the change is attributable to changes in the distribution of that component, net of other components. The rate effect is the change in marriage that is unaccounted for by changes in all four components (Das Gupta 1978).

The results appear in Table 2. The total change in the crude percentage of 25- to 29-year-old men married was 50.3, reflecting the drop from 74.5 % married to 24.2 % married. The compositional effects for each component indicate how much of the change would disappear if the socioeconomic composition of the young adult population had not changed. The right column expresses the effects of each component as a percentage of total change.

The first component—relative income—is the important one. If that distribution is held constant over time, 40.6 % of the change disappears. Each of the other components accounts for about 5 % of the change. Summing them, this simple analysis of four economic components can account for 54 % of the overall decline in marriage.

This analysis omits many aspects of relative economic circumstances. For example, we know that job insecurity has been increasing (Kalleberg 2011), but the decomposition cannot capture that. We have information about current income and occupation, but nothing about the perceived future prospects of workers, which must be less bright for young men than they were 50 years ago. The census cannot tell whether young people are optimistic about their prospects or whether their jobs are insecure. Moreover, the decomposition analysis also does not account for the stagnating prospects of women during this period. Thus, the real impact of declining economic opportunity is probably even bigger than this decomposition implies. The evidence therefore suggests that Easterlin was broadly right about relative income: the decline of marriage since 1960 can be largely accounted for by the deteriorating circumstances of young men compared with the previous generation.[13]

[13] I conducted a series of decompositions using a similar approach to assess the difference in the percentage married between black and white men. The results suggest that at least one-half of race differences in marriage in the 1960–2013 period can be ascribed to race differences in the economic characteristics of young men, lending further support to a structural interpretation (e.g., Wilson and Neckerman 1987).

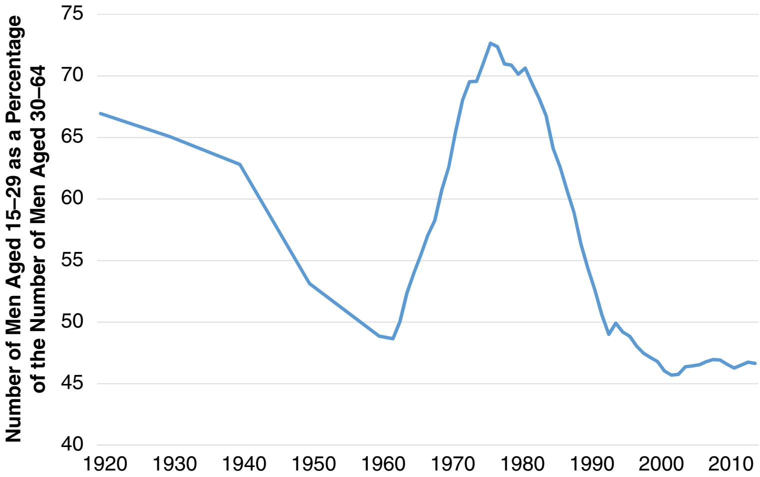

Fig. 15 Number of men age 15 to 29 as a percentage of the number of men age 30–64. *Sources:* Ruggles et al. (2015) and Flood et al. (2015)

The Decline of Wage Labor

Easterlin (1978, 1987) argued that the decline in relative wages for young men resulted from generational competition. Figure 15 recreates the key graph from his 1978 Presidential Address to the Population Association of America, showing the number of men aged 15–29 as a percentage of the number of men aged 30–64. Easterlin argued that young men's job prospects depended above all on how many of them were competing for those jobs. Thus, he argued, the huge boom in relative income after World War II occurred because young men were in short supply. As the Baby Boomers came of age, the number of young men entering the labor force exploded. With the abundance of workers, the golden age of postwar labor abruptly ended.

Easterlin's 1978 address came just after the peak of his graph. He could see that generational competition was going to drop just as quickly as it had risen. Accordingly, he predicted that a second golden age for young men's employment was just around the corner. By 1984, he argued, wages would be up, relative income would recover, marriage age would decline sharply, and there would be a new baby boom.

As it turned out, the second golden age did not materialize. Despite the smaller cohorts entering the job market after 1978, men's wages continued to decline. One factor was doubtless the mass entry of married women into the labor force, which partly compensated for the smaller size of the new cohorts. Political change also affected youth opportunities. Ronald Reagan was elected President in 1980, and America shifted to the right. The fading of labor unions, decline in the minimum wage, globalization, outsourcing, and stagnation of educational attainment all contributed to the dramatic decline of wages for young men entering the labor force and the long stagnation of wages for young women (Massey 1996; Piketty 2014; Stiglitz 2012; Weil 2014; Goldin and Katz 2010).

