

SPECIAL ISSUE

# Regional Review

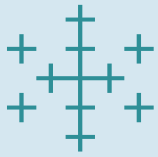
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Reaching  
the  
top

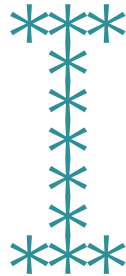
Challenges and opportunities for women leaders





A special issue  
of the *Regional  
Review* based on a  
Boston Fed  
conference and  
additional  
materials and  
commentary

# an introduction



IN JUNE 1968, more than 35 years ago, I started my first real job as a management trainee at the Federal Reserve Bank of New York. It was not my first-ever job—I had worked either part- or full-time since I was 14 years old. But it was my first full-time job after graduating from college with a bachelor's degree in political science a month earlier.

It was also a first for the New York Fed; I was their first female management trainee, though women held management positions and the head of the statistics department from 1959 to 1972 was a woman. In 1968, formal management training for women just out of college was not the usual situation, as many interviewers had made clear when they came to recruit on campus. But the New York Fed had recruited me for a job as a computer programmer. And when the interviews were over, I talked my way into interviewing for their management training program.

I certainly never thought that I would still be working at a Federal Reserve Bank 35 years later. In fact, I'm not sure if I had a single conscious thought about where I would be 35



by CATHY E. MINEHAN

## Women have made great strides in the business and professional world



years in the future. I did think that I would get an apartment on Park Avenue (it actually turned out to be in Queens), pay off my college debts, and in three or four years attend graduate school. I eventually earned an MBA—at night, reimbursed by the Bank—and went on to work in more varied and challenging jobs than I would have ever thought possible. For a long time, I was often the youngest person, and one of the few women, at the table—particularly in the payments and planning areas in which I focused. But eventually others joined me, including the many eminent women who participated in the Boston Fed conference, “Reaching the Top,” which is the basis for this special issue of the *Regional Review*.

We were part of the “quiet revolution” that Claudia Goldin writes about in her piece—a period of enormous change that

began in the late 1960s. In 1970, only half as many women as men had attained a four-year college degree by age 34. By 2000, the gap had disappeared, with 29 percent of women attaining at least a bachelor’s degree versus 24 percent for men. In the early 1970s, women accounted for only a small fraction of graduate and professional degree recipients. By 2001, they were receiving more than half of all such degrees conferred.

With changes in education also came changes in women’s roles in the workplace. Today, both wife and husband are working in 60 percent of married-couple families with children under the age of six, about double the percentage in 1970. And these mothers are far more likely to be in managerial and professional jobs—positions that only a few years earlier had been held primarily by men.

Several years ago, however, I became concerned as I began to hear anecdotes about well-educated women backing off from full-time to part-time work, or withdrawing from the workforce entirely as they started families or experienced difficulties moving up in their organizations. Data from the U.S. Bureau of Labor Statistics began to suggest that for the first time in many years, labor force participation rates among college-educated women with young children had slipped. A widely read article in *The New York Times* along with a drumbeat of other media coverage put the spotlight on women’s choices and progress. Stories about the difficulties of women combining work and family obligations—both for children and for elder care—in an ever-more competitive business world, and the concomitant rise in both stress and guilt, were regular features in newspapers and on television.

Moreover, even among the best-educated, highest-earning workers, Catalyst and other analysts found evidence of continued impediments to women moving into top spots. Women currently hold almost 51 percent of managerial positions, but only about 16 percent of corporate officer positions, 10 percent of “power titles” such as CEO or COO, and about 5 percent of top-earning jobs. Especially significant for the future, women account for only 5 percent of the corporate officers holding the key line jobs that make up the pipeline to top spots in most corporations. We all know that it makes a difference if both women and men in an organization cannot look up and see women at the top. If high-potential women begin to leave, what does that signal to women in more junior positions? What does it say to young women in college and



## Women at the top in the 1970s...

**Thirty years ago, only a handful of women were in the highest positions in large firms.**

**Only two were top Fortune CEOs at any point in the decade**  
*Katharine Graham*, Washington Post Co. beginning in 1972  
*Marion Sandler*, Golden West Financial Corp. beginning in 1974

**In 1,300 large U.S. corporations, women accounted for only:**

**11 top earners (1972)**

**150 board directors (1975)**

**485 corporate officers; with only a quarter holding the title of vice president or above (1979)**

Notes: Top earners are companies' three highest-paid employees as reported in SEC proxy statements.  
 Sources: *Fortune*, July 17, 1978; *Time*, January 5, 1976; "Profile of a Woman Officer," Heidrick and Struggles, 1979

## ...and in 2002

**In 2002, women held more than 50 percent of all managerial and professional positions. But among Fortune 500 companies, they accounted for only:**

**1.6 percent of CEOs**

*Carly Fiorina*, Hewlett-Packard Co.  
*Mary Sammons*, Rite Aid  
*Anne Mulcahy*, Xerox Corporation  
*Patricia Russo*, Lucent Technologies  
*Andrea Jung*, Avon Products Inc.  
*S. Marce Fuller*, Mirant  
*Eileen Scott*, Pathmark Stores  
*Marion Sandler*, Golden West Financial Corp.

**5.2 percent of top earners**

**7.9 percent of "clout" titles**

**9.9 percent of line officers**

**13.6 percent of board directors**

**15.7 percent of corporate officers**

Notes: Top earners are companies' five highest-paid employees as reported in SEC proxy statements. "Clout" titles include chair, vice chair, chief executive officer, president, chief operating officer, senior executive vice president, and executive vice president. Line officers are those with revenue-generating or profit-and-loss responsibility.

Sources: *Fortune*; 2003 Catalyst Census of Women Board Directors; 2002 Catalyst Census of Women Corporate Officers and Top Earners; and U.S. Bureau of Labor Statistics

graduate school who are preparing for their future careers?

The 35 years since I began work have brought much in the way of progress to women in the workforce, but they have brought challenges as well. Too few women occupy the corner offices, and increasingly the price paid by those who do succeed seems too high.

This special issue of the *Regional Review*, based on the Boston Fed conference, "Reaching the Top," is intended to address these issues. It brings together a group of distin-

There are still impediments even for the best and brightest

guished women and men from business, government, and the academic and research communities to study these questions. From the beginning, we decided to take a "life-cycle" approach, seeking to identify the key moments in women's lives and careers that influence where they ultimately end up. What is the evidence of a retreat, if any, from a quarter-century of progress? Are women getting the preparation and education necessary for careers that lead to the top? What are the key points in a woman's family and work life that either encourage or discourage that path? What organizational practices and structures help or hurt? And how can we all do better at each step of the way, so our most able and qualified workers remain in the pipeline?

Perhaps these questions are nothing to worry about, if these patterns reflect the choices of women in advantageous positions who can afford to leave the labor force if they so choose. But I worry anyway. We need to encourage our best and brightest women—our future leaders—not to drop out, but to stay the course, not because it is what some of us did, but because this is vital to our nation's economic future. As the economy becomes increasingly global and sophisticated, our nation's continued competitiveness and success will only come if we can tap into all of our citizens and take advantage of all the skills and leadership that the nation can generate.

Thus, recognizing the progress already made, I respectfully submit that we need to look for new models, new ways of doing things that make it possible for high-potential women and men to remain attached to the workforce when family or personal responsibilities demand time as well. This may require confronting long-held attitudes about work and how it is organized, changes that may prove costly in the short run. But in the long run, the loss of some of our most highly educated workers and role models for younger women may make the short-run costs seem less daunting. Making these changes is vital not only to maintaining our economy's long-run health, but also to ensuring that the satisfaction of contributing to the larger society through work is available to all who seek it. Only then will reaching the top be available to everyone. \*

*Cathy E. Minehan is President and Chief Executive Officer at the Federal Reserve Bank of Boston.*



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Preparing for a career **Women's educational attainment and early choices**

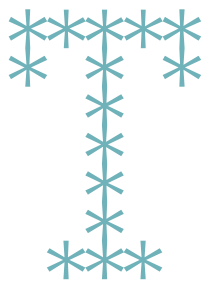


by CLAUDIA GOLDIN

a brief  
history  
of the quiet  
revolution  
that transformed  
women's work

# from the valley to the summit

**We can have a  
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only because  
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that took  
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years ago**



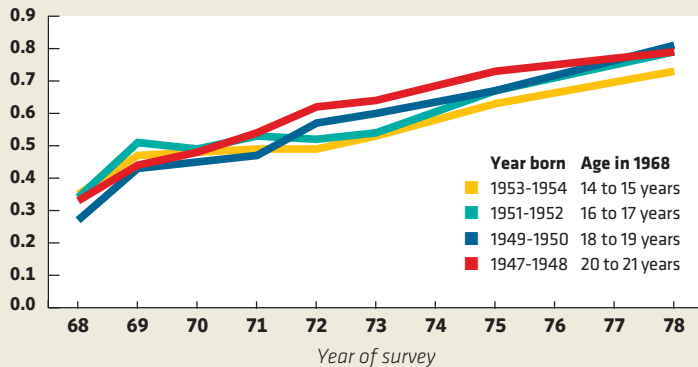
THROUGHOUT RECORDED history, individual women have reached summits, and their accomplishments have been touted as evidence that women could achieve greatness. But it has taken considerably longer for substantial numbers of women—more than a token few—to reach the peaks. Until recently, the vast majority of women—even college graduates—occupied the valleys, not the summits. They had jobs, not careers.

The only reason we can have a meaningful discussion today about “women at the top” is because a quiet revolution took place about 30 years ago. It followed on the heels

## Changing expectations about paid work...

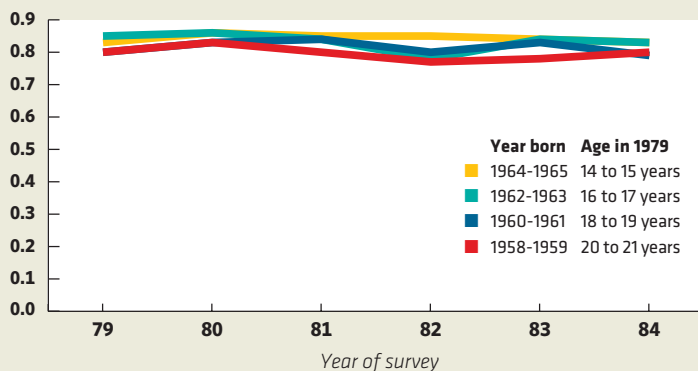
During the 1970s, the fraction of young women who expected to be working for pay at age 35 rose sharply, climbing to between 70 and 80 percent.

Fraction of women who expected to be working for pay at age 35



By 1979, the shift was in place, with virtually no further change during the 1980s.

Fraction of women who expected to be working for pay at age 35



Note: Data using the 1979 NLSY (lower panel) include in "expect to be working at age 35," individuals who said they would be married and raising a family at age 35 but, when questioned further, said they wanted to be working. Excluding this group reduces the average answer to around 0.65 to 0.70.

Sources: National Longitudinal Survey of Young Women, 1968 (upper panel) and National Longitudinal Survey of Youth, 1979 (lower panel)

of a noisier revolution, although the quiet one had greater long-run impact. The revolution was accomplished by many who were unaware they were part of a grand transformation that would deeply affect women and their families for decades to come. They were the unwitting foot soldiers of an upheaval that transformed women's employment and the workforce.

This transformation was startlingly rapid, thus the term "revolution," not evolution. The break occurred over a relatively brief period from the late 1960s to the early 1970s, and for women born during the 1940s and later. We can see the abruptness of the transition in a number of social and economic indicators: young women's expectations about their future work life, their college graduation rates, attainment of professional degrees, age at first marriage, and labor force participation rates all show sharp breaks and turning points during this short interval. Women's choice of college major and occupation also exhibit evidence of a shift during these years.

Perhaps it is not surprising that these factors would change around the same time, since they are all interrelated. When young women have expectations of high labor force participation, they are likely to alter their college programs and college graduation rates. Advanced degree programs, for example, are necessary for certain occupations. Particular college majors are required for certain advanced degree programs. Career aspirations will encourage women to marry and begin their families later; in turn, a later first marriage will serve to facilitate women's career development.

In the sections that follow, I present and discuss these factors. In the last section, I explore some of the explanations for why the quiet revolution occurred.

### The revolution in expectations about labor market work

In 1968, when young women 14 to 21 years old were asked by the National Longitudinal Survey (NLS) about their future labor force plans, their answers reflected the current labor market activity of their mothers, their aunts, and possibly their older sisters. Only about 30 percent said that they expected to be in the labor force at age 35. Most had mothers born between 1922 and 1929—a group with labor force participation rates at age 35 of about 30 to 35 percent. Yet the future labor force participation rates of these young women (of those ever-married born 1951 to 1954) would in fact be about 65 percent at age 35. That is, young women's expectations were more in line with what older women were currently doing rather than with what their own futures would actually hold.

But in the late 1960s and the early 1970s, something began to change. In 1975, the fraction of young women who expected to be working at age 35 reached 65 percent, more than double the response seven years earlier and more in line with their future rates. Even comparing 21-year-olds in 1968 with 21-year-olds in 1975 shows an increase in expected participation of about 35 percentage points. In fact, the expectations of all cohorts increased at the same time and by about the same amount. Furthermore, this period of rapid change in expectations ended by around 1980. Responses to similar questions asked by a later version of the NLS, begun in 1979 with a group of young women 14 to 21 years old, reveal virtually no change either by age or by year from 1979 to 1984—a very different picture from the sharp increase in expectations of future employment by young women from 1968 to 1978.

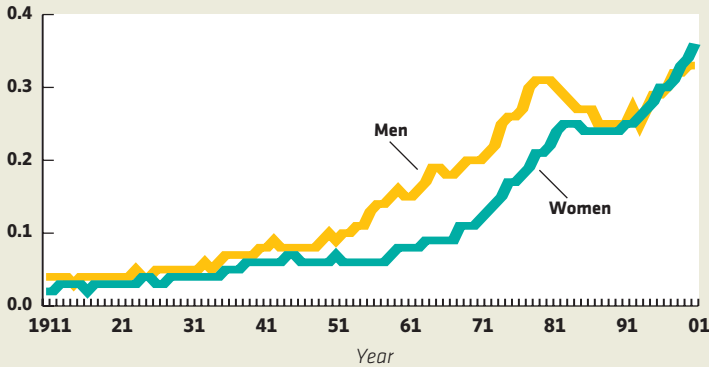
Thus, by the mid-to-late 1970s young women's plans were considerably different from a decade earlier, with the turning point in the late 1960s and early-to-mid 1970s. Expectations about participation in paid work no longer mimicked the experience of their mothers, but were in line with, if not somewhat higher than, the levels they would eventually achieve.



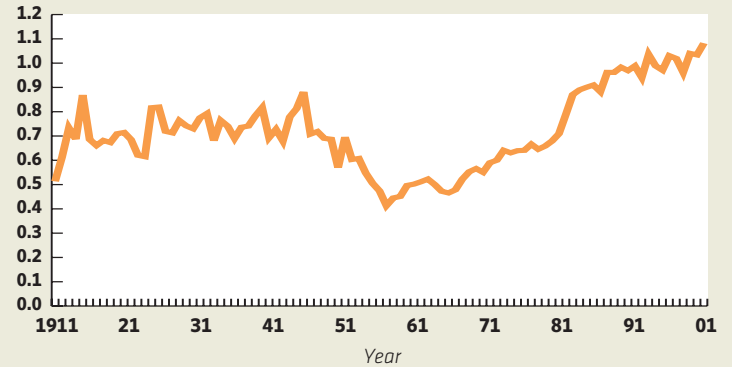
## ...lead women to greater investments in career-oriented education

As the revolution in expectations begins, women are already increasingly attending and graduating from college.

Percentage of population at age 35 that are college graduates

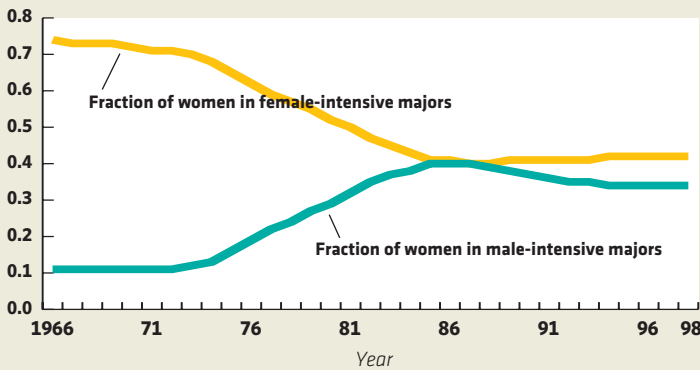


Ratio of female to male college-graduate shares of the population at age 35

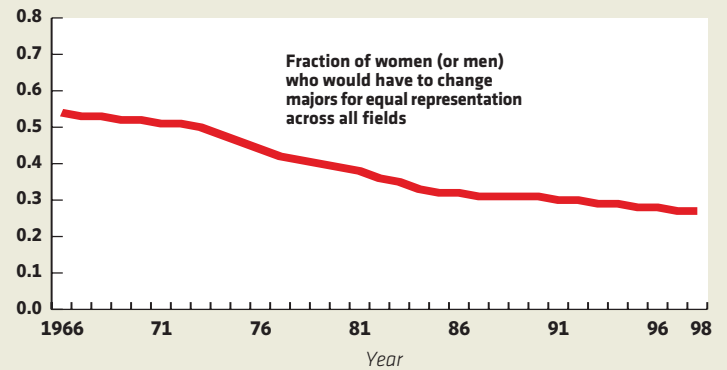


Their choice of college major becomes more similar to their male counterparts.

Fraction in gender-typical majors

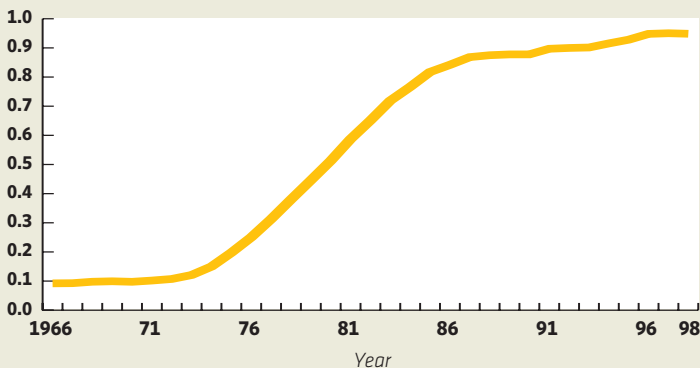


Dissimilarity index

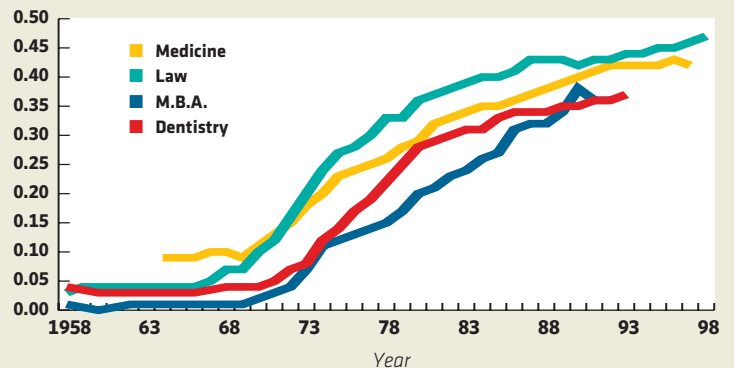


Especially notable is the sharp rise in the share of women majoring in business and management and enrolling in professional programs that had previously been entirely male.

Ratio of women to men in business and management major



Share of women among first-year students in selected professional programs



Notes: Upper panel: College graduate is 16 years of schooling or more through 1980, and a bachelor's degree or higher in 1990 and 2000. Middle panel: Female-intensive (or male-intensive) majors are those in which the share of women (or men) is 0.5 standard deviations above the mean in 1970, using 1970 weights. Out of 53 majors, 11 were female-intensive, 31 were male-intensive, and 11 were neither. Female-intensive majors were anthropology, arts & music, non-science education, English & literature, foreign languages, health technologies, linguistics, other life sciences, social services professions, sociology, and vocational studies & home economics.

Sources: Integrated Public Use Microdata Series of the U.S. Censuses, 1940-1990; Current Population Survey, 1990 and 2000; National Center for Education Statistics, U.S. Department of Education; *Journal of the American Medical Association*; American Bar Association; and *Digest of Education Statistics*, U.S. Department of Education



#### The shift in education from consumption to investment

Although not all the young women surveyed above would attend or graduate from college, the implication for professional advancement is clear. Young women (and men) who have a more accurate assessment of their future labor market involvement will invest more wisely in education and training, whether attending and graduating from college, choosing a college major, or enrolling in a professional degree program.

**COLLEGE MAJORS.** In 1966, almost 75 percent of women graduating from a four-year college majored in subjects in which most of the students were female. About 10 percent specialized in a subject for which most of the students were men, about the same fraction as in 1960; and about 15 percent majored in gender “mixed” fields, such as math, psychology, sociology, anthropology, linguistics, history, and arts & music.

Moreover, fully 40 percent of women college undergraduates majored in education—at a time when that major was 78 percent female. About 17 percent concentrated in English literature or foreign languages (combined, 68 percent female). And 3 percent were in home economics and social services professions (92 percent female). Thus, 60 percent (40 + 17 + 3) of all female undergraduates majored in one of three female-dominated concentrations (or combined concentrations).

By contrast, 50 percent of men in 1966 majored in either science (except “other life sciences”), engineering, or business & management. Most of the women’s concentrations could be classified as “job” or “consumption” oriented (e.g., education and literature), whereas those of the men as “career” and “in-

#### Women increasingly chose career-oriented majors that often led to advanced degrees

vestment” oriented (e.g., engineering, and business & management).

Another way to show the separation of the sexes is to compute a standard index of dissimilarity. The index uses the full range of the 50-plus concentrations for which we have data and measures the percent of women (or men) who would have to change concentrations for equal representation across the fields. This calculation shows that more than half of all women (or men) would have had to change concentrations to create equality by sex in all fields in 1966.

But in the early 1970s, the sex segregation of undergraduate majors fell markedly. The break is especially sharp for the fraction of women in male-intensive majors, but it is also apparent for the fraction of women in female-intensive majors and in the sex segregation index.

The proximate reasons for this change can be found in the enrollments in two large concentrations: education and business & management. The relative decrease in women’s enrollment in education depressed the fraction of women in female-intensive majors, while their relative increase in business & management boosted the fraction in male-intensive majors. By 1980, only about 20 percent of women were majoring in education; by 1998, the figure had dropped to 12 percent. Because of the increase in women’s college participation rates, the number of women majoring in education continued to rise from 1966 to 1973. But it has declined

steadily since 1973, despite the continued increase in the fraction of young women attending and graduating from college.

The reverse trend can be found in business & management. Only 2 percent of all women college graduates majored in these fields in 1966; the figure rose to 22 percent in 1988, the height of its relative popularity among all undergraduates. Because women also increased their numbers as undergraduates relative to men throughout the period, the ratio of women to men majoring in business & management majors increased at an even greater rate, climbing spectacularly from 0.12 in 1973 to 0.84 by 1986.

Therefore, beginning in the early 1970s, female undergraduates radically changed their concentrations. They moved out of majors that led to traditionally female occupations. They moved into those that were career-oriented and often led to advanced degrees. And their majors shifted to subjects that were more similar to those of their male counterparts. Differences in the college majors of men and women still exist but are considerably less significant than they once were. In 1998, about 27 percent of women (or men) would have to change majors for equality

across the fields, about half the rate in 1966.

**COLLEGE DEGREES.** The fraction of women graduating from four-year institutions of higher education increased greatly for women born from 1941 to 1951. This coincided with an increase for men due, at least in part, to Vietnam War draft deferments. But enrollments for men decreased substantially for those born from 1946 to the early 1950s, while enrollments for women continued to rise. Thus the ratio of women to men graduating from college soared for those born from 1946 to 1956, rising from 0.65 to more than 0.95.

This ratio began to rise for precisely the same women that underwent the change in college majors described above—women born in the 1940s, and graduating college from the late 1960s to the early 1970s. Such a change was not unprecedented—the ratio of female to male college graduates increased from a low point for those born in 1924 to those born in the 1940s. But that increase mainly made up for the large decrease caused by men returning from World War II and taking advantage of the GI Bill to attend college. The rise in this period was due to something else, and it echoes the breaks for college majors and labor force expectations.

**PROFESSIONAL DEGREES.** Women's enrollment in professional degree programs also reveals obvious turning points in the early 1970s. Women's share of first-year students in medical school, business school, and dentistry turned up around 1970; the share in law school increased sharply a year or two earlier. Similar trends can be observed in the number of women entering professional degree programs expressed as a fraction of all female four-year college and university graduates in that year. This fraction began to increase in about the same year as did the ratio of women to men among first-year professional students. However, almost all the growth in the fraction of female B.A.s continuing on to professional school occurs from 1970 to 1980, whereas the ratio of women to men in graduate programs increases throughout the period considered. Both these data series exhibit among the clearest and sharpest breaks of any shown in this paper.

### **The shift to careers and delayed marriage**

Changes in women's choices about career and family closely mirrored the changes in their labor market expectations and in their educational investments.

**OCCUPATIONS AND LABOR FORCE PARTICIPATION.** The shift in the occupations of college-graduate women, 30 to 34 years old, closely follows that for college majors. Traditional female occupations (e.g., K through 12th grade teachers, nurses,



**The age when college-educated women married rose 2.5 years for women born from 1950 to 1957**

librarians, social workers) show a sharp decrease starting around 1970 and bottom out around 1990. Nontraditional occupations (e.g., doctors, lawyers, managers, college professors) show essentially the opposite trend. The largest increase in the fraction of women in nontraditional occupations occurred in the 1980s, a bit after the change in college majors, probably because advanced degrees are needed to enter these professions.

As more women majored in career-oriented subjects and entered professional and advanced degree programs, they also increased their labor force participation during their late twenties and early thirties. Participation rates among young women (under 35 years) with college degrees or more show the greatest increase for women born during the 1940s. Whereas rates for young college-educated women born in the 1930s were around 50 percent, participation rose to 80 percent for women born in 1950. That is, the greatest change in labor force participation occurred in the 1970s.

As noted above, these women college graduates were the first group to correctly anticipate that their future labor force participation would be considerably higher than that of their mothers. Furthermore, their expectations changed when they were young enough to alter their educational investments. It is likely, therefore, that their actual labor force participation was high precisely because their educational investments made their employment more lucrative and desirable.

