Chapter 1

Introduction

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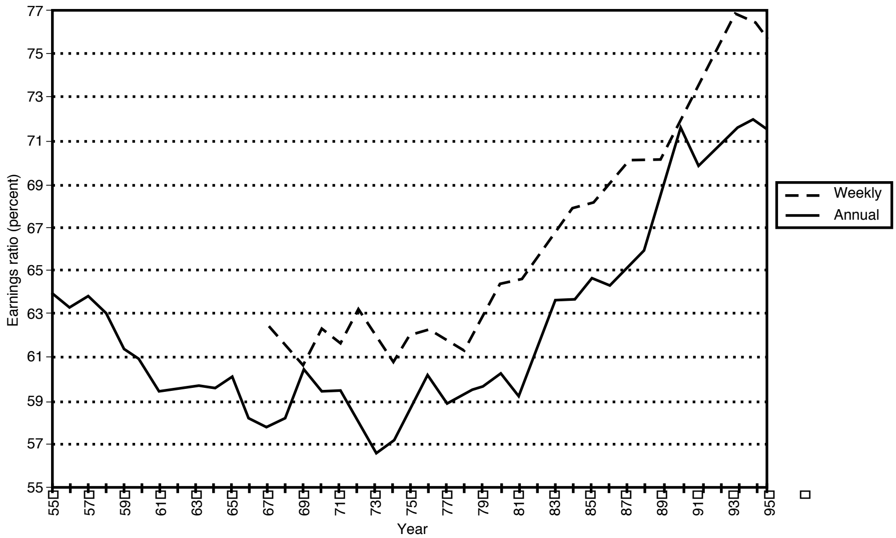
One of the most striking labor market developments since World War II has been the dramatic growth in the labor force participation of women. Between 1940 and 1995, women workers increased from one quarter to nearly one half (46 percent) of the labor force. The sharp rise in married women's participation in work outside the home that has spurred the expansion in the female labor force has caused a "subtle revolution" in gender roles in the family and in the larger society. While in 1940, 86 percent of married women were full-time homemakers, by 1994, 61 percent were in the paid labor force (see Goldin 1990).[1] Initially, it was older married women (over age 35) who were drawn into the labor force. Given the fertility patterns of the time, they tended to have school-age or grown children. One of the most significant shifts over the past twenty-five years has been the substantial growth in participation among younger married women, many of them mothers of young children. At the same time, an increase in the divorce rate and in nonmarital births has resulted in a large increase in single-parent families headed by women. Single heads constitute another large segment of women workers with significant family responsibilities (Blau, Ferber, and Winkler, forthcoming; Leibowitz and Klerman 1995).

The increased involvement of women in work outside the home has focused growing attention on the status of women in the labor market. Over the past twenty-five years, women have made important progress in narrowing the gender gap in pay and reducing "occupational segregation" by sex. Occupational segregation is the tendency of men and women to work in different jobs. Figure 1.1, based on published government data, shows the trends in the male-female earnings ratio for two earnings series: weekly earnings of full-time workers and annual earnings of year-round, full-time workers. The figure indicates that after over two decades of constancy, the gender earnings ratio began to increase in the late 1970s or early 1980s. Progress was steady through the 1980s, but the ratio appears to have plateaued in the early 1990s. Nonetheless, cumulative gains have been substantial: Between 1978 and 1995 women's weekly earnings (of full-time workers) increased from 61 to 76 percent of men's earnings.

Figure 1.1 Female-to-Male Earnings Ratios of Full-Time Workers, 1955–1995



Sources: Bureau of the Census, *Population Reports,* Consumer Income Series P-60, various issues; U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings,* various issues.

Women have also made important progress in reducing occupational segregation. Analyzing the distribution of men and women across the hundreds of detailed occupations listed by the Bureau of the Census, researchers found high and stable levels of occupational segregation through the first half of the twentieth century. In this case, signs of progress first appeared in the 1970s as women began to enter traditionally male professions and managerial jobs in unprecedented numbers. The Index of Segregation is a useful summary measure of the difference in the male and female occupational distributions. It gives the percentage of women who would have to change jobs for the occupational distribution of men and women to be the same. This index fell from 67.7 in 1970 to 59.3 in 1980 and 52.0 in 1990 (Blau, Ferber, and Winkler, forthcoming).

Despite important recent gains, however, women continue to earn less than men and to be heavily concentrated in "female" jobs. Moreover, women in the labor market complain about a "glass ceiling," a set of subtle barriers that appear to block their attaining the highest reaches of professional success. For example, when *Fortune* magazine surveyed male and female middle and top managers among its subscribers, in September 1995, both men and women agreed that women working in corporate America face considerable obstacles. An overwhelming 91 percent of women and 75 percent of men believed that the "existence of a male-dominated corporate culture" is the single most important barrier for women. Among the other chief barriers cited by women were the existence of a glass ceiling, women's exclusion from informal networking, management's belief that women are less career-oriented, and a lack of female mentors (Worton 1996). Of course, it is difficult to assess the accuracy of such beliefs; however, it is indeed the case that, despite the enormous growth in their share of the management ranks, women constitute only 3 to 5 percent of senior managers of companies included among the Fortune 1000 Industrial and Fortune 500. There are also relatively few women in Congress or governorships and few female college presidents (see Glass Ceiling Commission 1995).

