

The Status of Women in Japan: Has the Equal Employment Opportunity Law Made a Difference?

LINDA N. EDWARDS

This paper seeks to determine if the Japanese Equal Employment opportunity Law has had an impact on university-educated women in Japan. The law, which went into effect in April, 1986, prohibits gender discrimination with respect to vocational training, fringe benefits, retirement, and dismissal. It also encourages firms to provide equal opportunity with regard to recruitment, hiring, job assignment, and promotion. I find that since the passage of the law, young women have demonstrated a heightened interest in pursuing career jobs. In particular, they have increased their attendance at four-year colleges and universities and have chosen college majors more conducive to a business career. In contrast, the response to the law on the part of firms has been weak. In the future, however, an impending labor shortage in Japan will result in enhanced labor market opportunities for educated Japanese women. (*JEL J16, O53*)

In April, 1986 the Japanese Equal Employment Opportunity Law went into effect. This law prohibits gender discrimination with respect to vocational training, fringe benefits, retirement, and dismissal, and urges firms to try to equalize opportunity with regard to recruitment, hiring, job assignment, and promotion. In evaluating the possible impact of this law on the progress of Japanese women into the career jobs held predominantly by men, western commentators have been skeptical (Edwards, 1988; Gelb, 1991). The objective of this paper is to examine data for the period since the law's passage to determine if there have been any measurable effects on women's progress and in particular, on the progress of women with a four-year college or university degree. In addition, I discuss developments in the Japanese economy that herald an improved labor market outlook for Japanese women.

Linda Edwards • Queens College and the Graduate Center, Department of Economics, CUNY, Flushing, NY 11367-1597.

Journal of Asian Economics, Vol. 5, No. 2, 1994, pp. 217-240.
ISSN: 1049-0078

Copyright © 1994 by JAI Press, Inc.
All rights of reproduction in any form reserved.

I. THE EQUAL EMPLOYMENT OPPORTUNITY LAW

Equal pay for equal work for both men and women was mandated by Japan's Labor Standards Law in 1947. However, women were routinely excluded from many of the types of jobs held by men, so that this protection did not serve to equalize the wages of men and women. Indeed, the ratio of women's to men's hourly earnings in Japan in 1980, at 54 percent, was lower than in the eleven other major developed nations of the world.¹ One goal of the 1986 EEO Law was to improve women's economic prospects by helping them to gain access to those jobs and career paths from which they were formerly excluded.²

The EEO Law has two types of provisions directed at securing equal treatment: prohibitions and recommendations.³ The prohibitions, which apply to women who are already employed, specify that women cannot be treated differently than men with regard to job training, fringe benefits, retirement and dismissal. They are listed below.⁴

1. "Employers shall not discriminate between workers on grounds of sex in matters relating to the vocational training prescribed by Labour Ministry Ordinance to afford basic vocational ability for job performance."
2. "Employers shall not discriminate between the sexes as regards mandatory retirement age or dismissal of workers."
3. "Employers shall not invoke marriage, pregnancy, or childbirth as grounds for the retirement of women workers."
4. "Employers shall not dismiss women workers on the grounds that they have married, become pregnant, given birth, or taken maternity leave."
5. "Employers shall not discriminate between the sexes as regards to loans to workers of funds for building or purchasing a house, or other fringe benefits prescribed by the Labour Ministry Ordinance."

The recommendations focus on the recruitment and assignment of women workers:

6. "Employers should endeavor to give equal opportunities to men and women when recruiting and hiring workers."
7. "Employers should endeavor to treat women workers on an equal footing with male workers when assigning posts or promoting workers."

A key word in these recommendations is "endeavor". The practical significance of this word in the context of the EEO Law is that the Law empowers the Ministry of Labour to provide guidelines for employers to follow concerning recruitment, hiring, assignment and promotion. The use of government guidelines to achieve a government or regulatory objective is not unusual in Japan, and this type of "administrative guidance" in Japan can be quite effective.⁵

In addition to providing for the establishment of behavioral guidelines, the EEO Law sets out a series of steps for settling disputes that arise between employers and

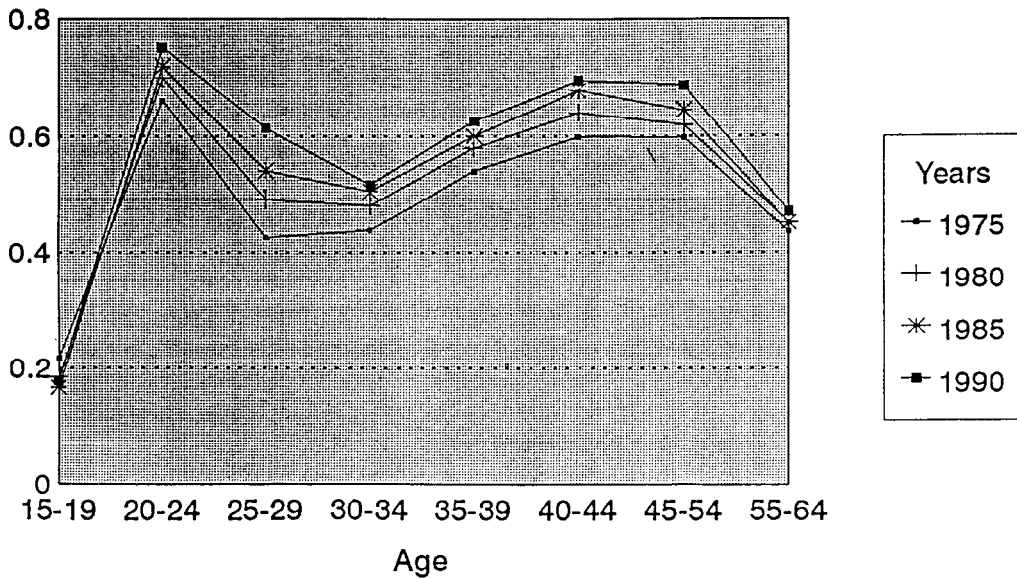


Figure 1. Women's Labor Force Participation Rate by Age, Selected Years

Source: Japan Ministry of Finance (1991), Table 2

employees. These steps begin with an appeal to the grievance machinery within an establishment and proceed through various local governmental levels up to an Equal Opportunity Mediation Commission, established by the Director of the local Women's and Young Workers' Office. Unlike the case of the corresponding anti-discrimination law in the United States, however, there is no specific provision for private parties to file suit in a court of law, nor for the government, on its own initiative, to investigate and prosecute cases of systematic discrimination. These may not be important exclusions in the Japanese context: "administrative guidance" allows the government to provide formal and informal advice to firms about how to satisfy the spirit and letter of the EEO Law without any litigation taking place.

But even aside from the problems of enforcement raised above, the impact of the law was expected to be weak—primarily because of the interaction between the lifetime employment system that is practiced in most large Japanese firms and the M-shaped lifetime labor force supply pattern of Japanese women. With the lifetime employment system, workers are hired upon graduation from school and expect to stay with the same firm until the age of compulsory retirement. (Firms maintain their flexibility by moving workers into any type of job or to any location that is in the best interest of the firm and by hiring part-time workers.) So-called midcareer mobility has been relatively rare. Further, the absence of any prohibition against age discrimination makes it perfectly acceptable for firms to refuse to hire anyone over the age of 30 or 35 years.

The lifetime labor force participation pattern of the typical Japanese woman combined with the lifetime employment system described above have acted in the past to effectively exclude Japanese women from career jobs, and nothing in the EEO Law

provides a remedy. Women have high participation rates upon leaving school. The participation rate then drops dramatically during the years of childbirth, and rises again when children reach school age (see Figure 1). What this means is that any Japanese woman who follows the pattern of dropping out of the labor force for a few years of childbearing and child rearing will not be able to obtain a career job because she will be too old.⁶ Moreover, because of the very unequal division of labor within the household, even those women who remain in the labor market during childbearing may not want jobs that require the significant time commitment currently demanded by career jobs.⁷ It has been argued, therefore, that unless firms changed their policies with regard to hiring workers over the age of thirty, and unless the division of labor between men and women within the household altered substantially, the passage of the EEO Law was unlikely to have a very large effect on the proportion of college-educated women in career-track employment (Edwards, 1988).