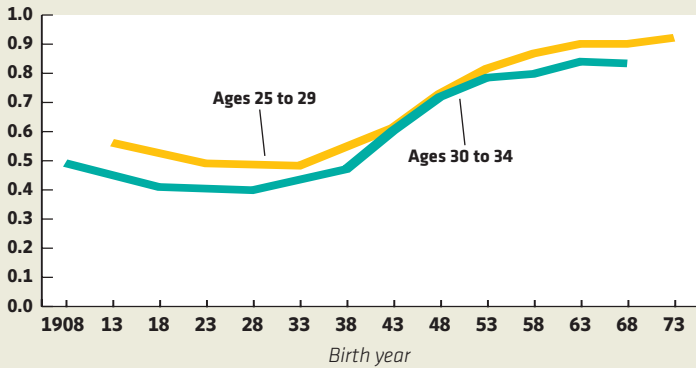
**AGE AT FIRST MARRIAGE.** A host of demographic changes also occurred for this group of women. One of the most important was the trend toward delaying the age at which they married.



## Postgraduate

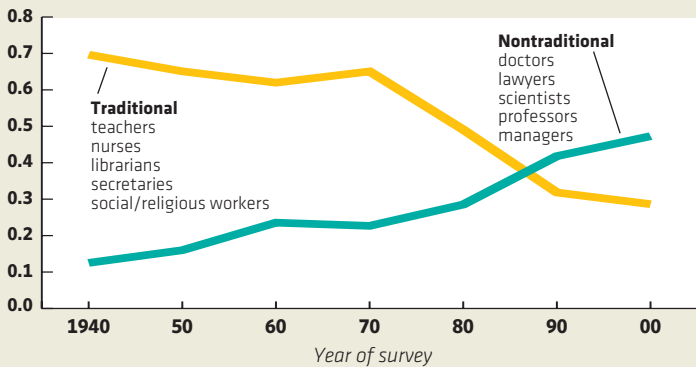
Beginning around 1970, young college-graduate women (under 35 years old) are far more likely to remain in the labor force...

Labor force participation rate



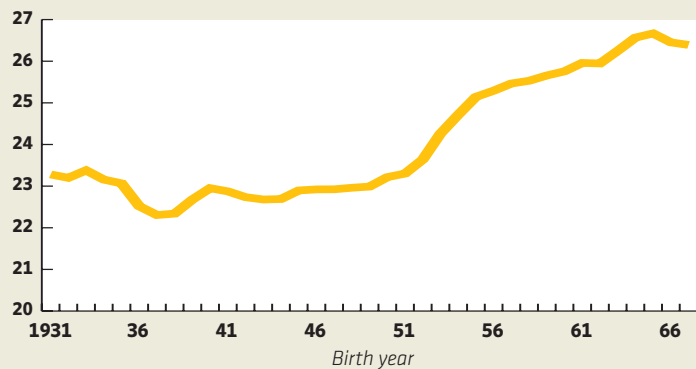
...work in nontraditional occupations...

Fraction of working college-graduate women, 30 to 34 years old, in occupation type



...and delay the age at which they first marry.

Median age at first marriage for white, college-graduate women



Notes: Upper panel: Data are for white, non-Hispanic, college-graduate women, except for 1970, which includes Hispanics. College graduate is 16 years or more of schooling, except after 1990 when it is a bachelor's degree or higher. Middle panel is civilian workers. Nontraditional occupations include all professional and managerial occupations except teachers, librarians, nurses, and social and religious welfare occupations.

Sources: Integrated Public Use Microdata Series of the U.S. Censuses, 1940-1960; Current Population Survey, 1970-2000, and CPS Fertility and Marital History Supplement, 1990 and 1995

The age at first marriage for college-graduate women began to increase for those women born around 1950. Women born in 1949 had a median age at first marriage of 23 years, about the same as for the previous two decades. But women born in 1957 had a median age at first marriage of 25.5. Because so many college-graduate women born in the two decades prior to 1950 married directly out of college, college had functioned, in large part, as a marriage market.

By the time the women born in 1957 married for the first time, their median age had increased by 2.5 years, a large increase in only seven years; and the median age at first marriage continued to climb, although more slowly, rising to 26.5 years for women born in 1965. The age at first marriage also increased for other education groups, but the increase was somewhat smaller than for college women.

### What caused the revolution?

The transformations in women's work roles—from jobs to careers, from “consumption” majors to “investment” majors, and from early to later marriages—took place in an astonishingly short period of time. Labor market expectations of young women were altered beginning in the late 1960s; and by the late 1970s, the transformation was completed. Undergraduate fields of concentration began to change around 1972, and the conversion was mostly finished by the mid 1980s. Similarly, enrollment in professional schools shifted up markedly around 1970, with the largest relative gains occurring by 1980. Changes in occupations and in labor force participation echoed changes in college majors and enrollment in professional schools. The mean age at first marriage began its upward climb with women born in the early 1950s and was completed with women born in the mid 1960s. The only reason that we are able, today, to speak about a significant group of women who are “leaders” and who are “at the top” (or who should be “at the top”) is because these changes allowed women to begin their climb from the valley to the summit.

What can explain why the changes occurred?

Any set of social changes as wide-ranging as those just mentioned is not likely to be explained by a single factor, so it would not be surprising to find several contributing circumstances.

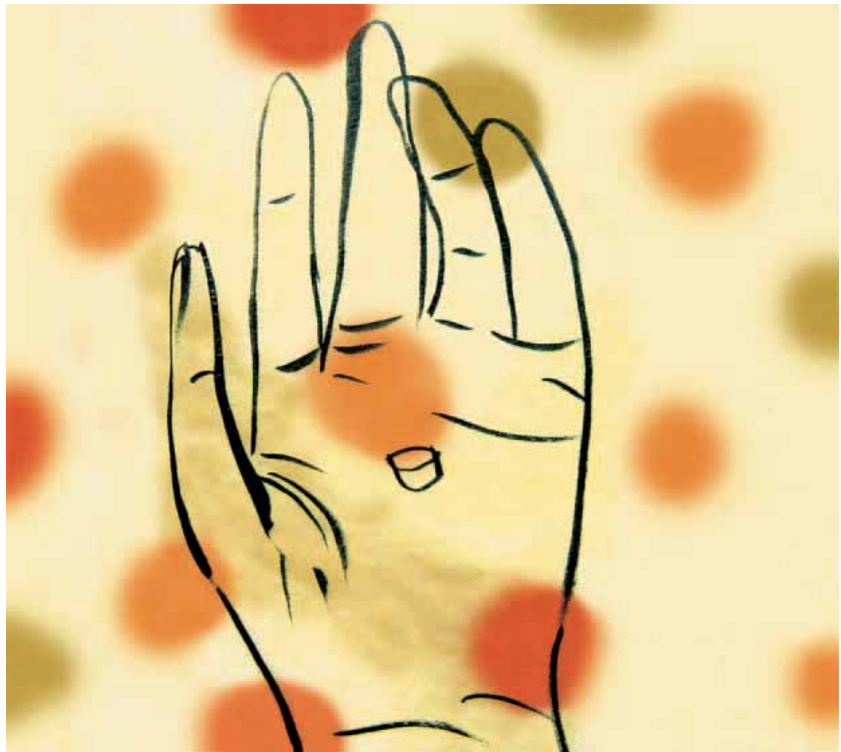
The first important clue is that the process described above was episodic rather than continuous. This suggests seeking explanations in factors that also changed discontinuously. Among the likely contenders are: (1) government mandates such as Title VII of the Civil Rights Act of 1964 that prohibited discrimination in employment practices such as in hiring and promotion, and Title IX of the Education Amendments of 1972 that required equal treatment of the sexes in educational programs, including colleges and universities; (2) social change spurred by the

resurgence of feminism that followed the Civil Rights movement and was reinforced by the anti-war movement; and (3) the contraceptive innovation, known as “the Pill,” which gave young women the ability to delay marriage and child-bearing and plan for a career. Other candidates include abortion reform, which was decided in some states before *Roe v. Wade*; the Baby Boom which, by producing a surplus of women (relative to men) of marriageable age (since women marry younger than men), may have forced some women to postpone or forgo marriage; and the declining economy of the mid 1970s, which may have produced the same effect.

I focus on the Pill, not because government mandates and larger social change made no contribution, but because their importance has been hard to assess. To statistically prove the impact of social change, one must find a factor that is related to the resurgence of feminism but unrelated to the choice of college major, college graduation, and enrollment in professional programs—a difficult, if not impossible, task. As for government mandates, various research papers have not yet uncovered a meaningful effect of antidiscrimination laws on women’s employment and earnings, although they do point to a strong impact with regard to race. (For a discussion of this evidence, see Blau and Winkler, page 38.)

The Pill, by contrast, has proven amenable to empirical exploration and appears to have made an important contribution in changing women’s careers and the age at first marriage. How did the Pill affect the expectations of young women or their desire to pursue college, male-dominated majors, and professional degrees? It lowered the costs to young, unmarried women of pursuing careers, particularly careers involving substantial, upfront investments of time.

A young college woman in the mid 1960s who was considering whether to enter a professional degree



### Access to the Pill delayed marriage and increased the share of women seeking professional careers

program or make other substantial career investments had to consider the impact on her personal life. Sex was highly risky in a world without effective, female-controlled, and easy-to-use contraception—and pregnancy could derail a career. The Pill was more reliable than other methods of contraception and its use was controlled by women. Thus, it might have had a *direct effect* in fostering women’s careers by reducing the risk and cost of having sex.

The Pill also could have had an *indirect effect* by increasing the age at first marriage, which may in turn have influenced other decisions advancing women’s careers. The Pill virtually eliminated one potent reason for early marriage and for many of the social trappings (e.g., going steady, engagements) that led to early marriage. With more men and women delaying marriage for many years after college graduation, the decision of any one woman to delay marriage meant that she would reenter a marriage market that would not be as depleted of eligible men. Thus, the Pill *could* have influenced women’s careers, college majors, professional degrees, and the age at first marriage.

What are the facts? The FDA approved the Pill for contraceptive use in 1960. Married women began to use it immediately, and their use peaked within about five years. But young, single women did not gain full access until the late 1960s or early 1970s, as most were minors and needed parental consent to obtain non-life-threatening medical care. Eventually, age-of-majority laws and mature minor cases at the state level lowered the age at which a woman could legally receive family planning services by a doctor without her parent’s consent. These changes were driven in large part by agitation during the Vietnam War to

further reading



“From the Valley to the Summit: A Brief History of the Quiet Revolution That Transformed Women’s Work,” by Claudia Goldin, National Bureau of Economics Working Paper 10335, March 2004.

“The Power of the Pill: Oral Contraceptives and Women’s Career and Marriage Decisions,” by Claudia Goldin and Lawrence F. Katz, *Journal of Political Economy*, August 2002.



lower the voting age. ("Old enough to die, old enough to vote," was the slogan at the time.)

Using these variations in state law and judicial rulings, Lawrence F. Katz and I were able to look at their impact on the age at first marriage and on women's careers. We find that laws allowing for greater access were strongly and positively related to the age at first marriage and strongly and positively related to the fraction of women pursuing professional careers. The availability of the Pill to young, single women does appear to have been a substantial factor in the quiet revolution.

While the Pill was an important factor, it was only one contributing factor; and it functioned within a larger changing social and economic environment for young women. Labor force participation rates had already been rising for some time, although until the late 1960s young women had not built the increases into their educational investment calculus. The appearance of the Pill may have enabled young women to view early investments in time-intensive careers as less risky. The resurgence of feminism may have awakened young women to the social changes around them and also contributed to their use of the Pill. Antidiscrimination laws affecting hiring, promotion, and education may also have contributed, on the margin, to protect women workers and to encourage schools to admit them.

Other factors appear to have been less important. Abortion reform may have mattered somewhat; but in our statistical analysis, abortion reform runs a distant second to the Pill in explaining the changes discussed above. Similarly, because women tend to marry men who are somewhat older than they are, the Baby Boom created a sex ratio bulge. But this does not explain much of the increase in the age at first marriage for the group of women analyzed here, nor can it explain the enormous increase in professional degrees for women.

Whatever the precise reasons, a great divide in college-graduate women's lives and employment occurred about 35 years ago. Before this change, women who reached the peaks made solo climbs. They became symbols and tokens demonstrating that women could achieve greatness. But real change demanded a march by the masses from the valley to the summit. That march began with women born in the late 1940s. \*

*Claudia Goldin is the Henry Lee Professor of Economics at Harvard University and Director of the Development of the American Economy Program, National Bureau of Economic Research.*

by MARCIA BRUMIT KROPF

# inspiring girls to be strong,



IRLS INCORPORATED, a nonprofit organization that serves girls aged 6 to 18, has been dramatically influenced by the transformation that Claudia Goldin describes. The group began in 1864 in Waterbury, Connecticut, as a place for girls to gather while their mothers worked in the factories. An early statement of purpose (1937) was explicit about its mission of preparing young women to be wives and mothers. "Little girls of today are the homemakers of the future,



# smart, & bold

the mothers of the next generation of citizens. Opportunities given to them now for cultural background, for healthy minds and bodies, for training in homecraft and a basic knowledge of motherhood—these determine the standards of our future homes.” As late as the 1950s, the Girls Incorporated mission remained essentially unchanged. In 1952, it inaugurated a Homemaker of the Year Award. In 1955, with funding from a shampoo manufacturer, it published *The Handbook of Charm*. The book covered topics such as hair, skin, posture, and wardrobe,

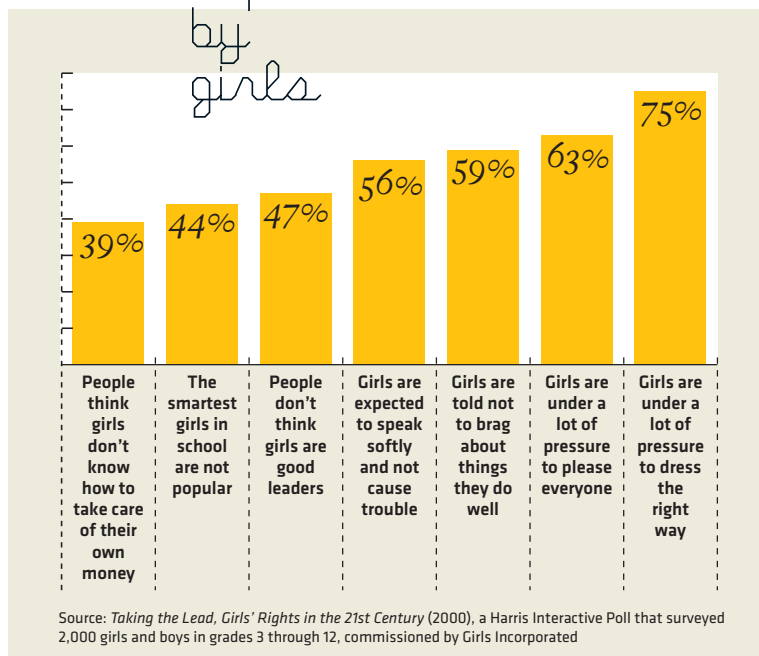
and offered pointers on manners including, “Don’t monopolize a conversation. Don’t interrupt when others talk. When at any public gathering, conduct yourself in a ladylike, considerate manner . . . don’t be conspicuous and call a lot of unnecessary attention to yourself.”

During the 1960s and 1970s, Girls Incorporated completely rethought its mission and purpose. With changing times came a new focus on preparing girls for interesting work and economic independence. In 1984, its first identity program, focused on adolescent pregnancy prevention, was introduced. In 1998, the current mission statement was adopted: to inspire all girls to be strong, smart, and bold. Today seven additional identity programs are offered, including math and science education, media literacy, violence prevention, economic literacy, leadership development, substance abuse prevention, and sports participation, all designed to help girls think about themselves in new ways.

But while Girls Incorporated and other organizations have evolved with the changing times, many of the old problems remain, leaving Goldin’s revolution unfinished. A recent Girls Inc./Harris Interactive survey of 2,000 girls and boys in



## Stereotypes experienced by girls



grades 3 through 12 found that three-quarters of the girls agreed that girls are under pressure to dress the right way; 63 percent agreed that girls are under pressure to please everyone; and 59 percent agreed that girls are told not to brag about things they do well. This raises troubling questions about the influences that girls face when they’re preparing for their futures. Boys recognized the stereotypes, too, but girls were twice as likely to be highly dissatisfied with them: 47 percent of girls compared to 23 percent of boys as measured by an index Harris created.

It’ll end with another thought-provoking Girls Inc./Harris study on the potential influence of “girls’ communities.” The study defined participation in a girls’ community very loosely, including playing on a girls’ sports team or being in a Girl Scout troop; it didn’t have to be as intensive as attending a girls’ school. Nonetheless, girls who participated in such groups were more likely to plan to attend college, more likely to feel safe, more likely to play sports, and more likely to read books than girls who did not. The study can’t explain exactly why these differences occurred, and it cannot sort out the extent to which girls who join girls’ communities are different—perhaps more motivated—to begin with. But it does raise interesting questions about what will most help girls make progress and to find a comfortable place in the economy and the world in the future. ✱

*Marcia Brumit Kropf is Chief Operating Officer of Girls Incorporated.*

by IOANNIS N. MIAOULIS

# encouraging

## women in engineering, math, & science



COME AS AN EMISSARY FROM one of Claudia Goldin's "male-intensive" majors. I am a mechanical engineer by training and, before I joined the Museum of Science, I was Dean of the School of Engineering at Tufts University. In these jobs, I have looked to promote women into leadership positions, and it has often been very difficult to find candidates. Thus I have spent a significant part of my career trying to increase the number of women studying engineering, science, and math.

My interest in encouraging young people to study engineering began in the mid 1980s when my wife and I moved to Boston. One day, I was trying to find my way to Tufts when I made a wrong turn and ended up in the parking lot of the local middle school. As I was looking around, it occurred to me that it would be fun to show the students some of the new materials we had made in the laboratory. IBM researchers had been working on new superconducting materials; magnets placed on them would float. Many of us thought this might lead to superconducting roads and magnetic cars, like in the TV cartoon show, *The Jetsons*. I got out of the car and met with the principal, who invited me back to talk with his eighth graders.

During the presentation, I planned lots of hands-on activities. To make the concept of electrical resistance understandable, I used the analogy of drinking a milkshake through a straw: the thicker the straw, the easier to drink the milkshake; the longer the straw, the more difficult to drink the milkshake. As I was giving my talk, a blonde girl with frizzy hair sat right in front of me, glued to everything I had to say.

At the end of my visit, I noticed the



teacher encouraging his "science boys," as he called them, to lobby me to help them build a superconductor. The little frizzy-haired girl cut right in front of them. "Dr. Miaoulis, I would love you to help me with my Science Fair project," she said. She wanted to investigate the fluid mechanics of milkshakes. As I was negotiating with her, the teacher pulled me aside and whispered in my ear, "Don't waste your time with her. She's a mediocre student. Why don't you work with the guys?" I was shocked.

I spent the next 15 years at Tufts focusing on making science and mathematics more exciting for young people in general, and young women in particular. The first hurdle: rethinking the K-12 curriculum, which had been set in 1892 when there were no airplanes, cars had just been introduced, and technology and engineering weren't on the radar screen. Today's curriculum focuses on the natural world but covers little about the human-made world where we spend most of our time. Inspiring today's students—women and men—would require a new approach.

I thought engineering would be a good way to get young people excited about math and science. Engineering makes math and science relevant to

people, and it uses project-based and collaborative learning in which women tend to thrive. In an engineering project, you identify a human need and come up with a solution. For example, suppose a second-grade classroom has a pet bunny, but one student is allergic to rabbits. An engineering project would be to design and build an outside habitat. Students use math to make measurements and science to understand that insulation is necessary since heat travels from hot to cold. They have to communicate verbally and in writing—to collaborate with each other *and* to convince the janitor to let them put the bunny house outside!

But success would take more than an "add women and stir" approach. Other schools had tried to improve the representation of women in math and science by simply accepting more women students or hiring more women faculty, and expecting the rest to follow. Yet, retaining women was the real problem and this required a larger transformation.

Tufts engineering students tended to drop out before taking a single engineering course—because they said engineering wasn't interesting. So we decided to introduce engineering from the first year and in a playful way. Professors took their passions and developed engineering courses around them. My two passions are fishing and cooking. I taught a fluid mechanics course called "Life in Moving Fluids," which focuses on the physics of motion of fluids but from the point of view of a fish. I also taught "Gourmet Engineering," a heat transfer course, with the experiments done in a kitchen. We also introduced design courses early to even up the experience gap that boys have over girls prior to college. Traditionally, women have had more difficulty than men in



by PAUL F. LEVY

# teamwork

## on the field & at work

visualizing things in three dimensions. Research suggests this is the result of the toys that girls play with compared to the toys that boys play with, and that early design courses can bridge the gap.

Along the way, we instituted other measures. We established a national web database ([www.wieo.org](http://www.wieo.org)) for women-in-engineering programs. We created innovative summer programs for high-school girls, and a program that pairs middle-school girls with Tufts engineering students and faculty to work at a local museum. We increased the representation of women on Tufts faculty to serve as role models and mentors. We also paid attention to things which are sometimes overlooked, like creating more women's bathrooms in buildings built when only 3 percent of engineering students were women. We changed the culture in a fundamental way.

And an amazing thing happened. Tufts became the only engineering school in the country that attracted more students from liberal arts than it lost to liberal arts. Today, 32 percent of Tufts engineering students—about twice the national average—are women; and 16 percent of the faculty are women, about four times the national average.

And in case you're wondering, the little girl with the frizzy hair won the science fair that year; in fact, she was the first of five girls in a row to win at her school, an unprecedented event. She eventually attended Haverford College and majored in history and biology, graduating with honors. Today, she works in Tanzania for her own nonprofit foundation that raises money, and designs and builds science laboratories for children. \*

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*Ioannis N. Miaoulis is President and Director of Boston's Museum of Science.*

ONE WAY THAT PEOPLE LEARN TEAMWORK, informal mentoring, and other workplace skills is through participating in sports. Yet, many women of my generation did not get a chance to develop these talents since they had fewer opportunities to participate in organized athletics when they were young. I came to understand the importance of sports from my own experience: My passion—all the rest is a hobby—is coaching girls' soccer, something I have done for the last 15 years.

My goal as a coach is to create an environment that rewards risk-taking, discourages criticism, and acknowledges the girls' desire to have social relationships while they play. In this environment, the girls gain prowess and confidence, and their individual satisfaction rises. They become more and more creative—trying out different approaches, fresh moves, new ideas—because they know they are not going to be criticized. Over time, what I would call the “explicit social intercourse” also grows, as girls from a variety of backgrounds become at least friendly, if not real friends.

But here is the magic. Imagine 22 kids moving around on the field. Eventually, the girls learn to place themselves as play develops during a game in a way that reflects their relative strengths and weaknesses as players. They do not have to be told to do this. They do it on their own, on the field. They talk to one another occasionally, but mostly it happens intuitively.

The result: a team that is truly greater than the sum of its parts. The players function as a cohesive group—going from offense to defense, left to right, one side to the other—and the team works as an organic whole. When mistakes are made, you hear, “Good try.” Or, “Don't worry about it. It'll be better next time.” And when successes happen, players are covered with compliments from everyone. And, most important, the girls are smiling when they leave the field, win or lose.

These lessons from the playing field also apply to companies and institutions. Mentoring works best when it happens informally with the person who happens to be standing next to you when you need it. A work environment that encourages risk-taking, discourages criticism, and supports social relationships will allow and encourage women to develop their skills and achieve high-level satisfying careers. And, the interesting part is that men like it, too. \*

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*Paul F. Levy is President and Chief Executive Officer of the Beth Israel Deaconess Medical Center.*



*Progress and obstacles* **Professional & managerial women in the workplace**



by JOYCE P. JACOBSEN

# choices changes

at critical moments  
in their careers, men  
and women make  
different choices—  
and those choices  
have consequences  
for the heights they  
ultimately attain



WHEN I THINK OF the women who started college with me at Harvard 25 years ago, I would have been hard-put to accurately predict who would work full-time continuously, who would work intermittently or part-time while their children were young, and who would drop out of the labor force completely while in their child-raising years. My three college roommates and I have among us a PhD, a JD, an MD, and a CFA; four marriages and one divorce; seven children and four stepchildren—and we all have worked full-time continuously. Yet a glance through my twentieth reunion book shows that while our family histories are not unusual, our work histories are. Many of my women classmates are not currently working or have taken substantial amounts of time off, even though they have JDs, MBAs, and other such abbreviated symbols of the overachieving upper-middle class in contemporary America.

As Harvard graduates, my classmates and I made the kinds of educational decisions that could have led us to the top. But not all of us made it. What happened to us once we left Harvard's hallowed halls? What were the choices we faced about our careers and our families—the choices that either kept us on or moved us

**People must simultaneously make decisions about their careers and family lives, and every resolution to a question about one part of their life alters the opportunities for achievement in the other**

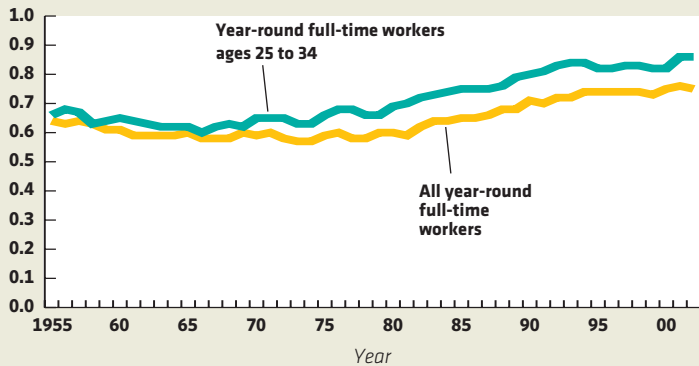
photographs by DEBRA McCLINTON



## A shrinking but persistent income gap

Relative to men, women are earning more than before, but this is mainly because men's pay has declined.

Female/male median annual income ratio



Source: Current Population Reports Series P-60

off the path to the top? What befell our male counterparts who also made the choice to slow down their career progression to spend more time with their families? Who among us grasped the brass ring, and how?

### Women at work

Women and men still don't have exactly the same career trajectories, but their work lives are starting to look more and more similar. The last half-century has seen a remarkable rise in female labor force participation, as well as a notable decline for men (see chart on page 19). Only about one-third of adult women worked in 1948; today, about 60 percent do. At this rate, we are potentially nearing the day when men and women will work in equal proportions.

Already women and men workers are equally as likely to become unemployed. In the past, women were more likely to be unemployed than men at all stages of the business cycle. But now that women and men work in the same industries and often the same occupations, they are subject to the same economic ups and downs and thus the same chances of losing their jobs in a recession.

Marriage and children, which never had much effect on men's work patterns, now have less effect on women, too. In 1960 women married at a median age of 20.3 years, often marrying right out of high school and/or interrupting their college education. Marriage led to children and thereby to child-raising—and child-raising generally implied women's exit from paid labor. If women reentered the labor force at all, it was after several years, often into part-time work, and generally into work that was job- rather than career-oriented. Today women marry later in their twenties, and they have their children later as well. Thus they are more likely to go on to college, less likely to interrupt their college education for marriage, and more likely to have embarked on a career before marriage.