One reason for concern over persistent gender differences in labor market outcomes is based on equity or fairness. In this view, the elimination of discrimination against women in the labor market is "a matter of simple justice."[2] Equity concerns over gender pay differentials, regardless of their source, are heightened by the growth in families headed by single women, as well as the increasing dependence of married couples on the wife's earnings. A second reason for concern is based on efficiency. To the extent that the gender gap reflects discrimination, such differential treatment of otherwise equally qualified men and women is wasteful. More broadly, social welfare is maximized if we obtain the greatest possible productivity out of all our resources, including our human resources.

OVERVIEW OF THE VOLUME

Initial versions of the papers in this volume were presented at a conference held at Cornell University in April 1995. The purpose of the conference was to better understand the factors that have impeded women's progress in the labor market and to suggest what can be done to promote gender equality. The papers focused on selected topics deemed to be particularly relevant to women's success. Given the changes in women's roles within the family that potentially affect all family members, attaining greater gender equity in the labor market requires addressing the issues that arise from shifts in gender roles in the family. Chief among them is how workers of both sexes can more effectively mesh their home and work responsibilities. These are not new concerns. In her paper, Claudia Goldin chronicles this tension between career and family for college women throughout the present century. Cohorts of women graduating from college in the early 1900s faced a stark choice between career and family. Considerable progress has been made since then, but Goldin finds that surprisingly few women, even among recent cohorts of highly educated women, have been able to attain both substantial career success and a family. Further evidence of this problem is provided by Jane Waldfogel, who reports in her paper that gender differences in the effects of marital status and children on wages account for a substantial and growing portion of the gender pay gap.

Since women continue to retain primary responsibility for the household in most families, this set of issues is of particular relevance to their ability to succeed in the labor market. The appropriate policies may involve voluntary employer responses to labor market shifts in the gender composition and family responsibilities of workers, government mandates, or a combination of both. To illustrate both the problems and the potential of formulating policies to deal with these issues, we focus on one of a number of possible policy approaches: parental leave.

Parental leave policies are particularly interesting in that their potential impact on gender equality in the labor market is complex. Access to leave permits women to maintain their tie to the firm after childbirth, thus enabling them to continue to reap the gains of their investments in firm-specific training or hold on to an especially good job "match." From the broader social perspective, parental leave may facilitate parents spending more time with their children during the crucial early months.[3]

However, the policy may have negative effects, depending on how it is specified, even on women's economic outcomes. While it seems clear that relatively short leaves are likely to increase women's labor force attachment and wages, extended leaves, especially if generous benefits are also provided, may arguably do the opposite. Moreover, since leaves tend to be disproportionately taken by mothers, even when they are available to both parents, they may reinforce traditional gender roles in the family and thus help to perpetuate differences in labor market outcomes between men and women. One example, though admittedly an extreme one, is that in Germany, as of 1992, women have had available to them (for each child) fourteen weeks of fully paid maternity leave, of which two months are mandatory, as well as an additional three years of parental leave with a paid allowance. The German parental leave is paid as long as the parent taking the leave works no more than nineteen hours per week (Blau and Kahn 1996). Rather than facilitating women's attachment to work such a policy seems virtually an invitation to their retaining a traditional role within the family. Moreover, to the extent that parental benefits are costly, government mandates of employer provision may result in lower wages for women (to finance the costs of the benefit). It is also possible that employers will be reluctant to hire women who are considered likely to claim leave. More generally, some economists are concerned that mandated benefits, by interfering with the market, may take a toll on economic efficiency.

A final aspect of parental leave policy that makes it of considerable interest is that U.S. policy in this area has strongly diverged from that of other industrialized nations. Specifically, while virtually all other advanced countries have long provided such entitlements, there was no federal mandate in the United States until 1993. This suggests that we may have much to learn from international comparisons.

Three of the papers in this volume investigate particular aspects of this issue and together illustrate the fruitfulness of such a concentrated focus. First, Jacob Kerman and Arlene Leibowitz study the impact of maternity leave on women's labor force attachment by comparing the labor supply behavior of women in states that passed maternity leave laws in the 1980s with the behavior of women in states that did not. Second, Jane Waldfogel examines the impact of maternity leave on wages by comparing outcomes for women who returned to their initial employers following a birth with those who did not. Finally, Christopher Ruhm and Jackqueline Teague examine possible efficiency effects of parental leave by looking across countries to see the impact of the presence and duration of leave entitlement on various macroeconomic outcomes in an effort to ascertain whether or not mandated family leave has negative effects on economic efficiency. Taken together these papers suggest that the effects of family leave on employers, workers, and society as a whole are quite positive. The relatively modest maternity leave likely to be taken by workers in the United States appears to increase the wages of women by enabling them to retain their tie to the firm and thus increase their experience and tenure. At the same time, the cross-national results indicate that moderate amounts of leave do not adversely affect economic efficiency.