II. WHAT DO RECENT DATA SHOW?

More than seven years have passed since the EEO Law went into effect. What impact can be observed in this short time period? Ideally, one would want to estimate a complete model of women's education, labor force, marriage, and childbearing decisions in order to properly disentangle the effects of the EEO Law from other economic and social changes that have taken place in Japan since the law's passage. But since such changes take an extended period of time to play themselves out and require many years of data to detect and unravel, a carefully modeled econometric analysis is not now feasible. Rather, I will compare changes in various measures of women's labor market and socioeconomic status between 1985 and 1990 with changes in one or both of the two five-year periods prior to the law's passage (1975–1980 and 1980–1985).⁸ Comparing changes in the earlier periods with those in 1985–1990 will make it easier to distinguish secular trends from changes that might be related to the passage of the EEO Law. Note that I purposefully do not include data covering the current economic recession in Japan, as my objective is to examine long-term changes rather than responses to short-term economic fluctuations.⁹

When examining these three periods, it is important to take into account possible differences in the macro economy that may affect comparisons between them. The entire 1975–1990 period exhibited positive real economic growth, but the annual rate of growth varied across the three sub-periods. In particular, the 1985–1990 post-law period was a period of unusually strong growth and expansion.¹⁰ Thus, in contrasting changes in women's status in the post-law period with the earlier periods, care is taken wherever possible to construct comparisons that will control for the effects of differences in economic conditions across the three periods.

I examine data primarily for young cohorts of women, since they are at the point in the life cycle at which many far-reaching decisions are made.¹¹ First, I look at their schooling, marriage, and childbirth decisions. These decisions will reflect, in part,

changes in expectations about what women will be able to achieve in the labor market. Next, I turn to a variety of labor market measures. In both cases my main focus will be, wherever possible, on enrollees and graduates of four-year colleges and universities.¹² This is the group for which employment discrimination has been most “stark and uncompromising” (Upham, 1987, p. 127). Further, given the Law’s emphasis on equal opportunity with regard to training and promotion, it is this group for which there is the greatest potential benefit. Similarly, since firms (at least the larger firms) tend to hire mainly new school graduates, any response by firms to the law in terms of hiring, wages, and career tracking will also be most evident in data for young women university graduates. Where appropriate, I include data for young men for purposes of comparison and also as a rough way to hold constant the effects of concomitant economic changes.

A. Women’s Choices Regarding Education, Marriage, Fertility, and Labor Force Participation

I begin by examining young women’s choices with regard to college and university education. Table 1 shows total enrollment in four-year colleges and universities by sex for 1975, 1980, 1985, and 1990. Panel A of the table shows the actual numbers of students in each year, while Panel B shows five-year changes. The figures in this table require some care in interpretation because the 1966 cohort, which was of college age in 1985, is about a quarter smaller than cohorts in neighboring years.¹³

Throughout the entire period, women’s enrollment increased at a faster rate than men’s. In the 1975–1980 period, women’s increase was 5.2 percentage points greater than that of men, and in the 1980–1985 period, it was 8.6 percentage points greater (see last column in table). Consequently, the proportion of women among those enrolled slowly rose from 21.6 percent in 1975, to 22.4 percent in 1980, to 23.9 percent in 1985. The rise in women’s enrollment, however, accelerated in the 1985–1990 period. In this period women’s enrollment increased by a whopping 33.9 percent, whereas for men the increase was only 8.6 percent, so that women’s share of enrollment went from 23.9 to 27.9 percent.

It is clear from these data that the growth in women’s incentives to invest in university education was greater in the recent five-year period than in either of the previous two five-year periods. Moreover, the much larger increase for women than for men in the recent period implies that changes in general economic conditions (which would be expected to affect both young men and young women) were not the cause. Thus, the data suggest that EEO Law, by altering women’s future expectations, was an important contributing factor.

Whether this increase in women’s enrollment—and the implied increase in their expected rate of return to higher education—was in fact prompted by the EEO Law or was caused by other factors is, of course, open to debate. Osawa (1987), for example, points out that there are both direct and indirect returns to women’s education, and that in looking at data up to 1986, the direct returns “remain elusive” (p. 11).¹⁴ However,

TABLE 1. Enrollment in 4-Year Colleges and Universities

Panel A				
<i>Enrollment Levels</i>	<i>Total</i>	<i>Women</i>	<i>Men</i>	<i>Women as a percent of total</i>
1975	1,652,003	356,167	1,295,836	21.6%
1980	1,741,504	389,890	1,351,614	22.4%
1985	1,734,392	414,384	1,320,008	23.9%
1990	1,988,572	554,666	1,433,906	27.9%

Panel B				
<i>Percentage changes in enrollments</i>	<i>Total</i>	<i>Women</i>	<i>Men</i>	<i>Women - Men (in percentage points)</i>
1975-80	5.4%	9.5%	4.3%	5.2
1980-85	-4%	6.3%	-2.3%	8.6
1985-90	14.7%	33.9%	8.6%	25.3

Sources: Statistics Bureau, Management and Coordination Agency,

1975 *Japan Statistical Yearbook, 1977*, Table 402;

1980 *Japan Statistical Yearbook, 1982*, Table 418;

1985 *Japan Statistical Yearbook, 1986*, Table 19-16;

1990 *Japan Statistical Yearbook, 1991*, Table 19-16.

there may have been an increase in the indirect returns—those generated through the marriage market rather than the labor market. That is, women with a university education are more likely to marry men who also have a university degree; and the latter are more productive in the labor market, bringing home higher earnings for the family.¹⁵ Osawa also points out that more educated women may be more efficient at investing in their children's education, which will in turn make their children more productive in their adult years, again yielding an indirect economic return.

This type of explanation for the secular increase in women's higher education cannot be readily extended to provide a reason for the observed *acceleration* in women's education investments between 1985 and 1990. However, an alternative "marriage market" argument can be advanced as an explanation for this acceleration. This argument is based on the increased prevalence of "love" marriages as opposed to arranged marriages in contemporary Japan. With "love" marriages becoming more common, one could argue that women now have a greater need to go to university to find a husband. There are two problems with this argument. First, the average age of marriage in Japan, at about 25 years for women and 28 years for men, is well above the college graduation age, so that spouses are more likely to be found on the job than at university. Women in white collar work in large firms do undoubtedly have a better chance of meeting and marrying male university graduates, but female junior college graduates are just as likely as university graduates to work in these settings.¹⁶ Thus,

investment in a junior college education would be sufficient if the woman's goal were simply to better position herself in the marriage market.

The second weakness with this variant of the marriage market argument as an explanation for the acceleration in women's university enrollment is that women who were attending university in 1990 are in a cohort with a relatively scarcity of women, so that their position in the marriage market will be *stronger* than the corresponding position of women who were in universities in 1980 and 1985. Women who were attending university in 1990 were between the ages of 18 and 22 years; on average, they will be active in the marriage market in 1995, when they are aged 23 to 27. The ratio of women to men in the prime marriage years, 25 to 34, in 1995 is expected to be .961, lower than it was in 1990 (.976), 1985 (.984), or 1980 (.998).¹⁷ Young women attending university in 1990, therefore, have *less* of a need to enhance their attractiveness as spouses than did the women of earlier cohorts. Thus, the increased prevalence of "love" marriages does not justify the large increase in female relative to male university enrollments between 1985 and 1990.

