Gender and Family Issues in the Workplace

Francine D. Blau
Ronald G. Ehrenberg
editors

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Chapter 2

Career and Family: College Women Look to the Past

Claudia Goldin

Recent college graduate women express frustration regarding the obstacles they will face in combining career and family. Tracing the demographic and labor force experiences of four cohorts of college women across the past century allows us to observe the decisions each made, the constraints each faced, and how the constraints loosened over time. No cohort of college graduate women in the past had a high success rate in combining family and career. Cohort I (graduating c. 1910) had a 50 percent rate of childlessness, whereas cohort III (graduating c. 1955) had a high rate of childbearing and an initially low labor force participation. Cohort IV (graduating c. 1972) provides the most immediate guide for today's college women and is close to the end of its fertility history. It is also a cohort that can be studied using the National Longitudinal Survey of Young Women. In 1991, when the group was between ages 37 and 47, 28 percent of the sample's college graduate (white) women had yet to have a first birth. The estimates for career vary from 24 to 33 percent for all college graduate women in the sample. Thus, only 13 to 17 percent of the group achieved "family and career" by the time they were about 40 years old. Among those who attained career, 50 percent were childless. Cohort IV contains a small group of women who have combined family with career, but for most the goal remains elusive.

College women today tell us they want both family and career. They have succeeded in achieving parity in numbers with their male counterparts, their educations are of about equal quality, and they are continuing in professional and graduate schools more than ever before.[1] Yet full equality—in both the home and the marketplace—still seems an elusive goal for them and they express a palpable frustration.

I describe here the demographic and economic fates of prior cohorts of college women. How did each combine family and career? Trade-offs of substantial consequence were made by all past generations of college women, compromises that the present generation appears unwilling to make. Despite shifting trade-offs and changing gender inequality in demographic and economic outcomes, each generation of female college graduates set the stage for the next. To comprehend how we have arrived at the choices faced by the current generation, we must understand change across the past hundred years.

FIVE COHORTS: A SUMMARY

I consider five cohorts of college graduates, each about twenty years in duration (see table 2.1). The differences among them and the progression of trade-offs can be summarized in the following manner. In cohort I—a group graduating about 1910 and born around 1890—college presented a stark set of alternatives between family and career. For most of these women it was one or the other, and when the selection was a career, it almost always involved teaching. Although college men in this generation married and had families at about the same rate as men without higher education, college women in this generation were set apart from their noncollege counterparts. More than 50 percent of college graduate women in this cohort either did not marry or, if they did so, did not have children.[2] College women were a small proportion of the young population, but college men were almost equally so. Although all college students were drawn disproportionately from the upper echelons of American wealth and standing, there is evidence that differences in the demographic experiences between college women and their noncollege counterparts were largely due to a "treatment effect" of college, rather than to selection bias.[3] That is, the college experience affected them.

The second cohort—graduating about 1933 and born around 1910—attained higher marriage rates than its predecessor cohort. But the proportion of the relevant population attending college for four years or more did not increase much. That is, the marriage and childbearing rate of this cohort increased from the previous one, but the apparent selection into college did not change. Mary McCarthy's autobiographical *The Group*, which concerns the lives of eight Vassar women in the class of 1933, opens at the wedding of one in the group just six weeks after her graduation. That would not have been the opening scene for a novel about the previous cohort of college women. The members of this second cohort not only married, but they also entered the workplace just after graduation. They remained at work for several years, frequently with aspirations, rarely fulfilled, of a full career. "They were a different breed than those of the previous decade," wrote McCarthy of her group, "not one did not propose to work this coming fall." But family eventually intervened. I characterize cohort II as attaining "job then family" and view it as a bridge from I to III. The full blossoming of the movement of college women into the American mainstream came after the 1940s with cohort III. I will not go into any further detail on cohort II.

Table 2.1   Characterizations of Five Cohorts of College Graduate Women

Cohort	Year Graduated from College	Approximate Birth Year	Characterization
I	1900 to 1919	1878 to 1897	Family or career (attaining)
II	1920 to 1945	1898 to 1923	Job then family (attaining)
III	1946 to 1965	1924 to 1943	Family then job (attaining)
IV	1966 to 1979	1944 to 1957	Career then family (desiring)
V	1980 to 1995	1958 to 1973	Career and family (desiring)

College offered the women in cohort III—graduating about 1955 and born around 1933—the opportunity to have both family and paid employment. But the two were to be serially scheduled. Family came first, in terms of timing and priority, and then employment. The employment of choice was, once again, teaching, for it allowed such serial timing without a large penalty. It was a profession one could "fall back on," because teaching would always be in demand and teaching credentials generally remained valid during job interruptions. But college also afforded the women of this cohort the opportunity to marry a college-educated man.

One might ask of many of the women from cohort III whether the direct (pecuniary) returns to college justified the tuition and opportunity costs of their four years of higher education. The answer was that it generally did not, but that college allowed them to tap into the market for college-educated men. Not only did women who attended college stand a considerably higher chance of marrying a college-educated man, but they also married the higher-income-generating man from among the college-educated group as well as from among the high school–educated group. As college became more accessible to the masses and as America became swept away by the post–World War II revival of family, college women married and had children at almost the same rates as their noncollege contemporaries. Despite all appearances to the contrary, however, the college woman of the 1950s set the stage for the events of the 1970s and the resurgence of feminism.

The women of cohort IV—graduating about 1972 and born around 1950—are the first for whom a considerable proportion have considered the career path. They are currently between ages 38 and 51 and their childbirth and marital histories are nearly complete. A portion of the cohort—those who were between ages 14 and 24 in 1968—were sampled in the first National Longitudinal Survey of Young Women (NLS-YW) and are studied in detail below. I find that among those who attained the B.A. degree, 29 percent had not yet had their first birth by 1991 when the group was between ages 37 and 47.[4] Although about 26 to 33 percent were on a "career track," using a generous definition concerning their

earnings in the late 1980s, only 13 to 17 percent had achieved "family and career" by that time.

College appears to be offering the women in cohort V—graduating in 1980 or later and born in 1958 or later—the opportunity for true equality with their male counterparts. College women today reject the choice of "family or career," the options of cohort I, and "family then job," that of cohort III. And they are uncomfortable with the choice of "career then family," that of many in cohort IV who just preceded them. They are unwilling to schedule events serially and thereby risk forfeiting one of them. Many of the doors that were closed to previous generations of college women are now open. Yet many of the female graduates of the past decade appear nervous, even frustrated.[5]

COLLEGE ATTENDANCE AND GRADUATION DATA FOR MEN AND WOMEN

Before exploring the basis for the characterizations just offered, it is instructive to examine the percentages of males and females who attended and graduated from college across this century. The fewer who attended college, the more they could be a highly self-selected sample from among the entire population. Because I would like to isolate the "treatment effect" of college, it is imperative to understand the process of selection into college.

Prior to 1940, the proportions of men and women who attended college were low, but the percentages were remarkably similar by sex.[6] Among those born around 1890 (from 1886 to 1895), for example, 9.5 percent of the men attended college for at least one year whereas 8.9 percent of the women did. Attendance figures are only slightly higher for cohorts born around 1900 (1895 to 1900); see figure 2.1 and appendix table 2.1).[7] Graduation rates are somewhat further apart, when the definition of graduating college is attending for four years or more (see figure 2.2 and appendix table 2.1).[8] Of the cohort born around 1890, 5.0 percent of men graduated college whereas 3.4 percent of women did. Attendance rates were far higher for women relative to their graduation rates, but only in part because two-year colleges are included in the data.[9] Until recently far fewer women than men who attended college actually graduated. By the cohort born in 1905, even graduation rates had narrowed between the sexes; the ratio of graduating males to females was 1.24. The trend, however, was not to continue.

The two lines in figures 2.1 and 2.2 diverge with cohorts born around 1910, and they remain apart until the recent period. Some of the men in the cohorts born around 1920 delayed their college education during World War II; many others would not have received a college education were it not for the war. The GI Bill of Rights provided the first large dose

Figure 2.1   Percentage of White Males and Females Attending College, by Birth Cohort
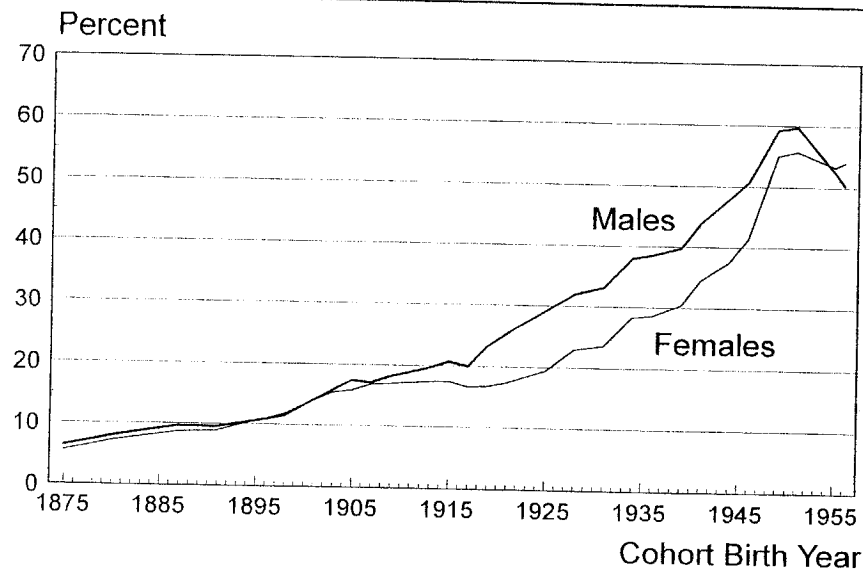
Sources: U.S. Bureau of the Census, series P-20, "Educational Attainment in the United States" (various years). See appendix table 2.1.

Notes: In virtually all cases only the responses of individuals aged 45–54 or 55–64 were used. For cohorts born since 1945 projections were made to 1995 or 1997 on the basis of changes for the preceding cohort that was aged 35–39 (30–34) in 1977 and 45–49 (40–44) in 1987.

of federal subsidization of college tuition and enticed a proportion of men in their 20s and early 30s to return to school.

Large differences between men and women in college graduation rates persisted until the cohorts born in the 1950s. The ratio of male to female graduates increased to 1.79 for the cohort born around 1930. It declined to 1.62 in the next ten years, but was still far higher than it had been earlier in the century. Attendance rates differed less than graduation rates, in part because men, whose tuition was subsidized after World War II, completed college at higher rates than women. Also, women attended two-year schools in somewhat greater numbers. The gap in both graduation and attendance eventually disappears. In 1980 more women than men were receiving B.A.s.

To summarize, cohort I attended college when few men and women went to college but when they attended in roughly similar shares to their populations. Cohort III attended college when the ratio of males to

females in attendance was greater than at any time in the past hundred years. Finally, cohort V is attending college in an era of the greatest gender equality in both attendance and graduation rates.

FRAMEWORK FOR UNDERSTANDING CHANGE IN FAMILY AND CAREER DECISIONS

I have constructed a simple framework to demonstrate how the constraints facing college women changed across the past century. Changing constraints, more so than changing tastes, I believe, served to alter the decisions of college women with regard to family and career.