When they have children, they are less likely to take time out from work, and they take less time off before returning full-time. In 1960 fewer than one in five women with children

under the age of six worked; today, over 60 percent do—almost identical to the labor force participation rate for married women overall. Over three-quarters of women with school-age children work.

Women also work in a much broader range of occupations than they did several decades ago. There is still substantial gender segregation in the labor market, but it derives mostly from differences in representation across jobs at the lower end of the pay and skill scale—jobs like transportation and material moving (87 percent men) or office and administrative support (74 percent women). By contrast, in professional jobs—those most likely to lead to positions at the top of organizations—men and women are more evenly mixed; for example, 32 percent of lawyers and doctors and 41 percent of postsecondary teachers are women. Overall, women comprise roughly half of all management, professional, business, and financial workers, equal to their representation in the workforce as a whole.

Although women's and men's work choices are starting to look more similar, we still see a gap in the rewards they receive for their work. Even among full-time year-round workers, women only receive three-quarters the pay of men (see chart on this page). Women have gained in pay relative to men over time, but mainly because men's earnings were stagnant or declining during much of this period. Women's earnings increased, to be sure, but not rapidly enough to explain their entire gain in relative pay. And it doesn't appear that moving women into male-dominated occupations in and of itself will completely solve the problem, since women are already substantially represented in higher-paying jobs. Within occupations, even female-dominated ones, men are disproportionately represented among the highest earners.

The good news is, among more recent cohorts, the wage difference is smaller, although it has not been completely eliminated. In 1960, the average 25- to 34-year-old year-round full-time woman worker earned 65 percent of the equivalent man's income, but today she earns 86 percent. Younger cohorts appear to be benefiting from greater investment in higher education, increased work experience and lifetime hours worked, rising earnings in many female-dominated occupations, and possibly a reduction in the most blatant forms of gender discrimination in pay and promotion. At the same time, the gender gap in pay is not completely shut. Young women still earn significantly less money than men, and it is likely that the gap will increase over time within this cohort, as these young men disproportionately move into high-paying senior professional and executive positions.

Thus, it is clear that today's women have much greater opportunities for and rewards from work than their mothers or grandmothers did. Yet there is still a long way to go before women and men follow the same career paths—and therefore a long way to go before women and men have the same op-

portunities for advancement, promotions, and pay. What leads men and women to follow different trajectories?

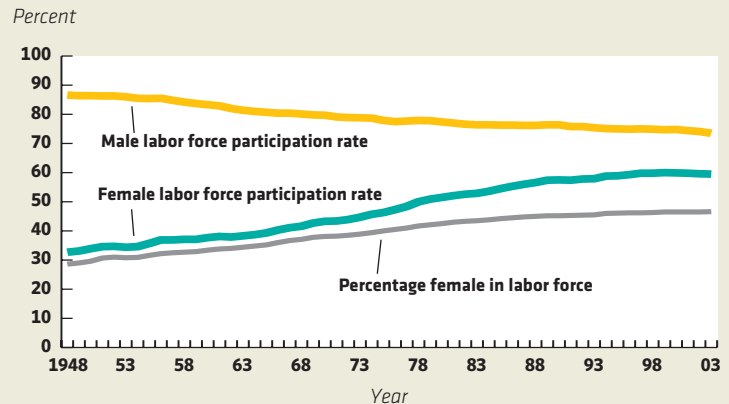
### Choices in careers and families

Men and women alike encounter numerous critical points in both their work and their family lives at which a decision they make—or one that someone else makes—will affect their subsequent career path. Some of these decisions might open a door to one career or close a door to another. They might lead to higher or lower pay, or more or less responsibility, or more or fewer opportunities for promotion. They might mean having no children or many, doing more or less housework, or caring for aging parents at home or putting them in a nursing facility. These choices—in career and in family—interact to allow or preclude the possibility of reaching the top.

After college, the first major career decision most people make is about their first job. Of course, as Claudia Goldin points out (see page 4), by this point people have already sorted themselves somewhat by college major. People with majors that lead to low-visibility or back-office fields may have already reduced their chances of winning many top leadership positions in traditional corporations. How much the first job itself matters for someone's ultimate career path, however, depends on the occupation and industry. Some students start off as investment banking analysts, for example, and later go on to pursue a wide variety of careers and leadership positions. But in other professions, such

## More and more work for women

More than 60 percent of women work today, up from 30 percent after World War II. Women now comprise nearly half the labor force.



Source: U.S. Bureau of Labor Statistics.

to do enough additional research to become full professors, and senior managers have to decide whether to accept assignments that will put them in line for further promotion.

Within a given career, the choice of what kind of organization to work for can also make a difference. Some firms are more demanding and less flexible than others; a lawyer working for a government agency may find a more manageable workload than one working in a large private law firm. Newer and smaller organizations tend to have relatively flat, nonhierarchical organizational structures, which can mean greater flexibility in job descriptions but fewer opportunities for promotions. Individuals in small startups or professional services firms that are

## Career and family outcomes are built from a series of critical choices, such as college major, profession, employer, marital status, and number of children

as military officers, the first position is a clear and distinct step along a progression to the top. Those who do not take that step cannot move up.

For those who ultimately aspire to the top, that first job will turn into a career—a series of increasingly responsible jobs within or across occupations and industries. Careers vary in whether, when, and how advancement happens. Some paths, like corporate manager or college administrator, provide the possibility of quick and frequent promotions, whereas others are slower-moving. Some have a single high-stakes threshold for further advancement: Law associates and consulting managers generally get only one chance to make partner; academics one chance to get tenure. Those who don't make the cut may have to leave their profession entirely or take a lower-paying job in the same occupation in order to remain employed in that line of work. And even in high-stakes occupations, those who have passed the initial hurdle often face further decisions down the road that affect their ultimate access to the top; for example, associate professors with tenure must decide whether

relatively unbureaucratized may have to take on much more responsibility for creating their own promotional paths. On the other hand, more bureaucratic and hierarchical firms may also be limited in promotion opportunities if they are not growing quickly, since advancement in these organizations generally requires others to vacate senior-level positions first. Finally, moving up in some kinds of organizations may require frequent relocations to corporate offices around the country or the globe; in other organizations, one can reach the top without ever having to move.

At the same time that men and women are facing these career choices, they are also making choices about their family lives. These are sometimes portrayed as simple binary decisions: whether or not to get married, whether or not to have children. But the realities of these choices—and their impact on career opportunities—are far more nuanced. Every small resolution to a question about family life alters the opportunities for achievement at work. Will the couple cohabit before or instead of marriage, and if so, for how long? Is household work equally



were the ones who curtailed their pursuit of higher education or chose majors that led to “family-friendly” jobs; who worked in jobs, rather than careers; who dropped out of the labor force or reduced their work hours when their children were young; who limited their aspirations for the sake of their families. As a result, they also bore the brunt of the career consequences: less employment, lower pay, and fewer opportunities for promotion and authority on the job.

But these days, it’s not all women—or even just women—who experience the costs of career-family conflict. Several recent studies of women and men in high-powered professions—ones that require large commitments of time and continuous labor force attachment, especially early in the career—find that only those people who spend relatively more time on child-raising than others in the same job suffer a career or earnings penalty.

For example, in an examination of managers and professionals in a financial services firm, Mary Blair-Loy and Amy Wharton find that although women in the firm earned less than men on average, there was no earnings penalty for mothers rela-

## Other things equal, only those women and men who spend relatively more time on taking care of children and family suffer a career or earnings penalty

divided, or is one person expected to take the greater share of responsibility? Are both careers weighted equally, or is one person’s career more important? Will the couple have children early on or later, once their careers are more established? Only one child, or more? Close in age or far apart? Will the couple use paid child care? Work alternate shifts? Have one parent stay home? What are the expectations regarding what shape the home will be in, how much time the family will spend together, how much community service the family will do, and how many lessons the children will participate in after school? Do other family members live nearby or far away, and how much help can they provide with child-raising? Does the community offer support services for working families, such as after-school care or easy transportation to activities? How much assistance do elderly relatives need because of aging-related disabilities? The outcomes of each of these family and career choices affect the heights a person can ultimately attain.

### When family and career collide

For most, if not all, people, family and career choices are unavoidably in conflict at times. A family emergency or the decision to stay home with small children might preclude taking a promotion that would lead to greater career growth. Pursuing a career opportunity for one spouse might mean slowing the other’s career path, or even uprooting the entire family. Historically, it was women who bore the brunt of these choices. Whether by preference or by lack of other options, women

tive to other women workers. But both women and men who took advantage of the firm’s family sick leave policy earned less than their peers. Likewise, a study by Mary Noonan and Mary Corcoran examined University of Michigan Law School students who graduated between 1972 and 1985 and found no evidence that marriage or parenthood reduced the probability of making partner. However, both male and female lawyers who took time out of the labor force for child care were less likely to do so. Alicia Sasser’s recent analysis of the Young Physicians Survey shows that women physicians earn less money annually if they are married or have children, but much of the pay gap is related to their working fewer hours per year. At the same time, women physicians who remain single and childless improve their earnings position relative to men over time. And Anne Preston finds that the public university science graduates she studied sorted themselves between a “parent track” and a “fast track.” The earnings of women who remain single and childless actually surpassed those of men who report spending substantial time engaged in child care.

Family characteristics can also affect potential career growth. Sociologist Mary Frank Fox, who recently examined productivity among academic scientists, finds that whether a scientist is in a first or subsequent marriage and whether or not their spouse is also in a scientific occupation both affect how many articles both men and women publish. (Subsequent marriages to scientists appear to be the best for one’s productivity, perhaps because child-rearing may be less of an issue in later marriages.) Fox

also finds higher productivity among women with preschool children than among either women without children or women with school-age children. It may be easier to manage one's work around young children, whose child-care arrangements tend to cover the full work day, than with school-age children, whose school schedules are more difficult to work around.

Thus, even women who have made the commitment to a high-powered profession may still not reach the top, depending on the strength of their commitment to family life. And today, men who dare to step onto the "parent track" can also suffer financial penalties. At the same time, men and women who do not have children or who are not as involved in their children's lives often see their earnings and opportunities increase. In other words, so long as you don't spend too much time with your family, then it need not affect your career to have one.

### Spring forward, fall back

Attaining the top takes more than just accumulating a continuous set of experiences that leads to the upper echelons of an organization. Advances occur at discrete points in time, with discretion on the part of both the individual and the organization. At these critical moments, men and women can determine—or at least influence—their own fates.

Women may fall behind at these junctures because they do not act proactively enough on their own behalf. The title of a recent book on women and negotiation—*Women Don't Ask*—says it all. Most research indicates that women are not as effective as men at negotiating for promotions, salary increases, or other work benefits. And many career paths require people to ask for opportunities to move ahead, rather than waiting for those opportunities to be bestowed upon them. In those careers, people who choose to negotiate and to take initiative to create their own opportunities are more likely to succeed—and those people are more likely to be men.

These critical moments are also points at which discrimination may occur. Discrimination need not be an all-or-nothing phenomenon in which, for example,

further reading

**"The Human Capital Explanation for the Gender Gap in Earnings;"** by Joyce Jacobsen, in Karine S. Moe (ed.), *Women, Family, and Work: Writings on the Economics of Gender*, Blackwell, 2003.

**Mommies and Daddies on the Fast Track: Success of Parents in Demanding Professions,** by Jerry A. Jacobs and Janice Fanning Madden (eds.), *The Annals of the American Academy of Political and Social Science*, 2004.

**Women Don't Ask: Negotiation and the Gender Divide,** by Linda Babcock and Sara Laschever, Princeton University Press, 2003.

women are never hired or never promoted or always paid less than men. Instead, it could be that discrimination operates—consciously or unconsciously—by reducing the chance that women move ahead at each juncture. If this is the case, women will be hired and promoted more slowly and will be likely to receive lower pay raises than do men. And even if the effect at each point in time is small, over time the disadvantages will accumulate and fewer women will move up the pipeline.

Nonetheless, evidence suggests that much of the gender difference in career outcomes occurs because men and women make different choices. These choices are changing, to be sure, but women are still more likely than men to make decisions that benefit their families at the expense of their careers (see Rosanna Hertz's essay on page 22 and Nancy Folbre's essay on page 49). It could be that women are making these choices because they genuinely prefer to spend more time with their families, or it could be that they have divested from the work world because they perceive that their opportunities for career growth are limited. But in the end, the outcome is the same—fewer women at the top.

At the same time, this suggests that the best way to improve women's opportunities is to change the tradeoffs at those critical moments. For example, we could make taking time off less costly or improve women's ability to negotiate for the arrangements they would need to stay in the workforce. We could make quality child care accessible and affordable. We could reconsider whether certain organizational hurdles, like tenure or partnership decisions, could be eliminated or changed to be more family-friendly. Indeed, we need to question the very way work is organized. Once we do so, we can build new structures that allow more people to balance their home and work lives.

Today's women undergraduates at elite universities are, if anything, even better prepared for the world of work than my friends and I were when we graduated. But I doubt if they have thought through how to balance career and family any more thoroughly than we did before we reached the real world. I hope, however, that as we restructure the workplace, today's young women won't need to put as much effort into balancing work and family as my generation did. Instead, they will be able to jump the work-family hurdle more gracefully—and thereby tap more of their potential. \*

Joyce P. Jacobsen is the Andrews Professor of Economics at Wesleyan University and author of *The Economics of Gender*.

### Married with children: The impact on women's work

Women's labor force participation rates	1960	2002
Single, never married	58	67
Divorced, separated, or widowed	41	49
Married	31	61
no child under 18	34	54
child 6 to 17	39	76
child under 6	18	60

Note: Data are for civilian women 16 or older.  
Source: Statistical Abstract of the United States



## work & leadership

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# tests of manhood



AT THE BEGINNING OF the twenty-first century, women have become full-time and continuous participants in the labor force. But even as the gender composition of the workforce has changed, the demands of both careers and motherhood have remained the same. Workers of both sexes are still expected to sequence their lives according to jobs and career demands—getting married after completing school, moving to a new city to get the big promotion, having children at a career transition point. At the same time, mothers are expected to display unending dedication to their children, from providing young children with afternoon milk and cookies to sideline cheering and chauffeuring teens to sports practices and games.

For those who aspire to the top ranks of an organization, the competing demands of work and family aren't difficult to negotiate early on when they are investing in education and career opportunities. The dilemma only arises later, once these men and women are well entrenched in the labor force. It is often a major change or crisis—the birth of a new child, a nanny quitting—that forces families' hands. Then they face the conflict between work and family head-on.

**The gender composition of the workforce has changed over the last several decades, but the demands of both careers and motherhood remain the same**

*by* ROSANNA HERTZ







And there's the rub. Work is all-demanding, while raising children is sequestered as a private problem to be resolved by individual families. Since gender equality in employment has not been accompanied with gender equality in the home, the burden of resolution falls primarily to women, who feel they must choose whether work or family will come first. This is especially true for those women who possess the financial resources to have a meaningful choice—which is to say, those who are most likely to be able to reach the top of organizations. What does this conflict mean for women who aspire to be leaders?

**Motherhood versus manhood**

Most corporate careers are constructed around traditionally male social roles and experiences. This outdated view harkens back to days when wives tended to the home and children, freeing men to pursue careers with a singular focus. However, though dual-career couples are now much more common, the prototypical career has not changed. Employers expect employees to invest themselves fully in their jobs, and employers invest, in turn, in those who do. Long hours, evening and weekend work, unplanned travel, after-hours socializing, lengthy out-of-town training, and high stress levels presuppose that someone who wants to succeed in conventional terms will either have no serious life outside of work or will have someone else, a spouse perhaps, to tend to the details of house, home, and family. Succeeding in an organization, then, requires passing a “test of manhood”—meeting the organization on its own (masculine) terms.

While society promises women they can be and do whatever they want, such freedom does not extend to the choice to become mothers. Instead, women face an expectation of compulsory motherhood, regardless of their career choice. Compulsory motherhood confounds career goals because there is no “right” time to have children. Some women meet this expectation by continuing to work, placing their children in day care or hiring nannies, while other previously work-focused women are startled to discover a deeply rooted belief that they want to be at home as their children’s primary caregivers. Becoming a mother is still viewed as one of

further reading



**More Equal Than Others: Women and Men in Dual-Career Marriages**, by Rosanna Hertz, University of California Press, 1986.

**“Working to Place Family at the Center of Life: Dual-Earner and Single-Parent Families’ Strategies,”** by Rosanna Hertz, *Annals of the American Academy of Political and Social Sciences*, vol. 562, 1999.

**Geeks and Geezers: How Era, Values, and Defining Moments Shape Leaders**, by Warren Bennis and Robert J. Thomas, Harvard Business School Press, 2002.

women’s primary contributions to their families and the larger community. It is our single most important test of womanhood, and our culture remains deeply ambivalent about women who do not commit to this task. Thus, women’s career aspirations must be reconciled with both personal and social expectations about women’s behavior and roles within the family.

Our social norms demand that women place their families first. But the corporate emphasis on the achievement of organizational, rather than individual, goals directly conflicts with this belief. If a woman decides to take time off while her children are young—following the expectations of compulsory motherhood—her behavior is commonly interpreted as a decision to disinvest in the organization. As one woman I interviewed put it, “It can take years to make up for the fact that you’ve had a child. It’s like something you’ve done to the corporation.” Allowing a child to disrupt her career means she has failed the test of manhood, but not having a child means she has failed the test of womanhood.

When these sorts of career-family conflicts arise, dual-career couples—those in which both the husband and wife are highly educated and pursuing demanding but well-rewarded upwardly mobile professions—have choices not available to those of more modest means. They can remain fully committed to the labor force, become stay-at-home parents, or work part-time. Nonetheless, they face much greater ambiguity and confusion about how to negotiate the work-family tradeoff, since no one partner can claim authority or primacy in the household based on “bringing home the bacon.”

Because of this cultural ambiguity, dual-career couples need to define a set of principles that can guide the pursuit of two careers and simultaneously create an acceptable union between career and family. But most couples cannot accurately describe how their careers are related, how they came to choose those careers, and, most important, how they came to mesh and manage two careers in one marriage. One man struck on what he felt was an apt metaphor: “It’s like a dual carriageway, and we are both going down those carriageways at more or less the same speed, I would say. While those carriageways don’t cross one another, if something happens on one of them, something necessarily happens on the other one.” How couples negotiate their career carriageways, then, has much to do with our cultural conceptions about work and parenthood.

**Private solutions**

My research over the last two decades has shown that women in dual-career couples adopt a variety of strategies to handle the conflict between work and family. Some choose not to bear children at all. They devote all their energies to their work lives and enjoy the full opportunities to succeed at work, since they are behaving in effect as a man would within the organization. However, they face the cost of not succeeding at home, at least in the eyes of others, since they do not have children. Other women take a market approach to child-rearing—paying

others to provide child care, house cleaning, and so on while they and their husbands continue to pursue full-time careers. They view their children as resilient, not in need of intense mother-nurturing. These women can succeed to a degree in both realms, but many find themselves stretched between the demands of their paid work and social expectations about intensive mothering.

Other dual-career women find ways to keep the family at center stage. Some opt entirely out of the workforce for extended periods of time to care for their children. Despite these women's previous attachment to their careers, their belief in the necessity of intensive mother-nurturing outweighs their fidelity to their work. Similarly, many women who continue to work after child-bearing still believe that the family should be organized around caring for children, not around work. These parents tend to feel like the woman I interviewed who said, "When we

dressed. These private solutions do not go far enough. They do not fundamentally alter our ideologies of work and family.

#### **Leadership: the ultimate test of manhood**

Many argue that we could alter these ideologies by creating greater work-life balance. In this view, work and life (family, friends, health, and so on) are the two ends of a pendulum's swing. The idea of work-life balance is to move the pendulum away from work, where it has been stuck too high, and towards the other aspects of life. This should lead to a more satisfying and enriching lifestyle, with one part reinforcing instead of competing with the other. And it places the onus onto the workplace, rather than the family, to change and accommodate this choice.

So far, so good. But the problem is, when we are talking about families in which both spouses have high-powered careers, it is

## **When we are talking about families in which both spouses have high-powered jobs, it is usually the wife who "balances" and the husband who has the career**

decided to have a kid, I decided I wanted to be a mom, a little bit, or why have a child? I just felt that if I am going to raise this kid, I want to be there for some of the events. Otherwise, I wouldn't have bothered."

In some of these families, the mother takes primary responsibility for the children, while in others, both parents are full participants. But in either case, the wives frequently try to straddle the worlds of work and family by working part-time. Part-time workers maintain some connection to the work world and a greater possibility of returning to a position of similar prestige and power, while at the same time, they have more time to be with their children. But part-time work is not a panacea. Organizations frequently make these arrangements on an *ad hoc*, case-by-case basis rather than creating formal policies or structures, which forces each woman to confront and negotiate with the organization as an individual on her own. As a result, other women in the organization do not benefit, and not enough high-prestige, powerful part-time positions are created.

Moreover, it's not clear that part-time work fully passes the tests of manhood and womanhood. Bosses and coworkers still view part-timers as less committed, since they are less available and less a part of the team. This can slow or curtail their job advancement. At the same time, part-time women are looked at askance by those who believe that children need their mothers at home full-time.

So far, change has been slow because we have enacted private, individual solutions, cobbled together in response to what is viewed as a private problem. Dual-career families look to themselves, to the marketplace, and ultimately to their checkbooks for solutions. In only a few instances do they look to their employers or to society for help. The real issue—our unchanged definition of what constitutes success at work and at home—is never ad-

usually the wife who balances. She is the one who reduces her career time or finds a job that is less demanding or becomes a part-timer in order that her husband's career might rise. In a study of parents' decisions about child-care arrangements in their children's first years of life, I found that it was rare for men to scale back significantly when their first child was born, whereas those wives who continued working frequently negotiated reduced work-hour schedules. Even the men who did cut back at first—working one fewer day per week, say—eventually went back to full-time, five-day-per-week employment. Their wives, however, continued to strive for "balance," moving the pendulum even further towards family as they increased their involvement with their young children. One man told me when his second child was born, "I have already experienced fatherhood with my first child. And with the second I didn't even ask my boss because I was promoted and rising fast and we needed the income. Anyway, my wife preferred to continue to work part-time." In these families, work-life balance meant that his career soared while hers limped along.

The ideology of balance reinforces the current structure of careers, which presumes that there is someone other than the employee who tends to the home and children. Work cultures do not care about the employment status of spouses. Thus, those employees who choose to seek balance do so at the expense of violating the cultural norms of careers. From an employer's perspective, work-life balance looks like disinvestment in work—a clear failure of the test of manhood. And to become an organizational leader still requires a singular passionate focus on work. So long as women do the balancing and men continue to keep the tradition of late nights and extensive travel, women will continue to fail the test. Achieving "balance," then, may come at the cost of precluding women from becoming leaders.



### The future of women as leaders

If we want women to lead, we will need to change our definition of leadership. The desire among many younger men and women to pursue both a personal and a professional life may help point the way. Take, for example, the case of a 32-year-old female automotive executive profiled in Warren Bennis's and Robert J. Thomas's recent book, *Geeks and Geezers*. She noted that in her company (and in the industry more generally), the operating definition of "leader" was someone who worked extraordinary hours, made all the key decisions in a forceful and directive way, rallied the troops from a corner office, and was ranked by the number of people who reported to him or her. But the value she attached to having a life after work forced her to find a different path. Rather than pull marathon work sessions, she planned her projects carefully, with realistic timetables. Rather than insist that her desk be the crossroads for all decisions, she delegated responsibilities to her team and rewarded them appropriately. And, she mobilized her people to be more efficient, so that they, too, could have a measure of balance in their lives.

To move us closer to the day when this woman's experience is not the unusual but the norm, we need more accounts and case studies of women who are organizational leaders, so we can understand the forces that have helped them to advance in their careers. We need to look at the varied life courses that women select that allow them to demonstrate leadership. We need to know whether it is even possible for aspiring women leaders to be anything other than completely devoted to their work; and if it is, we need to know more about how to combine leadership with families. Most important, we need to use this information to develop models for how organizations can best use the talents of women, rather than forcing women to choose between work or family because it is impossible to do both effectively and simultaneously.

Three-quarters of men and women at every life stage are working more hours than they would prefer. Many wish they did not have to make such drastic choices that preclude either children or a high-powered career. At the same time, organizations are increasingly bearing the cost of losing talented women who cannot make the current system work. We must ask ourselves what it would take to reorganize employment to make it more compatible with family life. But we must also remember that the solution is not just a matter of balance. We need to find better ways to allow talented women to excel. \*

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# paying the price

evidence on how  
family choices affect  
career outcomes

by CARRIE CONAWAY





IN MAY 2004, Brenda Barnes reached the Holy Grail of the ambitious working woman. Seven years earlier, she had resigned her job as president and CEO of Pepsi-Cola North America—two steps away from the top job at PepsiCo—to spend more time with her family. Yet she returned to the workforce right where she had left off: as the number-two person at Sara Lee Corporation, one of the nation’s largest consumer products companies.

Still, there were consequences. Barnes gave up seven years of earnings, which added up quickly at her Pepsi-Cola salary of \$2 million per year. And there was no guarantee that she could return to such professional heights. Indeed, many people—even, or perhaps especially, people on the path to the top—who make similar choices face the possibility of not only lost earnings, but also reduced future opportunities in the forms of employment, promotions, and authority.

These reduced opportunities do not come, for the most part, because employers instantly demote or cut the wages of people who take time out for family reasons. While discrimination of

this kind may occur, opportunities also decline because of the cascading impact that family choices can have on work hours, relocation decisions, and even career direction.

What are the penalties for stepping, even temporarily, off the career track to care for family needs? And which family choices matter most?

#### **Children and earnings**

If family choices have an impact on career outcomes, it should show up in people’s paychecks. The research evidence is quite clear that, at least in recent years, the choice to marry by itself does not reduce people’s incomes. Married men have long enjoyed a wage premium over single men, although the effect has declined somewhat recently. And married women without children earn just as much as single women; indeed, some studies even show a marriage premium for women without children.

Earnings differences don’t appear until children enter the equation. A recent study by researchers David Ellwood, Ty Wilde, and Lily Batchelder presents the best evidence to date on





the wage experiences of women who are currently in their child-rearing years. Their study is also one of the few that looks specifically at highly skilled women, whom they define as women who scored in the top third on a standardized test of ability.

Ellwood and his colleagues find that before child-bearing, the wages of highly skilled mothers and non-mothers were not significantly different. But highly skilled women experience an 8 percent reduction in their wages during the first five years after they have a child relative to similar women who never had a child. After 10 years, the penalty rises to more than 20 percent—and this is after accounting for any reduction in earnings

form is associated with approximately a 0.4 percent reduction in hourly wages for married women and a 0.3 percent reduction for single women. By contrast, household labor time has no effect on married or single men’s earnings. Women at the high end of the income distribution may be able to buy themselves out of the housework bargain by paying for services such as cleaning, convenience foods, and child care, but no research to date has examined how much these purchases might reduce women’s household labor time.