Another area where work-family conflicts may manifest themselves is in the scheduling of work. A number of dimensions of scheduling may be at issue, ranging from the total number of hours worked to their flexibility and even where they are worked, at home or at the workplace. We have chosen to focus on the first of these issues: the long hours that are often required to achieve success in management and high-level professions. Given that women so often retain disproportionate responsibility for household tasks, even when they are employed outside the home, such requirements pose an especial burden for them. They also constitute a barrier to men taking on a larger share of housework. What function do long-hour requirements serve and what are the prospects for changing them? We may think the answer to the first question is obvious. Employees are (explicitly or implicitly) required to work long hours to get more done. But in their paper Renee Landers, James Rebitzer, and Lowell Taylor suggest that the answer may not be quite so simple.

Long hours (or other types of extremely high performance standards) may be used to screen out employees who have less of some hard-to-observe trait like ambition or motivation and who cannot otherwise be identified. To the extent that the authors are correct, it may be particularly difficult to modify the environment so that workers (of either sex) with family responsibilities have an equal chance to succeed. For example, we might try to increase the ability of such workers to put in long hours by providing subsidized child care. However, if an important purpose of long-hour requirements is to screen out "less-committed" workers, employers may respond by lengthening work norms even further so that these workers will nonetheless be successfully screened out!

This finding implicitly raises a concern that was addressed frequently in the course of the conference: the importance of equalizing household responsibilities between men and women. Were these responsibilities more equally shared, women would not be disproportionately penalized by long-hour norms. Further, employers' adherence to such norms might weaken as they found themselves excluding large groups of men as well as women by such policies.

In the final paper, Donna Rothstein looks at another question that has been raised by women's increased presence in the workplace: the gender match between supervisor and worker. Do employees prefer to work with supervisors of the same sex? Do they perform better when they do? Or is it perhaps the case that both men and women prefer male supervisors? The last question is prompted by the possibility that male, and even female, employees have prejudices against women in supervisory roles. While it is likely that such prejudices have declined with the large-scale entry of women into management, as recently as 1996 a Gallup Poll found that 37 percent of men and 54 percent of women responded that they preferred male bosses.[4] On the other hand, the initial questions are prompted by a substantial literature suggesting that women benefit from the presence of other women at higher levels to serve as role models and mentors. And, as we have seen, many women believe that the absence of mentors is one of the barriers they face in the job market. Rothstein's paper makes a valuable contribution by more rigorously developing the empirical implications of alternative views of the impact of the sex of the supervisor. Her empirical results suggest, however, that testing such models may be difficult.

The volume closes with three perspectives on policy by Olivia Mitchell, Barbara Bergmann, and Elizabeth Peters. A number of interesting and important insights emerge from their consideration of these issues, some of which we discuss more fully below. However, we would like to emphasize here that no matter how helpful the research by economists and other social scientists in evaluating potential policy interventions, decisions about social policy in this area, as in any other, inextricably involve value judgments. These may relate to some very practical issues as well as to broader ones. For example, what is a family for the purposes of providing benefits and formulating other social policies? Does it include unmarried same-sex and opposite-sex couples as well as married couples and single heads? Does it include stepchildren as well as those related by blood or adoption? How do we factor in the needs of other relatives, like elderly parents, who may sometimes live in different households? Or as another example, to the extent they conflict, how do we trade off the needs of parents and children? These and many other questions cannot be answered solely by the "experts." We must all wrestle with these issues and hopefully, after careful study and debate, achieve social consensus. We now turn to a more detailed consideration of the papers in this volume.

FAMILY AND THE ECONOMIC OUTCOMES OF WOMEN

The Goldin paper sets the scene for the others through its examination of the changing role of work and family in the lives of college women over the course of the present century. Given traditional gender roles, men tend not to face the same problems as women in balancing work and family responsibilities, or tend not to face them to the same extent, since desirability as a spouse and ability to contribute economically to one's family are positively related to labor market success for men. While shifting gender roles within the family may be increasing the prevalence of family responsibilities among men, considerable gender differences remain. College women are a particularly interesting group to study because they are likely to have had an especially strong interest in pursuing a career. Goldin motivates her study of earlier cohorts by noting the frustrations of the current cohort of college women, her "cohort V," as they seek full equality in the home and the workplace. As Goldin points out, an understanding of the trade-offs made by past generations can assist us in understanding how we have arrived at the choices confronting college women today.

Goldin considers the experience of four earlier cohorts of college women. As we noted above, those women constituting cohort I, who graduated from college in the first two decades of this century, were forced to choose between marriage and family on the one hand and career on the other. As a result, more than 50 percent of them either did not marry or, if married, did not have children (compared with only 22 percent of non–college graduates). In 1940, when this cohort was between ages 45 and 54, 88 percent of never-married childless women were in the labor force compared with only 28 percent of currently married women with no children, suggesting that marriage itself, not just the presence of children, constituted a major barrier to work outside the home. Goldin characterizes this group as choosing between "family or career."

In the decades after 1940, female college graduates became demographically more similar to other women, and employment outside the home became more common for all married women. However, as Goldin points out, the tendency for women in her cohort III, who graduated between 1946 and 1965, was to sequence activities so as to enter or reenter the labor force after their children reached school age or older. She characterizes their choice as "family then job." In this we may note that they were quite similar to their non–college-educated counterparts. Moreover, the sequencing of family and work over the life cycle as well as other indicators (for example, the unequal division of housework between husbands and wives and the higher incidence of part-time work among women) suggest that while women did increasingly work outside the home, they either were not able or did not choose to pursue "careers." Hence Goldin's use of the term "job."