Nor is the marriage market argument consistent with changes in the types of education that women are choosing once they get to university. If the recent increase in women's enrollments were simply reflecting a continuing trend to invest in education for the indirect (marriage) returns, one would expect women's choice of university major to continue to be in those areas which are most synergistic with homemaking and child rearing, such as humanities, home economics, and education. What is evident in the data provided below, however, is that women are increasingly choosing college majors consistent with more ambitious career plans.¹⁸

Table 2 presents data on the course of study followed by women and men in four-year colleges and universities in 1975, 1980, 1985, and 1990. Overall, a greater proportion of women are choosing business-related majors now than in the past. Between 1975 and 1990, the proportion of women studying social sciences (which includes commerce and law) increased by 5.7 percentage points, while the proportions studying home economics and education declined by 1.6 and 5.8 percentage points, respectively. Moreover, as was the case with university enrollments, one sees a striking acceleration of the trend after 1985. The increase in the proportion of women studying Social Sciences was many times greater between 1985–1990 (5.6 percentage points) than it was either between 1975–1980 (–.2 percentage points) or 1980–1985 (.3 percentage points), and the decrease in the proportion of women studying home economics and education was also greater in the later period than in the earlier periods.¹⁹

The increased tendency of women to prepare themselves for career jobs in business is even more evident when one combines the fields of Social Science, Science and Mathematics, and Engineering, as is shown in the last row of Table 2. The proportion of men majoring in these fields has increased slowly over the period, as did the proportion of women until 1985. However, between 1985 and 1990 the proportion of women majoring in these fields rose by 5.6 percentage points, more than in either of the previous five-year periods and more than the corresponding proportion for men in

TABLE 2. Course of Study of Women and Men in 4-Year Colleges and Universities, 1975, 1980, 1985 and 1990

	1975		1980		1985		1990	
	Women	Men	Women	Men	Women	Men	Women	Men
<i>All enrolled</i>	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Course of Study*								
Humanities	32.6	6.4	35.9	7.4	35.4	7.6	35.9	7.2
Social Sciences (includes Business and Law)	15.0	6.5	14.8	47.9	15.1	46.1	20.7	46.9
Science & Math	2.0	3.1	2.2	3.4	2.6	3.7	2.2	3.8
Engineering	0.0	24.2	1.3	24.6	2.3	25.3	2.7	26.2
Health	8.4	4.6	8.9	5.7	9.5	5.9	8.0	5.0
Home Economics	8.1	0.0	8.1	0.0	7.7	0.0	6.5	0.0
Education	19.6	3.6	18.1	4.6	16.9	4.9	13.8	4.5
Other ^a	9.8	6.4	10.6	6.4	10.5	6.4	10.1	6.4
Social Sciences, Sciences and Engineering combined	17.0	73.8	18.3	75.9	20.0	75.1	25.6	76.9

Notes: *Figures do not always sum to 100% because of rounding error.

a. Includes Agriculture, Mercantile Marine, Arts, and "Other".

the entire fifteen-year period. Further, the increase in the absolute number of women pursuing these majors between 1985 and 1990, 71 percent, is extraordinarily high, both in comparison with their increase in the two previous five-year periods (15% and 13%), and in comparison with the increase in men's enrollment in these fields in the same five-year period (11%). The striking increase in women's enrollment in these career-related fields is also evident when one calculates the ratio of women's to men's enrollment. In 1975, women's enrollment was 6.3 percent that of men, in 1980 and 1985 the figures were 7.1 and 8.4 percent, but in 1990, it jumped to 12.9 percent.²⁰

Thus, in the 1985–1990 period, women's investment in career-oriented higher education increased markedly, both as compared to men in the same period and to women in the previous ten years, implying that career ambitions and expectations of the recent cohort of women have expanded beyond those of earlier cohorts.

If women expect to hold career jobs, they may also choose to postpone marriage and childbearing or to reduce the number of children they bear (the cost of children to families is directly related to women's earnings). Examination of data for the mean age of marriage by sex for five-year intervals from 1975 to 1990 reveals that the mean age has been rising both for men and women, but there is no acceleration in the trend after 1985.²¹

TABLE 3. Birth Rate by Age of Mother

Levels	Age of Mother			
	20-24	25-29	30-34	35-39
1975	107.0	190.1	69.6	15.0
1980	77.1	181.5	73.1	12.9
1985	61.7	178.4	84.9	17.7
1989	47.4	146.4	91.9	19.6
Changes				
1975-80	-29.9	-8.6	3.5	-2.1
1980-85	-16.4	-3.1	11.8	4.8
1985-89	-14.3	-32.0	7.0	1.9

Note: Live births per 1000 females

Source: Statistics Bureau, Management and Coordination Agency (1991), Table 2-25.

The data on fertility tell a somewhat different story. The total fertility rate for five-year intervals between 1975 and 1990, as well as for 1991, were as follows: 1.91, 1.75, 1.76, 1.57, and 1.53 (in 1991).²² As was the case for age of marriage, these data exhibit an ongoing trend—in this case a downward trend. However, the data show an increase in the rate of decline after the passage of the EEO Law: the decline in the five-year post-law period was greater than the decline in the *entire* ten-year period between 1975 and 1985.

The large drop in fertility in the post-law period is driven by a sharp decline in the birth rate for women aged 25-29, from 178.4 per thousand in 1985 to 146.4 per thousand in 1989 (the most recent year for which I have data), as is shown in Table 3. This is exactly the cohort most likely to be affected by the EEO Law; the postponement or reduction of births by this cohort will permit these women to take advantage of whatever opportunities the EEO Law may have made available to them. Of course, this cohort may compensate for this decline in births with an increased birth rate five years hence, but if the experience of previous cohorts as shown in Table 3 is any example, future increases in the birthrate of this cohort will not compensate for the current decline. While it is impossible to say at this time exactly what the completed fertility of the 1989 cohort of 25-29 year-olds will be, what is clear is that, at the least, these women are postponing childbearing.

The precise role played by the EEO Law in the acceleration of the decline in fertility is difficult to determine. Fertility decisions are the result of a composite of cultural and economic factors, and unlike the case with higher education where it was possible to make some adjustment for the effects of general economic conditions by comparing the enrollment behavior of women with that of men, there is no simple way to do so with fertility rates. Moreover, fertility, education, and labor force participation are all likely to be jointly determined, as well as subject to mutual feedbacks, so that unraveling the impact of the EEO Law would be a daunting task.²³ What one can say

with some certainty, however, is that the observed accelerated decline in fertility is consistent with a view that women perceive an increased possibility of labor market success in the post-law period and are reducing their fertility as a result.

The most obvious way to probe women's commitment to the labor market is to look at their labor force participation. Figure 1 shows the labor force participation rates for women by age for 1975, 1980, 1985 and 1990. Participation has been rising for all age groups, but the increase for the 25–29 year-old group is greater in the 1985–1990 period than in the earlier periods. This is exactly the cohort most likely to have been helped by the EEO Law. Moreover, the labor force commitment of this age-group is consistent with the decline in their fertility. Again, we will need to observe this cohort when it reaches 30–34 years of age to see if this increased labor force participation, and its implied career commitment, persist.²⁴

In sum, in the five-year period after the passage of the EEO Law, there is some indication that women are putting themselves in a position to better take advantage of career opportunities should they become available, primarily by increasing their propensity to invest in career-oriented higher education, but also by reducing their fertility, and by increasing their labor force participation in the crucial 25–29 age-group. Have there been corresponding changes in firm behavior? To answer this question, I again look at various types of evidence.

B. Responses of Firms

Consider first whether the EEO Law has affected the wages of university-educated women. If these women are being placed in jobs that are similar to those obtained by comparably educated men, this should be reflected in their wages. The most pertinent question, of course, is whether the EEO Law will generate any differences in the lifetime path of earnings of university-educated women, but this question will be impossible to answer until current cohorts of women age. At present, two types of earnings data can be examined: starting salaries of university graduates and age-earnings profiles of current university-educated employees.

