

**Women as Labor Force Participants:
Effects of Family and Organizational Structure**

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It's a great pleasure to be here today and to be able to have the opportunity to summarize a very large and provocative area of research, hopefully without giving up so much in the summarizing process that you can't see the point of it. This has been my area of study and practice for some twenty years now, and I still get excited about it—even as it is also overwhelming, both because so many studies come out on women's labor market participation and outcomes, and because so much is still left to understand.

In my talk today I want to outline a few facts I'm pretty sure about, pose some questions about what is happening now, and develop a framework that both guides part of my own work as well as indicates what I think needs to be done: done both in terms of studying by researchers in this area and in terms of making concrete changes that can affect women and men who are currently in their careers and/or about to begin their careers; changes that can make a difference in an individual's careers, and therefore cumulatively can make a difference that will show up in the statistics that we track concerning women's overall progress towards becoming equal participants with men in the labor force.

Labor force participation: The macro level

I always like to start out when I talk about trends in labor force participation by showing a couple of graphs that illustrate just how large the change has been in women's participation over the past half-century. You already heard this morning in the course of Claudia Goldin's talk about the remarkable changes that have happened over an even longer timespan. But let's just focus for the moment on the post-World War II era, which coincides pretty well with when yearly data became collected on many of the trends that I like to track. I'm also focussing today

on the U.S. experience; the general pattern of increased female labor force participation holds true for most other countries as well, although other details vary regarding relative unemployment rates and gender pay ratio patterns.

Figure 1 (labor force participation) shows the remarkable rise in female labor force participation, as well as the also-notable decline in male labor force participation, leading to a striking lessening of the gap between these two rates (73.5% and 59.5% for men and women respectively in 2002, for only a 14-point difference, as compared to a differences of 86.6-32.7=53.9, or almost 54 percentage points in 1948). The percentage female in the labor force has leveled out in the mid-40s, standing in 2002 at 46.6 percent female, quite a rise from 28.6 percent female in 1948. It is also notable that the trends appear to have leveled off starting in the mid-1990s.

Indeed, while it doesn't appear that women and men are completely converging in terms of labor force participation, their worklives are starting to look more and more similar. Figure 2 (unemployment) shows the notable convergence in male and female unemployment rates that again occurs in the mid 1990s, as well as the very recent phenomenon whereby the female unemployment rate is below the male unemployment rate (which also happened during the early 1990s). Again, the point is that women's and men's work patterns have become increasingly similar.

Marriage and children, which never had much effect on men's work patterns, now have less effect on women too. Table 1 (women's participation rates by marital and parental status) displays the convergence in participation rates across groups of women differentiated by marital status and age of youngest child. While all these groups show a rise in participation over this period, the most remarkable rise occurs among women with children under the age of six: in

1960 fewer than one in five of these women worked; now it is over sixty percent—almost identical to the overall participation rate for married women. For women with school-age children, over three-quarters of them work for pay.

But even as we see these large equalizations occurring, differences in work participation persist—and outcomes are still different for women and men in terms of the relative rewards received from participation in paid work. Figure 3 (gender income ratios) illustrates perhaps the best-known difference, the relative pay (wage and salary income) ratio. Even standardizing for year-round full-time work (given that women have a higher rate of part-time work; although even among full-time workers women are less likely to work long hours), women receive about three-quarters the pay of men. Here the gender pay ratio shows its sharpest and steadiest climb during the 1980s up through the mid-1990s, subsequently leveling off in the later 1990s, although during the recent recessionary period women's earnings have again rose relative to men's (reaching a recent all-time high of 76 cents on the dollar in 2001). As in earlier recessionary periods, this relative rise occurs more because men's earnings are stagnant or falling than because women's earnings are rising relatively faster than men's.

Figure 3 also shows the growth pattern for earnings among the most equal ten-year age group among the prime-age worker years (25 to 54), the 25 to 34 year olds. Here the gender earnings ratio climbs from a low in 1966 of 60 cents on the dollar (when my mother was 31 and not working) to a high in 2001 and 2002 of 86 cents on the dollar. Both the overall rise in relative earnings and the rise for this cohort are notable, and likely due to many causes: increased educational attainment for women, including a huge rise in postgraduate education; increased work experience and lifetime hours worked; rising earnings in a number of female-dominated occupations due to sectoral shifts in relative demand and supply (schoolteaching and nursing

being of particular interest); and, though hardest to measure, a reduction in the most blatant forms of gender pay and promotion discrimination.