In recent decades, the desire to "have it all"—that is, to successfully pursue a career and to have a family—appears to have become an increasingly prevalent goal among women. While there is no way of knowing precisely how prevalent it is or has been, Goldin's results show how rarely women have been able to achieve both career and family, even among a relatively recent cohort of college women. Using data from the National Longitudinal Surveys, Goldin looks in detail at attainment of career and family by the women in cohort IV, who graduated from college between 1966 and 1979. She characterizes their choice as desiring "career then family," as many of the women in this cohort postponed marriage and childbearing to pursue a career. Yet she finds that by the time they were between ages 37 and 47, 29 percent had not had a first birth. Moreover, while 33 to 36 percent were on what she defines as a "career track," based on their earnings by the late 1980s, only 13 to 17 percent had attained "family and career," where the former is defined in terms of having had a first birth.

Goldin's primary definition of career is having hourly earnings in the selected years exceeding that of the 25th percentile of men with sixteen years or more of schooling in the Current Population Survey (CPS). This is a relatively stringent definition by which substantial (though considerably smaller) portions of college-educated men in each year would also not have careers. What is perhaps most surprising is that when Goldin shifts to a much lower cutoff, being in the labor force in each of the three years she analyzes and generally working full time, the incidence of career and family among the women remains extremely low at 22 percent. Another way to see the apparent difficulty these women have faced in combining family and career is that, under all three definitions, approximately one half of the women with careers have not had a first birth.

Some qualifications may be raised about these findings. We do not know what proportion of the childless women were disappointed with not having children. However, Goldin does present evidence that half or more had indicated that they desired children when surveyed in their early- to mid-20s. Another qualification is that since this cohort has postponed marriage and childbearing, childlessness among them is likely to be overestimated because some have not yet completed their childbearing. At the same time, the measured career attainments of the cohort may appear especially low during the years surveyed because of the presence of young children among the women with families (increasing the proportion out of the labor force or employed in part-time, low-wage jobs, for example). Yet even these qualifications suggest that these women are making decisions and trade-offs seldom confronted by their male counterparts.

This conclusion is further reinforced by the results presented in the Waldfogel paper. She finds for young people (mean age 30) in both 1980 and 1991 that the wages of mothers were markedly lower than the wages of nonmothers and men. Over the period, women made substantial progress in narrowing the gender pay gap. Overall, the female-male pay ratio for this age group rose by fully 20 percentage points, from 64 percent in 1980 to 84 percent in 1991. However, mothers' wages rose considerably less dramatically (from 60 to 75 percent of men's wages) than nonmothers' wages (from 72 to 95 percent of men's wages). Thus, the relative disadvantage of mothers compared with the others increased. Waldfogel's analysis of the determinants of wages for men and women indicates that men receive a positive return to marriage, and children have either no effect on their earnings or a positive effect. In contrast, women receive a smaller return to being married than men, as well as a negative return to being parents. These findings of a negative effect of children on women's wages are especially striking in that Waldfogel controls for the effect of such human capital variables as age, experience, and education. Putting it somewhat differently, having children has a direct negative effect on women's wages, above and beyond whatever indirect effect it has on their experience or educational attainment.

Waldfogel finds that these gender differences in the effects of family status on wages account for a substantial and growing portion of the gender pay gap: over one third (36 percent) in 1980 and over one half (53 percent) in 1991.[5] Her results imply that effective policies to address the issues that confront parents in the labor market could have substantial beneficial effects on the gender pay gap. As noted above, we especially focus in this volume on family leave. Regardless of whether leave is for the temporary medical disability of pregnancy and childbearing or for the care of a newborn or young child, and regardless of whether it is available to men as well as women, in all countries women are disproportionately likely to take the leave.

IMPACT OF FAMILY LEAVE

Ruhm and Teague's paper provides a history of family leave legislation in Europe and North America. Virtually all industrialized countries now provide entitlements to job-protected absences from employment associated with childbirth. Often fathers as well as mothers qualify for time off work and most countries provide some income support during the leave. Until recently the United States was a major exception to this pattern. Prior to 1993, there was no federal legislation mandating parental leave and only a few states required job protection; although since the passage of the Pregnancy Discrimination Act of 1978, employers who have a medical disability program have been required to provide coverage of pregnancy and childbirth on the same basis as other medical disabilities. With the passage of the Family and Medical Leave Act, the United States now requires that those who employ fifty workers or more offer up to twelve weeks of unpaid leave to eligible employees. While this legislation is modest by international standards, as the authors note, it represents a substantial change in U.S. policy.

What are the potential effects of maternity leave on women's employment and wages? We may analyze these effects using the model developed by Klerman and Leibowitz, who make the important point that maternity leave is relevant only to labor markets where employers and workers tend to form long-term attachments. To see how this works, suppose that a woman is currently employed and that her employer offers a maternity leave of four weeks. If she becomes pregnant, she has two choices: She may remain with her current employer by taking the maternity leave and returning to work in four weeks, thus continuing to earn her current wage; but if she desires more than a four-week leave, she faces the choice of leaving her current employer and returning to work when she likes by finding a new job. How much will she earn in her new job?