If the law has had any impact on the wages of university-educated women, it should be most evident in the earnings of newly hired workers. Table 4 contains monthly contract earnings for newly hired male and female university graduates for selected years from 1975 through 1991. The ratio of women's to men's starting salaries exhibit a clear trend upward over the entire period covered in the table, from .910 in 1975 to .96 in 1991. However, this ongoing trend does not appear to have accelerated since the passage of the EEO Law.²⁵

Age-earnings profiles of university-educated women versus men also do not appear to have changed noticeably between 1980 and 1990. The earnings measure examined is average monthly scheduled cash earnings of four-year college or university educated regular employees, and excludes bonuses and overtime payments (if bonuses were included, the sex comparison would be even less favorable to women). When one compares the ratio of women's to men's scheduled earnings for 1980, 1985

TABLE 4. Starting Salaries of University Graduates by Sex, 1975–1991^a

<i>Year</i>	<i>Female</i>	<i>Male</i>	<i>Female/Male</i>	<i>Change in Col. 3</i>
1975	81	89	.910	
1980	109	115	.948	.038
1985	134	140	.957	.009
1990 ^b	172.4	179.7	.959	.002
1991	172.3	179.4	.960	

Notes: Salaries expressed in thousands of yen.

a. Regular monthly contract cash earnings excluding over-time allowance.

b. Data for 1990 are defined slightly differently; rather than starting salaries, they are the salaries of workers with zero years of experience.

Sources: 1975–1985 Statistics Bureau, Management and Coordination Agency (1990), Table 3-31;

1990 Policy Planning and Research Department, Ministry of Labour (1991), Table 97;

1991 *Japan Labor Bulletin*, February 1992, p. 3.

and 1990 there are some slight differences between the three years, but there is no evident pattern of change.²⁶

It may not be surprising that there is little discernable change in the wage profile of women relative to men in existing data, since most of the women included will have been hired and trained well before the law went into effect and were unlikely to have been hired for the same types of jobs as were men. More might be learned by studying the employment patterns of recent cohorts of university-educated women; are they becoming more successful in gaining career-type employment as a result of the EEO Law? There are two components to this question: (1) has the hiring rate for female university graduates increased, and if so, (2) are these women being hired into career-track management jobs?

Table 5 contains data relevant for answering the first question. It shows the proportion of graduates of four-year colleges and universities who obtain employment. This proportion has grown for both male and female graduates, though it has grown faster for female graduates, who started at a lower base in 1975. By 1990 the same percentage of both male and female graduates obtained employment, 81 percent. To see if the trend in this percentage accelerated after 1985, I show the change in the percentage for both women and men for the three periods. In the third period the percentage point increase is greater than in the first two periods, but since this is true for both men and women, the observed slight acceleration might be the result of economic changes rather than specifically related to the EEO Law.

Cannings and Lazonick (1994) also examine employment rates of newly graduated female university students. They use a regression model to hold constant the effects of the changing demand and supply conditions for female graduates in order to better isolate the possible effect of the EEO Law. Using time series data from 1953 through

TABLE 5. The Proportion of Graduates of Four-Year Colleges and Universities Who Find Employment

	<i>Female</i>	<i>Male</i>	<i>Female/Male</i>
Year			
1975	62.8%	77.5%	.81
1980	65.7%	78.5%	.87
1985	72.4%	78.8%	.92
1990	81.0%	81.0%	1.00
Changes			
1975–80	2.9	1.0	
1980–85	6.7	.3	
1985–90	8.6	2.2	

Sources: 1975 Osawa (1987), Figure 1;

1980–90 *Japan Labor Bulletin* January 1991, p. 3.

1990, they estimate a simple regression equation in which their dependent variable is the annual change in the number of female university graduates entering employment. Their explanatory variables are the annual increase in the number of new female four-year college graduates, an index of demand for university-educated women, a five-year moving average of the annual percentage increase in the number of marriages per 1000 population, and a dummy variable equalling one for the years from 1985, the year the EEO Law was passed, through 1990. They report a statistically significant positive coefficient for their dummy variable, and conclude that “the existence of the Equal Opportunity Employment Law . . . encouraged the employers to increase the proportion of university-educated women among the newly employed” (p. 20). Although there are some problems with their analysis, their results are suggestive of a positive employer response to the law.²⁷

Even if university-educated women have become more successful in obtaining employment, there remains the question of whether they are being hired for the career-track management jobs typically obtained by male university graduates. I do not have any historical data with which to examine this issue, but a recent study by the Foundation for Women’s Work (1990) provides some insight. This study documents one important way in which firms have responded to the mandate to give women equal opportunity to obtain managerial jobs—by replacing a single managerial track with two separate and somewhat different tracks. This so-called two-track system is ostensibly gender neutral, but some have argued that in fact it subverts the EEO Law by creating a group of second-class female managerial workers who will not be able to advance into the upper level ranks of the firm (see Gelb, 1991). If there is evidence that there has been an expansion in the use of this two-track system since the passage of the law and that women are being placed in the lower track, this evidence would support the hypothesis of Gelb (1991) and others that the two-track system is a

TABLE 6. Employment by Track^a and Sex, 1987

	<i>Male</i>		<i>Female</i>		<i>Female/Total</i>
Total	82,049	100.0%	55,615	100.0%	40.4%
Track A	81,268	99.0	2,062	3.7	2.5%
A-1	81,249	99.0	706	1.3	.9%
A-2	14	0.0	1,356	2.4	99.0%
A-3	5	0.0	0	0.0	0.0
Track B	615	.8	53,519	96.2	99.0
B-1	87	.1	0	0.0	0.0
B-2	462	.6	42,424	76.3	98.9
B-3	66	.1	11,095	19.9	99.4
Track C	166	.2	34	.1	17.0
C-1	80	.1	0	0.0	0.0
C-2	86	.1	4	0.0	4.4
C-3	0	0.0	30	.1	100.0

Note: a. For definitions of tracks, see text.

Source: Foundation for Women's Work (1990), p. 26.

mechanism by which firms are forestalling the advancement of women into high ranking career jobs in management.

The two tracks for which graduates of four-year colleges and universities are considered are a managerial employee track called the "sogoshoku" or "comprehensive employee" course, and a clerical employee track called the "ippanshoku" or the "general employee" course.²⁸ The sogoshoku track generally requires the employees to make complex judgements, subjects them to comprehensive job transfers and rotations, and places no limits on promotion. The ippanshoku track, on the other hand, involves jobs that are less complicated and more manual, generally limits job rotations and transfers to the local area, and limits promotion opportunities to lower-level or local management positions only.²⁹

This two-track system had been in existence prior to the passage of the EEO Law in 1985, but the Foundation for Women's Work study documents the fact that the number of firms who use it has increased since 1985. The Foundation surveyed 148 large firms in 1987 and found that 40 of the firms used a multiple-track system.³⁰ Of these 40, 24 or 60 percent had adopted the system in 1986 or 1987, whereas the remaining 40 percent had adopted it earlier. Thus, there was an acceleration in the adoption of multiple-track systems in this sample during the first two years that the EEO Law was in effect.

The same survey also provides information about the sex distribution of the employees in the various tracks. The data, shown in Table 6, distinguish not only the

type of work (Tracks A, B, and C), but also the locations to which the worker may be transferred (numbers 1, 2, and 3). Track A corresponds to the *sogoshoku* track, B to the *ippanshoku* track, and C to the technical track. The number 1 means that the worker is subject to unlimited transfer, 2 means that transfers will be limited to the local area only, and 3 means that there will be no transfers. Ninety-nine percent of men are in Track A, whereas only 3.7 percent of women are in this high level management track. In contrast, 96.2 percent of the women are in Track B, the routine white-collar work track, while only .8 percent of men are in this track. It is noteworthy that in each of the three tracks, women are much more likely to be in those subtracks that do not require unlimited transfer. Only 1.3 percent of women are in the A-1 track, the track that leads to the highest level management positions but also requires unlimited transfers. Thus, in 1987 the vast majority of women white-collar workers employed in large firms were not in jobs that lead to the highest level of responsibility and power.³¹

These data are, unfortunately, total employment data; we cannot tell from them whether newly hired college graduates were treated differently. They are most useful as a benchmark—they tell us primarily how women have fared in these large corporations prior to the passage of the law. A follow-up study that focuses on new hires is what is needed to see if the law has had any impact on the hiring of women into the *sogoshoku* track.

