Maternity Leave Policies and Women's Employment after Childbirth: Evidence from the United States, Britain, and Japan

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Editorial Note

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Acknowledgements

Abstract

This paper uses microdata from the United States, Britain, and Japan to examine the effects of family leave coverage on women's employment after childbirth. Our three sample countries provide a range of family leave policy regimes. The United States had no national family leave legislation prior to the passage of the Family and Medical Leave Act in 1993, but many women were covered by employer policies as a result of other federal legislation, state leave legislation, union contracts, or voluntary initiatives. Britain passed national maternity leave legislation in 1978, but, until the reforms of 1993, only about half of working women were eligible for coverage. In Japan, maternity leave was introduced as part of the national labour standards in 1947 but not all workers are covered; child care leave was introduced in 1991 and implemented incrementally over the next several years.

We use labour force survey data to examine the employment rates and employment decisions of women with young children in each of our three countries. Our results confirm that young children continue to have a very strong negative effect on women's employment; this effect is most pronounced in Britain. We then take advantage of panel data to investigate the effects of family leave coverage on women's job retention after childbirth. We find that family leave coverage increases the likelihood that a woman will return to her employer after childbirth in all three countries, with a particularly marked effect in Japan. This result suggests that the recent expansions in family leave coverage in the sample countries are likely to lead to increased employment of women after childbirth.

Introduction

This paper examines the effects of maternity leave coverage on women's employment after childbirth in three industrialised countries, the United States, Britain, and Japan. These three countries are well-suited for this analysis because all three had less than universal family leave coverage in the years studied here. Moreover, as we shall see below, these three countries have similar patterns of employment of women overall, and of women with young children. Our analysis takes advantage of the availability of comparable labour force survey data and panel data. These data allow us to estimate parallel models across the three countries in order to determine the extent to which the effects of family leave on women's retention may be generalisable across countries.

Since the family leave policies that we are studying here particularly affect the employment decisions of women with young children, we begin the paper by briefly reviewing the literature on the effects of young children on women's employment and by estimating these effects for women in our three sample countries. Next, we turn to family leave policies, reviewing the findings of previous research on the effects of family leave coverage on women's retention, describing the policy framework in our three sample countries, and then presenting our results and conclusions.

Young Children and Women's Employment

It is well-established that the presence of young children has a dampening effect on women's employment, all else equal (for recent evidence on this effect, see Leibowitz and Klerman, 1995, and Nakamura and Nakamura, 1994). Young children raise the value of a woman's time at home (Gronau, 1973); they also lower her net wage in the labour market if there are child care costs (Connelly, 1992). Thus, we would expect to find lower employment of mothers of young children in all three of our sample countries, although it is unclear a priori how these effects might differ across the three countries.

We use large nationally representative labour force surveys to estimate the effect of young children on women's employment in our three countries. For the United States, we use the March Current Population Survey (CPS). Pooling data from the 1992-1995 surveys gives us a sample of nearly 125,000 women between the ages of 18-45. For Britain, we use the

quarterly Labour Force Survey (LFS), pooling data from 1993, 1994, and 1995.[1] This yields a sample of over 90,000 women between the ages of 18-45. Our Japanese sample is from the Employment Status Survey (ESS) of 1992. The ESS sample contains over 50,000 women age 18-45. Sample means for all three datasets are shown in the Appendix.

Table 1 shows employment rates for women age 18-45 in our three sample countries, by marital status, age of the youngest child, and educational level.[2] The most striking result in this table is the strong effect of young children on married women's employment. This effect is particularly pronounced in Britain, where the employment rate of married women with infants (i.e., children under the age of one) is about 40 percentage points lower than that of married women with no children; this compares to a difference of 30 percentage points in the US and 36 percentage points in Japan. Similarly, the employment rate for married women with pre-school age children is over 30 percentage points lower than for married women with no children in Britain, as compared to a difference of 23 percentage points in the United States and Japan. Even school-age children have a larger effect on women's employment in Britain, than in the US or Japan.

A second striking feature of the raw data is the strong effect of education on the employment of women with infants, especially in the United States and Britain. Among married women with infants, women with college degrees are three times more likely to be employed than high school dropouts in both the US and Britain, whereas in Japan, the college-educated women are only two times more likely to be employed than the dropouts. These differences persist for married women with pre-school and school-age children; in fact, among Japanese women with older children, the least-educated are more likely to be employed.