The framework contains three periods, each of which should be thought of as seven to ten years in length. All periods occur after a woman achieves her highest grade or degree (a B.A., or higher degree, in the case of college women). In each period a woman's time endowment (T) can be spent employed full time (e), with family full time (f), or involved in some combination of the two, each part time.[10] Utility is a function of T^f, time spent with family, and income, Y:

$$U = U(T^f, Y).$$

For college women, each period at full-time work can be used to earn at least

$$Y_i^e = w_i^e T.$$

If a college woman works *full time for two consecutive periods* she obtains a return to job experience (r), and she obtains an additional return (r) if she works full time for three periods. Lifetime earnings (in the case of no discounting) are simply

$$Y^e \leq w^e \times T + w^e \times T(1+r) + w^e \times T(1+r)^2.$$

A "career" is defined as working full time for at least two consecutive periods, thus accruing returns to job experience.[11] Women who do not graduate from college earn, at most, each period

$$Y_i^n = w_i^n T, \quad \text{where } w^e > w^n.$$

No return to job experience accrues to non–college-graduate women, and therefore a woman who does not graduate from college cannot have a "career." "Family" is defined as having at least one child. Each child requires a minimum fraction (k) of a time period that must be spent with family. Women cannot engage in "family time" unless they have children.

Figure 2.2   Percentage of White Males and Females Graduating from College, by Birth Cohort
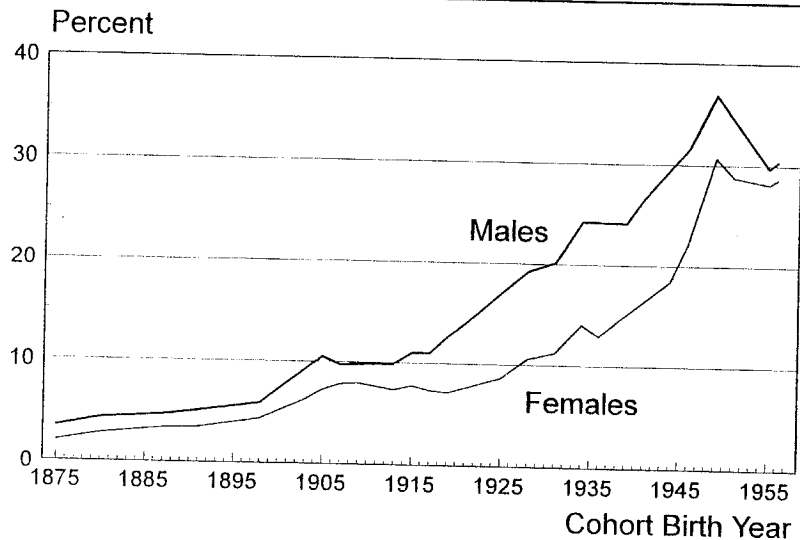
Notes: In virtually all cases only the responses of individuals aged 45–54 to 55–64 were used. For cohorts born since 1945 projections were made to 1995 or 1997 on the basis of changes for the preceding cohort that was aged 35–39 (30–34) in 1977 and 45–49 (40–44) in 1987.

I consider a woman's lifetime budget constraint (without possible husband's income).[12] Figure 2.3, panel A, depicts this constraint under the simple assumptions just made. The horizontal axis is time, of which there are three periods, of length T, which can be spent with family or in the labor force. Family time increases when moving from left to right; labor time increases in the opposite direction. Labor time earns at a wage, which depends on education and labor market experience, and the vertical axis shows income earned.

The points on and within the budget constraint contain every possible value of the lifetime allocation of a college woman's time. Beginning with the right-most point, (f,f,f) represents spending all periods full time with family and earning no income. Moving to the left, a woman can trade off any portion of this time to work in the market at wage rate w^f. The point (f,f,e) gives $w^f \times T$ income and $2T$ in family time. Moving farther to the left shows that when a woman works for two consecutive periods she

Figure 2.3   A Framework for Understanding Family and Career Choice

Panel A: Three-Period Budget Constraint
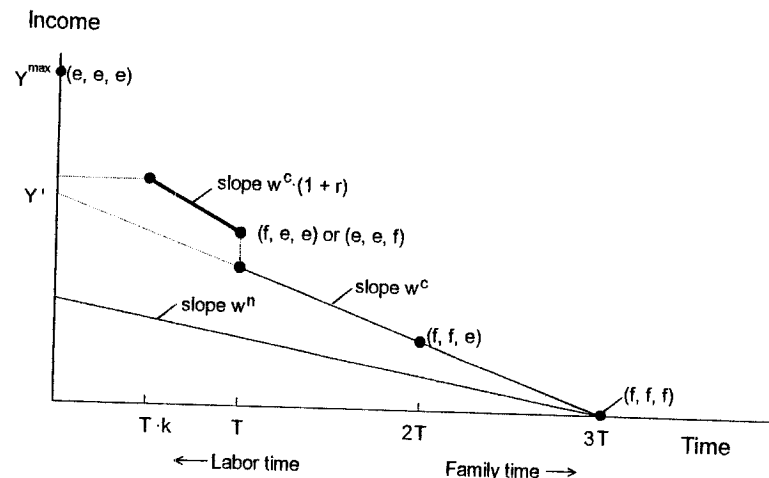
Panel B: Career and Family Choice
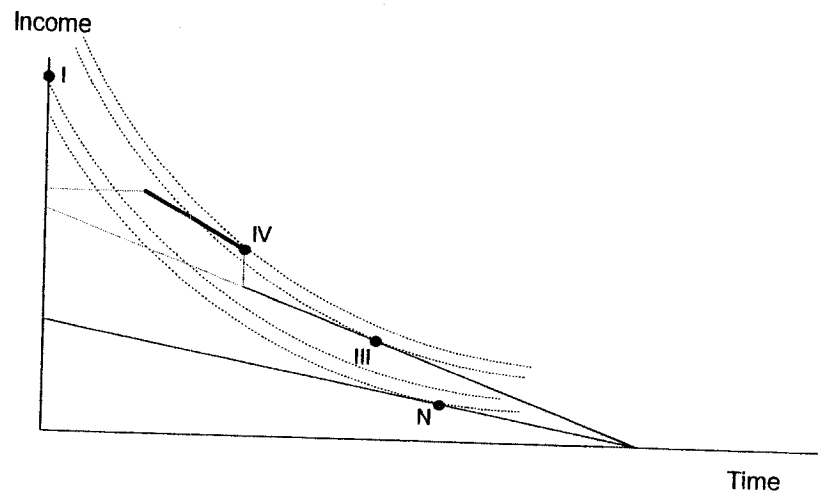
reaps a return of $r \times w^c \times T$ and the budget constraint has a break. This point can represent either (c, c, f) or (f, c, c). Note that all points between (f, f, f) and the break can be achieved by trading time with the market. Because children require only $T \times k$, all the points to the break are consistent with family and "job," although not necessarily with "family and career."

If a woman spends each of the three periods full time at one of the two activities (paid employment or family) there are eight combinations that are deemed rational. The ninth combination produces an interior point: (c, f, c), meaning two employment spells interrupted by family. It is dominated by either (f, c, c) or (c, c, f) because of the returns to continuous employment.[13] The budget constraint is invariant to the timing of the decisions, under the assumptions given.[14]

Allocations between $T \times k$ and T are of interest because it is the only range of "family and career." After a woman is in the labor force for two consecutive periods, she earns at the rate $w^c(1 + r)$. A woman who remains in the labor force for the entire three periods earns the maximum income (Y^{max}) at point (c, c, c). Given the assumptions of the framework, it would not be rational to spend a positive amount of time on family that was less than $T \times k$ and thus the budget constraint jumps to (c, c, c).[15]

The budget constraint in figure 2.3, panel A, has been drawn under the assumptions that $T = 7$ years, $k = 0.5$, and $r = 0.5$, a reasonable value if the return to experience is about 6 percent per year.[16] The darkened portion of the budget constraint and point (c, c, c) represent all possible time allocations that achieve a career. The (c, c, c) point is "career only," whereas the segment between $T \times k$ and T (which is also (f, c, c) or (c, c, f)) allows for "family and career."

The budget constraint gives the complete set of choices, possibly those facing college women today. But it does not represent those available to college women of past generations, for whom many segments of the budget constraint were off-limits. The women in cohort I were faced with a stark choice between two extreme points, (f, f, f), that is, $3T$, and (c, c, c) because married women generally did not work for pay.[17] The budget constraint takes shape with cohorts II and III when married women began to work for pay after their children were grown. But it would exclude the "family and career" portions. With cohort IV the "family and career" portion gets added. All of the changes in the budget constraint were due to the greater acceptance of married women, in general, in the labor force, not just college women.

How did college change the lives of these women? Without college, the budget constraint is the line with slope w^n in figure 2.3, panel A. With college, the budget constraint is first just the two extreme points, (f, f, f) and (c, c, c), then the line with slope w^c, and finally the broken line containing the "family and career" points.

Figure 2.3, panel B, shows that a set of homothetic indifference curves can generate equilibrium combinations chosen by many of the college

graduate women in cohorts I, III, and IV. Changes in the constraints facing college graduate women, in the absence of changing tastes or self-selection, can generate changes across the past hundred years regarding work, career, and family. It should be clear why so many women in the first cohort opted for point (c, c, c) even if they had the same preferences as the non–college-graduate group who chose point N. It should also be transparent why, as more options became available, many shifted to a combination of "family and job" given by point III, and why, when the budget constraint includes the "family and career" segment, many desire to shift to point IV. It is not clear from this analysis, however, why so many women in cohort IV have not been successful in getting to point IV.[18]

COHORT I: FAMILY OR CAREER

The women of cohort I completed their B.A. degrees between 1900 and 1920. Although prior cohorts of female college graduates can be studied, the women of cohort I are the earliest for which data on education, occupation, fertility, marriage age, and husband's income can be found in the 1940 Public Use Microdata Sample (PUMS) of the federal population census.

The first college to open its doors to women was Oberlin in 1837, but it was not until the 1850s that opportunities for women in higher education expanded, particularly with the establishment of women's colleges. At that time, however, many of the institutions of higher learning open to women were not true colleges but were seminaries, often no more intellectually demanding than high schools and without rigorous entrance requirements. Only in the 1870s and 1880s with the establishment of such women's colleges as Vassar and Smith, and with the opening of various state universities to women, did the era of women's higher education truly begin. By 1910, 73 percent of all colleges were open to women, almost 80 percent of which were coeducational institutions (Newcomer 1959, 37). Most of the women's colleges that had the minimum age requirement of 16 were upstanding institutions that endeavored to provide to women what other colleges were giving to men: They strove for equality of curriculum (Woody 1929). Most colleges and universities taught a liberal arts curriculum in which there were basically two courses of study: classical and scientific. Thus, women and men took similar classes, even when they were not at the same institution.