The largest source of decline of economic opportunity for young people, especially over the past two decades and in future decades, may be the automation of both manufacturing and services made possible by new technologies. The world's computing capacity is doubling every 18 months (Hilbert and López 2011). Because of innovations in artificial intelligence and sensing technology, robots are becoming increasingly flexible and easier to train, and their cost is dropping rapidly (Brynjolfsson and McAfee 2014). New technologies have eliminated millions of jobs over the past several decades, and they are on the verge of eliminating many more (Frey and Osborne 2013).

From the late eighteenth century to the late twentieth century, technological innovation created more jobs than it destroyed. Indeed, the rise of wage labor—the driving force of family change—was a direct consequence of technological innovation. When Henry Ford introduced the moving automobile assembly line in 1914, it doubled productivity (Ford and Crowther 1922). The assembly line threw a few carriage makers out of work as people shifted to cars, but overall employment surged. With prices declining steadily, car sales exploded. Employment at Ford's Detroit area plants went from 14,000 in 1914 to 100,000 by 1926 (Ford and Crowther 1922; Segal 2005). There were also hundreds of thousands of new jobs in automobile sales and service stations. This is a perfect example of creative destruction, and similar processes occurred again and again over the course of more than a century.

Today, mechanization seldom adds more jobs than it eliminates. Manufacturing employment in the United States peaked in 1979 and declined 37 % over the next four decades (U.S. Bureau of Labor Statistics 2015); during the same period, manufacturing output more than doubled (Board of Governors of the Federal Reserve System 2015). These trends are not confined to the United States. Owing to productivity improvements, employment in manufacturing is falling in most manufacturing countries, and worldwide manufacturing employment is probably declining (Levinson 2015).

The rise of intelligent machines is also eliminating service jobs. Travel agents, insurance agents, parking lot attendants, warehouse workers, and checkout clerks are being replaced by machines. Within the next few decades, driving will be automated (IEEE 2014). This will eliminate some 7 million working-class jobs—from taxi drivers to truck drivers—employing about 5 % of the nation's workforce. Frey and Osborne (2013) estimated that about one-half of the U.S. workforce is employed in jobs that are at high risk of automation within the next decade or two, and another one-fifth have a moderate risk of automation. They judged that only about one-third of jobs are reasonably safe. Eventually, perhaps, just a few percent of the population may be sufficient to produce all the goods and services society needs.

Figure 16 shows the percentage of men and women aged 18–64 who were employed for wages since 1800, with extrapolations into the future. Male wage work went up for 170 years, from 13 % in 1800 to a peak of 75 % in 1970. For the past four decades, the percentage has declined, to 64 % by 2013.[14] This decline is unprecedented. Suppose that

[14] Among the 36 % of working-age men who did not work for wages in 2013, 10 % were enrolled in school or college; 11 % were in institutions; 15 % were unemployed; 24 % were self-employed (down from 42 % in 1970); and 40 % were not in school, not employed, not institutionalized, and not looking for a job (Ruggles et al. 2015).

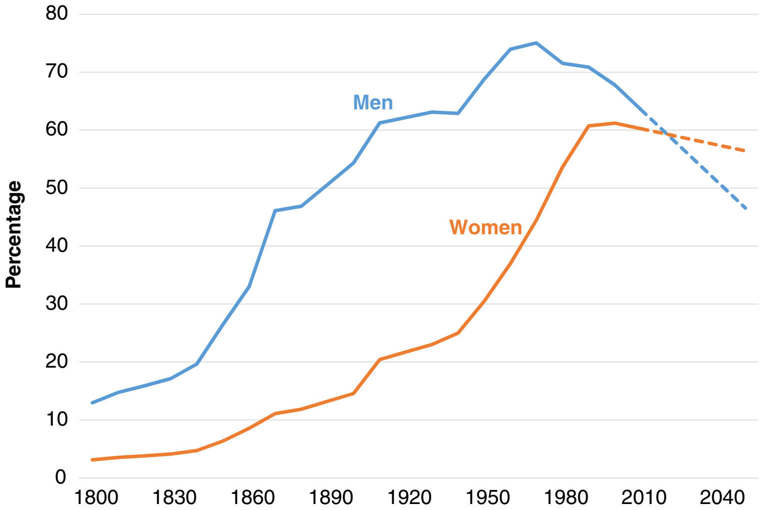

Fig. 16 The rise and fall of wage labor: Percentage of persons aged 18–64 engaged in wage and salary work, by sex: 1800–2050. *Source:* Ruggles et al. (2015)

current trends were to continue. The dashed line for men in Fig. 16 is simply a linear extrapolation of the current trend, which has been roughly the same for four decades. If the decline of male wage employment were to continue at the same pace over the next four decades, only 44 % working-age men would have wage jobs by 2050.

Among women, wage labor peaked in 2000. So far, the decline in wage labor has been slower for women than for men. Because male wage work is declining so rapidly, female wage employment will almost certainly exceed that of men within a few years. This is partly because young women entering the labor force are increasingly better educated than are young men (Goldin et al. 2006). In the long run, however, the disappearance of jobs will affect women as well as men, and women's employment will likely follow the same trajectory. If current trends continue, however, only 56 % of working-age women will work for wages by 2050.