To estimate the effects of young children on women's employment controlling for other characteristics that may be correlated with both employment and the presence of young children, we next estimate probit models, separately for unmarried and married women, as follows:

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1.   Individuals are in the LFS for five quarters. We selected one quarter from each year to avoid using the same individuals twice.

2.   Disaggregating by marital status is important, because employment rates for married women in Japan tend to be much lower than for other women, whereas in the US and Britain, they are higher.

(1) $Employment_{Unmarried} = f(Age, Ed4, Ed3, Ed2, Ch1, Ch5, Ch18, Othinc)$

(2) $Employment_{Married} = f(Age, Ed4, Ed3, Ed2, HusbEd4, HusbEd3,$
        $HusbEd2, Ch1, Ch5, Ch18, Othinc)$

where *Employment* = dummy variable for employed, *Age* = woman's age in years, *Ed4* = dummy variable for college degree or higher, *Ed3* = some college or equivalent, *Ed2* = high school degree or equivalent, *Ch1* = youngest child under the age of one, *Ch5* = youngest child at least one but under the age of five, *Ch18* = youngest child at least five but under the age of 18, *Othinc* = other family income, *HusbEd4* = husband has college degree or higher, *HusbEd3* = husband has some college, and *HusbEd2* = husband has high school degree.[3]

The marginal effects (and standard errors) from these probit models are shown in Table 2. In this table as in the previous table, the effects of young children on women's employment are strikingly similar in the United States and Japan. For married women in both the US and Japan, a child under the age of one reduces a married woman's employment by about 30 percent, a youngest child under five reduces employment by about 20 percent, while a youngest child who is school-age reduces employment by less than 10 percent. In Britain, in contrast, the effects of children on married women's employment are much larger: there is a 45 percent reduction in employment for a youngest child under one, 35 percent for a youngest child under five, and 14 percent for a youngest child under eighteen.

The raw data shown in Table 1 and the marginal effects from the probit models shown in Table 2 confirm that there are still very strong effects of young children, especially infants, on women's employment in these three countries. For this reason, it is of interest to look at family leave policies, such as maternity leave, which are likely to affect the employment decisions of women with children under the age of one.

Prior Research on Family Leave Policies and Women's Retention

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3.   Models for the US include controls for African-American and Hispanic. Models for the US and Britain include year. The Japanese sample excludes women who are enrolled in school. For further details on the definitions of the educational categories, see the notes to Table 2.

Family leave policies provide employees with a period of job-protected leave for reasons related to their family responsibilities. For example, in the case of maternity leave, women may take a certain number of weeks or months to care for a newborn, with a guarantee that their job or a similar one will be available if they wish to return to their employer after childbirth. Similarly, child care leave allows women (or men) to take time off work to care for or arrange care for an infant (or an older child), again with a guarantee that the job will be held for a period of time. Therefore, we would expect that family leave policies would increase retention - the likelihood that a woman returns to the same employer post-childbirth - and indeed there is evidence of this effect for all three of our sample countries (see Waldfogel, 1997b for the US; Macran, Dex, and Joshi, 1996, McRae, 1991 and 1993, and Waldfogel, 1997b for Britain; and Higuchi, 1996 and 1995, and Pasquale, 1995 for Japan).

Although we do not look at wage effects in this paper, it is important to note the possibility that family leave policies, by promoting job retention, may in turn may promote more rapid wage growth.[4] However, the direction of wage effects is unclear a priori (Blau and Kahn, 1992; Waldfogel, 1997a). If family leave policies allow women to take more time away from work, then they might result in lower pay for the women involved due to the loss in work experience, although such effects are likely to be small if the periods of leave are short. Conversely, if family leave allows women to return to a previous employer as opposed to leaving the work force entirely for a period of time or starting work with a new employer, then leave policies may boost women's wages by raising their levels of experience and tenure and by maintaining good job matches. Recent work in the US and Britain has provided evidence of positive wage effects of returning to the same employer post-childbirth (see Waldfogel, 1997a for the US; Waldfogel, 1997b for the US and Britain; and Joshi, Paci, and Waldfogel, 1996 for Britain). There is also some recent evidence on the positive wage effects of maternity leave coverage in the US (Waldfogel, 1997a and b) and Britain (Waldfogel, 1997b).[5]

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4.   Higuchi, and Waldfogel and Abe (1998) are examining these effects in work in progress.

5.   We do not consider here possible employment or wage effects of family leave mandates for women overall. See Ruhm (1997) and Waldfogel (1997c) for a discussion of these effects.