Women's higher education had what Thomas Woody, the noted historian of education, viewed as an unanticipated consequence. By the 1890s it was clear that college women were marrying at decidedly lower rates than were those who did not attend college, and that, even if they married, they were having considerably fewer children than their less educated counterparts. The finding spawned an extensive literature, for it was alarming to many in an era of growing nativism.[19]

They, and current researchers, have faced the same problem in trying to ascertain how much of the difference in demographic experiences was due to sample selection and how much was due to the treatment effect of college. Although definitive evidence on the subject has not yet been unearthed, two independent findings, discussed below, are consistent with the notion that demographic differences were more a function of what college did for women than which women went to college. One is that the marriage rate of college women rose before there was a great expansion of college graduation rates for women. Another is that surveys of Radcliffe alumnae reveal their nuptiality and fertility trends to be similar to those of all college women despite the fact that Radcliffe women were drawn from a rather elite group. In fact, the proportion of Radcliffe undergraduates who came from private schools increased between cohorts I and III.

That said, it should be noted that many of the previous studies of the nuptiality rates of college women were not based on nationwide samples, but rather on alumnae surveys. Most, but not all, were surveys of women in the elite colleges of the Northeast, often women's colleges like Smith, Vassar, Radcliffe, Wellesley, and Bryn Mawr (see, for example, Van Kleeck 1918). Not only were the studies biased in their selection of schools, often known for their low marriage rates, but marriage rates for relatively recent graduates were given with no adjustment for time since graduation. Estimates in the previous studies were biased both by virtue of composition and in terms of incompleteness of spell.

The 1940 PUMS affords a more universal view of the nuptiality of college women, although the bias here is probably in the opposite direction. By accepting the recollections of older women and using the percentage who listed themselves as "never married," it is likely that the proportion who claimed to have ever married is overstated. Among those born around 1890, more than 30 percent never married by age 45.[20] For those born around 1900, about 25 percent never married by age 45 (see table 2.2).

A woman who attended but did not graduate from college (or who graduated from a two-year college) stood a somewhat higher probability of marrying by age 45. But the percentage who never married for either college group was considerably greater than for women who never attended college (see table 2.2). Female college graduates born around 1890 were 4 times more likely to remain single than their noncollege counterparts (31.1 percent against 7.8 percent). Those who were born around 1880 were 3.7 times more likely to remain single than their noncollege counterparts (computed for women aged 55–64). College graduate women in the years from about 1900 to 1927 had lifetime marriage probabilities that were fully 20 percentage points lower than those of their noncollege counterparts.

Table 2.2   Percentage Never Married for (White) Women with Four Years or More of College and No College, 1880–1960 Birth Cohorts

Approximate Year of Birth	Ages 25–34	Ages 35–44	Ages 45–54	Ages 55–64
≥ Four Years of College				
1880				30.3
1890			31.1	28.5
1900		28.7	24.7	26.7
1910	38.7	21.2	19.1	16.9
1920	26.5	14.3	12.2	10.6
1930	17.4	11.3	9.1	8.2
1940	18.4	10.4	7.3	
1950	25.6	12.2		
1960	31.5			
No College				
1880				8.10
1890			7.80	6.11
1900		8.80	5.90	6.85
1910	16.90	6.23	6.06	5.88
1920	9.84	5.26	4.80	4.14
1930	6.80	4.60	3.55	3.11
1940	7.01	3.95	3.77	
1950	9.51	5.80		
1960	16.00			

Sources: 1940 PUMS, 1/100; U.S., Bureau of the Census (1953, 1966, 1972, 1985); 1990 Current Population Survey, Outgoing Rotation Group, NBER-CPS extracts.

The general conclusion of the turn-of-the-century studies on nuptiality and college was that the college experience both caused and enabled women to have a lower marriage rate. College permitted women to be more discerning in their choice of lifestyle and husband. Further, the typical occupation for college graduate women, particularly in the East, was as a teacher in a private girls' school, and "there is no station in life (save that of a nun) so inimical to marriage as that of resident teacher in a girls' school" (Shinn 1895, 948). Finally, men, it was said, often disliked intellectual women. The possibility of sample selection was raised, and some noted that women who considered going to college formed a biased sample because they had not married young (Newcomer 1959, 212–213). But the notion that the college woman would not have married anyhow was generally, though not entirely, dismissed.

Not only did the college woman of the early twentieth century have a lower probability of marrying, she also stood a much higher probability of not having children even if she married. Just under 30 percent of female

college graduates who were between ages 35 and 44 in 1940 (and were ever married) recorded no lifetime births. The percentage was 1.72 times that of women with no college education and was 11.7 percentage points higher (see table 2.3). Figure 2.4 graphs the percentage of ever-married (white) women having no births by ages 35–44 for college graduates, those with no college, and high school–only graduates.[21] Together with the data on marriage, those on children show that 50 percent of all female college graduates born between 1886 and 1895 either never married or had no children by the time they reached age 45 (see figure 2.5).

Female college graduates around the turn of the century made a distinct choice *between* family and career. About 50 percent did not opt for husband and children, whereas only 22 percent of those who did not attend college took that route.[22] College women of that era were twice as likely as women who did not attend college to take this atypical route in life. One is therefore led to ask what took the place of family.

Of those college graduate women who were between ages 45 and 54 in 1940 and who had never married, 88.4 percent were in the labor force in 1940, and the vast majority were teachers (60 percent in elementary and secondary schools and 4 percent in colleges). Even to contemporary commentators, their choice of occupation was viewed as peculiar: "If it be asked why college women marry less than others, it may very safely be answered . . . that it is *not* because they crave a more exciting and public life; for the majority of them are school-teachers (Shinn 1895, 947; emphasis in original). Of those aged 45–54 who had never had a birth but were in the ever-married group, 34.1 percent were in the labor force; of those who were currently married, 28.4 percent were in the labor force. Even for the college graduate woman with no children, marriage was a decisive factor in her employment.

College men were likely to have been drawn from the same families as the college women in cohort I, but their demographic fates were unaltered by their college experiences. In 1940, 10.2 percent of all college graduate white men aged 45–54 were never married, which is one third the rate for women. Of men in this age group with no college, 11.4 percent were never married, slightly higher than the rate for college graduates. In 1950 just under 7 percent of all college graduate men aged 45–54 had never married, or one quarter the rate for women. In 1960 the proportion for men was also 7 percent, or one third that for women, and in 1970 it was about 6 percent, or one half that for women.[23] The percentage of college graduate men who married by the time they reached age 45 was virtually identical to, indeed somewhat higher than, that of men with no college. Thus, the marriage rate of men was virtually unaffected by college, whereas that for women was reduced, at times substantially.

What accounts for the fact that 50 percent of female college graduates in cohort I either did not marry or did not have children by ages 45–54

Table 2.3 Percentage of (White) Ever-Married Women with No Births by Ages 35–44, for Various Educational Groups

Approximate Year of Birth	≥ Four Years of College	No College, High School Graduate	No College	> Four Years of College
1900	27.9	21.6	16.2	n.a.
1910	23.8	21.0	17.3	n.a.
1920	14.1	11.8	11.3	19.4
1930	10.1	7.5	7.2	14.0
1935	8.6	5.3	5.3	n.a.
1936	10.9	6.0	6.0	n.a.
1937	11.8	6.5	6.0	n.a.
1938	9.7	6.1	5.6	n.a.
1939	11.8	5.8	5.7	16.0
1940	14.1	6.2	5.9	20.6
1941	14.2	5.3	5.1	17.9
1942	15.7	7.0	6.8	20.8
1943	15.8	6.7	6.2	16.5
1944	16.1	7.9	7.2	18.3
1945	18.2	8.1	7.7	22.8
1946	18.1	8.5	7.9	20.4
1947	19.3	8.7	7.9	24.0
1948	18.9	8.6	8.2	23.8
1950	19.1	9.6	8.5	23.9
1952[a]	17.3	9.9	8.9	n.a.

Sources: U.S. Bureau of the Census (1955, 1964, 1973), series P-20, "Fertility of American Women" (various years, ending with no. 470, June 1992).

Notes: All data are for white women only. The educational categories change with P-20 no. 470 (June 1992). That may account for the decline in no births to women with ≥ 4 years of college when the other categories increase.

[a] A change in educational categories accompanied series P-20, no. 470 (June 1992). There is no longer a category of > four years of college and that for ≥ four years of college has been replaced by B.A. degree or higher. It is unclear whether the change in definition has caused the change in percentage childless or whether there has been an increase in births.

when the figure was 22 percent for women without college? Particularly since the percentage graduating from college was very low at the time, one cannot rule out the possibility that college women were a self-selected group who would have had the same demographic fate had they not attended college. Colleges like Bryn Mawr were known to have attracted young women who had no intention of marrying and to have provided them with a "higher calling." But the percentage from the land-grant institutions who did not marry was also high. Thus, the differences do not rest entirely on the type of college or the social backgrounds of the women.

The best evidence in support of the notion that college actually provided a "treatment effect" is that the percentage of female college gradu-

Figure 2.4   Percentages of Ever-Married White Women with No Births by Ages 35–44
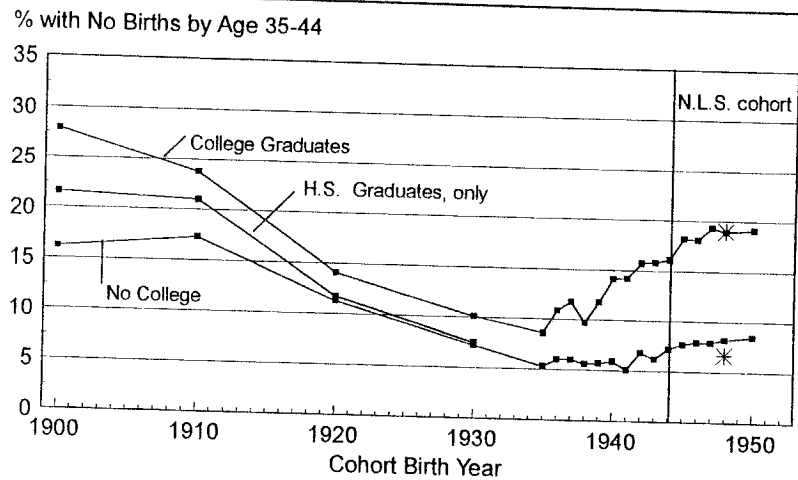
Sources: 1940 PUMS 1/100 sample-line; U.S. Bureau of the Census (1955, 1964, 1973); post-1970: series P-20, "Fertility of American Women" (various years).

Notes: The stars are for the NLS cohort members for whom a measure of sample participation was nonmissing in 1988. College graduates have completed ≥ sixteen years of school.

ates who never married (at each age) decreased substantially even when there was no increase in the percentage of women who were college graduates. The percentage of women who attended or graduated from college, as can be seen in figures 2.1 and 2.2, remained fairly constant for the cohorts born between 1905 and 1920.[24] But the percentage who never married, as can be seen in figure 2.6, began to fall sometime after the cohort born in 1890. Despite the stability in the percentage graduating from college, the percentage never marrying plummeted from around 25 to 10 percent for cohorts born between 1905 and 1920. If attending college involved self-selection, the underlying process would have had to change drastically to produce this result. Thus, there is prima facie evidence that there was little or no self-selection because the demographic experiences of female college graduates changed by birth cohort before the increase in attendance and graduation rates.