In addition, as our population ages, more families find themselves responsible for dealing with an aging or infirm parent.

## Deciding to get married, have children, or care for elderly relatives affects not just wages, but also other career opportunities such as training and promotions

associated with their having less experience or working fewer hours. Highly skilled men, on the other hand, experience no such negative wage effects after their first child is born.

According to Ellwood *et al.*, one important contributor to the child wage penalty for women is extended leaves. Staying out of the labor force for an extended period after having a child often has a dramatic impact on a woman’s wages. Highly skilled women who did not work during the second year after their child’s birth earned 10 to 17 percent lower wages than women who did work during that year, even after adjusting for lost experience and how long ago their child was born. Nonetheless, including this factor in the analysis still leaves a significant wage penalty for highly skilled mothers, and one that increases as their children get older. What else might account for this gap?

### Housework and parent care

Other family choices could be at play in contributing to the gender wage gap. For instance, although the amount of time women spend on housework has declined notably since the 1960s, women still do significantly more household labor than men (see sidebar on page 31). And several studies by economists Joni Hersch and Leslie Stratton demonstrate that the more housework women do, the lower their wages are—even after adjusting for the possibility (as some economists have argued) that lower-earning women might do more housework simply because the opportunity cost of time spent on housework is lower for these women. Hersch and Stratton’s research shows that every additional hour of household labor that women per-

Although the amount of time people spend on parent care is generally less than the amount spent on child care, it might still be enough to affect caregivers’ (generally women’s) employment. However, the best-designed studies to date on this issue show no such effect. Researchers have hypothesized that time spent on parent care may be coming from time that would otherwise be spent on housework, child care, or leisure, rather than work. While some studies indicate that caregivers may be less productive while at work, there is no evidence so far as to whether this is associated with decreased wages. And there is no research on whether parent care is a bigger or smaller problem for highly skilled women likely to attain top positions.

### Training, promotion, and authority

Deciding to get married, bear children, or care for an elderly parent affects more than women’s wages. These decisions might also affect women’s chances for other career opportunities, such as training or mentoring, promotions, or authority.

Unfortunately, we know little about whether or to what extent family choices affect women’s likelihood of getting training or mentoring. Studies are inconclusive as to whether women get more, less, or different training than men, let alone how family choices such as having children might factor into any discrepancy. Women on the path to the top do seem to be less likely to have mentors than men, but it’s not clear how much mentorship matters in getting to the top—or whether family choices are the reason behind the mentorship gap.

Family choices do, however, seem to have some association with reduced opportunities for promotion. Economists Deborah Cobb-Clark and Yvonne Dunlop find that for all workers aged 31 to 39 in 1996, there is a negligible sex gap in promotions overall. But women with the best chances to reach the top—those with college or postgraduate education and managerial jobs—appear to be promoted less frequently than similarly educated men, and some part of this difference may be due to family decisions. For instance, about 25 percent of women with preschool children are promoted, more than 3 percentage points fewer than equivalent men. However, women with older children are actually more likely to be promoted than equivalent men, nearly making up the earlier difference among parents of preschoolers. This may


further reading

**“The Impact of Childbearing on Wages of Women of Differing Skill Levels,”**

by David Ellwood, Ty Wilde, and Lily Batchelder, presented at the Harvard Economics Department Labor Seminar, April 2004.

**“Housework and Wages,”** by Joni Hersch and Leslie S. Stratton, *Journal of Human Resources*, 2002.

**“The Role of Gender in Job Promotions,”** by Deborah A. Cobb-Clark and Yvonne Dunlop, *Monthly Labor Review*, 1999.



## From personal experience *Women professionals at midcareer*

**ON ROLE MODELS:** “There are very few visible role models for me to point to, leaders who have responsibility for the money or for the profit and loss in the company.”

**ON CHILDREN:** “My husband and I are at that point where we’re trying to decide when is the right time to have children; and as I’ve heard today and from many other sources, there is no right time.”

**ON THE DOWNTURN:** “The largest challenge in my industry is the market downturn in high-tech and the impact on opportunities that has had. People try to preserve either their roles or certain employees, and you start to preserve the folks who are perceived to be similar to you or the breadwinners in their families.”

**ON ASPIRATIONS:** “My students [seem to be making] a conscious, deliberate choice no longer to reach, but to settle. They are at a select, elite business school, and they

We asked three midcareer women at the Boston Fed’s “Reaching the Top” conference to talk about the decisions they’ve made so far, the challenges they’re currently facing, and the impact of their work on their families and communities.

graduate with their MBAs but with their aspirations set four or five notches lower.”

**ON THE PIPELINE:** “We had tons and tons of hiring in the late 1990s and had made a lot of penetration [in terms of hiring] female engineers. When we look at that today, not only did we lay off many of them, but we’re at a very bad starting point for advancement beyond those first initial layers of new engineers.”

**ON THE INNER CIRCLE:** “No matter how smart, how successful, how politically plugged in, I’m not confident that I can even get into that inner circle. But let’s assume for a second that is a feasible option. Do I really want to do what it’s going to take to get there, given my current life?”

**ON FAMILY RESPONSIBILITIES:** “I enjoy my work, but what I really want to do is go work abroad in another emerging market. But my father is suffering from Alzheimer’s and my in-laws are facing serious health challenges. So for both my husband and I, that’s not in the cards in the short to medium term, and that’s okay.”

**ON WORK-LIFE BALANCE:** “I remember coming home from work one day and my house was full of kids. There were easily 10 children in my home, and I did not know one of them. My nanny knew significantly more of my neighbors and their kids than I would ever have dreamed of knowing.”

**ON COMMUNITY:** “I’ve had to seek out ways to hold onto community and family because it wasn’t something that would naturally be there given the kind of job I currently have. I have had to make a sustained effort to not have work be my life, but just one piece of it.”

indicate that parenting women’s promotions have been delayed rather than foregone. Part-time work, which is common among highly educated women with children, may also slow promotions. Women who work part-time are much less likely to be promoted than either male or female full-time workers, although they are much more likely to be promoted than men who work part-time. Moreover, no study has adequately assessed whether women’s family decisions directly reduce their opportunities for promotion or whether instead their (perceived) lack of chances for promotion might lead them to have children or take on additional parental care or household labor responsibilities.

Much research also demonstrates that women are significantly less likely to hold positions with authority over others, whether supervising other employees, having the authority to hire and fire, or having control over others’ pay. Family choices could be part of the reason for this gap; for example, perhaps women would prefer to have less responsibility at work because of the responsibilities they already carry at home. But the few studies that have explicitly examined the impact of marriage or childbearing on women’s authority level at work find no statistically significant association between the two. None have looked at the impact of parent care or household labor.

### Facing the consequences

There is still much more to learn about the consequences of

women’s family choices for their careers. We know that the choice to have children has a much greater impact on women’s careers—whether wages, promotions, or authority—than simply getting married or caring for parents. And we know that the effects of these choices are often long-term and indirect, reducing women’s wages and opportunities through how they affect subsequent decisions about whether and how much to work.

But we do not know nearly enough about all the possible penalties women might pay for certain family choices, nor do we know whether the consequences are greater or lesser than they used to be. One thing we do know, though, is that it’s not just women who face these consequences. As Joyce Jacobsen points out (see page 16), anyone who behaves like a woman in the eyes of the organization—who takes time off for child-raising, works part-time, or displays less than complete devotion to the firm—will pay a price in terms of salary and advancement.

At the same time, Brenda Barnes’ example demonstrates that it is possible to take significant time off from full-time work and still return to top leadership positions. Admittedly, she was not completely idle during those seven years; she served on six corporate boards and as interim president of a hospitality company. And neither is her experience by any means typical. Nonetheless, her path back to the executive suite shows that at least some women can do it all—even if they can’t always do it all at once. \*

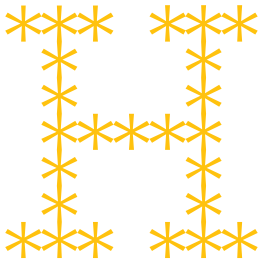
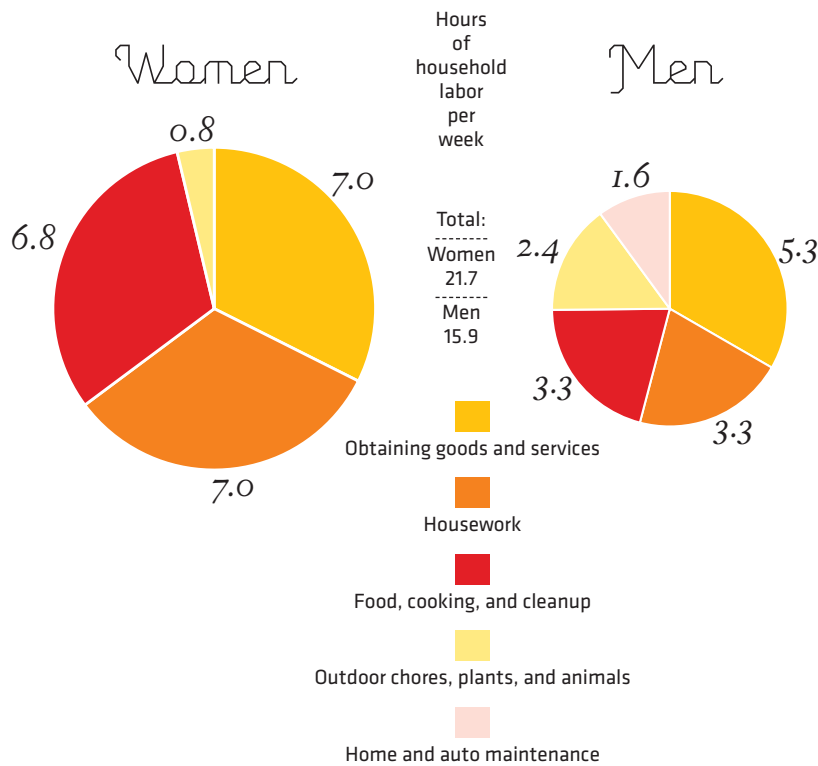


by CARRIE CONAWAY

where does the time go?







HOUSEHOLD LABOR IS ONE OF the primary battlegrounds over which the work-family conflict is fought. No matter how much time is spent at work, at the end of the day the house has to be reasonably clean, the kids fed, the yard mowed, and the shopping done. With a limited amount of time in the day, every family has to negotiate who will do which tasks and for how long.

For years, women have gotten the short end of this stick. In 1965, the heyday of the stay-at-home mom, women did an average of 30 hours of household labor per week—six times the 5 hours per week men logged. What little household labor men did was concentrated on repair and maintenance work, while women were responsible for cooking, cleaning, laundry, and so on.

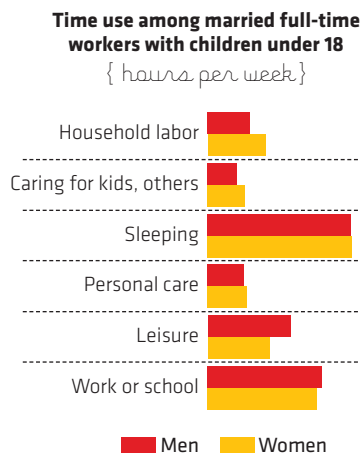
Times have changed, but household labor time hasn't changed nearly as much as one might expect. The most significant change since the 1960s is that about 50 percent less household labor is being done overall. To make up the difference, some families are now buying substitutes such as housecleaning and prepared foods. But other tasks simply go undone; the house is a little more dusty, the dinner less elaborate.

Nonetheless, women still do significantly more household labor than men. The chart at right shows a breakdown of time use

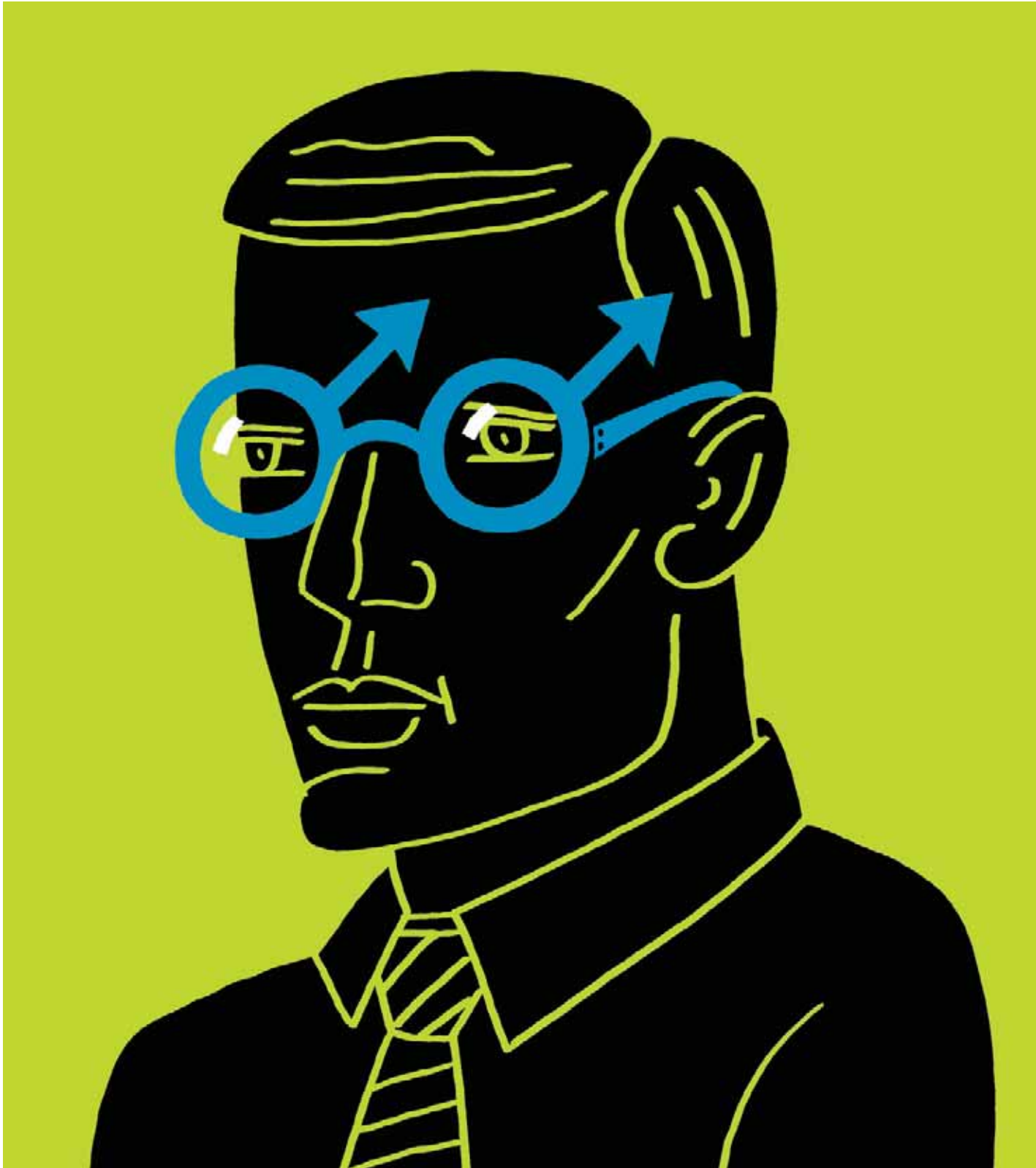
among married people who work full-time and have children at home—people who presumably have a similar amount of time available for household tasks. According to these data, these women spend about 10 more hours per week on household tasks, mostly on household labor and caring for children. To find the time for this, they sacrifice 8 hours of leisure per week relative to men and work about 2 hours less. Furthermore, it's not just the presence of children that creates the sex difference. Even married women who work full-time but don't have kids spend about 8 more hours per week on household labor and 10 hours less on leisure than equivalent men.

Furthermore, the kinds of work women do haven't changed much, either. Women still spend much more time than men on cleaning, cooking, and shopping—tasks which need to be completed promptly and frequently. Men have greater responsibility for outdoor and maintenance work, which can more often be done on a more flexible schedule and which tend to take less time overall.

It's hard to say how much this "second shift" matters for women's ability to reach the top of organizations. But it stands to reason that the more time anyone spends on tasks outside of work, the less time available for work itself—and therefore the less opportunity to move up. \*



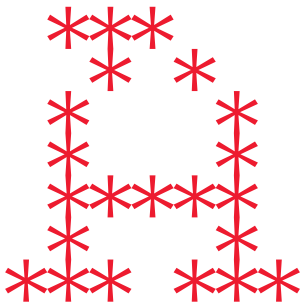
Source: Family Interaction, Social Capital, and Trends in Time Use Study, 1988-1999. Note: Numbers may not sum to totals due to rounding.



by BARBARA RESKIN

even if we could  
completely eliminate  
intentional  
discrimination,  
unconscious bias  
would still  
remain

# unconsciousness raising



ALTHOUGH WOMEN HAVE MADE unprecedented headway in the work world over the last 30 years, it has been slow going. The pay gap between the sexes has narrowed by about a half a cent a year, the decline in sex segregation stalled in the 1990s, and women's share of executive jobs has only been inching up. In short, equal opportunity remains out of reach for most women.

In the past, discrimination against employed women was commonplace. No doubt, several bushels full of bad apples still intentionally discriminate, but overt, intentional discrimination almost disappeared after it was outlawed. Unfortunately, a second type of discrimination, one outside the reach of the law, persists across American workplaces. This discrimination originates in unconscious mental processes that systematically distort the way we see other people. In order to deal with a constant barrage of stimuli, our brains are wired to reflexively categorize and stereotype people, often in ways that we would consciously reject. All but impossible to detect in ourselves, these unconscious reactions are normally outside of our control. While they are largely invisible, their consequences are not: They systematically disadvantage women—and minorities—at work.

Although individuals cannot banish the automatic unconscious distortions that limit women's careers, employers can minimize their discriminatory effects

**Our brains are wired to reflexively categorize and stereotype people, often in ways we consciously reject as false**



through personnel policies that reduce managers' discretion, such as formalizing hiring and promotion practices, holding managers accountable for fair decisions, encouraging employees to identify with groups in which membership is not associated with gender, and actively compensating for unconscious biases. Many employers would readily implement these reforms if they understood the consequences when cognitive errors go unchecked. However, most employers do business as usual unless something in their external environment forces them to change. Until we change the environment in which businesses operate, our unconscious biases will block women's and minorities' rise to the top.

### **Automatic stereotyping**

Unconscious distortions harm the career prospects of working women (and minorities) through stereotyping and ingroup favoritism. Stereotypes automatically associate in our minds group membership (e.g., male) and traits (e.g., aggressive). While most people consciously stereotype some groups (for example, the assumption that someone with a youthful or unsophisticated appearance lacks savvy about the world, or that someone from the South harbors conservative racial attitudes), automatic stereotypes occur outside our conscious awareness and may involve beliefs that we consciously reject.

Societies pass on a body of shared cultural "knowledge" to their members, and this knowledge includes the content of stereotypes associated with particular groups (e.g., skinheads, fundamentalists, immigrants, politicians). As a result, most people can accurately describe the content of stereotypes, regardless of whether or not they accept them as accurate. And apparently simply knowing these stereotypes leads our unconscious minds to draw on them, linking group membership with stereotypical attributes or behaviors. These automatic implicit associations have survival value. Because we cannot consciously consider each new bit of information our senses pick up, responding without conscious thought to some categories of stimuli (e.g., the sudden appearance of a snarling dog or a person who looks dangerous) frees up cognitive resources for other tasks. Similarly, automatic stereotypes about the sex or color of a person we encounter may help us to quickly size up a situation. Of course, to the extent that our stereotypes are not valid, we will size it up incorrectly.

The cognitive efficiency of automatic stereotyping makes it all the more tenacious. We process stereotype-consistent information more readily than inconsistent information. And anything that taxes our attention—multiple demands, complex tasks, time pressures—increases the likelihood of our stereotyping. For example, research subjects assigned to complete a sentence could obey an instruction to avoid sexist statements when they had ample time. But under time pressure (or more generally, with multiple cognitive demands), their statements were more sexist than those of a control group. The experimenter's admonition against sexism actually "primed" the subjects' unconscious sexist stereotypes, making them especially likely to come to mind. Similarly, we tend to believe and recall evidence consistent with our stereotypes (including untrue "evidence")

and dismiss evidence that challenges them. Thus, automatic cognitive distortion in our evaluation of evidence makes it hard for us to sort out valid from mistaken beliefs.

The unconscious beliefs most people harbor about women cast doubt on women's suitability for high-level jobs. For example, women are stereotypically viewed as less oriented to their careers and more oriented to their families than men are. They are also seen as too nurturing to effectively manage subordinates or head-to-head competition and too risk-averse to succeed in business. Automatic sex stereotypes block women's access to high-level jobs, especially in predominantly male work settings, by affecting the tasks supervisors assign to women and men, biasing their evaluations, and influencing the attributions they make for the successes and failures of workers of each sex.

For women who hold or aspire to customarily male positions, stereotyping is especially problematic because sex stereotypes for women are inconsistent with stereotypes about ideal job holders. As a result, predominantly male work settings put women in a double-bind. Conforming to societal stereotypes about how women should behave prevents their fitting the stereotype of the ideal worker, while satisfying the stereotype of the ideal worker violates prescriptive stereotypes about how women should behave. For example, Ann Hopkins, who successfully sued Price Waterhouse for denying her partnership despite her exemplary performance, was described by one partner as "overly aggressive, unduly harsh, and difficult to work with," while another encouraged her to adopt a more feminine appearance. In sum, Price Waterhouse did not promote her because she could not fill the mutually exclusive stereotypes of woman and Price Waterhouse partner.

### **Ingroup favoritism**

The machinations of our unconscious minds create another hurdle for women's access to top jobs. Within seconds of meeting a person, our brains automatically categorize them as someone like ourselves (a member of our ingroup; "us") or unlike ourselves (a member of our outgroup; "them"). Like stereotyping, automatically categorizing others is functional in a complex world. Because we categorize people immediately, we do so based on visible, and often surprisingly irrelevant, attributes. (People's inclination to classify all others into ingroups and outgroups was first observed among boys whose only visible difference was whether their shirt was red or blue.) Thus, whether we view others as "us" or "them" often depends on their sex.

Two processes associated with "us-them" categorization pose problems for women's advancement. First, having categorized someone as like or unlike us, we extrapolate to other characteristics, assuming that ingroup members generally resemble us and outgroup members differ. Second, we automatically favor ingroup members. We trust them more than other persons, attribute positive traits to them while ignoring their negative characteristics, prefer to cooperate rather than to compete with them, evaluate them more positively than others, cut them more slack when their performance falls short, and favor them when distributing rewards.



## Stereotypes of women are inconsistent with stereotypes of ideal executives, casting unconscious doubt on whether women are suitable for top positions

In settings in which men hold most top-level positions, ingroup favoritism limits women's likelihood of advancement. The career benefits from belonging to the "old boys' network" involve both conscious and unconscious ingroup favoritism. For example, when one female CEO asked her previous boss for a promotion, "he looked...flabbergasted" and then explained, "The guy I've got up there now has been my running partner, and it's taken me two years to get him to that position." Her boss's explanation suggests that he implicitly assumed that someone who shared his gender and interest in running also shared his executive ability. In similar situations in which women who were passed over for promotion sued (for example, *Foster v. Dalton* in 1995 and *Brandt v. Shop 'n Save Warehouse Foods* in 1997), the courts have acknowledged that "such actions are unfair from the standpoint of the plaintiff and persons of [their] sex," but concluded that they do not violate antidiscrimination laws. Because the courts interpret antidiscrimination law as applying only to intentional discrimination, it is legal for men to favor their buddies (usually male) over people they don't socialize with (almost all women and people of color).

Another upshot of the assumption that ingroup members resemble us and outgroup members don't is that the latter are

unlikely to come to mind for career-building opportunities. And if they do, they bring the baggage of "themness" with all its implicit associations. As another CEO told a researcher, "We [had] talked about having a woman [on the bank's board]...but had been unable to settle on someone who we thought could make a major contribution."

The daily effects of automatic stereotyping and ingroup favoritism may be small: being excluded, passed over, or denied credit. But over time, micro acts of unintentional discrimination lead members of ingroups to accumulate advantages not available to outgroup members. The disparities this produces are as consequential as those of intentional, overt acts of discrimination.

### Stemming discrimination through structure

The unconscious, reflexive nature of stereotyping and ingroup favoritism makes unequal opportunity for women an everyday occurrence. But when the laws of nature or of the mind lead to predictable, but undesirable outcomes, we often try to prevent it ahead of time. For example, because we know that automobile accidents can lead to serious injury or death, we require manufacturers to install seatbelts. Similarly, to sup-



press the bias that predictably results from automatic cognitive distortions, employers need to implement personnel practices that are analogous to seatbelts in preventing unintended disparate outcomes.

My favorite example of a preventive structure comes from a study of how symphony orchestras started to include women. Until the 1970s, Claudia Goldin and Cecilia Rouse report, virtually all the musicians in major symphony orchestras were male. In the auditions that symphonies used to select musicians, judges could see as well as hear the candidates. Moreover, the auditions were unapologetically subjective: Judges were not constrained by prespecified criteria. And those selected were almost always male. We can't know why this happened, but when symphony orchestras began to put auditioners behind a screen, thereby concealing their sex, symphonies increasingly hired women. The screen both curbed intentional discrimination and prevented any unconscious stereotypes and ingroup favoritism from having discriminatory effects on women applicants.

Although there are few settings in which applicants' sex can be concealed, the impact of blind auditions illustrates the importance of structures for reducing discrimination. The subjective and unstructured decision-



### **The impetus for change usually comes not from altruism or self-interest but from pressure outside the firm in the form of lawsuits, regulations, or adverse publicity**

making invites bias. Consider Home Depot, which began as a close-knit, predominantly male company in which people hired or promoted their buddies. The company's hiring and promotions practices remained informal as it expanded, and women's exclusion from management eventuated in a class-action lawsuit. In keeping with the consent decree that settled the lawsuit, Home Depot completely revamped its hiring and promotions practices. The new employment structure included computer or telephone kiosks in every store for people to apply for jobs and specify their qualifications and job preferences. When managers posted openings, they automatically received a list of all qualified applicants. By standardizing all facets of the matching process, Home Depot curtailed managers' discretion, reducing the likelihood that managers' conscious or unconscious ingroup favoritism or sex stereotypes would affect job assignments or promotions.

Simply reducing managerial discretion by formalizing personnel practices does not ensure a level playing field, however.