Family Leave Policy in the United States, Britain, and Japan

In the United States, there was no national family leave legislation prior to 1993, but an estimated 40-60 percent of women were covered by employer policies as a result of the federal Pregnancy Discrimination Act (which mandated that firms with temporary disability policies also cover pregnancy), state leave legislation, union contracts, or voluntary initiatives (Waldfogel, 1997a). In 1993, the Family and Medical Leave Act (FMLA) was passed and signed into law. The FMLA provides twelve weeks of unpaid job-protected leave for childbirth or other family or medical reasons for covered employees (i.e., those who work in the public sector or for private sector firms with more than 50 employees). Although the law covers only about half of American workers, many of whom were eligible for coverage already through the provisions noted above, there is evidence that the FMLA has had a positive impact on leave coverage and usage (Waldfogel, 1997c).

Britain has had national maternity leave legislation since 1978. However, until recently, only about half of working women were eligible for coverage, because a woman had to have worked two years full-time or five years part-time to qualify (McRae, 1991; Waldfogel, 1997b). In 1993, coverage was extended to all working women, in order to bring Britain into compliance with a European Commission directive on this issue.

In Japan, maternity leave was introduced as part of the national labour standards in 1947. However, not all workers are covered. In the Japanese Panel Survey on Consumers, for example, one-sixth of women who were working when pregnant with their last child reported that they had no maternity leave coverage at that job. Japan is unique among our sample countries in having national child care leave legislation. The Child Care Leave Law passed in May 1991 and went into effect in April 1992 for firms with 30 or more employees and April 1995 for firms with under 30 employees. The law allows mothers or fathers to take parental leave when a child is under the age of one; it also provides for shorter working hours for employees with pre-school age children (for further details on the law, see Higuchi, 1996; Pasquale, 1995). We do not examine the effects of the child care law in this paper, but it is important to mention as an indication of how attitudes towards the employment of women with young children are changing in Japan.

In summary, family leave coverage in the US and Britain consisted of less than universal maternity leave coverage for women prior to 1993,

and more complete coverage (universal in Britain but still not universal in the US) since 1993. In Japan, maternity leave has been in effect since 1947 but not all workers are covered; child care leave was added incrementally beginning in 1992. Thus, there is substantial variation in coverage within each of our countries.

The Effects of Family Leave Policies on Women's Retention

We take advantage of panel data for each country to look at the effects of family leave coverage on women's retention after childbirth.. Panel data are essential in order to identify the group most directly affected by family leave policies, i.e., women who were in work prior to their most recent birth. The panel data also allow us to track women's retention rates post-childbirth.

The US dataset is the National Longitudinal Survey of Youth (NLSY). The NLSY has followed a cohort of young men and women since 1979. In 1991, the sample members range in age from 26 to 34, with an average age of 30. There are 2213 young women in the NLSY sample who have had at least one child and have current earnings recorded in the survey; of these, 1402 were employed prior to their most recent birth, and it is this group that constitutes our sample for the retention models. The British dataset is the National Child Development Study (NCDS), which has followed a birth cohort since 1958. The cohort members were last interviewed in 1991, when they were age 33. There are 2453 women in the NCDS who have had at least one child and have current earnings. Of these, 1333 were employed prior to their most recent birth. The Japanese dataset is the Panel Survey on Consumers (PSC), a new panel study which began following a sample of 1500 women age 24-34 in 1993. The most recent data available are from 1995. As a result, the sample whom we are able to observe over the period of childbirth is fairly small: there are 269 women who had children between 1994 and 1995, and, of these, 109 were in work prior to their most recent birth.

These three datasets offer a rich array of human capital, demographic, and labour market variables, including measures of actual work experience and job tenure. In addition, each dataset can be used to identify or impute family leave coverage. The NLSY survey asks whether an individual had maternity leave coverage at her job. The NCDS does not indicate whether an individual was qualified for maternity leave coverage at the time of her last birth, but the work history data can be used to

impute qualification.[6] The PSC survey records maternity leave coverage (and child care coverage) directly.