Another way of establishing that self-selection cannot account for the high levels of nonmarriage among cohort I–women is to observe what happened in subsequent generations. Between cohort I and cohort III the percentage of the relevant female population who attended college for four years doubled; it increased from 7 to 14 percent (see appendix table 2.1) and the proportion among them who never married plummeted from

Figure 2.5   Percentages of White Women (All Marital Statuses) with No Births by Ages 35–44
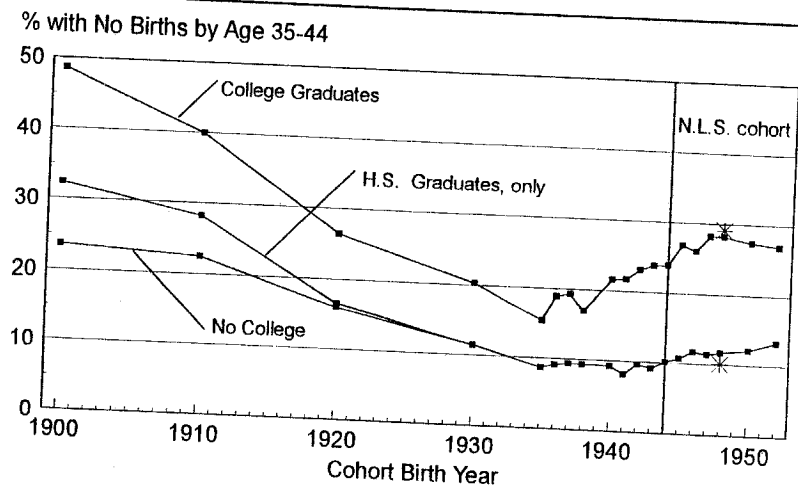

Sources: 1940 PUMS 1/100 sample-line; U.S. Bureau of the Census (1955, 1964, 1973), post-1970: series P-20, "Fertility of American Women" (various years); 1979 has been omitted because the columns in series P-20, giving the proportion ever married, do not sum properly.

Notes: For birth cohorts prior to 1941 the percentage with no births is given by: [(percent with no births among the ever married) × (percent ever married)] + (percent never married) because birth information was asked only of those who were ever married.

30 to 8 percent (at ages 55–64). I will construct a hypothetical case in which all never-married college graduate women in cohort I are self-selected and show that the change over time rejects the hypothesis.

Consider cohort I to consist of 100 women of whom 30 had self-selected to go to college because they did not want to marry. That is, college in this hypothetical case provides no "treatment effect" regarding marriage. If we double the number of college graduate women to 200 we are duplicating what happened in the move from cohort I to cohort III. The 30 single women for whom college provided no "treatment" will remain in the group. As an extreme case, assume that of the additional 100 there is no woman who will eventually remain unmarried; that is, the process that generates nonmarriage is not random. The percentage of women in cohort III who remain single should fall from 30 to 15 percent. But it fell to 8 percent—half the amount. The 30 women in cohort I could not have been self-selected from a population in which the desire to remain single remained constant. There must have been another set of factors accounting for the change in the proportion of college women who ever married.

Figure 2.6   Percentage Never Married, White College Graduate Women
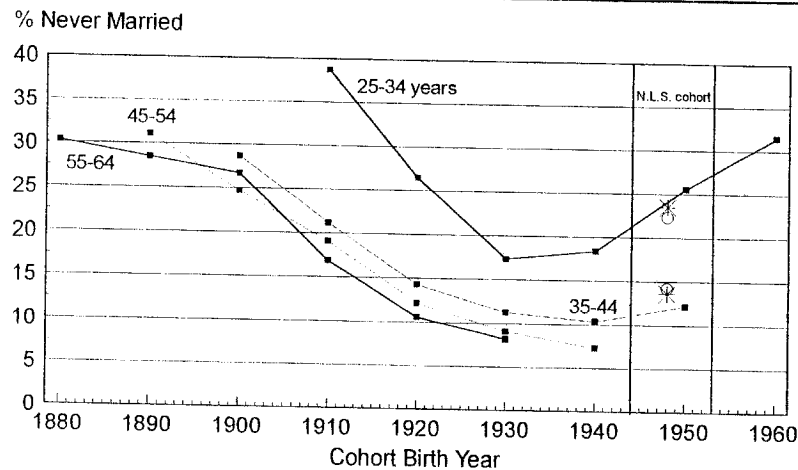
Sources: See table 2.2

Notes: It is not clear why the figure for those aged 55–64 (for the cohort born in 1900) is greater than that for those aged 45–54. The same reversal appears in the data for those having no college. The stars are for the NLS women with ≥ sixteen years of school completed; the circles are for those with a B.A. degree. The census data refer to years of school completed.

Other evidence in support of the claim that self-selection was not the primary factor in the low marriage rate among cohort I can be found in alumnae records. An extensive set of alumnae surveys from Radcliffe College reveals that the percentage never marrying among Radcliffe graduates tracks the national average very closely between 1890 and the 1970s. But the economic and social backgrounds of the Radcliffe graduates remained fairly constant. If anything, because there was an increase in the proportion of Radcliffe students drawn from private, as opposed to public, secondary schools between 1910 and 1960, they may have come from more, rather than less, elite families. Yet their marriage rates increased.[25]

Why, then, did the first cohort of college women marry at low rates and why did the rates begin to increase with subsequent cohorts? An important clue is found in what educated women, in particular educated married women, were allowed to do at the time. Educated women were, by and large, teachers, and, beginning around the end of the nineteenth century, school districts adopted policies restricting the hiring of married women and firing single women who married in service. These "marriage bars" increased slowly to the 1920s and then, with the necessity to ration jobs during the Great Depression, they escalated in the 1930s in teaching, office work, government

jobs, and various other positions (Goldin 1990, 1991). Many of the college women who taught when married were employed by private schools or found public school positions in some of the nation's large cities that had reversed their marriage bars earlier in the century or never had such policies. There was also considerable social opprobrium regarding the employment of married women, even those in white collar jobs before the 1940s.

For many of the college-educated women of cohort I, their era left them little choice. They could marry or they could have a career in teaching, but they could not easily do both. Marriage bars in teaching were largely removed after 1941 when both the exigencies of the war and the, possibly related, spate of state supreme court rulings declared marriage bars to be "capricious and unjust" (see Goldin 1990, 170).

Even though the percentage of college women who never married by ages 45–54 decreased to 19.1 percent by the cohort born around 1910, it was 6.1 percent for those who were not college-educated. Although it plummeted to 7.3 percent by the cohort born around 1940, it decreased to just 3.8 percent for those with no college education. College women were following a trend in nuptiality that was sweeping the nation, a trend apparent in figure 2.7 for noncollege women. The second factor, then, to have increased the marriage rates of college women was the general increase in marriage and family after the Great Depression. College women were enabled to have both family and job and were enticed to do so by a new norm that had, for a time, universal appeal.

COHORT III: FAMILY THEN JOB

By cohort III, college women had joined a bandwagon. All Americans, independent of educational attainment, were marrying at their highest rates in the twentieth century (see figure 2.7). And college women were not only increasing their marriage rates, but they were also increasing their numbers in proportion to the female population. During the twenty-year expanse of this cohort, graduation and attendance rates doubled (see appendix table 2.1). Women followed the lead of men into college, but the increase of men was so rapid that by the end of the 1940s men substantially outnumbered women.[26] In 1925 there were as many female undergraduates as male undergraduates, and for the ten years preceding there had been more women than men undergraduates (see figure 2.8).[27] But by 1950 there were two men for every woman in college. Even after the peak in postwar enrollments, say in 1960, male undergraduates outnumbered female undergraduates by 1.5 to 1. Because the statistics in figure 2.8 are from contemporaneous data, whereas those in figures 2.1 and 2.2 are for birth cohorts, they more accurately reflect the proportions of males and females in college during a particular year.

**Figure 2.7   Percentage Never Married, White Women with No College**
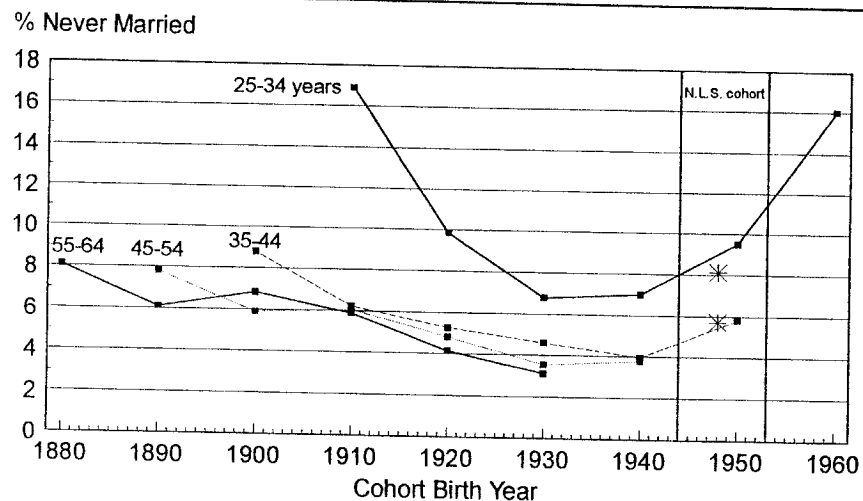
Sources: See table 2.2.

Notes: It is not clear why the figure for those aged 55–64 (for the cohort born in 1900) is greater than that for those aged 45–54. The same reversal appears in the data for those attending college.

Family, not just marriage, took the country by storm in the post–World War II era, and college women were not left out of this trend either. Among the college women who did marry, a far smaller proportion were not having children. About 10 percent, or a third the level for the first cohort, did not have a baby by ages 35–44 in the cohort born between 1926 and 1935. Thus, for the second cohort, 17.5 percent were either not marrying, not having children, or both, compared with 50 percent for the previous cohort.[28] College women had become part of the American mainstream in various ways. College was considerably more open to the masses, college women were marrying at a greater rate, and they were bearing far more children when married. But I emphasize that the timing of these changes is important to the argument and that the change in marriage and fertility rates preceded the increase in college attendance and graduation rates. Further, as noted above, the marriage and fertility increases were quantitatively larger than the increase in the proportion of women who graduated from college. Self-selection, with increasing enrollments, could not be the sole driving force in the changing demography of college women.

After World War II college became more accessible to and desired by Americans from most walks of life. The college enrollment of men soared

Figure 2.8   Ratio of Male to Female Undergraduates
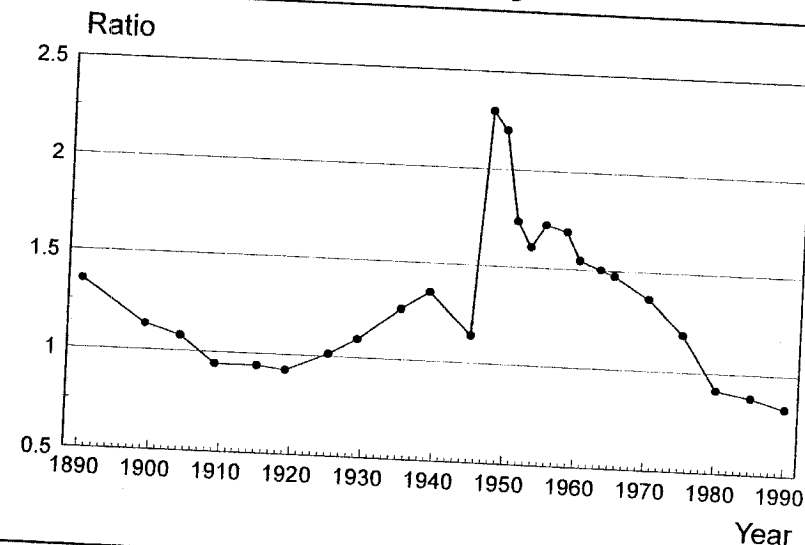
Sources: 1889 to 1953: U.S. Bureau of Education or Office of Education or U.S. Department of Health, Education, and Welfare, Biennial Survey of Education (various years); 1960 to 1965: U.S. Department of Health, Education, and Welfare, OFE (various years); 1970 to 1988: U.S. Department of Education and U.S. Department of Health, Education, and Welfare, Digest of Education Statistics (various years).