Accountability is another key factor in reducing biases in judgments. Managers must know they will be held accountable for the criteria they use, the accuracy of the information they use in personnel decisions, the procedures by which they make those decisions, and their consequences for gender and race equality. For instance, experimental subjects charged with recommending teaching assistants were less likely to recommend candidates of their own race and sex when they had been told that the decision-making process would be public than when they believed their decisions would be kept secret. But, importantly, when decision-makers are under time pressure (which is presumably most of the time), knowing that they will be held accountable does not suppress automatic cognitive biases. For accountability to be effective, departing from specified procedures must have tangible consequences. Home Depot, for example, fired managers who hired staff outside the computerized system.

Employers can also reduce the discriminatory impact of ingroup favoritism by promoting the formation of mixed-sex

ingroups by employees. One option is integrating work teams, thereby encouraging workers to categorize coworkers on bases other than their sex, such as teams, projects, or divisions. Organized competition between work groups, for instance, encourages team-based ingroups, which then discourages stereotyping because people tend to see their teammates as individuals.

In sum, micro acts of discrimination occur every day in most workplaces as a result of automatic cognitive processes that are largely outside of our awareness, much less our conscious control. The pervasive and automatic nature of these unconscious biases makes it almost impossible to prevent their helping men's careers and harming women's, even when firms implement structures to minimize bias and hold managers accountable for using them. This means that ensuring an equal-opportunity workplace may require consciously taking gender into account in job assignments and promotions. This could take the form of gender-conscious recruiting, such as targeting traditionally female labor pools or proactively identifying women who are likely candidates for advancement; or gender-conscious hiring, which explicitly treats sex as a "plus factor" in deciding among qualified applicants. The latter approach is legal only for firms that have admitted past exclusionary treatment (see article on page 38).

### External pressure

The *raison d'être* of work organizations is not to prevent discrimination, but to produce a service or product. And few organizational leaders, particularly in the private sector, take their positions primarily to create a more just society. As a result, reducing the discriminatory effect of automatic cognitive errors almost always takes a back seat to productivity and the career growth of top executives.

Widespread problems within a firm—such as high turnover among women professionals—can lead firms to change their personnel policies (see article on page 42). But usually the impetus for change comes from outside the firm, in adverse publicity regarding its treatment of women or minorities, lawsuits charging discrimination, or oversight by regulatory agencies. For example, the

further reading

**"Implicit Stereotyping in Person Judgment,"** by Mahzarin R. Banaji, Curtis Hardin, and Alexander J. Rothman, *Journal of Personality and Social Psychology*, 1993.

**"Minimizing Workplace Gender and Racial Bias,"** by William T. Bielby, *Contemporary Sociology*, 2000.

**"Rethinking Employment Discrimination,"** by Barbara F. Reskin, in Mauro F. Guillen, Randall Collins, Paula England, and Marshall Meyer (eds.), *The New Economic Sociology: Developments in an Emerging Field*, Russell Sage, 2001.

**"Second Generation Employment Discrimination: A Structural Approach,"** by Susan Sturm, *Columbia Law Review*, 2001.

Office for Federal Contract Compliance Programs monitors and regulates employers' compliance with presidential executive orders mandating nondiscrimination and affirmative action by federal contractors. Although the likelihood of losing a contract is minuscule, employees of federal contractors look more like America than those of noncontractors. Likewise, the outcome of discrimination lawsuits can influence the personnel practices not only of the firm under consent decree—like Home Depot—but also of other firms in the same industry or labor market. It is not easy to prevail in sex discrimination cases, however. Ann Hopkins succeeded in her lawsuit against Price Waterhouse only because the partners in the firm expressed conscious sex stereotypes. If their decision had been distorted only by their unconscious stereotypes, she would not have been able to prove sex discrimination.

The legal environment can also make a difference on women's outcomes in more subtle ways. For instance, a study by Doug Guthrie and Louise Roth showed that the more equal employment opportunity laws in a corporation's home state and the more progressive the federal appellate courts in the corporation's district, the more likely it was to have a female CEO. The policy stance of a region, a state, or a local labor market can affect women's access to top jobs through the message it sends to corporations about the consequences of disobeying discrimination laws. It can also affect women's representation in the candidate pool by encouraging or discouraging them from pursuing opportunities in various kinds of careers. And because women, like men, pursue the best jobs open to them, a favorable legal and regulatory environment will attract women to opportunities.

The logical conclusion of this analysis—that regulatory agencies should require firms to curb the consequences of automatic stereotyping and ingroup favoritism—is likely to be controversial. But organizations rarely implement genuine reform without external pressures; and in the absence of a political sea change along with a broader legal conception of discrimination, equal opportunity is likely to take place one firm at a time. Leveling the playing field more quickly will require pressure on lawmakers and regulators to address both conscious and unconscious barriers to women's inclusion. \*

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### Testing assumptions

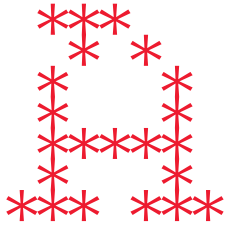
**A group of psychologists has developed an online test to study the prevalence and impact of unconscious beliefs about stereotyped groups such as women, blacks, Arabs, the elderly, and the overweight. The test shows the impact of our own unconscious stereotypes, even those we consciously reject as untrue. To take the test, visit <http://implicit.harvard.edu/>.**



by FRANCINE D. BLAU  
and ANNE E. WINKLER

# does affirmative action work?

**After four decades, we are still debating how much impact affirmative action can and should have on opportunities and outcomes at work**



AFFIRMATIVE ACTION is a lightning rod in the debate about how to achieve equal opportunity in America. Some oppose affirmative action because they question the presence of discrimination at all. Others acknowledge the presence of discrimination but feel that taking active steps to help women and minorities should not be necessary if antidiscrimination laws are doing their job. Still others view affirmative action positively, though even here there is disagreement about how to implement it. Some think it is sufficient to expand the pool of candidates for a job, while others think it should go beyond this towards preferential treatment for women and minorities. Others worry that specific goals for employing women and minorities may become *de facto* quotas. But in all the controversy and rancor, there is one question that is less often asked and even less frequently answered: Does affirmative action in employment actually work?

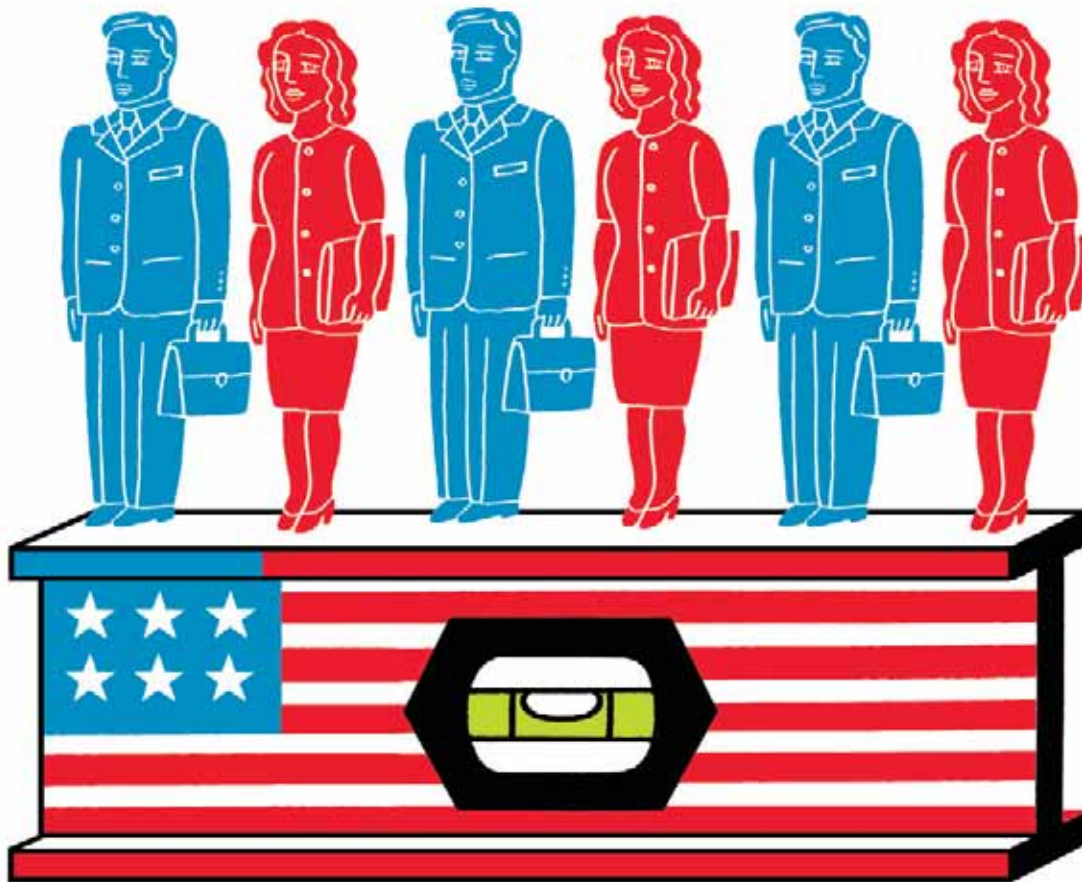
Affirmative action is intended to remedy the effects of discrimination against women and minorities in the labor market. While discrimination against women appears to have declined, the research evidence indicates that women and minorities continue to face significant labor market problems. For instance, statistical analyses of earnings data generally indicate that there is still a sizable sex and race wage gap, even after controlling for education, experience, occupation, industry, and other factors that might explain why women and minorities earn less than white men. In addition, courts continue to find evidence of sex and race discrimination; just one recent high-profile case was the \$54 million settlement of a sex discrimination lawsuit against Morgan Stanley in 2004. And audit studies, in which researchers

compare the employment outcomes of equally qualified workers who apply for the same job, show that women and minority applicants receive fewer interviews and job offers than equally qualified men and whites.

What most people refer to as affirmative action is actually an Executive Order signed by President Lyndon B. Johnson in 1965 and amended to include women in 1967, requiring federal contractors or subcontractors with 50 or more employees or more than \$50,000 in contracts to “take affirmative action to ensure that applicants are employed, and employees are treated during employment, without regard to their race, color, religion, sex or national origin.” Covered employers that “underutilize” women and minorities must submit annual goals and timetables—but importantly, not quotas—for hiring women and minorities. In a few other instances, employers may be required to have affirmative action programs because they have lost or settled a discrimination lawsuit. In addition, some employers have voluntarily adopted some or all elements of the policy.

In the last 30 years, a number of studies have attempted to assess whether affirmative action programs lead to greater employment and advancement of women and minorities. Because affirmative action is a loose amalgamation of many different employer practices, good data on its impact have been hard to come by. But the general consensus is that women and minorities have indeed benefited at least modestly from affirmative action. For example, Jonathan Leonard’s 1989 study on the issue found that employment rates for women and minorities increased faster in firms with federal contracts (who were thereby subject to affir-





mative action), than at otherwise equivalent firms without such contracts. In a similar vein, a 2000 study by William J. Carrington, Kristin McCue, and Brooks Pierce found an increase in the share of women and minorities employed at large establishments—where antidiscrimination legislation and regulations are most likely to apply—after the mid 1960s, when Title VII of the Civil Rights Act was passed and the Executive Orders were implemented.

further reading

Harry Holzer and David Neumark offer other valuable evidence in a recent series of studies (see suggested readings). They asked employers whether affirmative action or equal opportunity law played any role in recruiting and/or hiring for the position they filled most

**“What Does Affirmative Action Do?”** by Harry J. Holzer and David Neumark, *Industrial and Labor Relations Review*, 2000.

**“Assessing Affirmative Action,”** by Harry J. Holzer and David Neumark, *Journal of Economic Literature*, 2000.

**“The Continuing Need for Affirmative Action,”** by Barbara Bergmann, *Quarterly Review of Economics and Finance*, 1999.

**“Women and Affirmative Action,”** by Jonathan Leonard, *Journal of Economic Perspectives*, 1989.

***The Economics of Women, Men, and Work***, by Francine D. Blau, Marianne A. Ferber, and Anne E. Winkler, Prentice-Hall, 2002.

recently. Consistent with earlier studies, Holzer and Neumark found that firms using affirmative action had greater shares of minorities and women in their workforce. Moreover, when firms used affirmative action in recruiting—for example, advertising more widely for positions or requiring applicants to complete a larger number of screening tests to learn more about their attributes and potential—the new female and minority hires were equally as qualified as their white male peers; and once hired, they received equally as good job performance ratings (indicating they were likely equally as productive). When affirmative action was used in the hiring process, Holzer and Neumark again found that new female hires had similar qualifications and job performance. They did see some evidence of lesser qualifications “on paper” for minorities; but once hired, most minority groups performed at a level equivalent to their white male peers. Holzer and Neumark also found that employers who used affirmative action programs were more likely to have formal human resource procedures in place for evaluating their employees, which should help create more objective evidence when considering women and minority candidates for potential promotions down the road. In other words, this research suggests that affirmative action policies make firm personnel management practices more systematic and impartial—one of the remedies Reskin calls for (see page 32).

Of particular interest in the context of this volume is how affirmative action may affect women’s ability to reach the upper echelons of corporate America, government, and academia. Unfortunately, of the studies that have specifically looked at the



impact of affirmative action on women, none have focused on women at the highest rungs on the career ladder. Thus, we still do not know whether being the beneficiary of affirmative action early in their careers ultimately helps women to attain top leadership positions; though as noted, it does appear to have helped open doors to positions along the way. Affirmative action and antidiscrimination policy, in general, may also have broader social benefits, beyond the gains to the specific individuals hired, for instance by creating mentors and expanding networking opportunities for women and minorities.

The benefits of affirmative action in employment, then, are moderately positive for women and minorities alike. Some individuals, however, perceive its costs to be large, which is what makes the policy so controversial and also may threaten its effectiveness. One concern that has been raised is that it creates *de-facto* quotas. But work by Jonathan Leonard shows that federal contractors tend to fall short of their employment goals for women and minorities, suggesting that they are indeed goals and not quotas. The more frequently raised concern, however, is that affirmative action encourages reverse discrimination—deliberately excluding white men to provide more opportunities for women and minorities. Such concerns may particularly arise when the economy is in a downturn and jobs are scarce. However, Holzer and Neumark’s evidence suggests that the likelihood of more productive men or whites being passed over in favor of less productive women or minorities is probably low. And the fact that women and minorities still earn less than men and whites, all else equal, also indicates that reverse discrimination is not the norm.

Concerns about affirmative action not only make the program politically sensitive but could actually cause problems for those who are supposed to benefit from it. They may be viewed as “affirmative action hires” rather than as equally qualified, equally productive employees. This, in turn, could sap their confidence, creating a self-fulfilling prophecy. On the other hand, without affirmative action, women and minorities are likely to have fewer opportunities available to them or may invest less in education and training because they think that it will not pay off down the line. Looking to the future, the challenge is to continue to find ways to equitably level the “playing field” so that everyone has an equal opportunity to succeed. \*

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# a psychological effect of stereotypes

by CARRIE CONAWAY



WE DON’T NORMALLY THINK OF highly successful people as likely to suffer due to psychological pressure or stereotyping. But according to social psychologists, it is those most invested in their achievement who are most likely to fall prey to a kind of unconscious behavior known as stereo-

type threat. This threat is pernicious because it is not due to active discrimination by employers, teachers, or other external evaluators; rather, it comes from within. It emerges in situations where people worry that their poor performance on some measure might be attributed not to their individual ability, but to a negative stereotype about a group they belong to—women, African-Americans, athletes, liberals, any group at all. Members of these stereotyped groups worry that their individual results will serve as a referendum on the abilities of everyone in their group, and the stress and self-doubt this brings on demonstrably reduces their performance—creating the very outcome they were striving to avoid. For example, knowing that women are perceived as indecisive, a successful woman leader may still act indecisively, not because she actually is incapable of making a decision, but because the fear that others will perceive her that way slows down her decision-making process.

Stereotype threat is a complex psychological phenomenon that occurs only when several related factors coincide. Research evidence shows that for people to be affected by it, they must be high performers—people who care about doing well, rather than people who have dissociated themselves from striving for high achievement. They also must be put into a situation where their skills or abilities might be in question. This does not literally need to be an examination; a job assignment could serve the same purpose. But the task does need to be challenging, even frustrating, since these high achievers will not doubt their ability to perform well on an easy test. Studies also indicate that people will be more susceptible when they are invested in their image as a member of the stereotyped group. People whose group identity isn’t important to them won’t be worried about whether their poor performance reflects badly on their group. In addition, individuals are especially vulnerable if they believe that human intelligence is determined at birth (rather than being determined by situational



or learning experiences) and if they anticipate that they will experience discrimination in the test situation (rather than expecting to be treated fairly).

When these factors come together—as they often do on standardized tests and job evaluations—the effect on performance can be surprisingly large. The earliest research on this phenomenon, conducted a decade ago by Claude Steele and Joshua Aronson, focused on African-Americans’ performance on verbal material. They found that, after adjusting for initial differences in SAT scores, black students at Stanford University who took a challenging verbal test answered approximately 10 percent fewer questions correctly than whites did—but only if they believed that the test was a measure of their ability. If they were told that the test measured “psychological factors involved in solving verbal problems,” the black-white test score difference was eliminated.

Later studies have replicated Steele and Aronson’s results, often even without adjusting for initial differences in education or ability. And the effect is not unique to blacks. Studies show that women do worse on challenging tests of mathematical and scientific material, both when they are primed to think that the test demonstrates gender differences in math ability and when they are not primed about the test’s content (and thus are reacting purely on their knowledge that society expects women to be bad at math). The male-female gap is eliminated only when women are led to believe that the test is gen-

der-neutral. Even high-ability white men are susceptible. White men with near-perfect scores on the mathematics section of the SAT—that is to say, white men who were highly invested in their math performance—performed worse on a mathematics test when they were told the test was designed to understand why Asians are better at math. And the results also extend outside academic ability. White athletes did worse than black athletes in a golf exercise when they thought their scores demonstrated “natural athletic ability” (a stereotypically black trait), whereas blacks did worse than whites when they thought it tested “sports strategic intelligence” (a stereotypically white trait).

Unfortunately, we do not know much about stereotype threat outside laboratory settings—for example, in actual work environments. And we know even less about how it might affect women on the way up the corporate ladder. But one set of studies, by Laura Kray and colleagues, does demonstrate that stereotype threat could affect women’s outcomes in one key skill needed by successful executives—negotiation. Women and men business students in a negotiations class were paired (in either mixed- or same-sex pairs) and asked to negotiate over a price or over salary and benefits. Similar to the results of previous stereotype threat research, when women believed that the task demonstrated their negotiating ability—something they cared deeply about because of their identity as business students—their performance suffered. But if they were explicitly told that the test was a learning tool and did not measure ability, they did just as well as men. Likewise, if women were told that successful negotiators were rational, assertive, and self-interested—implicitly linking stereotypically male traits to success—they performed worse than men. But interestingly, and in contrast to some other studies, women actually outperformed men if they were explicitly told that the researchers expected to see gender differences because men were more likely to possess the traits associated with success. In this case, the explicit reference to gender differences led the women to compensate—indeed, overcompensate—for the negative effect of stereotype threat.

The bad news is, stereotype threat is pervasive, and it can have a significant impact on performance. The good news is, understanding the circumstances that trigger it can help to identify ways to avoid its effects. The more people believe that they are being evaluated on a gender- and race-neutral standard and that their evaluators are confident in their abilities, the less impact stereotype threat will have. \*

further reading



**“Thin Ice: Stereotype Threat and Black College Students,”** by Claude Steele, *Atlantic Monthly*, 1999.

**“Contending with Group Image: The Psychology of Stereotype and Social Identity Threat,”** by Claude M. Steele, Steven J. Spencer, and Joshua Aronson, *Advances in Experimental Social Psychology*, 2002.

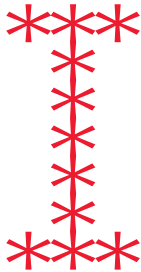
**“Battle of the Sexes: Stereotype Confirmation and Reactance in Negotiations,”** by Laura J. Kray, Leigh Thompson, and Adam Galinsky, *Journal of Personality and Social Psychology*, 2001.



by V. SUE MOLINA

## changing the face of consulting:

# the women's initiative at deloitte



IN 1992, MY EMPLOYER, Deloitte & Touche USA LLP, realized it had a disappearing woman problem. We had been hiring men and women in approximately equal numbers at the entry level since the early 1980s. We knew women were underrepresented among our partners, but we had always assumed that in 10 or 12 years, the women we'd hired in the 1980s would trickle up to the partner pool. But here it was, a decade later, and only 10 percent of that year's partner candidates were women. Where had all the women gone?

Our then-Chairman and CEO, J. Michael Cook, took it upon himself to find out what was happening. He hired Catalyst, the executive women's research and advocacy firm, to interview women who had left the firm. Catalyst discovered that 70 percent were working full-time for other companies and 20 percent were working part-time. The 10 percent who were at home generally intended to return to the labor market at some future time. Women were not leaving Deloitte because they wanted to stay home with children. They were leaving because they didn't want to work at Deloitte.

Many of these former employees perceived Deloitte's culture as male-dominated, not valuing women's ways of perceiving the world and relating to others. They also felt that the firm did not provide sufficient opportunities for women to advance. They believed advancement was limited for many women because they were excluded from informal networks, mentoring, and plum assignments due to assumptions made for them. And the long hours and heavy travel schedules for some made juggling work and home life next to impossible.

That Catalyst survey was a wake-up call to our senior management. Our most important asset was our people, and we were losing them in droves. This turnover was not only costly to us, but also frustrating to our clients. What's more, we were hiring the best and brightest men and women, and proportionately losing 80 percent of the women before they reached partner level. By definition,

the quality of our partnership had to be diluting. We knew we needed to make changes quickly or lose even more of our highly skilled staff.

Since that wake-up call, we've made a number of changes so that women are better able to succeed at Deloitte. Some of the biggest changes include:

- Implementing reduced work-hour schedules that are not just available, but actually used. Because reduced-hour workers still participate in practice development opportunities, recruiting, and other non-client activities, going on a reduced schedule no longer *de facto* takes people off the path to promotion—although it might extend the length of time it takes to get promoted.
- Creating a mentoring program that proactively matches female senior managers with partners so that the women can learn the informal rules of the road for advancement.
- Changing to a “3-4-5” travel schedule, in which our consultants are out of town three nights a week, working in the client's office four days a week, and in the home office on the fifth day. That way, even consultants who travel extensively can spend more time with their families.
- Improving recruiting practices to increase representation of women when filling vacant positions, whether at the entry or senior level.
- Identifying high-potential men and women who are currently or will soon be ready to move into leadership positions, to reduce the possibility that qualified candidates were overlooked and to increase the number of women promoted into senior leadership.
- Forming an advisory council of outside experts, currently chaired by former Secretary of Labor Lynn Martin, to monitor our progress.



## Milestones in working women's legal history

by BRAD HERSHBEIN



BETTINA/CORBIS

### Deloitte built a business case for improving its work environment

Three factors helped us to make such radical changes. First, our senior leadership, in the early 1990s and today, has been visibly committed to making this happen. In 1993, with the launch of our Women's Initiative, our CEO attended all the Women's Initiative meetings, held a press conference to announce its kickoff, and kept everyone talking about how we could improve the environment for women. Second, we had a strong business case. Turnover was costing us millions of dollars each year; we needed to stop the bleeding and find ways to retain our people. And third, we held ourselves accountable. As accountants, we love numbers. So we track the pipeline, promotions, gender gap in turnover, flexible work arrangements—all the elements that keep the door open for women. And we rely on the outside advisory council to keep our feet to the fire.