While it is not precisely a follow-up survey, the 1989 Basic Survey on the Management of Female Employment (Women's Bureau, Ministry of Labor, 1990), does provide some information about the representation of women in the managerial ranks of a large sample of Japanese firms, and reports on the intentions of these firms with regard to hiring more managerial women.³² In the surveyed firms, women comprised 5 percent of supervisors (*kakaricho*), 2.1 percent of section heads (*kacho*), and 1.2 percent of department managers (*bucho*). When queried on their future hiring plans, most firms did not expect to increase their use of female managers.³³ In addition, when asked about what steps they had taken to adjust the working environment in order to better promote women into the managerial staff levels, only 21.9 percent reported that they were taking any steps to do so. Overall, from the results of this 1989 survey, one gets the impression that although some firms are making an effort to make better use of the talents and skills of university-educated women, these firms are in the decided minority.

Other employer responses to the EEO Law noted by Sugeno (1987) were a change in job advertisements (fewer sex-based classifications of job offers in classified sections of the newspapers), some reduction in overt sex discrimination in employee education programs, improved eligibility for company perks like company housing and loan programs, and the abolition in many companies of sex differences in the age of mandatory retirement.

One aspect of management employment that has not yet undergone any change, the job rotation system, remains an important barrier to the advancement of women university graduates. In 1989, 40 percent of companies used job rotation systems, and of these, 14.6 percent mandated transfers that required the household to move (i.e., in

these cases the new job assignment was not within commuting distance from the employee's home).³⁴ Such a requirement is quite onerous to married women. In fact, it is by emphasizing this requirement that firms have steered women into the less challenging, *ippanshoku* management track (Sugeno, 1987). Even for men, the requirement to move one's family can be burdensome; about one-third of men with families elect to leave their families behind when faced with a job rotation that requires a household move (Minami, 1992). Firms will have to take family considerations into account in an unprecedented way, by allowing family members to coordinate, postpone or even refuse moves, before many women will be willing and able to flourish in the *sogoshoku* management track.

Overall, then, although there are some signs that firms are moving to improve opportunities for university-educated women, the fact that the most evident change is the spread of the two- or multi-track system suggests that up to now, this commitment has been at best half-hearted. A 1991 MITI report on women affirms the fact that progress has been slow, saying "the gap between men and women remains wide in the content of work and promotion" (*Japan Labor Bulletin*, August, 1991, p. 5). Furthermore, in the current recession, there is some evidence that women will have an even harder time than will men in obtaining career-track employment (*Japan Labor Bulletin*, October 1993).

A final indictment of the effectiveness in the EEO Law in altering firm behavior comes from Hanami (1991), who reviews the law's primary enforcement mechanism—administrative guidance. Hanami reports on the findings of the Administration Inspection Bureau of the Management and Coordination Agency of the Japanese government in its review of the effectiveness of administrative guidance regarding the EEO Law. This agency concludes in its report that administrative activity concerning female labor was "insufficient" and needed "much improvement", and that only in one percent of the firms covered by the EEO Law had in-house "promoters" been appointed to facilitate implementation of the law, despite encouragement by the Women's Bureau (Ministry of Labor) to do so. This finding, in Hanami's words, indicates "a failure of administrative guidance" (p. 12), and he concludes, "It is quite obvious that the law has not been effective in abolishing the discriminatory hiring practices of Japanese companies since a substantial number of them still discriminate against women in hiring and promotion" (p. 10).

C. Summary

I have presented information illustrating two discordant trends. On the one hand, we have seen that women are preparing themselves at an accelerated rate for career-path employment. They are now more likely to acquire a university education and to choose college majors which employers will find attractive, and they are continuing to reduce their fertility and increase their labor force participation. It is not possible to associate these changes uniquely with the passage of the EEO Law given the amount of data currently at hand, but the acceleration of ongoing trends after the passage of

the law is suggestive of a causal link. On the other hand, the responses of employers and government have been less encouraging. Newly graduated university-educated women were as likely as comparable men to find employment in 1990, but they were still not getting the same career-path jobs. Indeed, the most noticeable response of employers to the Law has been to increase the use of a two-track system that discourages educated women from embarking on the standard career path regularly followed by their male colleagues.

It has been argued that the expansion of two-track management systems is a way of accommodating the different needs and desires of women, rather than an attempt to forestall their progress. While this may be true, this argument betrays a vision in which a successful manager is one whose life is totally devoted to his or her company—to the exclusion of any significant contribution in the home. Structuring management jobs in this way precludes the participation of anyone, male or female, who wants to devote some of his or her attention and energy to family life. A response that would be more in keeping with the spirit of offering women equal opportunity would be one in which the nature of management jobs becomes more flexible and less time consuming, both for men and for women.³⁵

III. PREDICTIONS FOR THE FUTURE

While women's place in the labor market has not changed significantly in the past five years, it is my expectation that there will be changes in the future—changes that will take place whether or not government and business make a more serious effort to abide by the EEO Law. These changes will be brought about by the needs of the economy and facilitated by the above-documented expansion in women's preparation for career employment. In particular, a labor shortage has been developing in Japan and is expected to continue (though the effects of this shortage may not be felt again until after the current recession). Faced with this shortage, I believe that firms will become more amenable to hiring and promoting women.³⁶ In this section, I document the labor shortage and discuss the various strategies that Japan can use to deal with this shortage.

The impending labor shortage has been widely discussed in Japan. Many issues of the *Japan Labor Bulletin*, a monthly review of labor issues published by the Japan Institute of Labour, have referred to the problem, and two articles have addressed it in detail (Shimada, 1990; Kuwahara, 1990).

The primary reason for the labor shortage is the continuing decline in the Japanese birth rate, as described earlier. As a result, the number of young workers entering the labor market will peak in 1992 and will decline thereafter (Shimada, 1990). Similarly, the working age population (aged 15–65) is predicted to begin declining in 1995 (Kuwahara, 1990). This decline in the birth rate combined with the increased longevity of the Japanese men and women means that the ratio of the working to non-working population will shrink. The consequent tightness of the labor market has already begun to be felt. The ratio of job openings to applicants for new workers had increased

dramatically since 1986: from .6 in 1986 to 1.5 in 1990 (Japan Institute of Labor, 1991, Table 12). Moreover, a shortage of young workers has been reported both in highly skilled professional and technical jobs and in blue-collar jobs (Shimada, 1990; Kuwahara, 1990). While it is the shortage of unskilled labor that has received most of the attention up to now, the low birthrate will ultimately affect the supply of labor at all levels.

Shortages caused by the low birthrate will be exacerbated by policies of the Japanese government aimed at reducing annual work hours. Besides reducing the maximum work hours specified in the Labor Standards Law—the statutory workweek will be reduced from 44 to 40 hours beginning April 1994—the government has been encouraging firms to reduce work hours by requiring less overtime, by moving to a five-day workweek, and by urging employees to take their vacations (*Japan Labor Bulletin*, October, 1992 and October, 1993). Average annual work hours have in fact been falling, reaching 2016 in 1991. Nevertheless, the government's goal of 1800 annual hours will necessitate a further reduction of almost 11 percent (Sugeno, 1992). Finally, changes in attitudes of young men, many of whom are now placing an ever greater value on leisure time as opposed to time at work, will put additional pressure on labor supply.³⁷

There are a number of possible responses to the labor shortage. The most significant ones are to: (1) substitute capital for labor; (2) "export" capital by opening plants abroad; (3) expand immigration; (4) delay the retirement of older workers; and (5) make better use of women in the labor market.³⁸ The first two of these are standard responses, and have been used to meet threatened labor shortages in the past. They remain a "first line of defense", but may be less effective now than in the past because the percentage of employment in the non-manufacturing sectors of the economy has increased and there is less scope for moving production abroad or for substituting capital for labor in these sectors.