Table 2 (gender income ratios by age) allows us to look at the change in income ratios for particular age groups both within year and as cohorts over time from 1970 through 2000, as well as the most recent trends by age group from 2000 to 2002. Interestingly, the 1980 25 to 34 year old cohort stays very steady across time, at a relatively low gender earnings ratio of 69 cents on the dollar. The 1990 25 to 34 year old cohort has fared better in terms of level, but shows a bigger drop over time. In general, the ratios are lowest for the 45 to 54 year old age group, and cohort patterns show an upturn moving from 45 to 54 into the older age ranges as participation rates decrease for both genders. Clearly the more recent cohorts have benefited more from these changes in the labor market, while the older cohorts have experienced much less improvement in their relative pay situation over their time in the labor market.

The occupational level

The convergence in labor force participation rates is also notable at the occupational level, particularly for the better-paying occupations. While overall occupational gender segregation is still substantial (when measured by one standard measure, the Duncan index, over half of the workforce would have to switch occupations in order for each occupation to have the same percentage female as for the workforce overall), much of this is driven by the existence of numerous blue-collar occupations that remain highly male-dominated, as well as a number of large occupations, including many of those in clerical work, that remain highly female dominated. Table 3 (occupational percent female employment and gender weekly earnings ratios) shows the 2003 percentage female among full-time workers for the broad occupational

categories in the economy as well as for a number of high-paying occupations. Women are well-represented in all the large occupational categories, and no clear pattern emerges regarding the relationship between percent female in an occupation and lower absolute or relative earnings.

I highlight a few particularly well-paying occupations at the bottom of Table 3, again to illustrate the diversity even in this subgroup in terms of percentage female, median earnings, and gender earnings ratios. This is not to say that overall women's earnings wouldn't increase if they moved into higher-earning occupations, only to point out that there are women in high-earning occupations in large numbers already, and that moving into male-dominated occupations in and of itself isn't the key to raising overall women's earnings. On the other hand, it is also notable that in none of these broad occupational categories do women make even ninety percent of what men make (measured by this median weekly earnings basis).

To sum up, the background facts about labor force participation is that it is widespread; it is lifelong, but often punctuated for women by time out of the labor force during the childraising years; and it has three phases for most of both women and men: prechildraising; during childraising; postchildraising. The workforce is still highly segregated, particularly along occupational lines (rather than by industry or by firm), and women still work everywhere for lower pay.

In addition, even when we try to control for differences in work patterns between women and men, for instance by looking at only year-round full-time workers, or only workers in a certain age range, or in a certain occupation, or even by combining all those controls, we find differences in earnings and work patterns, in particular that men work longer hours and that

women earn less than men, both on an hourly basis and on thus (the combined effects of shorter hours and lower hourly pay) on an annual basis.

Why are there gender differences in labor force patterns and outcomes?

So the big (two-part) question is: What are the main causes of these continuing differences in both labor force participation patterns and outcomes, and can the observable differences in outcomes be attributed to the observable differences in patterns?

Critical junctures in family life

If I were answering this question twenty years ago, in other words for the older cohorts in this study, I would have given the answer: family. Women married at a young age and younger than did men (median age at first marriage in 1960 was 20.3 for women, 22.8 for men) and often interrupted their college education to do so (or married right out of high school, forgoing college attendance), marriage led to (or was precipitated by) children and therein to childraising, and childraising generally implied women's exit from paid labor and reentry only after several years, often into part-time work, and generally into work that was job rather than career, in that the positions open to these reentry women were generally not those that led to multiple promotions into positions of increasing responsibility and pay. Meanwhile men received a "married men's pay premium," either because employers responded favorably to married men and discriminated in their favor, or because they worked harder once they were married and had a family to support. Thus both variation among women in outcomes (in the period where there is variation; in the earlier period the story is the same for the vast majority of women) and differences between men and women can be explained.