The mean coverage and retention rates of women in the three samples are shown in Table 3. Among those who were in work prior to their most recent birth, about 65 percent in the US were covered by maternity leave, and of these, 64 percent returned to their employer within a year after child-birth. Retention rates for those who were not covered were about twenty percentage points lower, at 43 percent, so the overall retention rate was 57 percent. The figures for Britain are similar although slightly lower: 53 percent were covered, and about 60 percent of these returned to their previous employer within a year after the birth. Of those who were not covered, only 43 percent returned, so the overall retention rate was 52 percent. In Japan, in contrast, a much higher percentage of women was covered - 83 percent - and their retention rate - 60 percent - was as high as in the other countries. However, the retention rate of those not covered was much lower, only 5 percent. As a result, in spite of its higher coverage rate, Japan had the lowest overall retention rate, at only 50.5 percent.

To estimate the effects of coverage on retention, controlling for other characteristics that are likely to affect retention, we next estimate probit models, using the following general model:

(3)   *Retention = f(AgeB, Ed4, Ed3, Ed2, Notfirst, MLCov)*

where *Retention* = dummy variable for whether the woman returned to work for her previous employer within 12 months of her most recent birth, *AgeB* = mother's age at birth, *Notfirst* = a dummy variable indicating whether this was not her first birth, *MLCov* = a dummy variable indicating whether the woman was covered by a maternity leave policy, and the other variables are defined as above. In the US and Japan, the model also includes controls for large firm (1000 or more employees) and medium firm (100-999 employees). The US model also includes controls for union, government employee, African American, and Hispanic.

The marginal effects from the probit models, shown in Table 4, confirm the pattern seen in the raw data. There is a positive effect of

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6.   See Waldfogel, 1997b for details on imputing maternity leave coverage in the NCDS. Note that to the extent that maternity leave coverage is measured with error, the estimated effect of coverage will be biased downwards.

maternity leave coverage on retention in all three countries, and the effect is much larger in Japan than in the other two countries. In model 1, having maternity leave coverage raises the likelihood that a woman will return to her job within a year after childbirth by 16 percent in Britain, 23 percent in the United States, and 76 percent in Japan [7].

In the United States and Japan, it is possible that other firm characteristics that are correlated with maternity leave coverage might explain part of the positive effect of coverage on retention. Model 2 adds controls for firm size (and union and government employee in the US). These controls have the expected positive sign, but the effect of maternity leave coverage falls only slightly and remains strongly positive. Again, the effect of coverage on retention is much larger in Japan than in the other countries. This result that may reflect the sharp distinction in the Japanese labour market between women who are considered to be primary workers and are given the option to return to work after childbirth, and those who are seen as secondary workers and are not generally afforded the option to return (Higuchi, 1997 and Wakisaka, 1997).

Table 4 presents the retention models separately by educational group for the United States and British samples, and an interesting pattern emerges.[8] The largest effect of maternity leave coverage on retention is seen for women with some college education, with strong effects as well for women with lower levels of education. Among college graduates, in contrast, there is no significant effect of coverage on retention, suggesting that these women may be better able than the less-educated women to arrange a job-protected leave if they want one even in the absence of formal coverage.

Conclusions

Despite changes in recent years, women with young children are still much less likely to be employed than other women. Drawing upon large nationally representative labour force surveys from the United States, Britain, and Japan, we find that young children still exert a strong negative effect on women's employment in all three of our sample countries. This

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7. As noted above, the lower coefficient on maternity leave coverage for Britain may reflect the fact that coverage is measured in error.

8. The Japanese sample is too small to permit separate analysis by educational level.

effect is especially strong in Britain, and it would be interesting to explore the reasons for this in further research.[9]

We also look at whether family leave coverage affects the employment decisions of women with young children, using panel datasets and taking advantage of the variation in family leave coverage within each of our three countries. We find that maternity leave coverage has a very strong effect on women's retention with their firms after childbirth. This effect is especially marked in Japan, a result that merits further research.

Our results suggest that the recent extensions of family leave coverage in our three sample countries are likely to have positive effects on the employment of women with young children. Tracking these employment changes, and related earnings changes, as the policy extensions take hold is an important avenue for further research.

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9.   One possible explanation is the relatively high cost of child care for pre-school age children in Britain. Both Japan and the United States have more child care available for infants and toddlers than Britain, and the cost of that care is lower, relative to female earnings, than it is in Britain (Waldfogel, 1998).