In the last decade, the environment at Deloitte has become much more favorable for women—and for that matter, for men. For the last eight years, we have had the highest percentage of women partners, principals, and firm directors among the major accounting and professional services firms. Our gender turnover gap is almost completely gone. We now routinely appear on *Working Mother's* and *Fortune's* lists of the best companies to work for, and we have also been able to attract more clients because we have more staff stability on assignments. We still face many challenges ahead in maintaining an environment where women and men have equal opportunities for promotion and leadership at Deloitte. But we know that because of the strength of our Women's Initiative, we will continue to progress. \*

*V. Sue Molina is a retired partner and former National Director of the Initiative for the Retention and Advancement of Women at Deloitte & Touche USA LLP.*

**1920** Women receive the right to vote with the passage of the 19th Amendment

**1923** Equal Rights Amendment (ERA) first proposed by the National Women's Party

**1932** The National Recovery Act allows only one person per family to hold a government job; many women are fired

**1948** In *Goesaert v. Cleary*, the Supreme Court upholds a Michigan law that prohibits women from working in certain occupations (such as bartenders) on account of protecting morals

**1963** Congress passes the Equal Pay for Equal Work Act, barring wage discrimination on the basis of sex, race, religion, and ethnicity

**1964** Congress passes the Civil Rights Act, Title VII of which forbids discrimination on the basis of race, ethnicity, religion, and sex

**1967** President Johnson's Executive Order 11375 requires federal agencies and contractors to actively ensure that women are not discriminated against in education or employment

**1968** The Equal Employment Opportunity Commission (EEOC) rules sex-segregated help-wanted ads are illegal unless a *bona fide* reason exists for them

**1969** California passes the nation's first no-fault divorce law

**1969** In *Bowe v. Colgate-Palmolive*, the Supreme Court rules that women meeting the physical requirements can work in previously male-only jobs

**1972** Title IX of the Education Act mandates that all educational programs receiving federal aid cannot discriminate on the basis of sex

**1972** In *Eisenstadt v. Baird*, the Supreme Court rules that unmarried people have a right to use contraceptives, a right that married people received in *Griswold v. Connecticut* in 1965

**1972** Congress strengthens the Equal Pay Act to apply to executives and professionals and empowers the EEOC to enforce its rulings through legal action

**1973** In *Roe v. Wade*, the Supreme Court effectively legalizes abortion nationwide

**1974** In *Cleveland Board of Education v. LaFleur*, the Supreme Court rules it is unconstitutional to require women to take maternity leave on the assumption they are physically incapable of working

**1977** Indiana becomes the 35th and last state to ratify the ERA, 3 states shy of the 38 needed

**1986** In *Meritor Savings Bank v. Vinson*, the Supreme Court finds that a hostile or abusive workplace can constitute sex discrimination

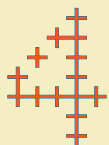
**1993** Congress passes the Family and Medical Leave Act (FMLA), requiring large employers to provide their employees up to 12 weeks of unpaid leave for pregnancy or family illness

**1997** The Home Depot settles a sex discrimination suit with over 7,000 of its female employees for more than \$65 million

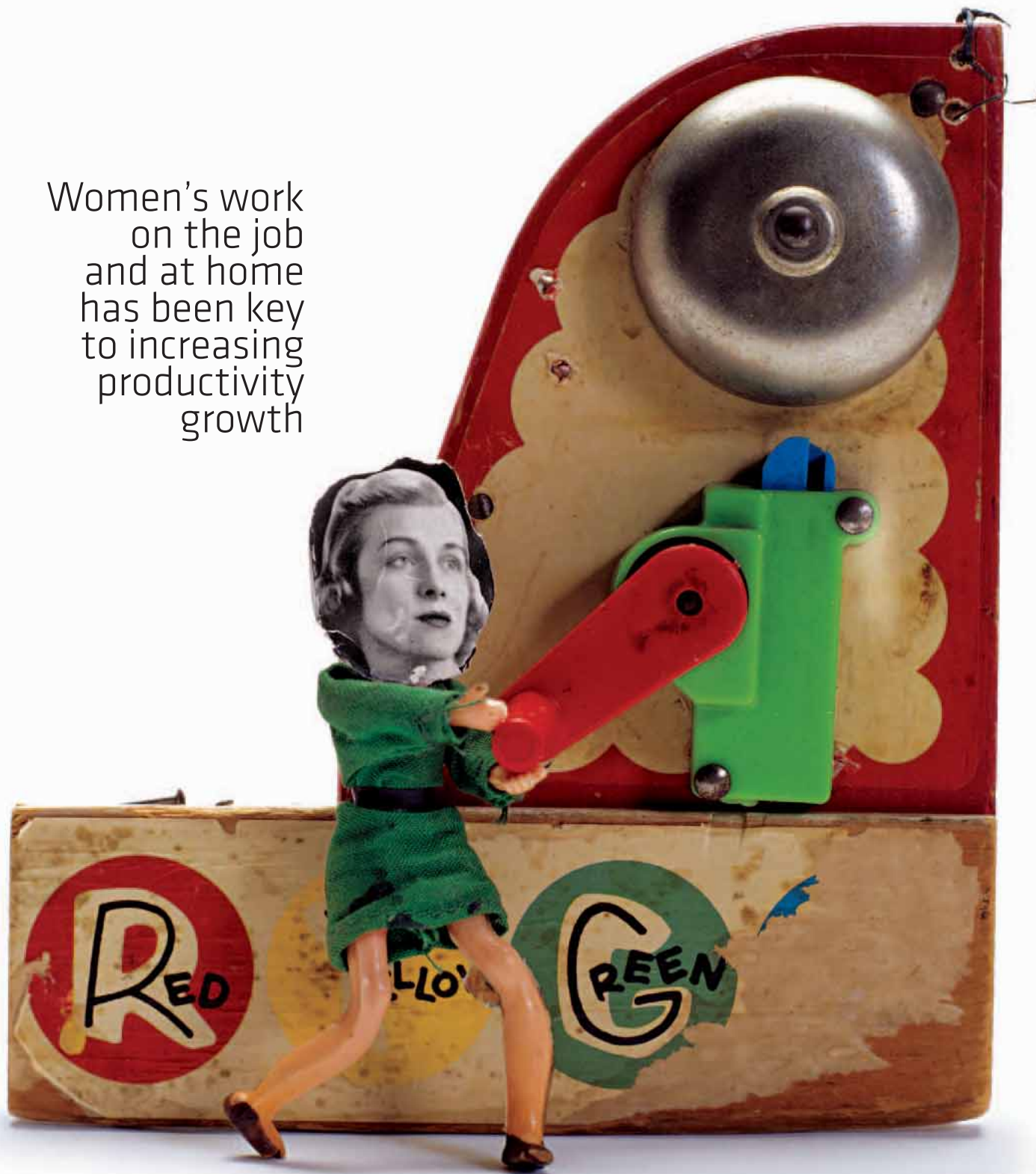
**1998** The Supreme Court finds that employers can be held responsible for sexual harassment of employees by supervisors, regardless of whether management specifically knew of the misconduct

**2003** In *Nevada Department of Human Resources v. Hibbs*, the Supreme Court rules that the FMLA applies to state government employees as well as federal and private-sector workers

**2004** After briefly going to court, Morgan Stanley settles for \$54 million a suit brought by the EEOC on behalf of 340 of the company's female managers and executives. Merrill Lynch, Morgan Stanley, and Smith Barney (Citigroup) have together paid out more than \$150 million in settlements so far



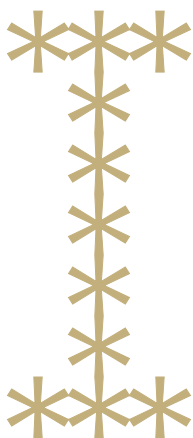
Women's work  
on the job  
and at home  
has been key  
to increasing  
productivity  
growth



by KATHRYN SHAW

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# women's contribution to productivity



IN THE LATE 1990s, anyone reading the newspaper saw stories describing the New Economy and the accompanying rise in the nation's rate of productivity growth. Labor productivity (measured as output per hour worked), which had previously grown at about 1.5 percent per year from 1973 to 1995, accelerated to about 2.5 percent a year from 1995 to 2000. Although productivity typically falls coming out of a recession, as it did in 2001, more recent data suggest that trend productivity remains high compared to the 1970s and 1980s.

This rise in productivity is quite large by historic standards and brings with it very significant positive implications for the economy. In particular, increases in productivity mean larger potential increases in GDP without the same risk of inflation in an economy where productivity is lower. One calculation suggests that current output per person is about 10 percent higher than it would have been without the productivity acceleration. And, in the long run, increases in productivity raise real wages and allow

**The economic contribution women make raising children may not be fully valued when measuring GDP and setting policy**



our children to enjoy a higher standard of living, accumulate greater wealth, and pay for programs such as Social Security.

I would like to suggest that women played an important role in this productivity increase, both directly as workers and indirectly in their role in raising children and investing in their communities. However, I would also like to suggest that there are gains to society of having well-educated children, and these gains may not be fully taken into account within families.

**Searching for causes**

What explains the large increase in trend productivity? There are several possible explanations. Evidence suggests that higher labor quality—improvements in education, training, or other factors—was not the primary cause. Calculations by Jorgenson, Ho, and Stiroh indicate that labor quality grew more slowly from 1995 to 2000 than from 1989 to 1995.

On the other hand, increased investment in computers and information technology (IT) appears to have been very important. Investment in IT rose 19 percent per year in the early 1990s and 28 percent per year after 1995, while the prices of computers and equipment fell more than 70 percent between 1995 and 2000. This is an astronomical rate of increase. Overall, IT doubled its impact during this period, and was pervasive across the economy, both in industries such as computers and electronics that produced IT and in industries (such as retail and wholesale trade and services) that used it—that is, purchased large amounts of it.

Still, IT does not account for the entire increase. An additional large push came from unobserved sources which may be in the form of intangible capital. For example, research by Sandra Black and Lisa Lynch, and others suggests that investments in innovative human resource practices, such as problem-solving teams, job rotation, information sharing, additional training, more effective screening of new hires, and better job security and greater use of incentive pay, were also key. In the United States, these practices began to be increasingly adopted in the late 1980s and early 1990s. Given lags in the effectiveness of these intangible investments, their impact could have contributed to the acceleration in trend productivity.

As workplaces institute more teamwork and on-the-job problem solving, they also change decision-making power, locating decisions with the employees who have the information. IT has brought more information to everyone but especially to people at the ground floor, pushing decision-making lower down the company hierarchy.

Adopting these practices also affects the demand for labor and pushes employers to value problem-solving skills when they hire. Almost all job growth in the last 20 years has been in occupations that require nonroutine problem-solving skills, according to David Autor, Richard Murnane, and Frank Levy. At all levels of the organization, our national expertise now lies in “thinking,” and our competitive advantage lies in producing high-quality, R&D-intensive products. The U.S. doesn’t produce commodities anymore. We produce problem-solvers.

**Women’s contribution at the workplace**

So, where do women fit in this picture? I would suggest that women have made both direct and indirect contributions to this increase in trend productivity.

The direct contribution has come about from their role as workers in the paid economy. First, women are increasingly better educated than men; 68 percent of women who had recently completed high school were enrolled in an undergraduate degree granting institution in fall 2002, compared to 62 percent of men. And 9 million women were enrolled in undergraduate and graduate programs in 2001, compared to 6.9 million men.

Second, women have a history of success as team players and problem-solvers. In surveys, female managers receive lower ratings on masculine attributes and styles of leadership (task-oriented, directive) but higher ratings for nonmasculine styles (interpersonally oriented, participative), according to studies by Alice Eagly and her colleagues. In the past, when the masculine approach was most valued, this meant that women faced a substantial uphill battle in being (and being perceived as) effective leaders, although lab experiments showed women to be more effective when the roles were defined as less masculine.

More recently, however, there are signs of a change in the ideal managerial style, from one in which leaders sit atop a hierarchy and operate by setting objectives and rewarding those who are successful to one where leaders aim to encourage commitment and creativity and take on the role of a coach or teacher. Driven by an economic environment characterized by an accelerated pace of technological change and intense global competition, this apparent redefinition of the ideal suggests that women may now have a comparative advantage in key managerial skills that are associated with firm productivity. Social networks inside the firm have also been shown to be important, both to women’s advancement and to firm productivity, and women have always been good at building and maintaining these networks.

In sum, women are increasingly well educated, they are adept

further reading

**“The Female Leadership Advantage: An Evaluation of the Evidence,”** by Alice Eagly and Linda Carli, *The Leadership Quarterly*, 2003.

**“What’s Driving the New Economy?: The Benefits of Workplace Innovation,”** by Sandra Black and Lisa Lynch, *The Economic Journal*, February, 2004.

**“The Human Resources Revolution: Is It a Productivity Driver?,”** by Kathryn Shaw, in Adam B. Jaffe, Josh Lerner, and Scott Stern (eds.), *Innovation Policy and the Economy, Volume 4*, The MIT Press, 2004.





quality child care has a social payoff in the range of three to four times its cost. Moreover, early childhood education has a much higher payoff than later remedial education or training. Basic problem-solving skills are more easily taught when a child is young and may be quite hard to teach later on; and some non-cognitive skills, such as motivation, are also more effectively transmitted when begun early at home.

Women have traditionally also been important in investing in the community, and in what Robert Putnam has called “social capital”—the neighborhoods, clubs, and civic associations that help communities work. Some observers have argued that as women entered the paid labor force and withdrew their traditional participation in these organizations, communities have weakened. This is a controversial question, and I am not going to fully address it here. But I would note that while forms of social capital that traditionally supported investment in children—such as the Girl Scouts—have declined, they have been replaced at least in part by others—such as music lessons, extracurricular clubs and activities, and participation in sports. Moreover, some market-provided services such as high-quality day care appear to offer a good substitute for traditional arrangements. So far, there is little evidence that having a working mother lowers a child’s test scores, once other factors are held constant.

Nonetheless, thinking carefully about women’s unpaid contributions to productivity raises some thorny questions. How much are those unpaid, unmeasured contributions worth in terms of GDP? Are women and men investing too much in

## Women are increasingly well educated and especially adept at skills such as team-building, problem-solving, and developing social networks on the job

at skills such as team-building and problem-solving that are increasingly valuable to organizations, and they are able to develop social networks in the workplace—all of which make a positive contribution to the nation’s economic productivity.

### At home and in the community

Women have also contributed indirectly to increases in productivity and long-run economic growth through unpaid work, both at home raising children and in their communities. Women are still disproportionately responsible for the valuable activity of caring for children, and the economic changes associated with the increase in trend productivity suggest that it has become more valuable than ever to raise children who are problem-solvers and who can think for themselves. There is a substantial body of research suggesting that investing in children has a high rate of return. For example, studies show that once you include such benefits as the reduced costs to the criminal justice system and special education, etc., higher-

their jobs and not enough in their children? And do current organizational practices encourage this overinvestment?

Nancy Folbre’s article includes a quote from Tipper and Al Gore: “At any given moment when the decision between work and family must be made, the workplace has a much stronger ability to quantify and express the immediate cost of neglecting work.” And although the Gores said it better, economists make exactly the same argument: Work provides explicit rewards. Home provides implicit or intrinsic rewards. People care about (their utility function includes) their own wages and their children’s future well-being, but they are unlikely to completely take into account their children’s future wages since investing in kids sends them no actual flow of money.

More specifically, society may underinvest in children for two reasons: First, we receive only the intrinsic rewards from our kids—we love them, we want them to do well—but not all of the extrinsic rewards that would come from greater GDP growth over the long run and higher income for our children. Second,



## We might invest more if the social benefits of well-educated children were fully taken into account when parents made decisions about their time

the social benefits to raising well-educated children—a well-educated workforce, reduced costs of various remedial social services—are not fully considered when parents make decisions about their time. We might invest more in our children if we took all of this into account.

Moreover, current organizational practices may be encouraging us to underinvest. Prime examples are the so-called “tournaments” that firms use to determine who makes it to CEO and other top jobs, and the “rat races” that determine which associates make partner at top law firms. These practices tend to reward observable variables like hours of work, rather than talent or productivity per hour, although there isn’t much evidence that very long hours of work or very long years of experience continue to raise productivity on the job. Instead, these practices may simply help in sorting workers or in signaling worker quality, which is economically valuable but doesn’t raise individual productivity. It would be beneficial to find better signals for productivity—signals that are not based on time at work.

### Looking for alternatives

Are there alternatives to current practices? And will they also facilitate women’s climb to the top?

One possibility is to reduce the monetary rewards for market work or to increase the monetary rewards for work at home. For example, policies such as income subsidies and maternity leave lower the cost of taking time out of the labor force and increase the amount of time that parents have to spend with their children. However, these policies are clearly expensive for taxpayers and firms, so that the benefits must be weighed against the costs. Moreover, the costs are also borne by women; for example, firms in European countries are thought to avoid hiring young women due to the high costs of maternity leave.

In addition, some current organizational practices have focused on rewarding people for hours, not productivity. But we know there is an alternative from the example of Deloitte & Touche (see page 42). Their attempt to reward productivity or

performance, rather than hours, is encouraging and a path that other firms might emulate, although progress in this direction is slower than one might like. One reason is institutional rigidity—firms may need to be pushed by the market to make these changes. For example, I don’t think that law firms have been pushed yet, perhaps because the surplus of law graduates means that lawyers can be easily replaced.

Increased emphasis on teams and on rewarding teamwork, and less on winning of tournaments would also tend to favor more investment time at home. In addition, many workers, and many women, perform better in team environments.

Finally, greater use of IT to measure performance should help bring both productivity gains and greater personal success for women. Whereas companies traditionally used subjective evaluations and hours worked to reward and promote, now many use enterprise resource-planning systems and other tools which can measure the productivity and talent of division managers quite well. In the long run, this should raise firms’ productivity and help boost women in their careers.

It appears that the labor market is increasingly encouraging firms to pursue policies that emphasize balanced lifestyles—as young men and women prefer jobs with more balance. Companies are increasingly focusing on this issue, but at a slow pace. Attitudes towards taking time off are also becoming more acceptable, but also at a slow rate. We need to ask whether organizational practices simply reflect old organizational habits and institutions or whether they reflect ways of obtaining optimal performance and attracting the right employees. It’s worth keeping in mind that although organizational changes may benefit firms in the long run, the transition can be costly. But perhaps we are moving in the right direction. ✱

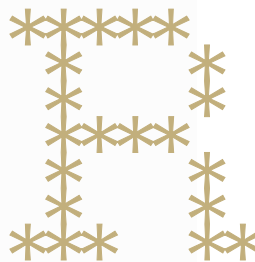
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by NANCY FOLBRE

gender,  
competition, and  
the long-run  
optimum

# spinning the top



EACHING THE TOP, the theme of this conference, seems like an excellent goal. Still, it is useful to consider more carefully what constitutes the top and in which direction the top lies. “Up” is perhaps the obvious answer. But as any mountaineer can tell you, the path to the summit often winds around many smaller peaks. Or, in mathematical terms (the preferred currency of the economics profession), a local maximum is not necessarily a global maximum.

It may seem implausible to many highly skilled professionals that aspirations to top management in a *Fortune* 500 company could represent less than a global maximum. But that is the conclusion to which this article leads. Although existing organizational and cultural practices have the benefit





## Women who enter “male” occupations enjoy a positive payoff in the labor market, but may find themselves at a disadvantage in the dating market

of creating incentives to increase output, they may also create perverse incentives that have negative economic effects outside the relatively easily measured world of market outcomes.

I was asked to address two questions: Do existing organizational and cultural practices have a productivity payoff? And, does the *status quo* reduce national production and income? The answers depend entirely on how national production and income are defined. Efforts to assign a monetary value to non-market activities, such as child care, volunteer work, and, more broadly, the intrinsic value of human capabilities, profoundly modify our economic accounts. Thus, while it is important to ask how to improve women’s chances of success within our current institutional environment, my goal is different. I argue that women should play a leadership role in redefining our measures of success.

### The impact of gender norms

In *Liar’s Poker*, his vivid account of working for Salomon Brothers in the 1980s, Michael Lewis describes the challenges facing a new employee who is handed a pair of telephones on the trading floor: “If he would make millions of dollars come out of those phones, he became that most revered of all species, a Big Swinging Dick.” Everybody wanted to be a Big Swinging Dick, Lewis explains, “even the women.” Yet, his next anecdote details the humiliation of a female trainee.

In management, as in other fields, considerable debate centers on the similarities and differences between men and women. It is an irritating debate, sometimes making us feel as though we are being boiled down to a binary gender assignment. Few of us want to choose between simplistic me-tooism (“Girls can do anything boys can do”) and sarcastic self-

righteousness (“Women who want to be like men lack ambition”). The debate becomes more interesting if we back off from simple polarity, acknowledge a multidimensional continuum between masculinity and femininity, and ask how we might be nudged in different directions along it, and why.

Femininity and masculinity are rather abstract concepts. And they certainly may change over time. But in the short run, one way they are reinforced is through the labor and dating markets, where those who don’t conform may pay a penalty. In research on labor market outcomes for gays, lesbians, and heterosexual counterparts with similar levels of education and experience, my colleague Lee Badgett learned that while gay men pay a wage penalty, lesbian women seem to enjoy a slight wage advantage. They seem to be more willing than heterosexual women to enter nontraditional occupations (gay men

likewise, but nontraditional occupations for men generally promise lower, not higher earnings).

One reason: a nontraditional occupation may impose costs in the dating and marriage market. Austrian economist Doris Weichselbaumer conducted an interesting experiment using the personal ads published in a free newspaper in western Massachusetts. She placed ads by two fictional white females who differed only in the gender conformity of their occupation, one a nurse, the other an electrician:

SWF, 31, good looking, slender nurse. Enjoys x-country skiing and films. Financially stable. Would like to meet a man for a lasting relationship.

SWF, slim, attractive, electrician, 30, financially stable, likes movies and rollerblading, seeks man for lasting relationship.

The ads ran for five weeks. The nurse received 77 responses, the electrician 39. Apparently, violating gender norms has some negative consequences in the dating market.

Badgett and I explored this further by asking groups of college students to rate 10 similar personal vignettes that randomly varied characteristics such as occupation. We found that (controlling for status, education, and other factors) a woman in a gender-nonconforming occupation is likely to face a reduced pool of potential suitors. The penalties for women are lower in nontraditional jobs that require substantial education or offer relatively high status—a female orthopedic surgeon, for instance, is penalized less than a female electrician. Men in gender-atypical occupations are also considered less attractive—but their earnings power matters more than their gender conformity.

This suggests that men who invest in market-oriented

human capital enjoy two positive payoffs—one in the labor market and one in the dating market. Women enjoy a positive payoff in the labor market if they enter an “unfeminine” occupation (though it may be decreased by discrimination), but their payoff in the dating market is much reduced. It is as though men are competing in two races that require similar training (e.g., the general aerobic conditioning that contributes to success in running a 15K race and a marathon), while women are competing in two races that require different training (e.g., a sprinter’s 100 yard dash and a marathon). It is no wonder that we describe women who combine family and highly successful careers as “superwomen.”

Public policies to promote better work-family balance might make it easier for these women to succeed. But our research suggests that the gender inequality we observe may have deeper sources than the absence of paid maternity leave, or limits to the length of the working day. It may also stem in part from cultural norms of masculinity and femininity that place women at a disadvantage. And it is difficult to explain why women would conform to such costly norms without looking more closely at possible differences in men’s and women’s preferences.

#### Gender and preferences

Economists tend to sidestep questions about preferences. Yet, common sense suggests not only that it is harder for women than for men to “have it all,” but also that women may want

more than men to “have it all.” Thus, it is worth considering the possibility that when it comes to children, women have more expensive preferences than men.

Such a hypothesis is consistent with a number of the insights of evolutionary biology. Differences in the size and quantity of gametes produced by males and females, combined with the physiological cost of carrying, nursing, and nurturing children, have significant implications for the way preferences may have evolved. Mothers have invested more in individual offspring and have more to lose (in terms of the long-term survival prospects of their genes) from the loss of a child than fathers. Similarly, women lose their reproductive capacity at a younger age than men, and mothers bond more closely and more quickly with offspring than do fathers. Thus, fathers are in a stronger position than mothers to credibly threaten to abandon their children.

A different set of evolutionary pressures operates on males and females. Natural selection rewards males who improve their mating effort by increasing their sexual access to females. It rewards females who increase their parenting effort by improving the likelihood that their children will reach maturity, including bargaining with males for greater support of children. In other words, many centuries of evolution may have favored females who are more willing than males to sacrifice some of their own consumption and leisure on behalf of their children.

These evolutionary pressures may also have implications for

## Valuing nonmarket work *The battle to measure work in the home*

The battle to measure and value nonmarket work has a long and fascinating history, punctuated by protests from women’s groups. My favorite example is a letter sent to Congress by the Association for the Advancement of Women in 1878, complaining of the Census Bureau’s failure to acknowledge the productive value of the home and woman as home-keeper. The letter failed to sway federal legislators, but presented a point of view shared by the Massachusetts Bureau of Labor Statistics, which began collecting data in 1865 on the number of adults engaged primarily in housework. A few men (less than 1 percent) fell into this category, and the small number of married women who engaged in neither paid nor unpaid work were categorized as “wives, merely ornamental.”

The English economist Alfred Marshall advised census-takers in Britain to adopt the practice of terming married women “dependents” and exclud-

ing them from estimates of the labor force, because this would make Britain appear to be more productive. Despite shifts to this terminology, early national income accountants tended to argue that household services represented productive work. In 1921, the National Bureau of Economic Research published a landmark study of income in the United States that calculated the value of household services based on estimates of the number of women ages 16+ primarily engaged in housework without monetary remuneration. Assuming that the proportion of “housewives” to the total population remained constant, and that the average value of their services in 1909 was about equal to the average income of persons engaged in the paid occupation of Domestic and Personal Service, they calculated that the value of housewives’ services amounted to 31 percent of market national income in 1909 and 25 percent in 1918.

Within universities, the emerging field of “home economics” created a platform for research on such topics. The first surveys in the United States that used time diaries were administered to small samples of farm wives in the 1920s. National income accounting, however, moved in a different direction. The economist A.C. Pigou insisted that national income should be defined only in terms of goods and services that could be brought “directly or indirectly into relation with the measuring rod of money,” and discouraged the application of such a measuring rod to household work.

In the early 1930s, two women economists published comprehensive studies of the economics of household production. But it was not until the 1990s, under pressure from women’s groups, that most countries moved toward making serious efforts to measure the value of nonmarket work.



the broader development of male and female capabilities and preferences. Physical strength becomes an advantage for males in competition with other males. Selection for mating effort tends to place males in “winner-take-all” games that reward risk-taking behavior. If they fail to mate, helping to nurture offspring becomes irrelevant. Selection for parental effort places females in strategic environments more likely to reward cooperation. Unlike men who face a shortage of potential partners, women face substantial long-term risks of being unable to raise children to maturity. As a result, men and women may have evolved propensities to behave somewhat differently even with similar environments.

This concept of gendered preferences is also consistent with experimental evidence. In carefully controlled laboratory settings in which participants play games with real money payoffs, women behave in more generous and more risk-averse ways than men. Women are particularly cooperative when paired with another woman. Other experiments that compare the productivity of men and women under different systems of compensation (piece rates, competition in which only the relative position matters—that is, the winner enjoys a large premium while the loser receives little) find that men and women are about equally productive under a piece-rate system, but that men try harder and are more productive if payments are competitive, perhaps as a result of greater confidence in their potential success.

Many more experiments of this type will be required to persuade me that these differences are truly important in explaining daily life. But I am intrigued by the thought experiment. What if it were true that women tended to be less competitive than men? Should we try to change our preferences (and those of our daughters) and not just try to behave but also to feel more like men? Or would society lose something important—including a chance to reconsider the role of competition in the economy?

### Too much competition?

In the world of neoclassical economics, competition rewards those who successfully pursue their own self-interest. At the macro level, everyone benefits from the increased output that

results from the alignment of incentives and rewards. Competition is generally viewed in the same short-run terms as what evolutionary biologists describe as male preoccupation with “mating success.” It is often remote from the longer-run benefits of rearing the next generation, or what evolutionary biologists describe as “parenting success.”

While competitive pressure is a useful device for encouraging positive economic outcomes, I would like to suggest that more competitive pressure is not always better. Rather, the relationship between competitive pressure and positive economic outcomes may be positive up to a point, but after that the costs may outweigh the benefits. Moreover, there is little reason to believe that our current economic institutions situate us at the right level. Indeed, while other economic systems may suffer from insufficient competition, we may suffer from too much.

Thomas Schelling, a great innovator in strategic modeling, was fond of what he called the “inexorable mathematics of musical chairs” as a way of exploring and understanding the relationship between intensity of competition and economic outcomes. In musical chairs, individuals parade around a group of chairs as music plays. When the music stops, they must sit in a chair. Those who fail are eliminated from the game; but for every person eliminated, a chair is also removed. In the final round, two persons compete for a single chair.

Imagine that individuals are doing something economically productive rather than simply parading to music. The competitive structure of the game urges them to pay close attention and try as hard as they can to grab a chair when the music stops, subject to the requirements of common courtesy. The intensity of the competition is determined partly by the number of players relative to the number of chairs, and partly by the cost of losing. When the stakes are low, the game is lighthearted. But if those who grab chairs are guaranteed lifetime job security while the others are relegated permanently to the unemployment line, the competition can become intense.

Increasing the number of competitors and the relative level of the reward does not always lead to more positive economic outcomes. It is not difficult to imagine a situation in which, if the stakes became too high, individuals would be tempted to violate common courtesy and engage in kicking, shoving, pinching, and eye-gouging. One can even imagine embittered players strapping on explosives in order to blow up the chairs. Much depends on how effectively the rules and civility of the game can be enforced. But holding these constant, increasing the intensity of competition is likely at some point to lead to declining benefits, perhaps even to costs.