This story, while still partly true, doesn't seem to provide the major part of the picture any more. Indeed, the diminution of this story is a large part of the answer to why gender pay differentials have declined. Women still marry at a younger age than do men, but it is much later than before (median age at first marriage in 1990 was 23.9 for women, 26.1 for men), and they have children later as well. Thus they are much more likely to go on to college, much less likely to interrupt their college education for marriage, and more likely to have embarked on a career before marriage. Married women have fewer children on average, with the majority of children growing up in one or two-child families, and child care is much more widely available. Thus they are less likely to take time out from work, and take less time out before going back to full-time work. Men receive less of a married men's pay premium than before, and whether or not their wife works appears to have little effect on this premium (see the survey of relevant literatures in Jacobsen 2002 as well as Jacobsen and Rayack 1996 for a discussion of the working wife effect). Marriage appears to be increasingly a matter of like marrying like in terms of labor market productivity, thus leading to less of a selection effect for married women to reduce their market work after marriage compared to earlier times.

Instead, changes in family structure posit a series of turning points for women at which individual variation in response to these changes, and nuances in the changes, bring out different responses from women (and from men to a lesser extent). Thus they are still critical junctures, but the increasing variation in response to these junctures means that family structure variables have less explanatory power in female wage and participation equations than in the past. For men, they still have little explanatory power, because men still show little variance in their response to these junctures.

Regarding individual variation, on a personal note, when I think of the women I started college with at Harvard/Radcliffe twenty-five years ago (1978), I would have been hard put to predict who would work full-time continuously, who would work intermittently, including switching to part-time while their children were young, and who would drop out of the labor force completely while in the childraising years. Most of the people I went to college with went on almost immediately to get professional degrees; my three roommates and I have between us a Ph.D., a J.D., an M.D., and a C.F.A., four marriages, one divorce, seven children, four stepchildren, and have all worked continuously. Yet many of our friends have much more varied histories for both work and family, and a glance through my twenty-year reunion book shows a substantial percentage of the women not currently working, even though they also have J.D.s, M.B.A.s, and other such abbreviated symbols of the overachieving upper middle class in contemporary America.

Clearly the answers lie both in the details behind the binaries (married or not married? children or childless, and how many children?) and in the reactions of individuals to the details. If you are married, who did you marry? What type of marriage do you have, one in which your two careers are weighted equally? One in which the wife is expected to take the greater share of responsibility for running the home and raising the children? What type of children do you have, ones who are close in age or far apart, ones who need attention because of physical or mental disabilities, ones who need attention because of learning or behavioral disorders? What are the expectations that your extended families and yourselves (you and your husband) have regarding what shape the home will be in, how much time the family will spend together, how much community service you will do, how many types of lessons the children will participate in after

school? What about your parents and parents-in-law? How near or far do they live from you? Do they need your assistance because of aging-related disabilities?

Family life has innumerable complications and distractions; thus by entering into it a person puts themselves in a situation where numerous critical junctures can arise, sometimes without warning. Thus it is the cause at the individual level of numerous career-affecting choices, even as the variation in the types of choices one has to make and the choices one makes reduces the power of the social scientist to measure, without more detailed family histories, the effect of the family on the career.

Critical junctures in careers

But as well as looking at the variations in family life to understand more deeply what operates to hold people back from reaching their full career potential, we need to look at the structure of careers themselves, and how the structure of career paths, when combined with the structure of family life paths, lead to unavoidable conflicts for most, if not all, people.

Careers have different structures that tend to vary with occupation (though also with industry and firm). We can differentiate career structures along a number of dimensions: up or out vs. multiple chances; steep vs. flat path (with regards to both pay and promotional opportunities/job titles); clear vs. cloudy path (i.e., where the individual knows what is required to advance, both in terms of timing and what is expected in terms of output/performance, vs. paths where what one should do in order to advance is not obvious, particularly during the early phase of the career). But all individuals encounter multiple critical points in their worklife at which a decision they (or someone else) makes will affect their subsequent career path. These

include such external junctures as tenuring and partnership decisions, and individual decisions such as whether or not to get more training or look for a new position.