Table 1: Employment Rates of Women Age 18-45 in the United States, Britain, and Japan by Age of Youngest Child and Educational Level (%)

A. UNITED STATES

ALL WOMEN	All N=123,783	College degree N=26,381	Some college N=38,298	High school N=42,405	< High school N=16,699
Youngest child <1 (N=7,637)	45.95	62.11	53.91	43.48	20.18
Youngest child >=1 & <5 (N=25,518)	53.66	69.01	60.01	53.16	28.18
Youngest child >=5 & <18 (N=42,034)	70.58	81.94	75.86	70.91	47.02
No children <18 (N=48,594)	76.65	88.83	76.09	75.10	48.40

MARRIED WOMEN	All N=71,763	College grads N=16,614	Some college N=20,431	High school N=25,967	< High school N=8,751
Youngest child <1 (N=5,999)	49.54	61.84	55.61	45.76	23.60
Youngest child >=1 & <5 (N=18,979)	56.22	68.09	60.13	54.78	31.33
Youngest child >=5 & <18 (N=30,148)	71.40	80.15	75.38	71.23	50.13
No children <18 (N=16,637)	79.26	88.10	83.00	75.66	50.55

UNMARRIED WOMEN	All N=52,020	College grads N=9,767	Some college N=17,867	High school N=16,438	< High school N=7,948
Youngest child <1 (N=1,638)	32.78	68.75	46.46	36.52	14.95
Youngest child >=1 & <5 (N=6,539)	46.22	80.74	59.64	49.20	23.81
Youngest child>=5 & <18 (N=11,886)	68.50	90.03	76.96	70.05	42.15
No children<18 (N=31,957)	75.29	89.27	73.37	74.74	47.37

Source: Tabulated from the March 1992-1995 CPS.

B. BRITAIN

ALL WOMEN	All N=91,551	College grads N=8,578	Some college N=14,001	High school N=49,484	< High school N=18,279
Youngest child <1 (N=5,845)	40.41	66.48	61.92	39.61	15.72
Youngest child >=1 & <5 (N=19,140)	47.95	70.04	67.46	48.72	26.04
Youngest child >=5 & <18 (N=26,887)	68.95	85.82	82.44	71.58	54.00
No children <18 (N=39,679)	77.82	85.57	73.37	81.97	61.38
MARRIED WOMEN	**All N=55,498**	**College grads N=5,094**	**Some college N=8,072**	**High school N=30,044**	**< High school N=11,625**
Youngest child <1 (N=4,605)	45.84	66.99	63.74	44.07	19.41
Youngest child >=1 & <5 (N=14,462)	53.96	69.97	69.98	53.78	32.73
Youngest child >=5 & <18 (N=20,775)	73.78	86.43	84.05	75.84	61.06
No children <18 (N=15,656)	85.39	91.30	91.00	87.85	69.90
UNMARRIED WOMEN	**All N=36,053**	**College grads N=3,484**	**Some college N=5,929**	**High school N=19,440**	**< High school N=6,654**
Youngest child <1 (N=1,240)	20.24	57.14	40.35	23.37	9.56
Youngest child >=1 & <5 (N=4,678)	29.37	70.83	50.00	33.30	14.58
Youngest child >=5 & <18 (N=6,112)	52.52	82.77	74.77	56.94	34.88
No children <18 (N=24,023)	72.90	82.01	65.42	78.14	52.39

Source: Tabulated from the 1993-1995 British Labour Force Survey.

C. JAPAN

ALL WOMEN	All N=50,599	College degree N=4,157	Some college N=12,031	High school N=29,386	< High school N=5,025
Youngest child <1 (N=2,159)	28.02	41.89	27.63	26.42	21.09
Youngest child >=1 & <5 (N=8,029)	42.12	47.28	42.25	40.80	45.71
Youngest child >=5 & <18 (N=19,257)	73.04	64.79	68.99	74.19	76.35
No children <18 (N=21,154)	81.74	85.32	85.71	81.11	68.47

MARRIED WOMEN	All N=32,846	College grads N=2,528	Some college N=6,883	High school N=19,724	< High school N=3,711
Youngest child <1 (N=2,151)	27.94	41.89	27.67	26.38	19.51
Youngest child >=1 & <5 (N=7,896)	41.58	47.05	41.92	40.16	44.71
Youngest child >=5 & <18 (N=17,037)	71.00	62.90	65.26	72.18	76.29
No children <18 (N=5,762)	64.04	65.25	60.30	64.05	69.39

UNMARRIED WOMEN	All N=17,753	College grads N=1,629	Some college N=5,148	High school N=9,662	< High school N=1,314
Youngest child <1 (N=8)	50.00	-	00.00	50.00	60.00
Youngest child >=1 & <5 (N=133)	74.44	66.67	78.95	77.22	65.38
Youngest child >=5 & <18 (N=2,220)	88.74	95.24	93.65	88.83	76.69
No children <18 (N=15,392)	88.36	92.29	92.58	87.84	67.81

Source: Employment Status Survey, 1992.