One real-world example is in the use of steroids and other performance-enhancing drugs in competitive sports. Such drugs pose serious long-term but uncertain health risks, yet the short-run pressures to use them are enormous—as are the rewards of winning. Without regulation and strict enforcement of rules, drug use can become endemic with an increase in the

further reading

**Family Time: The Social Organization of Care**, edited by Michael Bittman and Nancy Folbre, Routledge, 2004.

**“Contracting for Care,”** by Paula England and Nancy Folbre, in Marianne A. Ferber and Julie A. Nelson (eds.), *Feminist Economics Today: Beyond Economic Man*, University of Chicago Press, 2003.

**The Winner-Take-All Society**, by Robert H. Frank and Phillip J. Cook, Penguin, 1996.

attendant health risks to all players—even as the fact that everyone is using them neutralizes the competitive benefit any one person would have achieved.

In the modern economy, Robert Frank offers a compelling account in which information technology has increased the prevalence of high stakes, winner-take-all tournaments—and the adverse consequences that can arise from them. He notes that the tendency of people to evaluate their welfare in relative terms and to overestimate their chances of success in competition results in people allocating more effort to winning than is justified by the potential social benefits. Frank urges us to think less about individual performance within a given competitive game, and more about the design of the game itself.

Bringing the discussion back to the subject of this conference, many high-paying professional careers, including those of managers, lawyers, and top-level academics, are conducted like winner-take-all tournaments. As a result, both men and women often face a high price for devoting time to family and community, even if they have legal access to parental or family leave. As Tipper and Al Gore put it, “At any given moment when the decision between work and family must be made, the workplace has a much stronger ability to quantify and express the immediate cost of neglecting work.” Like resorting to steroids, working long hours is a competitive strategy that offers no individual advantage if everyone adopts it. And it can lead to a serious misallocation of time away from family and community.

Another example of the negative impact of excessive competition comes from the corporate accounting scandals of the last few years. Forms of executive compensation that were thought



**“...when the decision between work and family must be made, the workplace has a much stronger ability to quantify and express the immediate cost of neglecting work”**

to represent “optimal contracts” proved distinctly suboptimal because they encouraged cheating and opportunism. Although I know of no systematic analysis of gender differences in such behavior, it has been noted that women were well represented among the key whistle-blowers. At the same time, women who engaged in suspicious behavior were generally held to a higher standard and were subject to more public criticism than men. Martha Stewart is the classic example—last year she appeared on the cover of *Atlantic Monthly* as a witch being burned at the stake.

#### **The care sector**

The optimal level of competitive pressure may vary in different economic contexts. It is probably lowest in the traditionally feminine “care sector” of the economy that includes the paid and unpaid work of caring for dependents, and highest in the

more traditionally masculine “physical output” sector of the economy where goods are easily substitutable, and quantity and quality are more easily measured and monitored. In addition, some types of work, such as child care, nursing, and teaching, have intrinsic characteristics that make it difficult to rely on competition as a motivational device.

Empirical research could also help clarify the different effects of competitive pressure. It could reveal differences in propensities to violate the “rules of the game” and how they are affected by factors such as consumer choice, institutional transparency, monitoring costs, substitutability of inputs, and measurement of output.

For all the media attention devoted to corporate scandal, there has been remarkably little focus on such questions as who bears the costs when cheating and malfeasance become endemic. Any infractions of the rules, such as those governing



to improve test scores, but also to encourage a love of learning. The job of an elder-care worker is not merely to prevent bedsores, but also to make patients feel cared for. Incentives to improve performance in the measurable dimensions of these tasks can have the effect of reallocating effort away from those that are less easily measured.

Along similar lines, the care sector of the economy encompasses unpaid work in the home. Much of this could be replaced by the purchase of services—housekeepers, gardeners, nannies—with wages determined by the forces of supply and demand in competitive markets. But hired help do not typically provide good substitutes for personal commitments and family-specific skills.

Social scientists have been known to suggest that parenting could be rationalized and made more efficient by offering self-interested incentives. James Coleman argues that parents should enjoy a public reward based on a calculation of how much better their children perform than might be expected based on their objective characteristics. Shirley Burggraf argues that instead of taxing the younger generation as a whole to support the elderly, we should give parents a legal claim to a

### More competitive pressure is not always better; and while other economic systems may suffer from insufficient economic competition, we may suffer from too much

insider trading or mutual fund transactions, undermines investor confidence. But the costs are almost certainly higher when large numbers of workers and consumers are adversely affected. In this area, the poster child for misbehavior is not Enron, or Putnam, but Tenet Healthcare, the nation's second-largest for-profit hospital chain: In 1997, following a chain of lawsuits in which they admitted to defrauding both insurance companies and the federal government, Tenet agreed to pay \$100 million to about 700 former patients for illegally imprisoning them in psychiatric hospitals to obtain their insurance benefits.

If consumers know what they want, have perfect information, have adequate economic resources (or opportunities to acquire them), and are offered a range of choices, they can be expected to make the best decisions for themselves. But in sectors of the economy such as health, education, and nursing homes, these conditions are very hard to deliver. The problem is not lack of information, but its excess and complexity. And many consumers in the care sector are too sick, young, feeble, powerless, or poor to effectively evaluate their choices.

Even beyond issues of information and consumer choice, there is another question: Can we measure the outcomes that matter? The process of caring for dependents has complex emotional and personal dimensions, and includes many non-cognitive inputs and outputs that are difficult to quantify. The job of a health-care provider is not merely to cure an illness, but also to promote health. The job of a teacher is not merely

percentage of their children's earnings. Would daughters then become less desirable than sons, because they earn less?

Apart from the pathology of thinking about children in such instrumental terms, the "quality" of children cannot be reduced to measures of their future earnings. Families don't merely produce "human capital." They also produce human capabilities of much greater and more intangible worth. Every child is helplessly and powerfully unique. As the Texas populist Jim Hightower puts it, "It's easier to count the seeds in the apple than the apples in the seed."

All these factors are relevant to a consideration of the optimal level of competitive pressure in the economy and to efforts to derive better estimates of the value of care services provided outside the market.

#### Accounting for care

National income accountants don't get nearly as much scrutiny as corporate accountants these days. One could argue that national accounts matter less, because they are not informing decisions to buy and sell. But political regimes compete on the basis of certain measures, among them the rate of growth of GDP. And national income accounts provide basic benchmarks for the measurement of economic success.

But these measures of economic success exclude consideration of the value of nonmarket work. Imagine a corporation or a nonprofit firm that benefits from a large supply of volunteer



labor. If the supply of this volunteer labor changes over time, it is altering the relationship between priced inputs and outputs. This is why many organizations treat volunteer labor as an in-kind contribution and estimate its cost.

The movement of women into paid employment is one of the most significant trends of the twentieth century. When women reallocate their time and energy from home and family care to paid employment, they move from traditionally unmeasured into measured activities. This movement across the accounting boundaries probably overstates the rate of economic growth and misrepresents levels of economic welfare. Many countries, including the United States, are developing additions to their conventional national accounts to address this problem. These are termed “satellite” accounts because they are added onto the existing accounts, which remain intact.

The strategy adopted by most countries for measuring non-market work is to measure the inputs of time, using time-diary surveys of a representative sample of the population. Then the inputs of time are multiplied by the wage that would be paid if someone were hired to do work of comparable quality, or alternatively by the wage the person providing the service would have received in his or her market profession. Results from Australia, Canada, Finland, Norway, Sweden, and the United States show that, even when using the first method, nonmarket activities account for a sizeable proportion (between 40 percent and 60 percent) of the value of all output.

Yet, a number of thorny measurement and conceptual problems remain. I have had the honor of participating on a panel convened by the National Academy of Sciences to consider how best to assign a value to nonmarket work and health. In general, we found it easy to agree on methods of valuing non-market work that have obvious market substitutes, such as cooking and cleaning. More serious problems emerge in consideration of more personal forms of work, such as family care. For instance, time-use diaries capture the *activity* of caring for children better than the more diffuse *responsibilities* for child care, which often constrain parents’ activities.

But these problems (though daunting) are small compared to more conceptual ones. Time devoted to the care of children and other dependents can be treated simply as a form of “consumption” and valued at what it would cost to hire someone else to provide the service. But as the metaphor of “investment in human capital” suggests, we could also value the activity from the other direction—measuring the net present discounted flow of services from the capital asset.

### Who produces human capital?

Despite widespread rhetorical use of the term “human capital,” economists continue to interpret it narrowly. It is often assumed that the actual physical production of children, along with their early nurturance, is not an economic activity and only formal education counts as an investment in human capital.

Yet a growing literature documents the significant influence of early childhood experiences on both motivation and the acquisition of cognitive skills later in life.

In addition, economists typically estimate the value of human capital as the net present discounted value of future lifetime earnings—even though the services that children provide cannot be reduced to earnings. After all, by this measure, a daughter is worth less than a son, and neither Jesus nor Van Gogh was worth much, since they enjoyed no commercial success in their lifetimes. The capabilities that children develop have profound implications for our own sense of fulfillment, for our ability to govern ourselves, and for our ability to respond to the unforeseen challenges of the future. In technical terms, they have many “spillover” effects, “externalities” that are not captured by market valuation.

I have long argued that our public policies redistribute resources from parents in general (and mothers in particular) to nonparents. We have “socialized” the economic benefits of childrearing more extensively than we have socialized the costs. Fertility decline has provided important economic benefits. But reductions in the time and energy devoted to the next generation, like competitive pressure (and perhaps as a result of it), can go too far.

### Conclusion

Women may have different norms and preferences than men because we have had different responsibilities—differences that may be based to some extent in biology as well as culture. We have attained the power to change both biology and culture, along with the very meaning of femininity. And we have changed that meaning, for the most part, in positive ways. But in doing so, we may have entered a game in which we are offered a choice between adopting traditionally masculine priorities and being denied access to the “top.” If we focus too narrowly on the optimal strategy of individual choice, we will lose our collective opportunity to change the rules of the game.

Rather, we need to develop ways of controlling competitive pressures in the economy lest they weaken families, communities, and the long-run sustainability of our economy and society as a whole. We need to think more carefully about the institutional organization of the paid care sector of the economy, providing more guarantees of high-quality care for children, the sick, and the elderly. And we need to move beyond the margins of conventional economic theory to develop better social accounting systems. If we don’t, we may reach the top of the mountain only to see it crumble beneath us. \*

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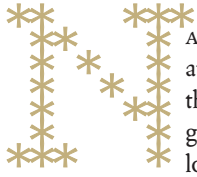


considering  
the impact of  
women's paid  
and unpaid  
work

by LISA M. LYNCH

# comments on 'spinning the top'





ANCY FOLBRE HAS WRITTEN an interesting and provocative piece challenging the premise that reaching the top in the private sector represents the global maximum in career goals. Examining the biology of gender differences, she looks at whether being successful at work makes women

less desirable mates and whether evolution has resulted in men with a more competitive winner-take-all attitude, while women are more generous and cooperative. She also asks us to reconsider the role of competition within our economic system and argues that this requires an explicit accounting of unpaid work in the home when measuring gross domestic product (GDP) in national income accounts.

Measuring the contribution to GDP of unpaid work would certainly be worthwhile and might even prove useful in efforts to compare cross-national trends in macroeconomic productivity. In a recent paper, MIT economics professor Olivier Blanchard points out that while productivity is higher in the United States when measured by output per worker, it is higher in many European countries when measured by output per hour of work. He argues that Europeans have chosen to work harder but fewer hours. As a result, they consume more leisure. What he does not discuss is whether some of this “leisure” may actually be time spent in household work such as raising children. It would be interesting to examine investments in child rearing in more detail as this might have ramifications for future productivity trends. But it is extremely difficult to come up with good data on this front. Measuring the output produced by services that are bought and sold in the marketplace has been challenging; doing so for services without a market price would be no easy task.

I would like to raise three additional points relevant to the quantity and quality of women’s labor supply.

**SKILLS, TRAINING, AND THE TIME SHORTAGE.** Economists and policy makers have highlighted the degree to which wage inequality is driven by skill differences. Yet, working women who want to raise their wages by getting additional education and training face the extra burden of a time crunch. While some progress has been made in the division of labor in household tasks, women still bear a disproportionate share of household work (see page 30). This constrains women’s ability to invest in training programs that take place outside work hours and creates a vicious circle with respect to their career advancement prospects. Women are less likely to participate in employer-funded after-hours programs and thus less able to apply for new career opportunities. As a consequence, they may be viewed by senior management as less committed than their male colleagues.

further reading



**“Measuring Organizational Capital in the New Economy,”** by Sandra E. Black and Lisa M. Lynch, National Bureau of Economic Research Conference on Research in Income and Wealth, April 2002, [www.nber.org/~confer/2002/criws02/lynch.pdf](http://www.nber.org/~confer/2002/criws02/lynch.pdf).

**“Revisiting the Relationships among Gender, Marital Status, and Mental Health,”** by Robin Simon, *American Journal of Sociology*, 2002.

**“Opportunity Counts: Teams and the Effectiveness of Production Incentives,”** by Brent Boning, Casey Ichniowski, and Kathryn Shaw, National Bureau of Economic Research Working Paper 8306, May 2001.

IS THERE A WORK-FAMILY TRADEOFF? Sociologists such as Robin Simon have highlighted the fact that women who work are happier than women who don’t. However, Simon also finds that working men and women react to the pressures and stresses of balancing job and family very differently. Men are socialized to view working harder at their job as consistent with caring for their families and their role as good providers. However, women are more likely to think of work and family as a zero-sum game—time spent at work is time *not* at home caring for their families, leading to increased stress and depression. This may play an important role in the apparent decision to “opt out” of work by some professional women.

**THE INCREASING IMPORTANCE OF SOFT SKILLS.** In our research, Sandra Black and I observed that as U.S. companies invested in new technology and adopted new forms of organizational design during the 1980s and 1990s, they also placed an increased premium on their employees’ “soft skills.” Other researchers, including Boning and colleagues, have reached similar findings. The ability to collaborate and work in teams, to be problem solvers, to be flexible, and to have good communication skills should favor women, since it plays to their socialization. This research also suggests that today’s workplace is characterized not simply by “winner-take-all” (or reward the “lone rangers”), but by an increasingly important role for cooperation and flexibility.

### Implications for policy

So what should we do? With respect to government policy, we should acknowledge that discrimination still exists and that women’s work lives have been considerably improved by their ability to legally challenge discriminatory practices. In addition, it is important to continue to press government to use its economic might as a customer to promote change. Finally, the importance of early investment on children’s subsequent education, social, and employment outcomes is well established. Government policies that ensure that female (and male) workers have access to quality child care regardless of income will help more families to be effective as both parents and workers.

As for employers, they need to maintain their vigilance against discrimination—both the overt and subtle forms, as Barbara Reskin’s paper makes clear. This requires that they explicitly measure and reward antidiscriminatory efforts. In addition, employers should recognize that relying on employees to engage in voluntary training outside normal work hours may well mean disproportionately fewer women advancing within their organizations. They also need to recognize the increasing importance of developing and promoting team players, not just “lone rangers.”

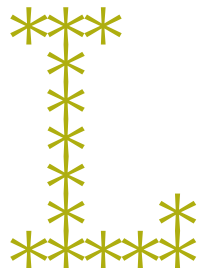
And individuals need to lobby government and employers for workplace policies that support employee development and recognize men’s and women’s responsibilities outside the workplace. We should use our position as shareholders to urge firms to increase the proportion of women in top management and directors’ positions. Finally, we should be active as parents and community members in schools, where much of girls’ and boys’ socialization takes place. ✱

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by KATHARINE BRADBURY AND JANE KATZ

# women's rise: a work in progress



LOOKING BACK over the last 30 years, it is impossible not to be impressed by the enormous revolution that has occurred in a relatively short time. Before 1970, few women held workplace positions of public power or authority. Only a handful had jobs in the top ranks of large companies, and even fewer were members of Congress or in Cabinet or top judicial positions. Women reporters worked in the newsroom, but almost none held positions of editorial responsibility at the most prestigious newspapers or appeared on television as anchor or even reporter on the evening news. Almost half of all college-educated women did not work, and those who did tended to be concentrated in nursing, elementary and secondary school teaching, and other traditional female occupations. In 1970, only 4 percent of architects, 5 percent of lawyers, 5 percent of veterinarians, and 10 percent of physicians were women.

By the dawn of the twenty-first century, this picture had changed radically. Today, women on their

**Recent data show declines in labor force participation for highly educated women, but the causes of these changes are not easy to identify**





way to the top not only have become more numerous, but they also have made substantial progress toward parity with men. Young women in college today are far more likely than before to choose majors in career-oriented and technical fields and to wait to marry and start families, as Claudia Goldin points out. They account for 60 percent of the bachelor's degrees in biological sciences, 50 percent in business, 47 percent in math, and 42 percent in physical sciences. They attend and complete college at rates that exceed those of young men, as Kathryn Shaw notes. In 2004, for the first time, women comprised more than 50 percent of the students admitted to the freshman class at Harvard College.

These changes in educational focus and attainment have been mirrored by shifts in the labor market. Today, almost three-quarters of all women between the ages of 25 and 64 are in the labor force, and the gap with men has narrowed substantially. This is even more apparent for college-educated women, who have labor force participation rates of 80 percent. Women now account for about half of all managerial and professional occupations, including 22 percent of architects, 28 percent of lawyers, 39 percent of veterinarians, and 30 percent of physicians. And these percentages are likely to rise as older professional workers (who are disproportionately male) retire.

The last 30 years have also seen a substantial narrowing of

In that case, in the absence of pay discrimination, they actually should be earning more.

All of these changes in the workplace have been accompanied by heartening changes in attitudes. In 1977, 74 percent of working men and 52 percent of working women agreed that "men should earn the money and women should take care of the home and children," according to a study by the Families and Work Institute. By 1997, attitudes had shifted, particularly among men, with 42 percent of working men and 40 percent of working women agreeing with the statement. Similarly, in 1977, only 49 percent of working men felt that an employed mother could "have just as good a relationship with her child as a mother who does not work outside the home"; by 1997, 62 percent agreed. Working women had apparently already figured this out; 70 percent agreed with the statement in 1977, rising to 73 percent in 1997.

#### Is the pace of change slowing?

Yet despite the progress, gender equality is still not a reality. And nowhere is this more apparent than at the very top—where barriers continue to be very much in evidence. As of 2004, there were only eight women CEOs among *Fortune* 500 companies (1.6 percent), up from two in 1992. Progress has been slow when compared to the perhaps optimistic predictions made

## In the 1970s and 1980s, married women with young children and high-wage husbands experienced the largest gains in paid employment and earnings

the gap between what men and women earn, whether measured by hourly pay or annual earnings. As Joyce Jacobsen notes, women (and especially younger cohorts) have gained in pay relative to men.

For those few women who manage to make it to the very top, wages also appear to have converged rather substantially. In a study of the five highest-paid executives in 1,500 corporations, economists Marianne Bertrand and Kevin Hallock find that women's representation in this group nearly tripled between 1992 and 1997 (reaching a modest 4 percent). Although these women earned 45 percent less than men on average, almost all of the difference could be accounted for by the facts that they were more likely to work for smaller companies (which pay less than big ones for the same job title); less likely to have the highest-paying titles (CEO, chair, president); and were younger, on average, with less seniority than the men. This suggests that the observed gap could dissipate over time as women gain experience and move into higher-paying titles at larger companies. Indeed, Bertrand and Hallock find that women's compensation grew relative to men's over the five years they studied, mostly because women gained representation in the largest corporations. Nonetheless, the authors do not rule out the possibility of discrimination. And other analysts have noted that if it is more difficult for women to achieve the very top positions, those that do may be even more qualified than their male counterparts.

early on in this revolution. In a 1979 survey of women officers in 1,300 large companies, 30 percent expected to see 50 *Fortune* 500 CEO slots held by women by 1999. Even Herman Kahn, founder of the conservative Hudson Institute (and reportedly a model for the Dr. Strangelove character in the Stanley Kubrick film), predicted that women would hold 10 percent of the top spots by the turn of the century.

The stubbornly slow pace of change at the top is also evident elsewhere in the economy. A recent study of top research departments in U.S. universities found that women's share of full professorships in the sciences ranged from 3 percent in engineering to 15 percent in psychology, leaving the growing number of undergraduate women in these departments with few female role models. And when the three major network news anchors recently announced their retirement, the most likely replacements being mentioned in the press were all white men. Noted retiring NBC anchor Tom Brokaw in *The New York Times*, "I honestly thought, eight or nine years ago, that when we [the three anchors] left, that it would be the end of white male anchor time . . . I think we are still stuck in a society that looks at white males as authority figures."

A number of statistics and indicators also show evidence of a slowdown in the pace of change. Women continue to increase their representation among college and graduate-school students and also among undergraduates studying technical fields.



However, the rise in the share of women among engineering B.A.s has slowed (rising from less than 1 percent in 1970 to 13 percent in 1986, but to only 19 percent by 2002). The female share of computer science B.A.s has actually dropped, from 37 percent in 1984 to less than 28 percent in 2002.

As far back as the 1980s, women's labor force participation rates began to rise more slowly; during the 1990s, the U.S. Bureau of Labor Statistics (BLS) began reporting declines for college-educated women with young children and for married women with young children.

In addition, Jacobsen and a number of other researchers have noted the slowing rate at which women's wages are converging with men's. In a recent paper, Francine Blau and Lawrence Kahn point out that the ratio of women's median annual earnings to those of men (for year-round full-time workers) rose 9 percentage points (reaching almost 69 percent) between 1979 and 1989, but increased only another 3.5 percentage points by 1999. Particularly relevant to "reaching the top," they show that at the high end of the wage distribution, the gender gap hardly narrowed at all during the 1990s (and much less than during the 1980s). In addition, they find that among the top 10 percent of wage earners, the "unexplained" portion of the

in the popular press have focused on high-powered women who, after trying to simultaneously work in prestigious jobs and care for home, husband, and children, have opted out of the workforce—some temporarily and some for longer periods—to mind their children while their husbands continue in the traditional income-earning role. A prominent example is the cover story in *The New York Times Magazine* (October 24, 2003) about "the growing number of highly educated professional women who are leaving ambitious career paths to spend more time with their families," not because they can't continue to achieve in the workplace, but because they choose not to. Another recent story in the *Boston Globe* (December 10, 2004), describes stay-at-home mothers as the new "status symbol" of a "privileged class." Such stories, along with the BLS data noted above, have raised concerns that the pipeline for the next generation of women leaders is diminishing and that hard-won gains from an earlier generation are being lost.

However, determining what might be driving this behavior is more difficult than it might appear. Economic theory suggests that how much any woman (or man) participates in the labor market depends on the interplay of several factors, including the wage rate she (he) can earn in paid work, other available

## Since the mid 1990s, among college-educated women, married women with young children and high-earning husbands saw the sharpest participation declines

female-male gap (the part that can't be assigned to factors such as education and age) actually increased in the 1990s. While this might be the result of unmeasured differences between top-earning women and men, it is also consistent with a glass ceiling. The gains women made in the 1980s may have put more of them into high-level positions where discrimination or other subtle impediments could have had an increased impact on their forward progress.

Not all of this evidence is necessarily cause for concern. As women's share of advanced degrees or their share of jobs in a particular occupation approaches 50 percent, one doesn't necessarily expect to see further "improvement." The same is true with labor force participation rates and other measures of labor force activity or success: As women approach parity with their male counterparts, one would expect further change to slow and eventually cease. Moreover, if women's preferences are genuinely different (on average) from men's, as Nancy Folbre speculates, then we would not ever expect exact numerical equality across all fields of study and occupations. Nonetheless, the mixed picture does suggest that understanding the extent and causes of this slowdown is important if we are to continue improving the working and home lives of both women and men.

### Are professional women "opting out"?

News accounts also have raised the question of a slowdown and reversal in some of the gains women have made. Stories

sources of income, and preferences—the value placed on time spent caring for children and other family members, cleaning, preparing food, or enjoying leisure activities. A higher wage rate makes paid work relatively more attractive compared to unpaid work at home and/or leisure and will tend to raise labor market participation and hours. Indeed, rising real wages, increased personal fulfillment from and social acceptance of women in paid work, and declines in the cost of purchased substitutes for work at home (prepared foods, vacuum cleaners, etc.) explain much of the increase in women's labor market participation in the twentieth century.

Greater income from any other source, including higher earnings by spouses, tends to reduce an individual's time spent working for pay because it allows greater consumption of both purchased and "homemade" goods and services. The presence of young children at home increases the relative value of unpaid work and, all else equal, should reduce labor market participation and work hours. To working parents, the cost of child care is equivalent to a reduction in the wage rate—for every hour worked, an hour of child care must be purchased.

Yet much of the history of the past few decades seems to run counter to the simple predictions in the previous paragraph. In the 1970s and 1980s, the biggest employment and earnings gains for married women came from the wives of high-wage husbands, according to research by Chinhui Juhn and Kevin Murphy. During this period, increased market opportunities,

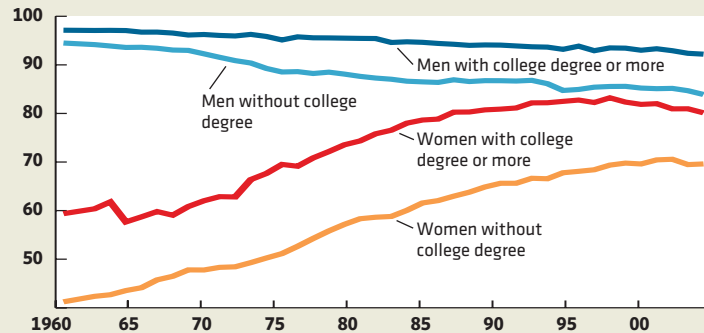




## Men and women in the labor force

Women entered the workforce in large numbers over the past four decades. However, growth in labor force participation by the most educated women slowed starting in the mid 1980s and declined in the late 1990s.

Percent in labor force (men and women, age 25 to 64)



Source: Current Population Survey, March supplement, 1962 to 2003

Note: Before 1992, "college degree or more" means at least 16 years of schooling completed.

particularly for highly skilled women, appear to have been large enough—and more important than the availability of husbands' earnings—to tip women's decisions in favor of more paid work. In the 1980s, married women with young children markedly increased their involvement in the paid labor market, and at a faster rate than other women—perhaps because labor market opportunities and preferences were also changing more than enough to shift the balance.

This suggests that the term "opting out" as used in the press is ambiguous. Decisions to work, and how much to work, always involve some balancing of the relative rewards and costs of working for pay, unpaid work at home, and leisure—and this is particularly true for those in the upper part of the income distribution, who tend to have a larger scope of choice. Women (and men) who make a decision to reduce their involvement in paid work presumably do so because the additional cost in terms of family or leisure time foregone is not worth the resulting additional salary. Attributing a reduction in labor force involvement to "opting out" does not tell us whether some women's preferences changed, social norms shifted (making it more costly for women to work), some women's opportunities worsened (their wages declined or they hit a glass ceiling), or some families received additional income from a booming stock market or higher husbands' earnings.