Notes: Undergraduate enrollments include colleges, universities, junior colleges or two-year colleges, normal schools, and teachers colleges. They do not include summer sessions. Part-time and full-time students are treated equally, and some of the rise of female attendance in the most recent period is due to the large enrollment of women who attend college on a part-time basis. Enrollment in graduate school and for professional degrees has been subtracted. Various assumptions have been employed and interpolations used in several years. All underlying data are available upon request from the author.

in the 1950s when they outnumbered women about 2 to 1, as can be seen in figure 2.8. With the decline in the marriage age for all Americans, college became, de facto, an active marriage market in which the supply of husbands greatly outstripped the demand. In general, as the age at first marriage declines and that at leaving school increases, the probability of meeting one's spouse in school increases. Among the college graduates in cohort III who eventually married, 57.2 percent did so before or within a year of college graduation.[29] Marrying a college man—and there was a large financial gain from doing so—was made far more likely through the route of college attendance.

Whether the direct pecuniary return to college was greater than some appropriate alternative rate is relevant for all cohorts. Various factors make

the question of particular importance for cohort III. When elites dominated college classes, the "country club" provided the preferred marriage market. But when "ordinary Joe" went to college, the only place for "ordinary Jane" to meet him was at college, and the campus took the place of the country club.

The direct pecuniary returns for the median female graduate probably fell short of the alternative rate of return. But the indirect pecuniary returns through the marriage market could have more than made up for the shortfall and may have been the initial impetus for the subsequent increase in the college attendance of women.

One can easily compute the rate of return to a woman's college education under a number of reasonable assumptions. The median female college graduate in the mid 1950s married in her year of graduation and, if she married, she worked for four years and then exited the labor force for about eight years.[30] She reentered the labor force, therefore, at about age 35. A high school graduate, it will be assumed, also exited from the labor force after four years but remained out for ten years or two years more than the college graduate. The ratio of a college graduate woman's earnings to a high school graduate's was about 1.3 when the college woman entered the labor market and increased to about 1.4 by midlife for both of them.[31] In nominal amounts the college woman, at the moment of her graduation in 1960, earned about $4,000 whereas the high school graduate of 1956 earned about $3,000. The direct expense for each of the four years of college was $837 for public universities and $1,552 for private universities.[32] Both the high school and college graduate women are assumed to work continuously after they reenter the work force until age 60, and their reentry earnings are taken to be those at the time of exit. Under these assumptions, the internal rate of return to the four years of college investment was between 4 and 6 percent.[33] The internal rate of return to college for men at that time exceeded 10 percent, or about double that for women (Freeman 1977). Even though the return to college for men and women—given by the ratio of wages earned by a college graduate to those of a high school graduate—was comparable, the internal rate of return for women was half that for men because of their briefer employment.

But the simple calculation does not consider that college affected a woman's future resources through the man she married, what I will term the "indirect" return to college. In 1960 the probability that a woman aged 30–39 married a college graduate was vastly increased by her having graduated from college. Almost two thirds of all college graduate women (aged 30–39 and married), and more than one third of those who attended college but did not graduate from a four-year school, were married to a college graduate. Only 10 percent of the high school graduate women were married to a college graduate (see Goldin 1992, table 3).

Not only did college-educated women face a much higher probability of marrying a college man, but they also married men with higher incomes within each educational level. Further, among the women who attended college and married college men, those who married during college or immediately following graduation had husbands whose later earnings exceeded those of women who married college men later. The early birds got the bigger worms. On the negative side, however, college women still had a somewhat lower probability of ever getting married, although it was considerably higher than it had been for the previous cohorts.[34]

The indirect computation is quite simple and uses the 1960 PUMS. A standard log earnings equation is estimated for the husbands, to which are added variables concerning wife's education and the timing of their marriage in relation to her education (see Goldin 1992, table 4). The thought experiment involves taking a high school graduate woman in the 1950s, giving her four years of college, and then observing her husband's income in 1960 when she was between ages 30 and 39. The total impact is to increase her husband's income by almost 40 percent.[35] The largest component (66.5 percent of the 40 percent increase) comes from altering the probability that she will marry a more educated man. The likelihood that she will marry a man who attended or graduated from college increases, whereas the likelihood that she will marry at all other levels decreases. This change, then, increases husband's income by 27 percent.

But increasing her education results in another effect. The college graduate woman married the higher-income-earning man at all levels of his education. This factor accounts for 22.5 percent of the total 40 percent, or a 9 percent gain in husband's income for the college graduate woman over that of the high school graduate. Because almost 80 percent of all college graduate women married a man who attended some college, the effect can be thought of as part of the gains from the college marriage market. Another possible interpretation is that women with more education were better able to assist their husbands and thereby directly enhanced their income.[36] Finally, a third effect involves the fact that marrying early, either in college or upon graduation, also increases one's earnings. The "early bird" effect adds the remaining 11 percent of the total 40 percent, or about a 4 percent gain in income for the college graduate woman. Overall, therefore, the thought experiment of giving a high school graduate woman a college education in the 1950s increased her income through the marriage market by 40 percent.[37]

Following the logic of treating the indirect gain as one does the direct gains from education and assuming that a woman marries and does not divorce, the total returns to her education are now greatly augmented and, under reasonable assumptions, double. The total return to college for the second cohort, rather than being in the range of 4 to 6 percent, is now closer to 10 or 11 percent. Thus, the full return to women's college edu-

cation in the 1950s is increased from a value that is somewhat less than the real return to assets to one that is more in line with the returns to college education for men. Families, therefore, should have been willing to send a daughter to college if they viewed her marriage prospects as being enhanced by the experience. Thus, it would not be surprising if many families refused to pay for their daughter's education if they thought she would simply marry the "boy next door."

The majority of women in cohort III, like most in cohort I, prepared to be teachers. The percentage who were teachers in 1960 decreased slightly from that of the previous group, but was still between 50 and 60 percent. And the proportion who taught at some time in their lives must have been considerably greater. The employment rates of married women in cohort III were not much higher than those of the women in the previous cohort when they were young (29.6 percent versus 25.3 percent) and did not greatly exceed those of women who did not attend college (29.6 percent versus 26.7 percent).[38] But their employment rates greatly exceeded those of women who did not attend college when both groups were older. That is, college women who married and had children were now having family and employment serially—first family and then, when their children were teenagers, employment.

To recap, cohort III women had substantially higher marriage and fertility rates than cohort I women, were in the labor force considerably more when older but not much more when younger, and were teachers to almost the same degree. The women of cohort III benefited by the substantial decrease in barriers to their employment. Before the 1940s the vast majority of school districts and many employers of office workers had "marriage bars"—stated policies that married women would not be hired and that single women would be fired upon marriage (see Goldin 1990, 1991). Added to the marriage bars were reinforcing and pervasive norms restricting the ability of married women to work for pay. Of additional importance is that the number of men entering college increased substantially in the 1940s and 1950s. Finally, all Americans were marrying earlier and having more children, and these changes affected the college-educated as well. The three changes were reinforcing. College women no longer had to treat marriage and employment as alternatives in life, and college was no longer just a place to learn for it was, de facto, transformed into a place to meet one's spouse.

But as this cohort aged it became less content with its small victories, and successive generations of college women launched a campaign for more equality and finally for real equality. Cohort III included the women who were awakened and provoked by *The Feminine Mystique* (1963), Betty Friedan's description of the experiences of her own generation who graduated from college in the 1940s. Feminism sprang from this group who knew they were as able as their male friends in college but who encountered a world outside college that was not ready for them.

COHORT IV: CAREER THEN FAMILY

Cohort IV—graduating between 1966 and 1979 and born between 1944 and 1957—was the first to enter the labor force in the era of modern feminism. I characterize it as having desired "career then family" because it has delayed marriage and children while it has pursued career. But in consequence, it has experienced a high rate of childlessness. I will also show that its success rate in the employment arena has not been stellar. In the popular press it is often portrayed as trying to combine career with family, juggling both with little spousal help at home.

The *Current Population Reports*, series P-20, reveals that among those with four years or more of college, 27.4 percent of this cohort have not yet had a first birth by 1990.[39] And among those with more than four years of college, 33.3 percent have not. Although not as extreme as those for cohort I, these figures are higher than are those for any cohort since then, and the proportion of women graduating from college is almost ten times what it was in 1910. The statistics do not look good for the "family and career" route, if family is defined as having had at least one birth.[40] But in comparison with previous cohorts, a far higher proportion of cohort IV has been employed since college graduation. Even though many of them have not yet had a first birth, a substantial proportion could be "having it all."[41]

Longitudinal data are needed to gauge the success of the group at attaining career goals. The National Longitudinal Survey for Young Women (NLS-YW) is precisely the cohort of interest and at last interview, in 1991, it was between ages 37 and 47. The survey began in 1968 with about 5,000 participants, but through attrition has been whittled down to about 2,400 in 1988 when the group was between ages 34 and 44. The sample in 1988 of white women who earned a B.A. degree was 600 and 646 for those with four years or more of college. Yet, amazingly enough giving the small sample and its possible attrition bias, its demographic features are very similar to those in the relevant Current Population Survey (CPS) group.

Figures 2.4 and 2.5, giving the proportion of college women having no births by ages 35–44, contain a demarcated area for the NLS cohort and data points for the NLS cohort in 1988. Among white, NLS ever-married women with four years or more of college and aged 35–44 in 1988, 19 percent had not yet had a first birth (figure 2.4); the figure in the relevant CPS is 18.9 percent. For all marital groups the NLS figure is 29.1 percent (figure 2.5), whereas that in the CPS is 28.2 percent. Similarly, for the data on proportion never married by ages 25–34 and 35–44, figure 2.6 shows the close agreement between the NLS data and that in the 1980 census.[42]

Gauging whether a woman has achieved a "career" is considerably less objective than determining whether she had a first birth. Any measure will be arbitrary. Because careers are generally assessed against a male standard,

I begin by defining a "career" as attaining an earnings path that some group of men has achieved. I use the earnings of women in their late 30s and early 40s, when both family and schooling investments were generally complete. The standard will be the man at the 25th percentile in the male distribution. For women to achieve a "career" will not even require that they reach the median of male hourly earnings in any one year. It should be noted at the outset that the wage standard chosen is virtually identical to one that uses, instead, the median wage of the women themselves. Therefore, the standard could be equally expressed in terms of a female, not a male, norm.