For centuries, observers have been making dystopian predictions that technological innovation would create massive unemployment and inequality, predictions that proved to be false or at least premature (Mokyr et al. 2015). Is this time different? The past four decades of decline in the relative income of the young might be only a temporary setback. Easterlin could yet prove prescient: dramatic fertility decline across much of the globe is creating very small cohorts, which might finally improve the prospects of young workers. Perhaps some new technological innovation, as yet unimagined, will increase rather than reduce the need for labor. It is equally possible, however, that the opportunities are not coming back, and that we are witnessing the beginning of the end of the era of wage labor.

Wage Labor and Families

For thousands of years, corporate families provided the means of subsistence for most people. Then, for about 130 years, wage labor opportunities grew rapidly, first among men and then among women. The tectonic shifts in the structure of the economy since the early nineteenth century transformed family relations. The transition from corporate families to male breadwinner families was a consequence of the rise of male wage labor in the Industrial Revolution. The transition from male breadwinner families to dual-earner families reflects the massive increase in wage labor among married women following World War II. The decline of corporate families led to a profound upheaval of generational relations as family patriarchs lost control over their wage-earning sons. The decline of male-breadwinner families led to an equally profound upheaval of gender relations as men lost control over their wage-earning wives and daughters. The two great transformations of family economies—from corporate to male breadwinner and from male breadwinner to dual earner—undermined the economic logic of patriarchal authority.

The dramatic retreat from marriage over the past half-century could never have occurred without the loss of patriarchal control and the shift in attitudes that accompanied it. But the proximate cause of the retreat from marriage since 1975 is a different structural change: the massive decline of relative earnings and falloff of wage labor participation among young men, combined with the long stagnation in earnings among young women.

With growing inequality, families are facing diverging destinies (McLanahan 2004). A minority of young people are faring well in the new economy, and young people with resources are continuing to form marital and cohabiting unions. Among the college-educated with good jobs, the impact of family change is muted. Marriage is still feasible; marital instability is declining; and cohabitation and single parenthood can be managed without hardship. For much of the population, however, the outlook is grim. Almost one-fifth of young adults live in poverty, more than double the percentage in 1973 (Ruggles et al. 2015). More than 10 % of young earners have their wages garnished because of debt, often for child support (Arnold and Kiel 2014). Many who have jobs are underemployed, taking unskilled and part-time jobs even if they have good qualifications. Among young people who lack resources, families are difficult to form or sustain: fewer and fewer young adults are marrying, and those who do are at increasing risk of divorce. For people without secure jobs that provide a living wage, cohabitating unions are highly unstable. Whether cohabiting or not, most unmarried mothers of infants are in poverty (Amato et al. 2014; Carbone and Cahn 2014; Cherlin 2014; Flood et al. 2015).

Despite these challenges, few would choose to return to the families of the past. Patriarchy has receded; today's families are far more humane and egalitarian than anything that came before. Corporal punishment of wives is universally condemned, and wife-beating is illegal in every state. Child-beating is still legal in the United States, but even in Texas, it is no longer acceptable to punish a child with a switch (Zinser 2014). Women are no longer legally subordinate to their husbands. Wives can work for wages, they can keep their earnings, and they no longer need their husband's permission to open a checking account or sign a contract. There is growing tolerance of new family forms, to the point where same-sex marriage is now legal throughout the United States. Time-use data show that families are becoming more and more egalitarian with respect to housework and childcare (Goldscheider et al. 2015).

If the era of ever-expanding wage labor is truly drawing to a close, that will create new challenges for families, but it will also create new opportunities. For the last

10,000 years, most of humanity has been forced to work long hours in repetitive and backbreaking toil just to earn basic subsistence. We are on the verge of being able to make everything we need, including all kinds of things unimagined by previous generations, without that kind of tedious and grueling drudgery—indeed, with hardly any work at all. Our silicon servants will have the potential to provide everyone with food, shelter, and all other necessities, freeing us to pursue our dreams and passions.

In 1930, John Maynard Keynes wrote an essay on "The Economic Possibilities for our Grandchildren." He predicted that the combination of technological innovation and capital accumulation will eventually solve the problem of material needs. Keynes argued that "the economic problem may be solved, or be at least within sight of solution, within a hundred years" (Keynes 1930:96). Eighty-five years after this prediction, I believe we are already within sight of solving the economic problem. We now must address what Keynes saw as the real problem: how "to live wisely and agreeably and well" (Keynes 1930:97).

To make families stronger, reduce family instability, enable young people to form marital or cohabiting unions, and eliminate child poverty, we must figure out how to share the bounty of the machines. Our biggest challenge is not how to produce wealth but how to distribute it: how to get money into the hands of people—especially young people—so that they can buy all those goods and services that the robots can produce with so little human effort.

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