### Evidence from the Current Population Survey (CPS)

To examine these issues, we tabulated data on the labor market involvement over the last two decades of highly educated women and men—those with a college degree or more—of prime working age, defined as 25 to 54 years old. Published BLS data, such as those cited above, focus on college-educated women with young children or married women with young children, but not both, and typically have a wider age range.

The data we examine are useful for shedding light on "pipeline" issues for the upper echelons of the labor market because

they are restricted to women with at least four years of college (who comprised 30 percent of women age 25 to 54 in 2004). Note, however, that they provide only limited insight into the handful of women who ultimately make it to the "very top."

Has labor market involvement declined for married women compared to divorced, separated, widowed, or never-married women? And among married women, are the reductions more pronounced for mothers with children living at home and/or women with higher-earning spouses?

We focus on labor force participation because it most clearly reflects an individual's or family's decision about whether or not to work (or seek work). We use data from all 12 monthly BLS surveys each year; thus, labor force participation rates are the fraction of women working or looking for work in an average week during the year. When calculating changes over the decade 1994 to 2004, we average data from 1994 and 1995 for beginning-of-decade participation rates and data from 2003 and 2004 for end-of-decade rates; this reduces the impact of economic conditions in a single year. We also look briefly at other measures of the intensity of women's labor market involvement, including the share working full time and the average weekly hours of full-time workers.

The analysis is complicated by a number of changes in the way BLS gathered information, resulting in "breaks" in the data in 1994 when these new procedures were implemented. In particular, the old procedures assumed that adult women were likely to be homemakers; thus, if they happened to be home when the BLS surveyor knocked on the door, they were more likely than men to be misclassified as not in the labor force ("keeping house") even if they were in fact employed (working a few hours a week) or unemployed (seeking work). The change resulted in a small jump in some women's measured labor force participation between 1993 and 1994, not because behavior had changed but because the revised procedures were more accurately classifying them.

What do we find? While highly educated women are much more likely to work in the first place, changes over time in their labor force participation are similar to those of other women. The labor force participation rate of prime-age women with at least four years of college rose in the 1980s and early 1990s, leveled out in the mid-1990s, and then declined. Between 1994–95 and 2003–04, the rate declined from 84.7 percent to 81.8 percent—about 3 percentage points. Meanwhile, prime-age, highly educated men's participation rates also declined about 1 percentage point, to 95 percent in 2003 and 2004.

The decline was most pronounced for married women with children under the age of three, whose participation dropped about 8 percentage points. (Women on maternity leave under the Family and Medical Leave Act (FMLA) are counted as employed; thus these measures understate the extent to which women with very young children are taking time out—and understate the drop if more women were taking advantage of its provisions as the decade wore on.) Married women with school-age children (6 to 17 years old) decreased their participa-

tion after 1994, but only modestly, by 2.6 percentage points. By contrast, highly educated, married men with children under age 18 at home have *higher* participation rates than those without children; their participation rates were fairly stable over the two decades and did not appreciably decline after 1994, while rates for married men without children slid by about 3 percentage points.

Since these data provide a snapshot at a point in time, we cannot tell whether mothers who are not in the labor force in the survey month are out for only a short period or for the longer term. But if the declines reported above reflect increases in relatively temporary exits after childbirth (beyond FMLA leave lengths but shorter than a year or two), one would not expect mothers whose youngest child is three to five years old to have lower participation rates and steeper declines than those with school-age children, which they do.

Post-1994 declines in participation rates were somewhat larger among mothers with higher-earning husbands (in the top two-thirds of college-educated women's husbands) than among those with husbands earning relatively less (in the bottom third)—although the differences are not huge. However, mothers with the highest-earning husbands (top third) showed particularly steep declines during the late 1990s, with a 10-point drop between 1997 and 2001, after which their participation began to rise again. Mothers with middle- and low-earning husbands saw more gradual and consistent declines.

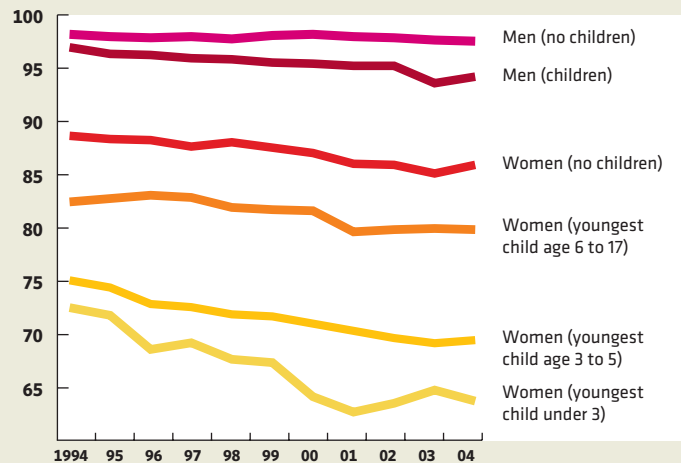
Married women without children at home also reduced their labor force participation after 1994 (having increased it in the 1980s), but the decline, like the preceding rise, was more gradual than for those with children. At the same time, the decline in participation for married women was greater than for divorced, separated, widowed, or never-married women. Labor force participation for the latter group held fairly steady until the early 2000s, with the ensuing decline possibly attributable to the recession.

Other measures provide somewhat less evidence of reduced labor market involvement for highly educated women after 1994. The fraction of prime-age college-educated women working full-time rose modestly, then leveled out at nearly 83 percent, and fell only after 2001, perhaps the result of the recession, and only by a small fraction. Patterns were similar for married and unmarried women; only mothers of young children (under age three) became noticeably less likely to work full-time, and even then only temporarily, with the share working full time declining between 1994 and 2001 and then rising from 2001 to 2004. Similarly, the average weekly hours of women working full-time declined after 1994, but the declines were small—one-quarter to three-quarters of an hour—and varied only slightly with marital status or for mothers with school-age children. Mothers of young children cut their weekly hours slightly more—by about one hour per week.

While these patterns run somewhat counter to the evidence on labor force participation, they are not surprising. Many studies show that decisions about work hours or full-time status

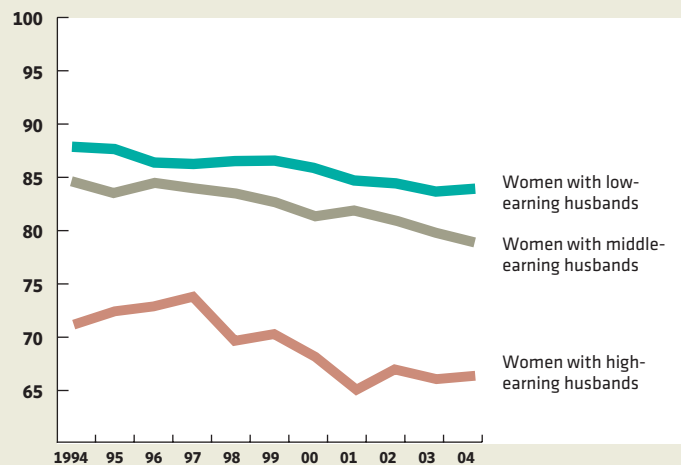
### For highly educated women, the declines in labor force participation were greatest for married women with small children...

Percent in labor force (married, college-educated women and men, age 25 to 54)



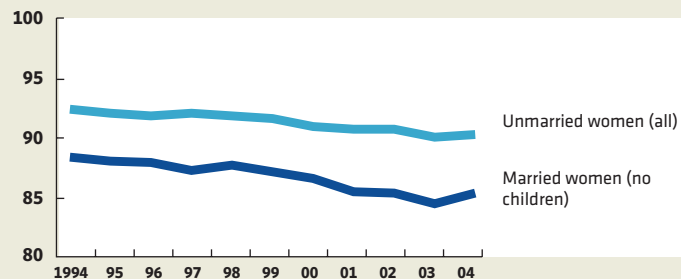
### ...and for women with relatively high-earning husbands.

Percent in labor force (married, college-educated women, age 25 to 54)



### Married women without children and unmarried women also reduced their participation, but more gradually.

Percent in labor force (college-educated women, age 25 to 54)



Source: Authors' calculations from annual averages of monthly Current Population Survey data, 1994 to 2004

Notes: Middle panel: College-educated wives are classified into three groups based on whether their husbands were in the top, middle, or bottom third of the distribution of their husbands' usual weekly wages. Lower panel: Unmarried women include divorced, separated, widowed, and never married.



tend to be less responsive to income and wages than decisions about whether to seek work at all. Jobs are often offered in relatively inflexible work-hour configurations set by employers, and many women (and men) have limited ability to vary their hours of work. Even during the 1970s and 1980s, when women were entering the labor force and nontraditional occupations in large numbers, the increase in the percentage working full-time was very modest.

### Possible explanations

With this evidence on some of the recent changes in the labor market behavior of highly educated women, we return to the question of explanations. What follows is a brief discussion of a number of possible factors suggested by economic theory. In particular, what might have changed to cause the observed post-1994 patterns? While a full assessment is well beyond the scope of this article, our goal is to move beyond the notion of “opting out” to consider more clearly defined explanations and their potential implications.

**Women’s wages and labor market opportunities.** Women’s (and men’s) wages play a key role in determining their participation in paid work. Moreover, increases in women’s wages and market opportunities are frequently cited as central to the large influx of women into paid labor in the 1970s and 1980s.

Did something change? Blau reports that real weekly wages for college-educated women declined very slightly in the 1970s, rose more than 15 percent in the 1980s, and then grew more slowly—increasing at only about two-thirds the 1980s’ rate—in the first half of the 1990s. In our sample of prime-age, college-educated women, real weekly earnings rose 19 percent between 1983 and 1993 and less than 12 percent from 1994 to 2004. This slowdown in real wage growth might be an important reason for the observed drop in women’s participation.

In addition, any slowdown in the expected trajectory of future wages—caused, for example, by an increase in discrimination or other subtle barriers—might also reduce labor market commitment. On the whole, overt discrimination has declined markedly over the past 40 years, and the wage convergence among the very top corporate earners found by Bertrand and Hallock confirms this view. Nonetheless, Barbara Reskin persuasively describes the persistence of subtle forms of discrimination. And, as mentioned earlier, Blau and Kahn found evidence consistent with an increased negative impact of glass ceiling barriers at the high end of the wage distribution in the 1990s.

A change in other factors that could cause women to discount their market wages might also have had an impact. If, for example, the costs of child care began rising relative to women’s wages, women’s “net” wages would decline. Similarly, changes in institutional arrangements that made it more difficult to balance work and family might cause women (and men) to discount their wages—for example, if the length of the standard work week rose or hours of work became less flexible. But most observers find the opposite—flexible work arrangements are spreading to more workplaces. On the other hand, as Rosanna

Hertz notes, our society still tends to hold as an ideal the top executive willing to make a 24/7 commitment to her job. With more women moving into high-level jobs, institutions may be changing too slowly to keep pace, or the new arrangements may not apply to the very top.

**Other family income.** Greater increases in other sources of family income in the 1990s compared to the 1980s, such as husbands’ earnings and the stock market, could also have been a factor in women’s reduced labor market involvement.

However, the weekly earnings of the husbands of the women in our sample increased about 12 percent in real terms between 1983 and 1993 and rose roughly the same amount (11 percent) between 1994 and 2004. The decline in married women’s participation in the data could be caused by husbands’ faster earnings growth in the later period, but is not easily explained by the steady growth that occurred, suggesting that husbands’ earnings were probably not the most important contributors to wives’ participation declines during the 1990s. On the other hand, these data on wage changes are medians (half the women had husbands with higher earnings and half with lower), and provide no information about the connections between an individual wife’s participation and her own husband’s income. For example, wives of high-earning husbands could be reducing their participation in response to above-average wage growth for their husbands; if this were happening to a greater degree post-1994, husbands’ earnings could still be an important part of the explanation.

Greater income from nonwage sources, such as higher stock market returns, could also have been a factor. Because stock holdings are more concentrated among high-income households (which also tend to be more educated), the 1990s boom would be expected to cause a decrease in college-educated women’s labor supply, on average. One might expect a similar effect on college-educated men, but this is difficult to disentangle from other reasons for the long-term downtrend in men’s participation.

**Preferences and cultural norms.** When economists use the term “preferences,” they generally are referring to the intrinsic tastes of the individual making the decision. In addition, changes in social norms—larger-scale shifts in attitudes across many people—can have an impact similar to the effect of discrimination. A culture in which women are “supposed” to care for children, home, and husband imposes additional costs and constraints on women who would choose to work and achieve in the marketplace.

Did women’s preferences or social norms change in the 1990s to put more value on their being at home? Changes in preferences and social norms are notoriously difficult to document and their impacts difficult to quantify. Yet, during a period when there are significant shifts in gender roles, the possibility that changing tastes are an important factor is hard to ignore.

Data from surveys by the Families and Work Institute suggest that individual attitudes and social norms of *working* men and women, at least, continue to move in the direction of sup-

porting women's work. The share of working men who agreed that "men should earn the money and women should take care of the home and children" held steady at 42 percent from 1997 to 2002, and the share who thought that an employed mother could have "just as good a relationship with her child" rose by 2 percentage points (to 64 percent). For working women, the continuing trend away from traditional gender roles was even more stark, with a change in only five years of 3 percentage points (from 40 percent to 37 percent) on the first question and 5 percentage points (from 73 percent to 78 percent) on the second. Moreover, younger working men and women (under age 30 in 2002) were less likely to hold traditional attitudes than older workers, which both confirms the view that the tide is

likely to jump into market work at the rate of their predecessors. However, this is a better explanation of why rates would rise more slowly than of why they are declining.

**Labor market attachment and the timing of breaks.** The observed pattern in labor force participation might be the result of a shift in the timing of women's labor force involvement over their lifetimes, rather than a change in the factors affecting the trade-off between market and nonmarket work. Delayed marriage and child-bearing have meant that women typically work more years—and also potentially develop stronger attachments to the labor market—before taking time out for children. Suppose that women today are taking longer breaks to care for children but intend to resume a heavily committed work-life

## We still don't know whether women's preferences or social norms shifted, opportunities in the workplace worsened, or families had more income from other sources

not turning and also suggests that it is unlikely to revert in the future. At the same time, it is also possible that it became more socially acceptable for college-educated women to withdraw from paid work in the 1990s compared to the 1980s or 1970s—a shift which might not be captured in these questions because of the way they are worded.

**The characteristics of potential entrants.** Another possibility is that the women with the highest skills and market wages joined the labor force during the steep run-up in participation rates in the 1980s, leaving the pool of potential entrants in the 1990s more heavily weighted toward women who face lower wages, have greater income from other sources, or who more highly value activities outside paid work. If this were the case, these women would be un-

likely to return, while their counterparts of several years ago took shorter breaks if they returned, but were less likely to return, on average. Then the recent drops in measured participation could reflect a short-term adjustment to the shift in timing rather than a decline in women's cumulative lifetime participation in the labor market.

### Beyond opting out

After rising steeply in the 1980s, college-educated women's labor force participation declined during the 1990s. The declines were very modest for unmarried women and for married women with school-age children, and small compared with the large increases that occurred during the 50 years following World War II. Overall, participation of all college-educated women remains high (almost 82 percent were in the labor force in 2004), and even higher for the subset with graduate degrees (almost 86 percent), although it is still less than their male counterparts (95 to 96 percent).

However, declines in participation were somewhat larger for married women and noticeably larger for mothers with young children or mothers whose husbands had relatively high earnings. These are exactly the women—those with alternative sources of income or higher values of their time out of the paid labor market—that economic theory predicts would be most affected by a softening of women's wages or an increase in impediments to advancement. Yet this same sensitivity also existed in the 1970s and 1980s, and participation among these groups of women rose especially steeply during those decades. Although these women may have the resources to leave paid work, they have not consistently chosen to do so. Hence our effort to move beyond the notion of "opting out" and more explicitly identify possible reasons for the shift in outcomes in the 1990s. Although we provide some evidence to help sort out which factors were more important, additional research will be required to put together all the pieces of the puzzle. ✱

further reading



**"The Gender Gap in Top Corporate Jobs,"** by Marianne Bertrand and Kevin F. Hallock, *Industrial and Labor Relations Review*, October 2001.

**"The U.S. Gender Pay Gap in the 1990s; Slowing Convergence,"** by Francine D. Blau and Lawrence M. Kahn, National Bureau of Economic Research Working Paper 10853, October 2004.

**"Wage Inequality and Family Labor Supply,"** by Chinhui Juhn and Kevin M. Murphy, *Journal of Labor Economics*, January 1997.

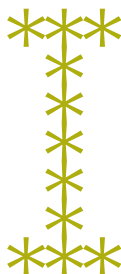
**"Recent Trends in the Well-Being of American Women, 1970-1995,"** by Francine D. Blau, *Journal of Economic Literature*, March 1998.

**"Changes in Women's Labor Market Involvement, 1994-2004,"** by Katharine Bradbury and Jane Katz, Federal Reserve Bank of Boston Public Policy Discussion Paper, forthcoming 2005.



# improving opportunities for women

by HELEN FRAME PETERS



**One solution is to encourage young women to take on leadership roles in all areas of endeavor, so they can learn to fail, pick themselves up, dust off their egos, and try again**

IDENTIFYING PROBLEMS is easy. We can look around us and simply observe the fact that far fewer than half of our business and public leaders are women. Identifying potential solutions is much more challenging—especially when the problem is one as broad in scope as what is preventing women from becoming leaders. And coming up with innovative solutions is even more difficult still.

In the spirit of progress, I offer what I hope are five new suggestions for ways to make concrete improvements in opportunities for women.

**Publish the data.** A recent study by the Boston Club and Bentley College showed that women own almost 50 percent of the assets in Massachusetts, but they only serve on 9 percent of the boards. Another study at MIT by women science faculty found that women faculty at MIT received less grant money, research assistance, and even smaller offices than their male counterparts. Publishing data like these will get people to look at why this is happening and what they can do within their organizations to fix it.

**Manage the money.** Women may have 50 percent of the assets, but we certainly don't act like it. Women often shy away from finance and money matters, leaving this important activity to husbands or experts. Every woman needs to take charge of her personal balance sheet, planning for future life stages and investing soundly and wisely. Women who sit on corporate or nonprofit boards need to be experts in reading the balance sheet, income statement, and statement of cash flows. Your advice isn't worth as much if you can't translate it into the currency of the organization.

**Focus on your university.** There are a number of things women can do with their alma maters to improve women's opportunities. At my alma mater, the University of Pennsylvania, women were not donating at the same rates as men. At the request of the trustees, we organized a council of women alumnae and started to tackle the issues that are important to women. We reviewed promotion and tenure statistics, safety issues, and women's athletics. To celebrate 125 years of women on campus, we commissioned the first oil portraits of women leaders, created a women's history archive, and built a women's walk and sculp-

ture garden. Finally, we made sure that women were on the important nominating committees so that more women served as trustees and members of the board of overseers.

Sure enough, as we got more women involved, we increased women's donation rates, eventually raising more than \$100 million that will be used for programs that are important to both women and men at the university.

**Teach young women how to fail.** We need to encourage young women to take on leadership roles in all areas of endeavor, so they can learn to fail, pick themselves up, dust off their egos, and try again. I know of a young woman who was a high school valedictorian and a very talented athlete. She went on to a very select university, where she played a sport her first semester. At the end of the semester, she received all A's except for one B+, and she dropped her sport because she was worried about her academic career. She's smart, and she has the potential to do great things, but how will she learn how to fail? Without that opportunity, women become perfectionists, withdrawing from taking risks, and ultimately are less successful in whatever they do.

**Do your part, but accept those who can't or won't.** Once you've arrived, you need to do more, even if you think you have already done your part. Find ways to make opportunities for women in every area of your life. Take a stand where you can, and applaud others who follow suit. But remember that there are many women in positions of influence who, for whatever reason, don't feel comfortable doing this. We need to celebrate their successes even if those women don't take the same path. It may not always feel good when someone like this ends up on top. But we need to remember that we all win when we celebrate accomplished women.

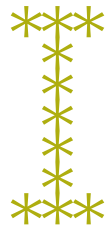
Taking these steps will help move us from a society in which women have the opportunity to succeed to one in which women do succeed, in equal measure with men. \*

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*Helen Frame Peters is a professor of finance and a former dean at the Carroll School of Management at Boston College.*



# the hard work *by* FRANCENE RODGERS left to do



GRADUATED FROM Barnard College of Columbia University in 1967. If you'd asked me back then, at the beginning of the women's movement, where working women would be today, I would have said we'd be much farther along. The sixties were a time when change accelerated rapidly, and we all thought that rate of change was going to continue for the rest of our lives. So naturally I feel frustrated when I look at the situation today, with women participating much more fully in the labor market but still not moving into leadership positions.

Does this mean the women's movement was unsuccessful? Hardly. When I started working, men did not believe that women were capable of being in business. Sexual harassment was commonplace, if not a daily occurrence, for many working women. And as Claudia Goldin and Joyce Jacobsen indicate elsewhere in this issue, women's educational and occupational options were far more limited. All of that has changed dramatically.

But still, the women's movement hasn't completely fulfilled its promise and its mission, and the reason is that the world is more complicated than it seemed back then. We thought all we needed to do was to pass antidiscrimination laws, get women a seat at the table, and have a few role models at the top. We didn't realize that work hours would increase to the point that work time and family time have almost become antonyms, or that the lack of power and pay associated with women's jobs would be so unyielding, or that the power structure of corporate America was so deep and enduring. We made the easy changes, but they weren't enough. We still have a lot of hard work left to do.

One thing we didn't realize back in the sixties was that women's problems in the workplace are not only about family and children. Clearly, family choices have a significant impact on women's work lives, but that's not the only factor that keeps women from being successful. Women without children report many of the same problems with alienation, exclusion, and stereotyping—no surprise given Barbara Reskin's research. And the problems only get worse as they move up the ladder. Many women leaders tell me that when they got to what they thought

**The women's movement hasn't completely fulfilled its promise and its mission, and the reason is that the world is more complicated than it seemed back then**







was the top, they discovered there was another level they didn't know about until they arrived. They can provide numerous examples of being left out. This is not necessarily due to conscious behavior by men, but it continues to exclude even women who by every standard are incredibly successful.

We also didn't realize how hard it would be to change how people think about men's and women's work. As Nancy Folbre points out, we still see large differences in what men and women choose to do. There's nothing wrong with people making different choices. But there's a deeper issue, which is that the things women choose to do are less paid, less powerful, and less valued. Girls still don't feel comfortable wanting power, influence, or money, and they don't seek out the jobs that will lead to those outcomes. And when women do enter occupations that were previously male-dominated, the occupation's salary and prestige decline; medicine and middle management are just two examples. The solution isn't to make all women into business executives. Instead, we need to look at how we value occupations so that pay and power are less associated with our gender stereotypes.

We thought that giving women more control over their work schedules would solve much of the work-family problem. Indeed, my consulting firm, and others like it, have spent the last 30 years helping employers to learn how to do this, and we have seen major improvements in this regard. Flex time, executive-level part-time jobs, and compressed workweeks are commonplace today but were all but unheard of even two decades ago. But unfortunately, all the positives of becoming more flexible have been trumped by the increase in working hours. What's the point of compressing or moving around 70 hours of work per week? It's too much work, no matter how it's arranged. One problem is our wage and hour laws. While most nonmanagerial and nonprofessional employees must be paid overtime for any work over 40 hours per week, for managers and professionals all work above 40 hours per week is essentially free to the employer. This inevitably leads to abuse. Ironically, these rules were implemented in order to give nonunionized women some protection against unreasonable work practices. Today, the laws have backfired against working women, who increasingly work in professional jobs and therefore are exempt from overtime protections.

This dovetails with another issue, which is that employers are incredibly sloppy in the way they use time. Time is the only finite thing there is, and yet employers treat it as if it were infinite. I talk frequently with employees about their work lives, and they tell me that they resent not one iota of the time they have to spend serving customers or clearly adding value to the company. But what they resent is the time their employers waste. They hate unnecessary bureaucracy and rework and endless memos. They hate people who call meetings without an agenda or let the meetings run too long because they start late. In short, they resent the time they spend at work that seems wasteful, when they don't understand what value is being added to the business. I think it's practically criminal for bosses to encroach on employees' time because of poor planning. But right now, there are no consequences for doing just that. We simply culturally

accept that we're a country that works all the time, and we don't hold employers accountable.

Women should be the ones holding employers' feet to the fire, but we have been too timid in stating our needs and in helping our companies change. Somehow we thought that if we were at the table, that was going to be the change in itself. But we can't just be at the table; we have to speak up. Men don't even see the problem, by and large, because they're not the ones who are having the problem. And they won't fix what they can't see.

Speaking up is difficult, however, when women and men communicate in different ways. Thirty-five years ago we resisted the idea that men and women differed in any substantial way. But the more I have worked in this field, the more I think that there are important differences between us. These differences don't mean that one sex or the other is less productive or less valuable, but they do mean that people's behavior can be interpreted negatively even when it wasn't intended that way. For example, women say "I'm sorry" to mean that they empathize with another person, whereas men tend to use it when they think they did something wrong. Similarly, men tend not to make eye contact with speakers during presentations, which women interpret as rude. Women might want more time to think over a decision than a man would, which a hiring manager might interpret as "hesitation in battle." The list goes on. These kinds of misinterpretations are very hard to fix, especially because the problem is not that one gender is wrong and the other is right. It's that we're different in this respect.

FINALLY, IN THE HALCYON DAYS of the women's movement, we didn't realize how much of the problem would need to be solved not by individuals or employers, but by the community. We had this incredible revolution of women's work. But we did absolutely nothing to support it, and now we're surprised that women are struggling. To move forward, sooner or later we will have to invest in more public support for the policies and structures that allow both men and women to work—for example, more accessible child care and school schedules and events that are set with working parents in mind.

In *Childhood and Society*, Erik Erikson writes, "Freud was once asked what he thought a normal person should be able to do well. The questioner probably expected a complicated, 'deep' answer. But Freud simply said, 'Lieben und arbeiten' (to love and to work). It pays to ponder on this simple formula; it grows deeper as you think about it." We should all have the right both to have work that gives us meaning and to have families that we can care for. Giving up on women's ability to do both is giving up on fundamental human rights for women. We know that women start out as ambitious as men. We know that women want to both work and have families. The question is, how? This is our revolution to finish. \*

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*Francene Rodgers is the founder and former CEO of WFD Consulting and now serves as its Chair. She has consulted to dozens of Fortune 500 companies on workplace issues and is active in numerous organizations that promote the well-being of women and families.*



This special edition of the *Regional Review* is based on presentations made at *Reaching the Top: Challenges and Opportunities for Women Leaders*, a conference sponsored by the Federal Reserve Bank of Boston on March 3, 2004.

We thank the following people for their contributions toward making our conference a success.



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