The third response, an increase in immigration, is probably the least attractive to the Japanese. In general, the entry of foreign workers into Japan is highly restricted. For example, in 1986, foreign workers accounted for .05 percent of the Japanese labor force, as compared with about 7 percent in France and former West Germany (Goto, 1991). The shortage of workers to take unskilled jobs that are dirty, difficult or dangerous (so-called three-D jobs) in the 1980's caused the burgeoning of illegal immigration of unskilled workers. The government responded by amending the Immigration Control and Refugee-Recognition Act, effective June 1, 1990, to make it *more* difficult for unskilled workers to enter Japan. At the same time, the Act relaxed restrictions on the entry of workers with professional knowledge and technical expertise (Shimada, 1990). The latter may alleviate in part potential shortages in skilled labor, but large inflows of skilled workers are still unlikely because, as a general policy, the Japanese are reluctant to admit foreign workers.³⁹

The fourth way that Japan can alleviate its labor shortage is by making better use of its older workers. Mandatory retirement in most large firms has risen from the age of 55 to the age of 60, but firms have been very resistant to increasing the retirement

age to 65 (Shimada, 1990). Since life expectancy in Japan is among the highest in the world, this low mandatory retirement age would seem to leave a large scope for expanding the labor pool by using older workers.

However, even though Japanese men retire from their lifetime jobs at a relatively early age, this does not mean that they leave the labor force. The labor force participation rate of older men is quite high in Japan: in 1990, for example, it was 83.3 percent for men aged 55 to 64 years, and 36.5 percent for those 65 and over (the corresponding figures for the U.S. were 67.2 percent and 16.6 percent, respectively).⁴⁰ Thus, there is a pool of older workers who might be more efficiently used in the Japanese economy, although the scope for expanding the labor force by using these older male workers is less than might be predicted from an examination of the age of mandatory retirement.

Although older workers may be able to fill part of the gap created by the labor shortage, they will not be good substitutes for young, newly trained workers. To meet this need, Japan will have to turn to its young women. The existence of the EEO Law can act to facilitate the shift to employing women, especially university graduates, in jobs that formerly were held by men by making this change more socially acceptable both to employers and to male employees. Still needed, however, are an increased availability of child care leaves and child care facilities, an increased flexibility in the workplace, and an increased sharing of household tasks before larger numbers of women in the prime childbearing years will stay in the labor force as full-time regular workers. A need for these changes is evident in the responses of women employed as regular workers in the 1990 Basic Survey of Women's Employment Management. When asked what the government should do to promote women's equal employment opportunity, 51.2 percent of the women said that the government should introduce systems like child care leaves to help women stay on the job, and 34.6 percent said that the government should promote the reduction of working hours.⁴¹

IV. CONCLUSION

Examining data for the five-year period subsequent to the passage of the EEO Law, I find that young women have demonstrated a heightened interest in pursuing career jobs: they have increased their attendance at four-year colleges and universities, chosen college majors more conducive to a business career, reduced their fertility, and increased their labor force participation. While these changes are undoubtedly the result of a variety of social and economic factors, I have presented evidence that the EEO Law has played a contributory role, especially with regard to schooling. In contrast, the response to the law on the part of firms has been weak. Firms have hired more female university graduates, but predominantly in a second-class managerial track. It remains to be seen exactly how recent cohorts of female university graduates will progress on the job.

Despite the sluggish response of firms up to now, I believe that the outlook for career-minded young women in Japan is more hopeful for the future. My optimism

results not from the EEO Law, but rather from the needs of the Japanese economy. A labor shortage has been developing in Japan, caused in large part by past declines in fertility. I have argued that the way businesses are most likely to adjust to the predicted shortage of educated male labor in the future is by making better use of young female university graduates. Indeed, the passage in 1991 of the Child Care Leave Bill, which allows employees of both sexes to take a one-year leave of absence from their jobs, indicates that both government and business have finally begun to think actively about how to make the workplace more attractive to women who wish both to have a career and to marry and have children.

Nevertheless, despite these changes, it is still not clear that women will embrace the opportunities that become available. It has been argued that, relative to men, Japanese women currently enjoy a “golden age of freedom”—reduced household responsibilities combined with the freedom to quit their jobs at will—and that equality with men “would limit their current options and level of enjoyment of life considerably” (Iwao, 1991). Will Japanese women actually want to make the commitment to the career jobs for which they are now qualified? Will they choose to relinquish their freedom for the challenges and restrictions of a corporate career? Perhaps what young women (and young men) will seek in the future is not the stifling commitment of today’s male managers, but rather a more balanced existence which provides scope for the fulfillment of both private and professional roles.

Acknowledgment: I wish to thank M. Anne Hill, William Lazonick, Marcus Rebick, and Kazuko Shiraishi for helpful discussions during early work on this paper, and Robert Evans Jr., Marianne Ferber, Robert Lipsey, Charlotte Muller, Hugh Patrick, Michael Smitka, Tetsuji Yamada and members of the Japan Economic Seminar at Columbia University for comments on an earlier draft. Eiko Takagi and Akiko Yamanaka graciously translated several Japanese documents, and Elicia Brown and John Lombardo provided research assistance. Partial funding came from a PSC-CUNY research grant. An earlier version of this paper was presented at the January, 1992 meetings of the ASSA in New Orleans, LA.

NOTES

1. Mincer (1983). For the U.S., the ratio in 1980 was 66 percent. The labor force participation rate of women was slightly higher in Japan than in the U.S. in that year, but since 1980 this rate has increased faster in the U.S. than in Japan.

2. At the same time that the EEO Law was passed, complementary amendments to the Labour Standards Law were enacted which removed restrictions on overtime or holiday work for women in managerial and technical jobs (previously, all women had been restricted to no more than two hours per day of overtime work), and lifted certain hours restrictions for other female workers. In addition, exemptions from the prohibition against late-night and underground work for women were expanded to cover managerial and certain technical occupations, and restrictions against women’s doing “dangerous and harmful” work were lifted, except during pregnancy and after giving birth. Finally, prenatal and postnatal leaves were extended.

3. The description of the EEO Law in this section is taken from Edwards (1988). For an excellent discussion of the background of the legislation, see Upham (1987).

4. The prohibitions and recommendations are quoted directly from Akamatsu (1986), but in a different order.

5. Young (1984) defines administrative guidance as “when administrators take action of no coercive legal effect that encourages related parties to act in a specific way in order to realize some administrative aim” (p. 943). He points out that although compliance with administrative guidelines is technically voluntary, “Japanese administrators rely on informal pressure and other means of enforcement to persuade regulated parties to comply” (p. 983). See also Upham (1987).

6. Japanese women are quite aware of the age restriction on employment. In a 1989 survey of women’s working conditions conducted by the Office of the Prime Minister, 45 percent of women who were not currently working indicated that relaxing the age limit was a “need and measure” that would help them reenter the labor force. More women chose this response than any of the other responses provided. (The data come from the Japanese Center for Information and Cultural Affairs On-line Data Base and are derived from the “Public Opinion Survey on Working Women, October 1989” conducted by the Prime Minister’s Office. 3677 working men and women between the ages of 20 and 60 (inclusive) were interviewed.)

7. Data on time allocation for men and women in Japan provide some evidence of the difference in the intra-family division of labor between men and women. In 1985, for example, out of a total of 60 hours per week spent on the job, in commuting to work, and in housework, Japanese men spent 3.5 hours, or 5.8 percent of their total work and commuting time, in housework. The corresponding percentage for women was 54.6. By comparison, in the United States (using data for 1981), the percentages were 22.5 for men and 54.1 percent for women (Juster and Stafford, 1991, Table 3).

8. Although the EEO Law was passed in 1985 (to go into effect in April 1986), it is unlikely that much response could have taken place immediately upon its passage. Thus, changes in behavioral measures between 1985 and 1990 will incorporate changes caused by the existence of the law.

9. There is some evidence that women university graduates are more seriously affected by short-term economic fluctuations than are their male counterparts. For example, in the current recession a survey by Recruit Research Co. reports that recruitment from the March, 1994 university and graduate school classes is predicted to drop by 39.8 percent for females, but only by 20.8 percent for males (*Japan Labor Bulletin*, October, 1993).