The timing of when these critical career junctures occur. In many occupations, what happens early in the career can be highly determining of what happens later. One may have to exit a career completely (e.g., not receiving tenure may require one to leave academia); switch from one, generally more lucrative, path to another (e.g., not making partner in a large law firm may require one to take a lower-paying job to remain a lawyer). In other occupations, midcareer decisions can be important in terms of determining one's earnings, but not cause one to exit one's occupation (e.g., an engineer's deciding whether or not to become a project manager; an associate professor with tenure doing enough additional research to become a full professor).

The difficulty of dealing with career junctures is multiplied when other people's well-being and potentially careers are affected by these decisions. Thus a husband faced with a promotion that would require geographic relocation has a direct effect on the wife's career path as well. Even job changes that do not require geographic relocation but cause worktime patterns to shift will have repercussions on other family members.

A number of interesting studies have come out recently that utilize relatively detailed data sets for particular high-powered occupations or firms to study these career path issues more closely. Almost by definition, these occupations require large commitments of time and continuous labor force attachment, particularly in the early years. These studies tend to indicate that the family penalty for women (and men) in high-powered professions only exists for those women and men who commit more time to childraising relative to time spent on their careers. Blair-Loy and Wharton (2003), using firm-level data on managers and professionals in a financial services firm, find no earnings penalty for mothers relative to other women workers in

the firm. Noonan and Corcoran (2003), using a sample of University of Michigan Law School graduates (in the 1972-85 graduation cohort), find no evidence of a direct effect of marriage or parenthood on the probability of becoming partner, but both male and female lawyers who take time out of the labor force for childcare are less likely to become partners. Sasser (2002), using the Young Physicians Survey, finds that women physicians do have a annual pay differential associated both with being married and with having children, but that much of it is related to their working fewer yearly hours. She also finds that women physicians who remain single and childless improve their earnings position relative to men over time. This is consistent with the work of Preston (2000) on a set of college graduates from a specific university, all of whom received degrees in the sciences. She finds that both women and men sort between a “parent track” and a “fast track”, such that those women who remain single and childless actually surpass those men who report spending substantial time engaged in child care.

Note that these studies also allow us to see the effects on men of having a relatively greater commitment to childcare. Thus, while the effects of children still do not show up for men in the aggregate, these more focussed studies show that those men who dare to step onto the “parent track” also suffer financial penalties. The studies in some cases also allow for more detailed discussions of differences in family type. Fox (2003), who concentrates on publication productivity among a sample of academic scientists, finds differences in productivity for both women and men related to whether a person is in a first or subsequent marriage and whether or not their spouse is also in a scientific occupation (subsequent marriages to scientists being the best for one’s productivity). Interestingly, Fox also finds higher productivity (while Blair-Loy and Wharton find higher earnings) among women with pre-school children than among either women without children or women with school-age children. Perhaps this is related to the ease

of dealing with young children once you have made the commitment to hiring a child care provider, compared to the difficulties of scheduling school-age children where child care is piecemeal and school schedules are difficult to work around.

Thus, even among women and men who have made the commitment to be in a high-powered profession, earnings and productivity differences arise related to their relative commitment to family life, potentially more to this alternative use of their time (which still tends to be stronger among women) than to any direct (i.e., potentially discriminatory aspect) attribution to their family status. In other words, if you don't spend too much time with your family, then it need not affect your work to have one.

Small seeds of discrimination and difference

In all of the above studies, unexplained pay and/or productivity differentials between men and women persist even after relatively detailed controls for family structure and other relevant variables are included. This is indeed the case in virtually all pay differential studies ever undertaken. Thus it is important to also think about how critical junctures can also cause these differences to occur.

The studies I have just mentioned all move away from the continuous framework of human capital theory (where differences between people are modeled in terms of different payoffs to years of education, experience, and firm tenure—time in a particular firm) into a framework in which advances occur in discrete jumps. But what these studies address only implicitly is what in addition may happen at critical career and family life junctures. These may also be points at which either discriminatory actions operate, or at which differences in women's

and men's reactions to these junctures differ significantly. Thus these actions and reactions may lead to different probabilities of success at different family and career junctures.