I first define a "career" for the NLS women with four years or more of college to be an earnings path for a series of years (say 1987 and 1988) during which their hourly earnings exceed that of the 25th percentile male (in the relevant CPS) also with four years or more of college. I restrict the NLS sample to women who are represented for all the years under consideration (see also notes to tables 2.4 and 2.5 for other exclusions).

Mean and median hourly earnings for women with four years or more of college are fairly similar in the CPS and NLS for the 1980–1988 period, even though neither sample has been weighted in any comparable manner (see table 2.4).[43] Further, it is interesting to note that the medians for women are in the range of the 25th percentile in the male distribution.

The results on "career" are presented in table 2.5 in two ways: Part A includes only women with positive hourly earnings in each of the years considered, that is, only those in the labor force and not self-employed; part B accounts for women who were not in the labor force in any one or all of the years. Thus, if one wants the percentage of all college graduate women who attained "career," the numbers in part B should be used; if one wants the same for women who were in the labor force, part A should be used. Given the definition of a "career," 43 percent of all (white) women with four years or more of college *employed in both 1987 and 1988* are above the mark. Self-employed women are excluded from both the numerator and denominator but are included below in another measure of "career."[44] The comparable figure is 35 percent for women who had at least one child and 56 percent for those who did not. Restricting the definition to attaining the same cut-off for 1985, 1987, and 1988 gives 30 percent for women with children and 47 percent for those without. Note that the percentages just given are for women who were employed in each of the years considered.

But some of the women in this cohort were not in the labor force in one or all of the years considered. Part B of table 2.5 adjusts for the labor force participation rate (for those not self-employed). Using the two-year definition gives 24 percent for women with children and 54 percent for those without. Employing the three-year definition gives 18 percent for women with children and 45 percent for those without.[45] Similar estimates are obtained by using income, rather than hourly earnings, and the income measure enables the inclusion of the self-employed as well as others whose hourly earnings are omitted.

Table 2.4   Hourly Earnings in the Current Population Survey and the National Longitudinal Survey of Young Women

Year	Males in CPS			Females in CPS			Females in NLS		
	Median	25th	N	Median	Mean	N	Median	Mean	N
1980	8.750	6.500	8,977						
1982	10.83	7.778	7,887	6.528	7.245	5,793	6.440	6.763	355
1983	11.43	8.262	7,753	8.108	8.896	5,179	7.690	8.443	342
1985	13.25	10.00	7,781	8.750	9.562	5,170	8.560	9.185	345
1987	15.00	10.91	7,577	10.00	10.98	5,360	9.665	10.36	350
1988	15.63	11.25	7,175	11.00	12.10	5,501	11.06	11.99	345
1991	18.25	13.20	7,155	11.25	12.68	5,212	12.16	12.73	340
				13.50	14.82	5,717	15.38	15.90	349

Sources: Current Population Survey, Outgoing Rotation Group, NBER-CPS extracts; NLS-YW.

Notes: For CPS: Ages 14–24 in 1968; college graduate = sixteen years attended and completed last year; top-coded values are assigned 1.4 × top amount; hourly earnings is (weekly earnings)/(usual hours worked per week); observation is excluded if hourly earnings < one half relevant minimum wage; race = white. No top code issues are addressed for 1991.

For NLS: Same restrictions on education, race, age, use of one half minimum wage on an hourly basis for exclusion. Data are given for observations containing a nonmissing value for (computed) job experience in 1985. Hourly earnings in NLS is hourly rate of pay in current or last job derived by the NLS from "rate of pay" and "time unit rate of pay" variables. Various extreme outliers are coded as missing values (but are recorded as their actual values in the computation of the career variables in table 2.5). The NLS changed its procedure in 1991, which increased the "rate of pay" by factoring in separate time period information collected from teachers. In both the CPS and NLS earnings from self-employment are excluded.

The percentage of these women who attained family *and* career can be seen in table 2.6 for four definitions of career: the two-year and three-year measures for both the hourly wage and annual income data.[46] The conclusions are not substantially affected by the choice of earnings variable and I will make reference only to the hourly earnings results. Using the three-year definition, only 13 percent of the group attained both "family and career." Another 13 percent had career but no family, and 74 percent did not attain career of whom 78 percent had family. Using the two-year definition, 17 percent attained both "family and career," and another 16 percent had career but no family. For every woman who attained family and career there was another woman who attained career but had no family, using any of the definitions.[47]

The definitions of career just employed may be subject to the criticism that they adopt a male income standard. But, as I noted before, the results are identical if I chose, instead, the standard of the median wage or earnings of all college graduate women in the cohort. If career is meant to proxy success as judged by the individual, a personal standard would be

Table 2.5   Career Attainment Among College Graduate Women: National Longitudinal Survey of Young Women

	Total	Women With Children	Women Without Children
A: Percentage attaining career for white women with ≥ sixteen years school, only for those in labor force 1985, 1987, 1988			
Career: 1987, 1988	43	35	56
Career: 1985, 1987, 1988	37	30	47
B: Percentage attaining career for white women with ≥ sixteen years school, for those in *and* out of labor force			
Career: 1987, 1988	33	24	54
Career: 1985, 1987, 1988	26	18	45

Source: NLS-YW.

Notes: Career is defined as having hourly earnings exceeding that of the 25th percentile male (white, ≥ sixteen years schooling) in the CPS of the relevant year (see table 2.4). NLS women are included if they are in the sample for all of the years considered (for example, 1987 and 1988) and have earnings data that are not missing. The self-employed are excluded from both numerator and denominator, as are those who refused to answer questions on their earnings. Children born to women until the end of the survey (1991, although there are only seventeen first births after 1985) are included. The figures that are unconditional on labor force participation give a zero value to career for women who are out of the labor force in any of the years considered. Women whose hourly earnings are below one half the minimum wage are considered to be out of the labor force. Had they been included in the labor force, the career percentages conditional on labor force participation would be somewhat lower and closer to those unconditional on labor force participation.

more appropriate. But the intent is not to discern whether women found contentment in their paid work. Rather, it is to assess whether those observing them judge that they attained careers. Another potential criticism is that life continues after age 40 and careers for many begin in midlife. Once again, the issue here is whether cohort IV has achieved "family and career" by midlife, an oft-stated goal of many in cohorts IV and V.

Other definitions can be devised that do not use an income standard. Consider, for example, a definition of career based on employment and full-time commitment, with no income or hourly wage cutoff. More concretely, consider a woman to have a career if she is in the labor force for each of three years (1985, 1987, and 1988) during which time she is generally a full-time worker (as an employee or self-employed).[48] Among those in the sample who had at least one child, 31 percent had careers using this definition, and among those who did not have a child 67 percent had careers. But only 22 percent of the total group had "family and

Table 2.6   Family and Career for Cohort IV: Four Definitions of Career

	Family	
Career	Children	No Children
Using hourly wage measure: 1985, 1987, 1988 (N = 482)		
No	57.7%	16.2%
Yes	13.1	13.1
Using hourly wage measure: 1987, 1988 (N = 511)		
No	53.6%	13.5%
Yes	17.0	15.9
Using income measure: 1985, 1987, 1988 (N = 585)		
No	60.7%	15.6%
Yes	12.1	11.6
Using income measure: 1987, 1988 (N = 611)		
No	54.7%	12.3%
Yes	17.3	15.7

Source: NLS-YW.

Notes: See tables 2.4 and 2.5. The definition of career using income is similar to that using the hourly wage. The cutoff point uses the data for men in table 2.4 multiplied by 2,000 hours. Women in the NLS who were self-employed and others with missing hours information are included in the earnings data. Earnings is the aggregate of wage and salary, and business, professional, and farm income.

career" using this definition. The percentage is higher than that obtained using the income or hourly wage cutoff, but it still implies that one college graduate woman in 4.5 attained "family and career" by age 40.

Defining career as (usually) full-time, although not necessarily year-round, employment during each of three years, is not what is generally meant by career. More than 40 percent of the women deemed to have a career using this definition did not, in 1985, attain the income level of a college graduate man at the 25th percentile of the male distribution; just 53 percent of these "career" women attained the income level of the college graduate man at the 25th percentile of the male distribution in both 1985 and 1987.[49] Why the figure for "family and career" is low even when lenient

criteria are used can be understood by a decomposition. First is the fact that 28 percent of the women in the group did not have children, implying that the percentage with "family and career" cannot exceed 72 percent using any standard for career. Further, among those who had children, 46 percent were in the labor force for all three years (1985, 1987, and 1988). The full-time commitment criterion brings the final figure down to 22 percent.

One may wonder what percentage of men would pass the "career" standard imposed here. The NLS for Young Men was terminated in 1983 owing to attrition but a substitute can be found in the Panel Study of Income Dynamics (see Moffitt and Gottschalk 1993).[50] The probability that a man above the 20th percentile remained in that position for another year was 92 percent, the probability that he would stay for two years was 85 percent, and for four years was 78 percent. If the same probabilities held for the man above the 25th percentile (and held for college men to the same degree as for all men), 64 percent of men would have been above the mark using the two-year definition, whereas 43 percent of all college women were in the NLS.

The most generous interpretation of the data is that between one fifth and one quarter of all college graduate women with children attained career as they neared midlife. And about one half of the women without children have achieved career. But because almost 30 percent of the cohort has not yet had its first birth, between 17 percent (0.712 × 24 percent) and 13 percent (0.712 × 18 percent) of the cohort have realized the goal of "family and career."

It is difficult to say what factors encouraged and enabled the women in this cohort to attain "family and career." Slightly more of the career women than the noncareer women expressed a desire when they were 15 to 25 years old for paid employment when 35 years old (60.3 percent versus 56.7 percent in 1969). But most of the difference comes from the group who never had children among those attaining career (63.5 percent versus 57.1 percent).[51] That is, those eventually attaining career and no family were more apt to have expressed an early desire for paid employment.

Divorce was considerably more common among the ever-married women who attained career than among those who did not (37.5 percent versus 23.0 percent using hourly earnings; 43.9 percent versus 22.5 percent using income). And conditioning on having children does not change the difference much (33.3 percent versus 16.9 percent using hourly earnings; 37.1 percent versus 18.1 percent using income). It was career, not children, that somehow affected divorce, or vice versa. College graduate women with both family and career had a divorce rate 20 to 30 percent higher than average for the entire group of college women.[52] Not only was divorce more common, but marriage was less frequent among college women who would eventually attain career. Among those who achieved career, 76 percent married by 1988, whereas among those who did not attain career 87 percent married.[53] Thus, in 1985 only 53 percent of the career group was currently married, whereas 79 percent of the non-career group was. I would like to emphasize, however, that the determi-

nation of "family and career" does not require that the college woman was currently married nor that she ever married.

Women with careers, not surprisingly, had more years of education than average college women (64 percent of those with careers had more than sixteen years versus 39 percent of those without careers). But there is no clear separation between those who attained their career with children and without (59 percent of those with children had more than sixteen years of schooling whereas 68 percent of those without children did). The NLS, despite its richness, does not hold the answer to the question in the minds of many college women today: What is the key to "family and career"? There are no obvious early differences and those that develop later in life, for example, with regard to the timing of marriage and children, may be correlated with unobservable differences across individuals.