10. The Japanese economy was stronger in the 1985–1990 period than in the previous two five-year periods in many respects. During the 1985–1990 period, the Japanese economy experienced the longest expansion of the entire 1975–1990 period (beginning in November 1986 and continuing through 1990), while in the 1980–1985 period it experienced lower growth than the other two periods and contained the longest recession (from February, 1980 to February, 1983) (Ito, 1992; Keizai Koho Center, 1992). In addition, the ratio of job openings to job applicants grew dramatically from 1986 to 1990, but was fairly steady from the end of 1975 through 1986 (*Japan Labor Bulletin*, September 1993).

11. In contrast, there is less scope for the law to have a direct effect on the labor market opportunities of older women because their educational investment decisions have already been made.

12. During the past three decades, the educational attainment of women has been below that of men, but both have become increasingly more likely to enter higher education. In 1960, the proportion of women high school graduates entering four-year colleges and universities (the education that positions a young person for a management career or a profession) was two point five percent, and for men it was 13.7 percent. By 1988 these proportions had grown to 14.4 for women and 35.3 percent for men. However, this advancement rate peaked for men in the early 1980s, whereas for women it has continued to grow. Attendance at two-year colleges also grew over this period for women, but not for men. The proportion of women high school graduates who attended two-year colleges was three percent in 1960 and grew to 21.8 percent in 1988; for men it remained roughly constant at about two percent. (All of these data are from Hill, 1992, Table 12).

13. Births in 1965 were 1.811 million; in 1966 they were 1.461 million; and in 1967 they were 1.875 million (Japan Statistical Association, 1987, Vol. 1, Table 2-1). The dip in fertility in 1966 was a

result of the belief that girls born in that year would be excessively masculine and aggressive (Hashimoto, 1974).

14. In a more recent analysis, she reports that the returns to higher education for women in Japan may be increasing (Osawa, 1993).

15. A similar type of rationale has been offered for American women's decisions to attend college in the 1950's. Goldin (1992) estimates that for members of this cohort, attending college, by increasing a woman's probability of marrying a college educated man, increased her lifetime income by 40 percent.

16. During the 1970's and 1980's, female junior college graduates actually had a *better* chance of finding employment than did female university graduates. Firms felt that since all women would leave work for marriage and childbearing, a junior college graduate would be able to stay on the job an extra two years. As an illustration of the difficulty that female university graduates had in finding employment, a 1981 survey found that 70.9 percent of firms which hired university graduates hired only male graduates. Even when hired, female university graduates often received the same rate of pay as female junior college graduates (Osawa, 1987).

17. In 1985, for example, only 17.9 percent of women and 7.4 percent of men married prior to the age of 25. These figures and the data in the text for 1980 and 1985 come from Japan Statistical Association (1987), Vol. 1, Table 2-10. Data for 1990 are from Keizai Koho Center (1992), Table 1-2. Data for 1995 are estimated from data from 1990: the ratio of women to men aged 25-34 in 1995 is assumed to be the same as the ratio of women to men aged 20-29 in 1990.

18. In studying women's investments in college education over this century in the U.S., Goldin (1992) also uses information on the changing distribution of women's college majors to demonstrate the greater importance of direct versus indirect returns to college education in the 1990 cohort of graduates, as compared to the cohorts graduating in the 1950's and 1960's.

19. The declining birthrate in Japan, by ultimately reducing the demand for teachers, has also contributed to the reduced popularity of education as a major.

20. The source for all of the figures in this paragraph is the same as for Table 1.

21. The average age at marriage for men for the four bench-mark years 1975, 1980, 1985, and 1990 are, respectively, 27.0, 27.8, 28.2, and 28.5; for women, they are, respectively, 24.7, 25.2, 25.5, and 25.8 (for 1975-1985 these data come from *Japan Labor Bulletin* (October, 1990), p. 3, and for 1990, from *Japan Labor Bulletin* (January, 1992), p. 4).

22. The sources are: for 1975-80, Japan Statistical Association (1987), Table 2-39; for 1985, Statistics Bureau (1990), Table 2-26; and for 1990-91, *Japan Labor Bulletin* (September, 1991).

23. Higher levels of education and labor force participation are negatively related to fertility. See, for example, Hodge and Ogawa (1991), who provide an excellent analysis of post-war fertility through 1982. They discuss in detail the interrelationships between fertility, labor force participation, and schooling, but do not attempt to develop a fully simultaneous model. Osawa (1988) also studies postwar fertility trends in Japan through the early 1980's. She demonstrates that it is women's participation in paid employment outside the home rather than labor force participation *per se* that affects the cost of children and, consequently, fertility. The secular movement of women into paid employment, especially after 1970, she argues, combined with increases in wage rates, are important explanations for the post-1970 declines in fertility. Interestingly, the increase in paid employment rates for women between 1980 and 1985 (from 29.5 to 31.8%) are just about the same as between 1985 and 1990 (31.8 to 34.5%), so that this factor cannot be used to explain the accelerated fertility decline since 1985. (The latter data come from the 1980, 1985 and 1990 issues of the *Year Book of Labour Statistics* (Policy Planning and Research Department, Ministry of Labour, Japan).)

24. It would be useful to have similar information for female university graduates, since data for selected earlier years suggests that their age pattern of labor force participation differs from the overall average (Higuchi, 1987).

25. Data presented in Osawa (1993), Figures 3-3 and 3-5, suggest that for young women aged 20-24, hourly wages (including the value of bonus payments) of the university-educated have risen faster since 1986 than the corresponding wages of those with a junior college or high school education. It is

hard to know how to interpret this finding, however, since comparable data for men also show the hourly wage (including bonus payments) rising relative to that of junior college and high school graduates (although in the case of males, the wage of high school graduates is above rather than below that of university graduates).

26. A graph illustrating these trends is available from the author on request (the data come from various issues of Policy Planning and Research Department, Japan Ministry of Labor).

27. By setting their dummy "law" variable equal to one for 1985, they are assuming that firms respond immediately to the passage of the law, even before it goes into effect on April 1, 1986. In addition, two of their six post-law years are affected by the abnormally small birth cohort of 1966, and it is not clear that their index of demand fully takes this into account.

28. There is also a specialized track, "senmonshoku" course, for jobs requiring high-level technical skills or knowledge. These tracks are described in detail in Sugeno (1987).

29. Cannings and Lazonick (1994) liken the latter to the widely discussed "mommy track" in the United States.

30. The sample of large firms included trading companies, banks, insurance firms and security firms.

31. One gets the impression from reading the popular press that young Japanese women who want a challenging managerial job with the possibility of advancement have chosen to work for foreign rather than Japanese firms.

32. The survey covers a representative sample of 7000 firms with 30 or more regular employees.

33. The proportion of firms which do not expect to increase the number of female managers depends on the level of the management assignment (it is greater at the department manager level than at the supervisor level) and on whether or not firms already have female managers (it is greater for firms which do not already have female managers). The data are as follows.

Proportion of firms that do *not* plan to increase female management staff in the next three years

	<i>Firms without female mgrs.</i>	<i>Firms with female mgrs.</i>
Department manager (bucho)	96.6%	86.7%
Section head (kacho)	88.8%	64.9%
Supervisor (kakaricho)	77.4%	46.9%

(Source: Women's Bureau, Japan Ministry of Labor, 1990, Table 9.)

34. For large companies, the percentage with job rotation systems is higher: for companies with 5000 or more employees it is 96.1 percent; and for those with 1000 to 4999 employees it is 88.9 percent (Women's Bureau, Japan Ministry of Labor, 1990).

35. The typical work schedule in Japan makes it difficult for women to both work full-time and meet their household responsibilities. At present, Japanese workers spend longer per day in work-related activities (which include labor time, commuting time and work breaks) than do workers in Britain, France, Germany or the United States. The figure stood at 12 hours per day in Japan versus 10 hours and 22 minutes in the United States (*Japan Labor Bulletin*, October, 1991).