Klerman and Leibowitz argue that her alternative wage elsewhere is likely to be less than her current wage for two reasons. First, workers often accumulate training on their jobs. Some of this training may be general enough to be transferable to other firms. However, some is likely to be "firm-specific," that is, useful only in the current job. Since such firm-specific skills will not be rewarded elsewhere, the wage available at other firms is likely to be less than it is at the current firm. Second, the current job may be a particularly good "match" between the worker's skills and abilities and the needs of her employer. This is especially likely to be the case if the current job was located after a considerable period of job search. If the current job represents an especially good match, then an alternative job located when the woman returns to the labor force is likely to pay less.

How will women respond to the choice between taking a leave of up to four weeks at their current wage versus a longer leave at a lower wage? There are three possible situations to consider. First, women who would in any case desire a leave of four weeks or less are not "constrained"; they will simply stay out their preferred amount of time and return within the four-week period. Second, some women who would prefer a longer leave, given their current wage, will decide that it is not worth the cost of a lower wage and will also opt for the four-week leave; however, they are "constrained" by the employer's leave policy. Finally, a third group of women who prefer a longer leave will decide to quit their current job and return to work at a later point. Their leave is prolonged by the constrained choice they face: Once they sever their ties to the firm, the opportunity cost of labor force withdrawal falls; hence, they are likely to stay out of the labor force longer than they would have at their higher preleave wage.

We can use this analysis to understand the impact of an increase in leave from, say, four to twelve weeks. Klerman and Leibowitz focus on the case where the leave duration is increased by government mandates; however, the same reasoning would apply if the employer simply extended the leave time voluntarily. In examining the labor supply consequences of leave it is useful to distinguish three labor market states: employment, leave, and work. A woman who is out on maternity leave from a specific employer is employed but not working. The behavior of the first group of women who were not constrained by the initial leave policy would be unaffected by change. The second group of women who preferred a longer leave but settled for a four-week leave would stay out longer. Using Klerman and Leibowitz's distinction between employment and work, the weeks of employment of this group would be unchanged (that is, they would remain with the employer in either case), but their weeks worked would be reduced. Finally, with respect to the last group who left their jobs rather than accept only a four-week leave, two outcomes are possible. Some of the women in this group will now choose to remain with the firm and take a leave of twelve weeks or less. Both their weeks of employment and their weeks worked are likely to increase. Others in this group may still decide to leave the firm and stay out their preferred amount of time (more than twelve weeks) in exchange for the lower wage. Their employment and weeks worked will be unchanged.

What can we conclude about the impact of an increase in the duration of maternity leave on the employment status of new mothers? This analysis suggests that their average weeks of employment should unambiguously increase. Weeks of employment of women who would have remained with the firm in any case are unchanged, while some women who would have left the firm will remain employed. If we look at employment probabilities as Klerman and Leibowitz do, we expect the probability of employment to increase. However, the expected effect of an increase in the duration of maternity leave on average weeks worked and the probability of working is ambiguous, since there are countervailing effects. On the one hand, women who would have preferred to stay out a longer period of time but made do with the four-week leave will stretch their leave time and reduce their weeks worked. On the other hand, some women who would have left the firm will remain with the firm and return to work sooner. Finally, the probability of being on leave (that is, employed but not at work) rises, since the number of women quitting their job is reduced.

What about the effect of an increase in maternity leave duration on women's wages? Here the situation looks less complex initially, but there are some hidden complexities that need to be taken into account. If we are considering leaves of relatively short duration, women's wages are very likely to be increased. This is because, at the longer leave duration, more women will choose (or be able) to remain with the firm and retain the higher wages that come from their firm-specific training or from their initial job being an especially good match. However, if the duration of the maternity leave is very long, such as is the case in some other countries, women who would otherwise have stayed out a relatively short time may be induced to extend their leave a great deal. The effect on wages is then less clear. Even remaining with their current firm, the extended time out is likely to lower the wages of these women compared with what they would have earned if their time out was shorter. Thus, maternity leaves of long duration may have an adverse effect on women's wages. This is especially the case if they are also generously paid, as they are in some industrialized countries, further tipping the scale in favor of a prolonged absence from the job.

Klerman and Leibowitz test the employment implications of this model while Waldfogel sheds light on the wage implications of maternity leave. Before turning to an examination of these findings, it is worth considering the desirability of various outcomes. If we view maternity leave from the perspective of women's labor market status, we are likely to be especially interested in its impact on wages and to regard relatively short work disruptions as good outcomes. However, as pointed out by Klerman and Leibowitz, many advocates for children supported the Family and Medical Leave Act as a measure that would allow mothers more time to develop healthy, secure relationships with their infants in the months immediately following childbirth, without forcing them to quit their job. They interpret this as meaning that a favorable outcome would be a reduction in weeks worked or in the probability of working by new mothers (that is, an increase in time spent with their newborns). However, as we have seen, maternity leave laws could simultaneously increase time spent by women at home with newborns in the first several months after birth, but increase work time after the child is older by encouraging attachment to the firm of women who otherwise would have left their jobs. Given these potentially offsetting effects, the welfare effect on children of a finding of constant or even increased work probabilities must be regarded as uncertain, even by those who would like to increase the amount of time new mothers spend with newborns. Indeed, since a primary concern of advocates of the Act was the bonding that occurs between mother and child in the first few months after the birth, this type of mixed effect might be quite consistent with their goals.