In particular, while human capital theory leads to a framework in which discrimination is modeled as continuously lower payoffs to one's human capital (measured in years of education, experience, and firm tenure) the critical junctures framework is one in which discrimination currently operates by generating lower probabilities of success at different career junctures for the discriminated-against group. Thus discrimination need not be an all-or-nothing phenomenon in which, for example, women are never hired or never promoted or always paid less than men, but instead a phenomenon in which women are hired and promoted at lower rates and are likely to receive lower pay raises than do men (Valian 1998).

In addition, the critical junctures framework also highlights the importance, on career paths that require proactive behavior at the critical junctures, of the relative ability of women to act on their own behalf. For instance, it appears that women are not as good as men at negotiating in order to get promotions, salary increases, etc. (Babcock and Laschever 2003). Career paths that require negotiation at critical junctures, or require the creation of these critical junctures (e.g, asking to be considered for promotion) will favor the person who is willing to negotiate, who is good at negotiating, and who is willing to take the initiative to create the juncture.

What does this framework imply regarding ways to reduce gender differences in earnings and employment? It implies that interventions can occur at critical junctures in order to forestall discrimination, to improve people's negotiating skills, to make it more likely that people will not have to take time off from work unless they really want to. For example, parental leave that

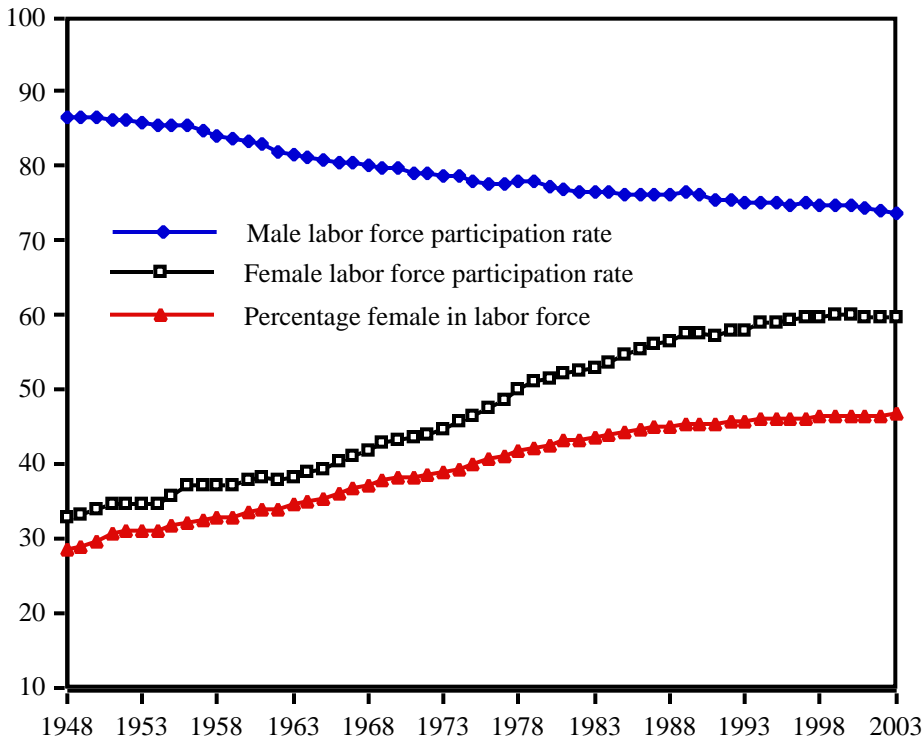
stops the tenure clock or extends the time until the partnership decision is made. For example, formal training of people to negotiate effectively for what they want. It also implies that we should think about whether certain organizational hurdles are really necessary, or whether they serve as structures that facilitate discrimination against women and against people with families, families that they want to spend time with. Once the very structure of work itself can be questioned, we can address the issue of how to make work more family-friendly and thus build a structure for life courses that allows more people to balance their home and work lives.