36. This opinion has also been expressed by Osawa (1990) and others. For example, a recent MITI Small Business White Paper argues that it is necessary to "improve working conditions, the working environment and to provide job opportunities for those women and elderly persons who are highly motivated to work" (quoted in the *Japan Labor Bulletin*, July, 1991, p. 1). It has also been suggested that a labor shortage will put pressure on the lifetime employment system used by large companies, making it easier in the future for women to recenter the labor force (*Japan Labor Bulletin*, December, 1993).

37. Surveys of Japanese men of various ages conducted in 1973, 1978, 1983 and 1988 show a decided alteration in attitudes toward work versus leisure time, with leisure time becoming more highly valued. A comparison of different cohorts at the same age demonstrates that more recent cohorts place a higher value on leisure time, have a greater desire to harmonize work and leisure time, and are less likely to live mainly for their work (*Japan Labor Bulletin*, November, 1991, p. 8.). Surveys of new recruits also document the same desire for more leisure—less desire to work overtime hours, less desire to work hard, and a greater propensity to stress private life over work (*Ibid.*, p.10).

38. Shimada (1990) also suggests that Japan make better use of its existing manpower by organizing work somewhat differently and encouraging midcareer mobility so that workers can be employed in those firms in which their skills are most needed.

39. The extremely cautious response of the Japanese government and of general public opinion to immigration is unmistakable in the report of the Study Group Regarding the Effects of Foreign Workers, published on January 21, 1991 and summarized in the April, 1991 issue of the *Japan Labor Bulletin*. See also Goto (1991).

40. The Japanese data come from Statistics Bureau, Management and Coordination Agency (1991), Table 3-2. The U.S. data are for 1989 and come from U.S. Bureau of the Census (1991), Table 632.

41. Japan Ministry of Labor (1991). The survey covered women in about 4000 business with more than 30 regular employees. Other responses to the question (multiple responses were permitted) were that the government should: better educate firms about the EEO Law (40.3%); more strongly enforce the law (35.4%); work to familiarize women with the law (28.9%); and provide additional counseling to firms about the law (17.8%).

REFERENCES

- Akamatsu, Ryoka. 1986. "Introduction to the Equal Employment Opportunity Law of 1985." International Labour Office: Legislative Series 1985-Jap. 1.
- Cannings, Kathleen and Lazonick, William. 1994. "Equal Employment Opportunity and the 'Managerial Woman' in Japan." *Industrial Relations*, 33(January): 44-69.
- Edwards, Linda N. 1988. "Equal Employment Opportunity in Japan: A View from the West." *Industrial and Labor Relations Review*, 41: 240-250.
- Foundation for Women's Work. 1990. "Report of the Study Group on the Two-track Management System (in Japanese)." Tokyo: Author.
- Gelb, Joyce. 1991. "Tradition and Change in Japan: The Case of Equal Employment Opportunity Law." *US-Japan Women's Journal, English Supplement 1*: 48-75.
- Goldin, Claudia. 1992. "The Meaning of College in the Lives of American Women: The Past One-hundred Years." Cambridge, MA: National Bureau of Economic Research Working Paper No. 4099.
- Goto, Junichi. 1991. "A Formal Analysis of Migrant Workers in Japan." Research Institute for Economics and Business Administration, Kobe University, Discussion Paper No. 25.
- Hanami, Tadashi. 1991. "Discrimination in the United States and Japan—From a Legal Viewpoint." *Journal of American and Canadian Studies*, 8(Autumn): 1-31.
- Hashimoto, Masanori. 1974. "Economics of Postwar Fertility in Japan: Differentials and Trends." *Journal of Political Economy*, 83(March/April): S170-S194.
- Higuchi, Yoshio. 1987. "Labor Force Withdrawal, Re-entry and Wages by Educational Attainment in Japanese Women," mimeo, Columbia University.
- Hill, M. Anne. 1992. "Women in the Japanese Economy," mimeo, Queens College.
- Hodge, Robert W. and Ogawa, Naohiro. 1991. *Fertility Change in Contemporary Japan*. Chicago: Chicago University Press.
- Ito, Takatoshi. 1992. *The Japanese Economy*. Cambridge, MA: MIT Press.

- Iwao, Sumiko. 1991. "The Quiet Revolution: Japanese Women Today." *The Japan Foundation Newsletter*, 19(December): 1-9.
- Japan Institute of Labour. 1991. *Japanese Working Life Profile, Labor Statistics 1991-1992*. Tokyo: Japan Institute of Labour.
- Japan Labor Bulletin*. Tokyo: Japan Institute of Labour, various issues.
- Japan Ministry of Finance. 1991. *The Actual Situation of Women's Work, (Fujin Rodo no Jitsujō)*. Tokyo: Ministry of Finance.
- Japan Ministry of Labor. 1991. "EEOL—From the Viewpoint of Female Workers (1990 Basic Survey of Women's Employment and Management, in Japanese)." Tokyo: Ministry of Labor.
- Japan Statistical Association. 1987. *Historical Statistics of Japan*, Vols. 1-5. Tokyo: Japan Statistical Association.
- Juster, Thomas and Stafford, Frank. 1991. "The Allocation of Time: Empirical Findings, Behavioral Models, and Problems of Measurement." *Journal of Economic Literature*, 29(June): 471-522.
- Keizai Koho Center. 1992. *Japan 1992, An International Comparison*. Tokyo: Keizai Koho Center.
- Kuwahara, Yasuo. 1990. "Are Workers Really in Short Supply?," *Japan Labor Bulletin*, 29(March): 4-8.
- Minami, Takao. 1992. "Transfers of Workers and the Separation of Families." *Economic Eye*, 13(Spring): 23-25.
- Mincer, Jacob. 1983. "Intercountry Comparisons of Labor Force Trends and of Related Developments: An Overview." *Journal of Labor Economics*, 3(January): S1-32.
- Osawa, Machiko. 1987. "Changing Role of Education and Women Workers in Japan." *Keio Business Review*, 24: 87-101.
- . 1988. "Working Mothers: Changing Patterns of Employment and Fertility in Japan." *Economic Development and Cultural Change*, 36(July): 623-650.
- . 1990. "Women's Response to Economic Changes." *Japan Labor Bulletin*, 29(April): 5-8.
- . 1993. *Keizai Henka to Josei Rodo*. Tokyo: Nihon Keizai Hyoronsha.
- Policy Planning and Research Department, Japan Ministry of Labor. *Year Book of Labour Statistics*. Tokyo: Ministry of Labor, various years.
- Shimada, Haruo. 1990. "The Labor Crisis; A Strategic Response to Structural Changes." *Japan Labor Bulletin*, 29(November): 5-8.
- Statistics Bureau, Management and Coordination Agency. *Japan Statistical Yearbook*. Tokyo: Management and Coordination Agency, various years.
- . 1991. *Social Indicators by Prefecture*. Tokyo: Management and Coordination Agency.
- Sugeno, Kazuo. 1987. "The Impact of the EEOL at its First Stage of Enforcement." *Japan Labor Bulletin*, 26(October): 5-8.
- . 1992. "The Supreme Court's Hitachi Decision on the Duty to Work Overtime." *Japan Labor Bulletin*, 31(May): 4-8.
- U. S. Bureau of the Census. 1991. *Statistical Abstract of the United States: 1991*. Washington, DC: USGPO.
- Upham, Frank K. 1987. *Law and Social Change in Postwar Japan*. Cambridge, MA: Harvard University Press.
- Women's Bureau, Ministry of Labour. 1990. *Basic Survey of the Management of Female Employment (Heisei Gannen Joshi Koyo Kanri Kihon Chosa)*. Tokyo: Ministry of Labour.
- Young, Michael K. 1984. "Judicial Review of Administrative Guidance: Governmentally Encouraged Consensual Dispute Resolution in Japan." *Columbia Law Review*, 84: 923-983.