Table 2: Employment of Women in the U.S., Britain, and Japan: Marginal Effects from Probit Models

A. UNITED STATES

	(1) Unmarried women	(2) Married women
Age	.0050*	.0023*
	(.0003)	(.0003)
ED4	.3271*	.3067*
	(.0059)	(.0066)
ED3	.2598*	.2334*
	(.0059)	(.0064)
ED2	.2199*	.1774*
	(.0057)	(.0062)
Husband ED4		-.0076
		(.0077)
Husband ED3		.0657*
		(.0067)
Husband ED2		.0564*
		(.0062)
Child < 1	-.3448*	-.3030*
	(.0134)	(.0078)
Child < 5	-.2226*	-.2237*
	(.0071)	(.0055)
Child < 18	-.0666*	-.0664*
	(.0059)	(.0051)
Other income	-.0020*	-.0019*
(in thousands)	(.0001)	(.0001)
Pseudo R^2	.1307	.0852
Observations	52,020	71,763

B. BRITAIN

	(1) Unmarried women	(2) Married women
Age	.0112*	.0022*
	(.0004)	(.0004)
ED4	.2825*	.2280*
	(.0092)	(.0073)
ED3	.1882*	.2174*
	(.0084)	(.0060)
ED2	.2790*	.1528*
	(.0072)	(.0051)
Husband ED4		.0277
		(.0084)
Husband ED3		.0731*
		(.0080)
Husband ED2		.0849*
		(.0056)
Child < 1	-.4912*	-.4495*
	(.0152)	(.0087)
Child < 5	-.4275*	-.3544*
	(.0084)	(.0061)
Child < 18	-.2701*	-.1391*
	(.0084)	(.0057)
Other income	-.0013*	-.0314*
(in thousands)	(.0049)	(.0098)
Pseudo R^2	.1411	.1127
Observations	36,053	55,498

C. JAPAN

	(1) Unmarried women	(2) Married women
Age	.0034*	.0141*
	(.0003)	(.0006)
ED4	.1857*	.1257*
	(.0111)	(.0153)
ED3	.1792*	.0509*
	(.0086)	(.0122)
ED2	.1167*	.0204*
	(.0076)	(.0103)
Husband ED4		-.1170*
		(.0109)
Husband ED3		-.0602*
		(.0146)
Husband ED2		-.0094*
		(.0091)
Child < 1	-.1781*	-.3100*
	(.0807)	(.0133)
Child < 5	-.0970*	-.1917*
	(.0222)	(.0087)
Child < 18	.0140*	.0245*
	(.0071)	(.0083)
Other income	-.0001*	-.0003*
(in thousands)	(.0000)	(.0000)
Pseudo R^2	.3080	.4466
Observations	17,678	32,791

Notes: ED4 is a college degree (US) or university degree (Britain and Japan); ED3 is some college (US), A-levels (Britain), or junior college (Japan); ED 2 is high school (US and Japan) or some qualifications (Britain); the omitted educational category is less than high school (US), no qualifications (Britain), or junior high school (Japan). Models for the US and Britain include controls for year. Models for the US also include controls for African-American and Hispanic. The US sample is from the March 1992-1995 CPS; the British sample is from the 1992-1995 LFS; the Japanese sample is from the 1992 Employment Status Survey.

Table 3: Retention Rates of Mothers in the United States, Britain, and Japan (%)

A. UNITED STATES	All N=2213	College degree N=283	Some college N=532	High school N=847	< High school N=551
Percentage in work prior to most recent birth	63.35	83.04	66.35	64.70	48.28
Percentage of those in work who were covered by employer maternity leave policy	64.98	69.79	64.02	68.25	55.26
Percentage of those covered by employer policy who returned to same employer	64.32	68.90	65.93	62.84	60.54
Percentage of those not covered by employer maternity leave policy who returned to same employer	42.57	52.11	38.58	43.10	40.34
Total percentage (of those in work) who returned to same employer	56.70	63.83	56.09	56.57	51.50