Klerman and Leibowitz use an ingenious "natural experiment" to assess the impact of increased leave availability on women's labor supply. Specifically, they compare 1980–1990 changes in the labor supply of the mothers of infants in the six relatively small "experimental" states where maternity leave statutes were passed in the late 1980s with changes in these probabilities in the "nonexperimental" states without such laws. However, it is possible that women's labor supply changes might have differed between the experimental and nonexperimental states, even in the absence of the leave legislation. To address this possibility, they also examine the differences in labor supply between the experimental and nonexperimental states for new mothers relative to the differences for a control group that would presumably not be affected by the legislation: mothers of toddlers, two and three years old. These comparisons constitute a more stringent test of the effects of the maternity leave legislation. In further analyses, Klerman and Leibowitz also explicitly control for the state unemployment rate and for the demographic characteristics of mothers. While some results are consistent with the theory, estimates from the more stringent comparison, also including demographic controls, imply that the maternity leave statutes have no statistically significant effect on employment, leave, or work.

This finding of no impact of leave statutes is surprising. Moreover, Klerman and Leibowitz also find that their results appear to be highly sensitive to specification; this constitutes an important caution for future work. However, the discussants of their paper point to a number of reasons why it may have been particularly difficult for the authors to uncover the effect of maternity leave statutes in their study. It is quite possible that more robust conclusions may emerge from future research employing this framework for analyzing the impact of changes in laws in larger states (such as California) and by the federal government.

Waldfogel examines the impact of maternity leave on wages for two cohorts of young women (with mean age thirty) from the National Longitudinal Survey of Young Women (NLS-YW) and the National Longitudinal Survey of Youth (NLSY). The NLS-YW sample consists of women who are observed working around 1980; the NLSY sample consists of women who are observed working around 1991. Explicit information on maternity leave coverage is available only in the NLSY data; however, Waldfogel is able to observe employment continuity over the period of childbirth in both data sets. A woman is classified as maintaining employment continuity over childbirth if she returned to her previous employer post-birth, regardless of whether or not this was the result of utilizing a formal maternity leave policy. Waldfogel finds that maintaining employment continuity over childbirth was associated with higher pay for both cohorts. This finding reflected in part higher starting pay among women who retained employment continuity, suggesting that they were a positively selected group. However, it also reflected their higher level of subsequent work experience and job tenure. Where it was possible to observe maternity leave coverage, Waldfogel found that women who were covered and returned to their original employer had higher subsequent wages, owing in part to pre-existing differences and in part to the higher levels of experience and tenure that they accrued after childbirth. Given that maternity leave in the United States is generally likely to be of relatively short duration and unpaid (see Mitchell's contribution in this volume), these findings are consistent with our theoretical discussion. Waldfogel's results suggest that job-protected maternity leave could be an important remedy for the pay penalties associated with motherhood.

As noted above, one issue of concern to economists is the potential impact of mandated family leave policies on economic efficiency. Ruhm and Teague investigate this question using a longitudinal cross-national data set assembled by the authors to examine the impact of leave policies on macroeconomic outcomes. As the authors note, economists' concerns about mandated leave policies stem from their assumption that workers and firms will *voluntarily* agree to the provision of family leave if the expected benefits exceed the expected costs. If costs are greater than benefits, workers will choose to forgo the leave in exchange for higher compensation. By mandating leave in all circumstances, this flexibility is eliminated, thus making employers or workers or both worse off. Proponents of mandated leave generally emphasize its desirability in terms of reducing gender inequality or protecting the welfare of children. Ruhm and Teague note, however, that for these arguments to have weight on efficiency grounds, rather than simply for equity reasons, there must be some "market failure," that is, some reason why the market left to its own devices does not produce the most efficient outcome.

Ruhm and Teague explain that family leave could provide a positive externality if young children receive better care when one parent takes time off from employment. A portion of such benefits are reaped by society as a whole—for example, in the form of lower medical costs, some of which would otherwise be paid by the government, or fewer problems in school. In such circumstances workers will undervalue the benefits of family leave from society's perspective and this would provide an efficiency rationale for government intervention. They also develop another economic justification based on asymmetric information, which refers to a situation in which the two parties to a transaction have different amounts of information. In this case, they assume that workers have greater knowledge of their probability of having children and taking time off than their employers do. In such circumstances, firms that voluntarily provide leave are likely to disproportionately attract workers with a high probability of taking it, increasing the costs of these firms. Parental leave mandated by the government eliminates this "adverse selection" problem.