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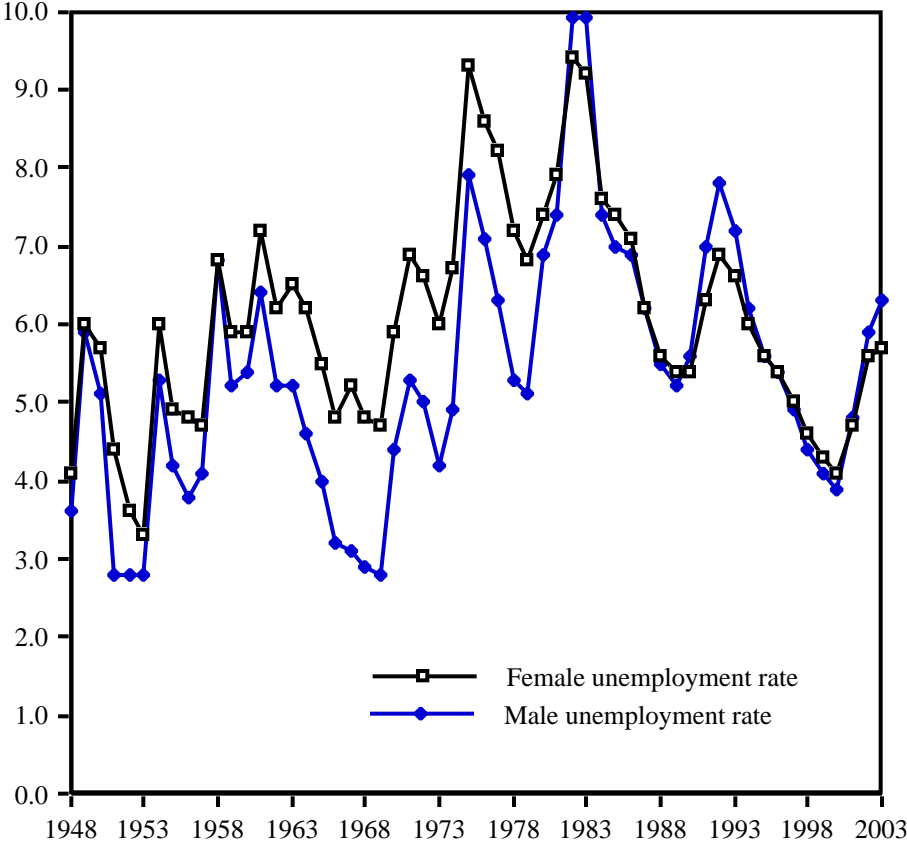
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Figure 1: U.S. Labor force participation rates by sex and percentage of labor force that is female, 1948-2003



Source: *Economic Report of the President 2004* (Tables B-36, B-39).

Figure 2: U.S. Unemployment rates by sex, 1948-2003



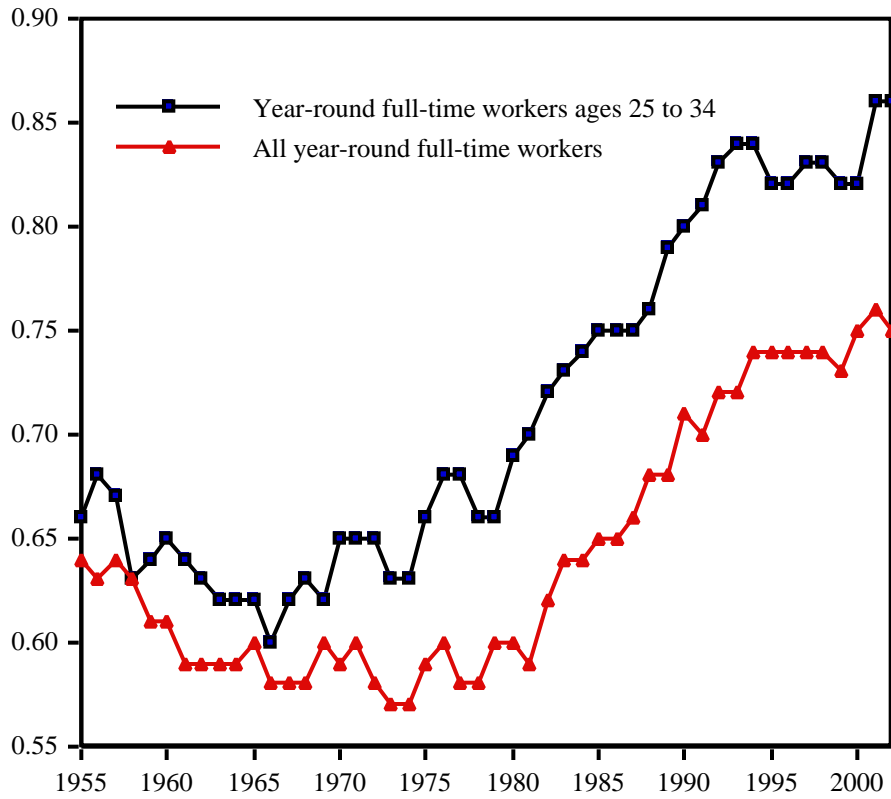
Source: *Economic Report of the President 2004* (Table B-42).