When today's young college women observe the experiences of cohort IV, it is clear why they express considerable frustration. Only 17 percent of the college graduate women in that cohort have achieved *both* "family and career" using the two-year definition and just 13 percent have using the three-year definition.[54] Looking on the bright side, however, one might consider these numbers to be nontrivial proportions of the cohort. And not only are they nontrivial, but they are probably much higher than achieved by cohort III. That is, cohort IV is probably the first in U.S. history to contain even a small group who managed to reach midlife with both family and career. But the proportion is sufficiently small that young women today have judged cohort IV to have failed at "having it all."

But are college women today judging the success or failure of cohort IV by their own standards, not those of cohort IV? The NLS surveyed its participants concerning the desire for future births. Beginning in 1978 the question was asked of all women, rather than just those who were ever married. Among those who remained in the sample to 1991 and who did not have a first birth by 1991, 48.4 percent had desired one in 1978. For those in the group who were aged 24–29 in 1978, 62.9 percent did. If the older group had been similarly inclined when they were aged 24–29, a considerable proportion (19 percent = 63 percent × 30 percent, where 30 percent = percentage with no births by 1991) of the entire cohort was disappointed with the "family" outcome. That is, a greater percentage of the group (19 percent) was disappointed with not having children than eventually achieved the "family and career" outcome (between 13 and 17 percent).

SUMMARY AND CONCLUSIONS

The demographic and labor force experiences of college women changed considerably across the past century. In the first cohort of college women studied (graduating c. 1910), 50 percent either never married or never had a first birth. But by the third cohort (graduating c. 1955), college graduate women were marrying and having children at rates that were high both by

absolute standards and relative to other women their age. Cohort IV (graduating c. 1972) is the most recent to have nearly completed its fertility history and rates of childlessness appear to have climbed once again, although they are far lower than for cohort I. Yet among women in this cohort who attained "career" status, using my definitions, nearly 50 percent were childless by ages 37–47. "Career" still entails large costs.

I have emphasized altered social constraints surrounding women's paid employment as generating many of the changes across the cohorts. There is at least one important complication. College women themselves fought for many of these changes. Around the turn of the century a small proportion of men and women attended and graduated from college. Attendance for men climbed considerably just after World War II when college men outnumbered women by about 2 to 1. Some time during the 1940s women realized that they could have family and job—albeit serially timed—and that college could enable and enhance both. Although the direct returns to college for women probably did not justify their increased enrollments, the heightened indirect returns through the marriage market did. Thus, some portion of the increase in college attendance and graduation rates of the women in cohort III was due to the simple fact that they followed men into college. By today's standards, that is not a kind characterization. But, paradoxically, profound social change was set in motion by cohort III, women who probably entered college with the least motivation for academically serious studies and whose "Mrs." degrees were worth nearly half of the total returns from their B.A.s.[55]

Cohort IV was the recipient of cohort III's legacy: considerably loosened constraints in educational and labor market choices. But, as these women reach midlife perhaps one sixth have thus far achieved "family and career." Is it no wonder that the women of cohort V are nervous about reaching that elusive goal?

ACKNOWLEDGMENTS

APPENDIX

Appendix Table 2.1   College Attendance and Graduation Rates by Sex, for Cohorts Born 1875–1955

| Birth Year | White Males | | White Females | | | | |
	Attended College (1)	Graduated from College (2)	Attended College (3)	Graduated from College (4)	(3)/(1)	(4)/(2)	(2)/(1)– (4)/(3)
1875	6.4%	3.4%	5.5%	2.0%	.86	.59	16.8
1880.5	7.9	4.2	7.2	2.7	.91	.64	15.7
1887.5	9.6	4.6	8.7	3.3	.91	.72	10.0
1890.5	9.5	5.0	8.9	3.4	.94	.68	14.4
1897.5	11.4	5.8	11.8	4.3	.97	.74	14.4
1902.5	15.8	9.2	15.4	6.2	.97	.67	18.0
1904.5	17.4	10.5	15.8	7.2	.91	.69	14.8
1906.5	17.1	9.7	16.8	7.8	.98	.80	10.3
1908.5	18.2	9.8	17.0	7.9	.93	.78	7.4
1912.5	19.7	9.9	17.4	7.3	.88	.74	8.3
1914.5	20.7	11.0	17.5	7.7	.85	.70	9.1
1916.5	20.0	11.0	16.6	7.3	.83	.66	11.0
1918.5	23.3	12.6	16.8	7.1	.72	.56	11.8
1920.5	25.4	13.9	17.4	7.6	.69	.55	11.0
1924.5	29.1	17.0	19.4	8.6	.67	.51	14.1
1927	31.9	19.2	22.9	10.6	.72	.55	13.9
1930	33.1	20.1	23.6	11.2	.71	.56	13.3
1933	37.9	24.2	28.3	14.0	.75	.58	14.4
1935	38.4	24.2	28.6	12.9	.74	.53	17.9
1938	39.7	24.1	30.3	15.0	.76	.62	11.2
1940	43.8	26.6	34.4	16.4	.79	.62	13.0
1943	47.9	29.6	37.5	18.4	.78	.62	12.7
1945	50.7	31.6	41.4	22.3	.82	.71	8.5
1948[a]	59.2	36.9	55.0	30.7	.93	.83	6.5
1950[a]	59.7	34.4	55.7	28.8	.93	.84	5.9
1954[a]	52.5	29.7	53.3	28.1	1.02	.95	3.9
1955[a]	50.3	30.4	54.0	28.6	1.07	.94	7.5

Sources: U.S. Bureau of the Census, series P-20, "Educational Attainment in the United States" (various years).

Notes: In virtually all cases only the responses of individuals aged 45–54 or 55–64 were used. For cohorts born since 1945 projections were made to 1995 or 1997 on the basis of changes for the preceding cohort that was aged 35–39 (30–34) in 1977 and 45–49 (40–44) in 1987.
[a] Projections to 1995 or 1997 based on the experiences of the previous cohorts.

NOTES

1. The ratio of men to women in professional schools was 23.4 in 1960 but 1.66 in 1988. The ratio in graduate schools was 2.48 in 1960 but 0.90 in 1988 (U.S. Department of Education, Digest 1988; U.S. Department of H.E.W., O.F.E. 1960).

2. The 50 percent figure is for the cohort born c. 1890: 31.1 percent (= percent never married) + [27.6 percent (= percent having no children by ages 35–44) × 68.9 percent (= percent ever married)].

3. When I refer to selection bias I mean that regarding marriage and family only. The issue is whether the college women in cohort I married and had children at lower rates because they were initially a self-selected group. Under that assumption, college enabled them to fulfill their desires. Alternatively, college could have had a true treatment effect. In this case, if a random group of bright women were allowed to go to college, they would alter their marriage and family goals because they would be given a chance to have a career, under the constraints of the day that family and career were incompatible.

4. The figure is 28.8 percent for no first births by 1991 for white women with ≥ sixteen years of education (28.6 percent for white women with B.A. degrees) conditional on being in the sample in 1991.

5. This conclusion is based, admittedly, on a small sample—those in my Economics 1356 class, other undergraduates with whom I have spoken, and the impressions of friends who teach generation X.

6. It should be noted at the outset that in all of the empirical work that follows only white men and women are considered because of the considerably smaller number of nonwhites who attended college in the past. A similar study of African American college women could be done using alumnae records of all-black universities and colleges, but I have not yet done it.

7. The percentage attending college may be exaggerated for the older cohorts, although differences by sex could be accurate. I suspect the figures are exaggerated because the data for high school graduates are overstated in the 1940 census (see Goldin 1994).

8. Both the graduation rates and the attendance rates are as of ages 45–54 or 55–64. See figures 2.1 and 2.2 for sources and notes.

9. In 1962, for example, two-year colleges accounted for 14 percent of all college enrollees for both males and females. Yet the ratio of graduation rates to attendance rates was 61 percent for males but 48 percent for females in the birth cohort of 1940 (see appendix table 2.1). Thus, the differences in graduation rates between males and females must be accounted for by differential graduation from four-year colleges. The same is probably not the case for earlier cohorts. Graduation rates were much lower for women in the cohorts born before 1905, thus graduating before about 1927. A large proportion of the women in these cohorts who attended college were in teachers colleges and normal

schools, but it is difficult to separate data for the two-year normal schools from those for the four-year teachers colleges in those years. Normal schools are of little importance after the 1940s.

10. "Full time" here, means without interruption (nonintermittently) and full time, in the usual manner (meaning at least 35 to 40 hours a week).

11. Career earnings are akin to a large bonus at the end of the second and, possibly, third years.

12. The model can be expanded to account for why the women in cohort III went to college even when the increase in their earnings did not result in a sufficiently high rate of return. If college gained them entry to a lucrative "marriage market," as I claim below, their budget constraint will be shifted upwards.

13. By (e, f, e) is meant that the first period is spent in the labor force full time, the second at home with family full time, and the third and final period in the labor force full time. The allocation produces an interior point because the gains from job experience accrue only when experience is continuous.

14. The budget constraint may not be invariant when, as in this framework, there is a return to experience for a portion of the last period or a portion of the first. The invariant portion will involve a "timing error," similar to the excluded combination (e, f, e). That is, a woman can work two consecutive periods and have a child in either the first or the last period. The minimum time required for a child is $T \times k$, leaving $T \times (1 - k)$ for paid employment. If the $T \times (1 - k)$ portion is taken at the start of the first period, it earns at only w^e, and the budget constraint will not include the portion with slope $w^e(1 + r)$.

15. The reason is simply an assumption of the framework that a child requires $k \times T$ time and that anything less will not produce a family.

16. This is because $(1.06)^7 = 0.50$.

17. The maximum income for this cohort might be thought of as Y', which is full-time work for three periods but no career.

18. The problem might be that if point IV is attempted through the (e, e, f) route, marriage and children are put off too long, and biological clocks determine outcomes. One would have to add stochastic terms into a more elaborate model. Alternatively, when point IV is attempted through the (f, e, e) route, children often consume the time demands of career.

19. See Cookingham (1984) for references.

20. I focus on college graduates to get around the problem that college attendance includes those at two-year colleges and normal schools. I have assumed that women graduated from college at age 22, but that is generally a minimum, and the age for the earlier cohorts was probably much higher.

21. The age group is determined by the demands of the most recent data.

22. These figures are for women aged 45–54. It should be emphasized that even women in this cohort who did not attend college also had a rather low rate of ever marrying.

I use the language of choice (for example, opt) even though I contend that many cohorts of college women were extremely constrained in their choice set. Many faced a stark choice of having family *or* having a career. The language of choice may be imperfect for all women. The reader should take the use of words, such as choice and opt, as a shorthand to mean that choices are subject to various constraints. In addition, it is always the case that some women, college and noncollege, may not have made intentional and volitional choices.

23. U.S. Bureau of the Census (1953, 1966, 1972) and the 1940 PUMS.

24. I do not yet know what accounts for the sharp increase in college graduation rates, and to a lesser extent college attendance rates, with cohorts born around 1897. It is possible that the World War I military draft accounts for the rise.