Ruhm and Teague test for a negative effect of mandated family leave on efficiency by examining its impact on a number of important macroeconomic outcomes, including gross domestic product, the employment-to-population ratio, the labor force participation rate, and the unemployment rate. Even if negative effects on efficiency were found for mandated family leave, such mandates could still be advocated on equity grounds—for example, for reducing gender inequalities in economic outcomes. Their results, however, provide little support for the view that moderate periods of parental leave reduce economic efficiency, and there are even some indications of modest beneficial effects, particularly when paid time off work is considered.

WORK HOURS AND GENDER EQUALITY

As discussed above, another issue of importance to women in the workplace is the long hours expected of workers seeking to succeed in high-powered professions. Landers, Rebitzer, and Taylor develop a fascinating and provocative new analysis of how work hours are determined in such settings. They argue that in many cases long work hours (or other performance measures that entail long hours) are used to screen employees for other valuable characteristics that are hard to observe, such as commitment or ambition.

The problem is again one of asymmetric information. A "short-hour" worker—that is, a worker who would like to work short hours in the long term, say after making partner in a law firm—knows who he or she is. However, the firm is not able to distinguish such short-hour (less committed) workers from their long-hour (more committed) counterparts. Firms may respond by setting work-hour norms at extremely high levels to discourage short-hour workers from applying. In such a case, firms that individually lower their hours norm would be flooded by short-hour workers, and this adverse selection problem will deter firms from doing so. A "rat race" equilibrium will result in which firms are unwilling to offer shorter hours even if, with the increase in women in these fields and growing household responsibilities for men, a larger proportion of professionals might want them. The authors present considerable empirical evidence in support of their model, drawn principally from law firms.

This model has strong policy implications. It suggests that overly long hours represent a coordination failure in the labor market. A single firm abandoning stringent work norms will suffer adverse consequences; it will be inundated with short-hour workers. If, however, all firms simultaneously abandon their hours norm, short-hour employees will be distributed across many firms, with no one firm suffering undue costs compared with its competitors. As a consequence, policy interventions that correct this coordination failure can, in some cases, improve both equity and efficiency. However, their consideration of specific policy interventions uncovers serious potential problems with each possible candidate for social intervention. For example, one approach to the hours problem would be to reduce the cost of long hours for employees who would otherwise be likely to work short hours. This might include policies like parental leave or subsidized child and elder care services. Yet the model implies that as long as firms remain committed to screening out short-hour workers, interventions that increase the hours of short-hour workers may have the perverse result of making prevailing work norms even more stringent.

It is uncertain how widespread "rat race" equilibria are in the real world. Both discussants suggested alternative explanations for long-hour outcomes in the professions. Moreover, as we pointed out above, their disproportionate negative effects on women would be mitigated if household responsibilities were more equally shared between men and women. And such policies might appear less desirable to employers if they resulted in substantial numbers of men as well as women being screened out.

GENDER OF SUPERVISOR AND ECONOMIC OUTCOMES OF YOUNG WORKERS

In the final paper, Rothstein investigates the impact of the sex of the supervisor on male and female workers' wages and other employment outcomes. Rothstein formulates three possible models of supervisor-employee matches on labor market outcomes. First, she asks what the impact would be if male employees had prejudices against working under female supervisors. Drawing on the work of Becker (1971), Rothstein develops a model suggesting that in this case male workers will receive a wage premium for working for a female supervisor. The higher wage is necessary to induce discriminating male workers to accept jobs with this "unpleasant" working condition. Owing to the greater expense, employers will make every effort to match male workers to male supervisors. But where they cannot do so and are forced to pair male workers with female supervisors, male workers will receive a wage premium. Such male workers who are employed with female supervisors at a higher wage will feel as well off as male workers employed with male supervisors at a lower wage.

Second, Rothstein analyzes the case where the gender of the supervisor affects worker productivity, specifically where the productivity of male employees is reduced when they work for a female supervisor. This could occur, for example, if same-sex supervisors have better rapport with employees. (This case may be easily reversed to consider the possibility that women are less productive when they work for male supervisors.) In this circumstance, male workers will not receive different pay depending on whether or not they work for female supervisors. If male workers were paid less when working with female supervisors, in accordance with their lower productivity, none of them would be willing to accept such assignments. The wages of male and female workers and male and female supervisors will be set so that the cost of producing a given level of output is the same for each type of work group (that is, a same-sex or opposite-sex match between worker and supervisor).

Finally, Rothstein considers the case where male employees matched with female supervisors have higher training costs. This may occur, for example, because same-gender supervisors serve as more effective mentors. Male workers on the "training track," that is, in jobs where substantial on-the-job training is taking place, will be assigned to male supervisors to reduce training costs. This implies that male employees with male supervisors should have faster wage growth and higher promotion probabilities than male employees assigned to female supervisors. If we assume that female supervisors are more effective at training female workers, then we also expect female employees with female supervisors to have faster wage growth and higher promotion probabilities than female employees assigned to male supervisors. This model is of particular interest because it points to possible long-term effects on career development of the gender match between young workers and their supervisors.