B. BRITAIN	All N=2453	Univ degree N=209	A-levels or higher N=634	Some qual N=1302	No qual N=308
Percentage in work prior to most recent birth	53.32	75.12	61.99	48.16	41.56
Percentage of those in work who qualified for statutory maternity leave	52.59	56.06	58.27	51.52	39.84
Percentage of those qualified for statutory maternity leave who returned to same employer	60.06	73.86	70.31	50.77	49.02
Percentage of those not qualified for statutory maternity leave who returned to same employer	43.20	69.57	48.17	35.20	40.26
Total percentage (of those in work) who returned to same employer	52.06	71.97	61.07	43.22	43.75

C. JAPAN	All N=269	Univ degree N=36	Junior college N=96	High school N=129	Jr. high school N=8
Percentage in work prior to most recent birth	40.5	47.2	38.5	40.3	37.5
Percentage of those in work who were covered by formal employer maternity leave policy	82.6	100.0	73.0	84.6	66.7
Percentage of those covered by employer maternity leave policy who returned to same employer	60.0	70.6	59.3	56.8	50.0
Percentage of those not covered by employer maternity leave policy who returned to same employer	5.3	-	10.0	0.0	0.0
Total percentage (of those in work) who returned to same employer	50.5	70.6	46.0	48.1	33.0

Notes: Tabulated from the NLSY (United States), NCDS (Britain), and the Panel Survey on Consumers (Japan). United States and British samples include both married and unmarried women; Japanese sample includes married women only.

Table 4: Retention of Women after Childbirth in the United States, Britain, and Japan: Marginal Effects from Probit Models

A. UNITED STATES

	(1) All women	(2) All women	(3) ED4	(4) ED3	(5) ED2	(6) ED1
Age at birth	-.0164*	-.0220*	-.0266*	-.0333*	-.0120	-.0323*
	(.0043)	(.0045)	(.0127)	(.0093)	(.0069)	(.0108)
ED4	.2001*	.1844*				
	(.0473)	(.0481)				
ED3	.0750	.0553				
	(.0418)	(.0423)				
ED2	.0585	.0430				
	(.0385)	(.0389)				
Not first birth	.1756*	.1666*	.2435*	.1299*	.1634*	.1438*
	(.0282)	(.0285)	(.0667)	(.0566)	(.0458)	(.0701)
Covered by maternity leave	.2318*	.2001*	.1364	.2694*	.1664*	.1894*
	(.0289)	(.0297)	(.0743)	(.0599)	(.0480)	(.0686)
Large firm (1000+)		.1813*	.0816	.2529*	.1746*	.1414
		(.0502)	(.0954)	(.0997)	(.0833)	(.1564)
Medium firm (100-999)		.1387*	-.0205	.2287*	.1045	.2249
		(.0403)	(.0992)	(.0719)	(.0645)	(.1188)
Union		.0387*	.1213*	.0479	.0369	.0201
		(.0146)	(.0522)	(.0332)	(0248)	(0253)
Pseudo R^2	.0639	.0802	.1091	.1132	.0682	.0780
Observations	1,396	1,396	235	350	548	263

B. BRITAIN

	(1) All women	(2) ED4	(3) ED3	(4) ED2	(5) ED1
Age at birth	.0320*	.0670*	.0264*	.0425*	-.0052
	(.0047)	(.0196)	(.0083)	(.0067)	(.0125)
ED4	.1649*				
	(.0599)				
ED3	.0973*				
	(.0494)				
ED2	.0567				
	(.0466)				
Not first birth	.0685*	.0402	.0572	.0650	.2427*
	(.0317)	(.0754)	(.0546)	(.0472)	(.1071)
Covered by maternity leave	.1636*	-.0303	.2256*	.1673*	.1679
	(.0310)	(.0796)	(.0540)	(.0455)	(.1022)
Pseudo R^2	.0873	.0708	.0614	.0815	.0399
Observations	1,305	157	393	627	128

C. JAPAN

	(1) All women	(2) All women
Age at birth	.0360	.0371
	(.0194)	(.0197)
ED4	.2092	.1683
	(.3986)	(.3989)
ED3	.1445	.1270
	(.3846)	(.3489)
ED2	.1063	.0413
	(.3799)	(.3816)
Not first birth	.0329	.0908
	(.1151)	(.1216)
Covered by maternity leave	.7587*	.7303*
	(.2180)	(.2259)
Large firm (1000+)		.1831
		(.2187)
Medium firm (100-999)		.2378
		(.1351)
Union		.0387*
		(.0146)
Pseudo R^2	.5536	.5710
Observations	109	109

Note: Sample for the retention models includes only women who were in work at the time of their most recent birth. All models for the U.S. include controls for African-American and Hispanic; models 2-6 include controls for government employees for those years for which the variable is available.