25. These findings come from a project using two extraordinary surveys of Radcliffe graduates: the Centennial Survey (covering graduating cohorts from 1910 to 1975) and that taken during the semicentennial in 1928 (covering graduating cohorts from around 1890). I will be using these surveys in future research on college women. The percentage graduating from public secondary schools was 67 percent for the 1910–1919 graduating cohort but 49.4 percent for the 1950–1959 graduating cohort. See Solomon (1985) for a discussion of the semicentennial survey; the data are held by the Henry Murray Research Center of Radcliffe College.

26. It should be noted that World War II also affected women's presence in the academy because they were allowed to enroll in far greater numbers during the shortage of male students. Many universities, such as Harvard, changed their rules during World War II, allowing women to take classes previously reserved for men only.

27. Attendance at both junior colleges and normal schools could inflate the statistics for women more than for men. Both were intended for less than a four-year period. As a percentage of total undergraduate enrollment by sex, junior (or two-year) colleges have been attended by men to the same degree as women. That was not the case for normal schools, a teacher-training program that did not culminate in a degree. Women, to a far greater extent than men, attended normal schools and state teachers colleges, although the latter were four-year institutions. The education statistics for the pre-1940s, however, do not conveniently separate individuals who attended normal schools from those who attended state teachers colleges. Data for 1929 to 1930 indicate that among all female undergraduates in state teachers colleges and normal schools only 20 percent were in normal schools. The same data also indicate that about 30 percent of all female undergraduates who began in teachers colleges finished the four-year program and graduated (U.S. Bureau of Education Biennial Survey 1928–1930).

28. Only 8.2 percent of the cohort born between 1926 and 1935 never married by ages 55–64. The 17.5 percent figure is: 8.2 percent (= percent

never married) + [91.8 percent × 10.1 percent (= percent with no children among those ever married, by ages 35–44)].

29. See Goldin (1992), table 2. The figure is computed from the 1960 PUMS by defining "marriage before or in year of school completion" as: (years of school attended + 6) ≥ age at first marriage.

30. In a sample of about 700 female graduates of the class of 1957, 42 percent married before or within eight months of graduation (see Goldin 1992). Of those who were married by 1964, or seven years after graduation, the median woman worked until 1961, or for four years after graduation. In 1964 the median graduate had one 3-year-old and an infant (or was probably expecting one). Among those without children, more than 80 percent were in the labor force. The addition of a child under age 3 reduced participation to 26 percent and a 3-to-5-year-old reduced it to 35 percent. There were too few women with children ages 6 and over to observe when women, in this sample, began to reenter the labor market. I assume here that most reentered when their children began first grade. Thus, they exited after four years and remained out for eight years, or long enough for the younger of the two to be 5 or 6 years old. My sense is that, for various reasons, this is an underestimate of the median time spent out and will, therefore, result in an overstatement of the rate of return.

31. The annual starting income for college graduates in the class of 1957 was about $3,800 (1957 dollar), close to the figure from the 1960 PUMS for college graduate women, assuming an annual increase, in nominal terms, of about 2.5 percent. The ratio of a college graduate's annual income to a high school graduate's was 1.3, in the 1960 PUMS, for those aged 25–29, but 1.4 for those aged 44–49.

32. Figures are for tuition, room, and (seven-day) board (U.S. Department of Health, Education, and Welfare 1960).

33. The calculation solves for r in the standard equation:

$$\Sigma C_t / (1+r)^t + \Sigma Y_t^c (1+r)^t = \Sigma Y_t^{hs} / (1+r)^t,$$

where C = direct costs of college, Y^c = income of a college-educated woman, Y^{hs} = income of a high school–educated woman. A woman is assumed to graduate from high school at age 18, work until she exits from the labor force at age 22 (presumably to raise a family), reenter the labor force at age 32, and retire at age 60. If she, instead, graduates from college, she works from 22 to 26, exits at 26, reenters at 34, and retires at 60. Wages for both high school and college graduate women rise with job experience so that the ratio begins at 1.3 but rises to 1.4 by midlife.

34. For women aged 30–39 in 1960, 6 percent of those who graduated from high school but did not attend college had never married. Of those who attended college, but did not complete four years, 7.1 percent had not married. Of those who graduated from college, 15.1 percent were still in the never-married group in 1960, although by the 1980s only 8 percent of this group had never married.

35. The total change in (the log of) income from is 0.334 and exp(0.334) = 1.3965, or about 40 percent. The 0.334 figure is almost identical to the difference in the coefficients on wife's education (college minus high school graduate = 0.324) in a regression on her husband's income, not including any other covariates.

36. Because the factor "married in college" is not of importance for the group aged 50–59 (see Goldin 1992), the marriage market hypothesis seems more compelling.

   Benham (1974) estimates a similar equation, using the 1960 PUMS, but with a different purpose. He interprets the positive coefficient on women's education in the male earnings equation as indicating the greater productivity of more educated women in the home and their impact on their husband's earnings. To distinguish between the marriage market and productivity hypotheses, Benham includes the wife's age at marriage in the husband's earnings equation, together with their respective levels of education. Women who marry later given their level of education have a higher probability of having finished their education after marriage. Under the selectivity hypothesis husband's earnings should be unaffected by postmarriage education, whereas it might be affected under the productivity hypothesis. Benham finds a negative coefficient on the age at marriage and interprets it as not supporting the selectivity hypothesis. But women who marry later, given their level of education, were less likely to have taken advantage of the marriage market in college or high school. That is, Benham's variable is picking up part of the "early bird" effect.

   More important, my way of separating the productivity hypothesis from that concerning the marriage market is to note that the productivity hypothesis can take effect only within educational groups. The largest single effect on a woman's income from going to college was from marrying a college-educated man. That effect cannot be due to her enhancing his productivity but must, instead, be sought in a marriage market model.

37. How one treats this income depends on various assumptions concerning whether husbands and wives share all income equally, how long a woman remains married, and whether, should she divorce, she receives alimony in proportion to her husband's income.

38. The 25.3 percent figure is for those graduating around 1928 to 1937, whereas the 29.6 percent figure is for those graduating around 1948 to 1957.

39. The figure for those with a B.A. degree is 26.9 percent in 1992, although the educational categories change from 1990 to 1992. There is a decrease in those without a first birth moving from the measure ≥ four years of college to having a B.A. degree that can be duplicated, to some extent, in the NLS data.

40. I also include, below, adopted children and stepchildren (see endnote 47).

41. I am adopting the language of the women in cohort IV and the popular press in defining "having it all" as children and career. Many women find happiness without children and some, with children, would also

want to include having a loving husband. I am not denying the diversity of opinion on what constitutes personal happiness. I am, however, using the most common and least restrictive definition of family by those in cohort IV and others who describe its aspirations.

42. I use ≥ sixteen years of schooling, as the definition of college graduate, when making comparisons with the CPS but a B.A. degree when not. When the *Current Population Reports* series P-20 refers to 35-to-44-year-olds, I drop the youngest age in the NLS for comparison. Consistency is attempted with any data set in making comparisons with the NLS.

43. The NLS calculated hourly earnings differently in 1991 than before (see table 2.4). For that reason, I do not use 1991 in the calculation of "career."

44. The self-employed are also excluded from the hourly earnings figures in the CPS.

45. Note that the three-year definition really spans four years because of the absence of data for 1986.

46. The income measure is almost exactly the same as the hourly wage measure. It uses the hourly wage of the male at the 25th percentile multiplied by 2,000 hours. The group of women included expands, in part, because it includes the self-employed.

47. In the definition of family, only "own" births have been included. Including adopted children increases the "family and career" group minimally to between 13.3 and 17.4 percent of the total (using the hourly earnings measure); adding stepchildren plus adopted children increases the group to between 14.7 and 19.6 percent.

48. The criteria are applied to white women, with highest grade completed equal to sixteen years or more. The women must have been in the labor force in 1985, 1987, and 1988 (using the CPS definition of labor force participation), and their usual hours worked weekly in the preceding year must have exceeded 39. Because hours and labor force participation apply to different years, there are some cases of missing values for usual hours worked for women considered in the labor force. These cases have been coded as "career" as long as usual hours in other years exceeds 39 a week or is missing. This decision rule results in an upper bound estimate of the percentage with "career."

49. See the note to table 2.6 for the procedure used to obtain the income at the 25th percentile of the male distribution.

50. The Moffitt and Gottschalk (1993) data are not given by educational group. I am using the transition matrix for the entire sample. In addition, they give quintiles not quartiles.

51. These data use the three-year, hourly-earnings definition of career. See table 2.5.

52. I have conditioned the entire group on remaining in the sample in 1987. A range is given for the hourly and annual income measures using the three-year definition.

53. The data throughout this section use the three-year hourly wage measure of career described above and given in tables 2.5 and 2.6.

54. The 13 and 17 percent figures are derived from the underlying data, but could also be obtained by multiplying the percentage of women attaining careers who had a first birth by the percentage having a first birth.

55. By academically serious studies I am relying on the distribution of college majors and the fact that cohort III included the greatest percentage of education majors of any of the cohorts. One could, of course, make similar claims about the recent generation of college men and women who are majoring in business and commerce. I am also basing the statement on the comments on contemporary college guidance counselors who noted the problems of keeping young women in college when the pull of marriage and family was so strong.

Commentary on Chapter 2

Ileen A. DeVault

In "Career and Family," as she has done many times before, Claudia Goldin provides us with firm economic evidence that allows us to expand on arguments that social historians have made. Historians of women's education have long suspected and discussed the patterns pointed out here by Goldin. In particular, I thought of Margaret Rossiter's work (1982) on the history of women scientists since the late nineteenth century. Rossiter found that the never-married women of Goldin's cohort I created careers for themselves despite institutional hostility, while the married women scientists of the mid-twentieth century (especially Goldin's cohort III) failed to gain full careers or to be taken seriously.

Goldin makes a convincing and interesting argument about the "treatment effect" of college education for women. She also weaves the historiography of women's education very effectively into her discussion of women's changing life plans. On the other hand, it seems to me that we have to talk not only about changes in women's life plans and goals, but also about changes (or lack of changes!) in men—and men's life plans. This might help explain the unusually high divorce rate Goldin finds for her cohort IV: In Goldin's analysis, "family" is represented by children, but the high divorce rate reminds us that "family"—and family-related tasks—includes husbands as well. Historians, sociologists, and economists have found, for example, that there has been much less change over the past twenty to thirty years in men's participation in housework than in women's. Historians and sociologists have also argued in recent years that the very definition of "family" has changed over time. To give just one example relevant to Goldin's argument, recent research suggests that cohort I women such as the founder of Cornell's School of Home Economics, Martha Van Rensselaer, and her life partner, Flora Rose, may have formed a type of alternative family. Certainly their relationship helped to sustain their long and productive careers (see Babbitt 1995). It is hard to know how to analyze these shifting forms and definitions of alternative "families"—especially in economics. After all, standard data sources such as the U.S. Census do not acknowledge such alternatives. But perhaps cohort V needs to know that "family" can be whoever you love; happiness does not have to equal a husband and 2.6 (or 1.8) children.