Rothstein's empirical work is based on data from the National Longitudinal Survey of Youth. The empirical results indicate that for both young men and women there is a negative impact on current wages associated with working for a female supervisor. A female supervisor is found to have no effect on individuals' perceived likelihood of promotion and minimal positive effects on employee wage growth. Rothstein concludes that, taken together, the results do not provide clear-cut support for any of the three theories. She speculates that, in the empirical work, gender of supervisor may serve as a proxy for percentage female in the occupation, which has been found to negatively affect the wages of both women and men owing to "crowding" (Bergmann 1974). She notes that it is also possible that female supervisors are lower down in a firm's hierarchy, suggesting that the employees that they supervise would also be at lower levels on their job ladders.

IMPLICATIONS FOR POLICY

The policy implications of the papers presented at the conference and of the discussions that they stimulated are formally considered by Mitchell, Bergmann, and Peters. In her contribution, Mitchell provides a useful summary of recent trends in the availability of "family friendly" policies based on data from the Bureau of Labor Statistics' Employee Benefit Survey of employees of medium-sized and large firms. She finds that between 1988 and 1993 there was a sharp increase in the proportion of such employees who were at firms that offered unpaid maternity and paternity leaves: to 60 percent in 1993, up from 33 percent in 1988, for maternity leave; and to 53 percent in 1993, up even more dramatically from 16 percent in 1988, for paternity leave. Mitchell attributes this rapid change to the implementation of the Family and Medical Leave Act and expects coverage to rise still further since the 1993 data collection occurred partway through the Act's implementation period. The Act does not mandate paid leave, however, and Mitchell finds no upward trend in the extremely small proportion of employees at firms offering paid leaves. She also finds surprisingly little growth in child care assistance. Only 7 percent of sampled employees worked at firms that provided direct financial support to parents who needed adoption help and child care in 1993.

There were, however, some areas of rapid growth in the provision of family-friendly benefits. For example, there has been a sharp increase in the proportion of employees at firms that offer flexible benefit and/or reimbursement accounts: to 53 percent in 1993, up from 13 percent in 1988. Elder care assistance has also increased considerably, although the nature of the assistance is not specified. It is likely that many offerings are of the "resource and referral" variety, which also constitute the bulk of firm offerings in the child care area. More substantial financial assistance remains rare.

In their papers, Bergmann and Peters address some of the broader issues raised as policies evolve in this area. Bergmann examines the impact of family-friendly policies on gender equality and cautions that some policies that appear to make life easier for women, and may even be welcomed by a majority of women, could actually promote greater gender inequality. For example, policies that provide additional opportunities for part-time work or provide maternity leaves that extend significantly beyond the time necessary to recover from the disability caused by childbirth tend to reinforce the traditional division of labor within the family and may actually facilitate maintenance of traditional arrangements. In contrast, workplace policies that encourage greater participation by the male partner in family tasks or that promote the purchase of substitutes for unpaid family labor tend to promote equality. The bottom line is that the impact on gender equity of family policies needs to be carefully scrutinized.

As Peters points out, family and workplace policies are designed to address a number of goals, and these goals may potentially conflict. One potential conflict that she addresses is closely related to the points raised by Bergmann: a conflict between a concern with gender equality of opportunity and the well-being of children. Peters contrasts child care subsidies that are the primary family and work policy in the United States with maternity and paternity leave that tend to be more extensive and generously provided in other countries. Peters notes that employers are likely to value continuity of employment and short leaves of absence. While child care subsidies clearly facilitate employment, the impact of maternity leave is unclear. Were we to move in the direction of more extensive and paid maternity benefits, and if this caused more extended absences from work, employers might become more reluctant to hire or promote women of childbearing age. In terms of the well-being of children, Peters notes that an implicit motivation for an extensive leave policy is the idea that parental care is "better" than nonparental care. Yet most research has found no evidence of a negative effect of maternal employment on children over age 1. For infants, the evidence is mixed, with some studies finding negative effects and other studies finding no effects.

The policy presentations as well as many of the papers in this volume point to important links between family issues and the economic outcomes and well-being of women. Given traditional gender roles in the family, this link is perhaps inescapable. A fundamental need in addressing these issues is the development of appropriate social and employer policies to meet the needs of workers with family responsibilities. Also of great importance to women's labor market status is a more equal sharing of household responsibilities between men and women in the family. Although this outcome may be less directly amenable to policy intervention, it is nonetheless extremely important that policies be formulated to facilitate greater gender equity within the family as well as in the larger society.

NOTES

1. The 1994 figure is from U.S. Department of Labor, Bureau of Labor Statistics *1995 Handbook of Labor Statistics* (prepublication data). The term "subtle revolution" was coined by Smith (1979).
2. This was the title of the President's Task Force of Women's Rights and Responsibilities report (1970).
3. There is some evidence that nonparental care during the first year of life may have negative effects on children, but not all studies have found this to be the case. See the contribution by Elizabeth Peters for a consideration of this issue.
4. See "Bias Alive in Workplace," *St. Louis Post-Dispatch*, March 27, 1996. Since men tend to staff upper-level positions in most firms, many men and women make this assessment without having had an opportunity to compare. When workers are exposed to women bosses, pre-existing stereotypes tend to break down. Ferber, Huber, and Spitze (1979) found that both men and women who had ever had a female boss were considerably less likely to prefer a male boss.
5. These figures include the effect of gender differences in family status characteristics, but such effects are negligible: 1 percent in 1980 and 0 percent in 1991.