Table 1: U.S. Labor force participation rates for women by marital status and by age of youngest child for married women, 1960 and 2002

	<u>1960</u>	<u>2002</u>
Single, never married	58.6	67.4
Divorced, separated, widowed	41.6	49.2
Married	31.9	61.0
no child < 18	34.7	54.8
child 6-17	39.0	76.8
child < 6	18.6	60.8

Sources: *Statistical Abstract of the United States* 1996 (Tables 624, 626, 627); 2003 (Tables 595, 597, 598). Data are for civilian women ages 16 and over.

Figure 3: U.S. Female/male median annual income ratios, year-round full-time workers, overall and for 25 to 34 year olds, 1947-2002



Sources: *Current Population Reports Series P-60*, nos. 23, 27, 30, 33, 35, 37, 39, 41, 43, 47, 51, 53, 60, 66, 75, 80, 85, 90, 97, 101, 105, 114, 118, 129, 132, 137, 142, 146, 156, 159, 172, 174, 180, 189, 193, 197, 200, 209, 213, 218, 221.

Table 2: U.S. Female/male median annual income ratios, year-round full-time workers, by age, 1970, 1980, 1990, 2000, and 2002

	<u>1970</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>	<u>2002</u>
15 years and over	0.59	0.60	0.71	0.75	0.75
15 to 24 years	--	0.82*	0.90	0.91	0.91
25 to 34 years	0.65	0.69	0.80	0.82	0.86
35 to 44 years	0.54	0.56	0.69	0.73	0.74
45 to 54 years	0.56	0.54	0.61	0.69	0.69
55 to 64 years	0.60	0.57	0.63	0.65	0.68
65 years and over	0.72	0.72	0.65	0.71	0.74

Sources: *Current Population Reports Series P-60*, nos. 80 (Table 49), 132 (Table 50), 174 (Table 24), 213, 221 (Table PINC-03).

*Average of figures for 15-19 and 20-24 year olds.

Table 3: U.S. percentage female, gender weekly earnings ratio, median weekly earnings, and percentage of total full-time workforce, by occupational category, 2003

<u>occupational category</u>	<u>percent female</u>	<u>earnings ratio</u>	<u>median earnings</u>	<u>% of workforce</u>
all full-time workers	43.9%	0.79	\$620	100.0%
professional and related operations	54.4%	0.74	\$845	21.1%
office and administrative support occupations	74.3%	0.88	\$523	15.1%
management, business, and financial operations	44.5%	0.70	\$961	14.4%
service occupations	49.7%	0.79	\$403	13.3%
natural resources, construction, and maintenance	4.2%	0.73	\$608	11.0%
sales and related occupations	44.0%	0.62	\$598	9.9%
production occupations	29.4%	0.70	\$519	8.6%
transportation and material moving	12.9%	0.75	\$520	6.5%
lawyers	31.5%	0.87	\$1560	0.6%
chief executives	23.5%	0.72	\$1558	1.0%
physicians and surgeons	31.5%	0.59	\$1405	0.5%
architects and engineers	13.9%	0.76	\$1053	2.5%
financial managers	51.6%	0.63	\$1004	0.9%
postsecondary teachers	40.8%	0.79	\$982	0.7%

Source: *Employment and Earnings*, January 2004 (Table 39)