Appendix

A.   Sample means for United States

Current Population Survey, March 1992-1995 (Tables 1 and 2)

Variable	All Women (N=123,783)	Married (N=71,763)	Unmarried (N=52,020)
Employed	0.6795	0.6738	0.6874
Married	0.5798	1.0000	0.0000
Age	32.6203	34.3620	30.2158
Ed4	0.2131	0.2315	0.1878
Ed3	0.3094	0.2847	0.3435
Ed2	0.3426	0.3618	0.3160
Ed1	0.1350	0.1219	0.1528
Husband Ed4	-	0.2703	-
Husband Ed3	-	0.2631	-
Husband Ed2	-	0.3323	-
Husband Ed1	-	0.1344	-
Youngest child <1	0.0617	0.0836	0.0315
Youngest child 1-<5	0.2061	0.2645	0.1257
Youngest child 5-<18	0.3395	0.4201	0.2285
No children under 18	0.3927	0.2318	0.6143
Other income (1,000 dollars)	26.9941	35.6673	15.0316

National Longitudinal Survey of Youth, 1979-1993 (Tables 3 and 4)

Variable	All Women with Children, Working Prior to Last Birth (N=1402)
Age	29.9387
Ed4	0.1676
Ed3	0.2518
Ed2	0.3909
Ed1	0.1898
Not first birth	0.6106
Covered by maternity leave	0.6498
Log wage	2.0775
Experience	8.6239
Tenure	3.7884
Number of children	1.7468
Part-time	0.2557
Large firm	0.169
Medium firm	0.2725
Union	0.1448
Government	0.0164
African-American	0.2332
Hispanic	0.1711

B.   Sample means for Britain

Labour Force Survey, 1992-1995 (Tables 1 and 2)

Variable	All Women (N=91,551)	Married (N=55,498)	Unmarried (N=36,053)
Employed	0.6658	0.6957	0.6198
Married	0.6062	1.0000	0.0000
Age	31.7499	34.2503	27.9010
Ed4	0.0937	0.0918	0.0966
Ed3	0.1529	0.1454	0.1645
Ed2	0.5405	0.5414	0.5392
Ed1	0.1997	0.2095	0.1846
Husband Ed4	-	0.1290	-
Husband Ed3	-	0.0947	-
Husband Ed2	-	0.6118	-
Husband Ed1	-	0.1525	-
Youngest child <1	0.0638	0.0830	0.0344
Youngest child 1-<5	0.2091	0.2606	0.1298
Youngest child 5-<18	0.2937	0.3743	0.1695
No children under 18	0.4334	0.2821	0.6663
Other income (in pounds)	18.5386	8.9305	33.3288

National Child Development Study, 1979-1993 (Tables 3 and 4)

Variable	All Women with Children, Working Prior to Last Birth (N=1,333)
Age	32.3961
Ed4	0.1178
Ed3	0.2948
Ed2	0.4704
Ed1	0.1170
Not first birth	0.5861
Covered by maternity leave	0.5259
Log wage	1.5662
Experience	12.2104
Tenure	4.4337
Number of children	1.7749
Part-time	0.5446

C.   Sample means for Japan

Employment Status Survey, 1992 (Tables 1 and 2)

Variable	All Women (N=50,569)	Married (N=32,791)	Unmarried (N=17,768)
Employed	0.6985	0.5989	0.8829
Married	0.6491	-	-
Age	32.6738	35.9009	26.7031
Ed4	0.0822	0.0770	0.0918
Ed3	0.2378	0.2096	0.2900
Ed2	0.5808	0.6005	0.5442
Ed1	0.0993	0.1130	0.0740
Husband Ed4	-	0.2724	-
Husband Ed3	-	0.0567	-
Husband Ed2	-	0.5109	-
Husband Ed1	-	0.1601	-
Child <1	0.0427	0.0655	0.0005
Child 1-<5	0.1587	0.2404	0.0075
Child 5-<18	0.3806	0.5187	0.1250
No children	0.4181	0.1754	0.8670
Other income (in 100,000 yen)	54.3591	56.0873	51.1536

Panel Survey on Consumers, 1994 and 1995 (Tables 3 and 4)

Variable	All Women with Children, Working Prior to Last Birth (N=109)
Age	28.6239
Ed4	0.1560
Ed3	0.3394
Ed2	0.4771
Ed1	0.0275
Not first birth	0.5321
Covered by maternity leave	0.8257

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