

***Unemployment Insurance-Employment
Insurance Transition: An Evaluation of
the Pre-2001 Maternity and Parental
Benefits Program in Canada***

Final Report

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Abstract

This research uses the Canadian Out of Employment Panel (COEP) (1995-1998) to investigate implications of the change from Unemployment Insurance (UI) to Employment Insurance (EI) for four aspects of a maternity/parental leaver's experience of the maternity and parental benefits programme: 1) the probability of benefit receipt; 2) the probability of returning to paid employment *before* the end of the maternity/parental benefit entitlement; 3) the probability of returning to paid employment *at all* at some point during or after the benefit period; 4) the probability of returning to the *same job*.

Although fathers are also eligible for parental benefits, these benefits are still largely utilized by mothers. Hence, for simplicity, the study uses women or mothers to denote all maternity/parental leavers throughout the text. COEP data indicate that 90.4 percent of maternity/parental respondents in the COEP survey reported benefits under UI; 89.6 percent reported benefits under EI (not a statistically significant difference). However, there may have been a shuffling of who actually receives benefits. That is, some groups of leavers who did not receive benefits under UI did receive benefits under EI; other groups who received benefits under UI no longer received benefits under EI. For example, the leavers who received benefits under EI were, on average, more affluent, better-educated, more likely to be aged 25 to 34, more likely to be employed by a large firm and more likely to have held more than one job in the period preceding the birth.

For a worker with a maternity/parental job separation, the probability of receiving UI/EI depends upon a number of factors. Results from our multivariate analysis show that: 1) leavers aged 35 to 44 are more likely to be benefit recipients; 2) leavers who are permanent employees are more likely to be benefit recipients; 3) leavers who worked for larger firms (more than 100 employees) are more likely to be benefit recipients; 4) leavers whose Record of Employment (ROE) job started during the approximately 30 week reference period prior to the separation are less likely to be benefit recipients; 5) the switch from UI to EI did not have a statistically significant impact on the probability of benefit receipt, controlling for other relevant characteristics.

COEP data indicate that 31.0 percent of workers with a maternity or parental job separation returned to paid work before 27 weeks (the maximum entitlement period) under UI; 32.2 percent returned early under EI. About 9 percent had not yet returned to paid employment by 75 weeks after the job separation began (under either system). 85.8 percent returned to the same job under UI; 84.0 percent returned to the same job under EI.

Further econometric work on the probability of returning to paid employment early (i.e., before the end of the EI/UI entitlement period) indicates that: 1) younger workers are more likely to return early and older workers are less likely to return early; 2) workers with less than high-school education are less likely to return early and workers with post-secondary education are more likely to return early; 3) financial pressure can increase the probability of returning early (e.g., workers who are single at the time of the ROE or

whose spouses are not working full-time are more likely to return early; low liquid assets are associated with an early return to paid work; workers with mortgages to pay are more likely to return early); 4) workers who receive UI or EI benefits are less likely to return early; 5) there has been no apparent impact of the switch from UI to EI on the probability of an early return to paid employment.

The principal results of a multivariate analysis of the probability of returning to and staying in paid employment by 75 weeks after the maternity/parental separation began show that: 1) younger and less experienced (aged 15-24) workers are less likely to have returned; 2) workers experiencing problems in finding suitable childcare are particularly less likely to have returned.

Finally, the probability of returning to the same job (for those who returned to paid employment) is determined by slightly different factors: 1) those with higher education have a higher probability of returning to the same job; 2) characteristics of the pre-birth job are important (e.g., unionized workers are more likely to return to the same job; those working for larger firms are more likely to return); 3) having received UI or EI is not important for return to the same job; 4) the switch from UI to EI did not influence the probability of returning to the same job; 5) those workers whose leaves exceeded provincially available leaves were less likely to return to the same job.

1. Introduction

In Canada, partial wage replacement is provided to new parents who take time away from a paid job to care for their infants through the maternity and parental benefits component of the Employment Insurance (previously Unemployment Insurance) programme. Thus, until 1997, applicants for maternity/parental benefits required 20 weeks of paid employment with either 15 hours per week or a minimum weekly earnings. The switch from Unemployment Insurance (UI) to Employment Insurance (EI), means that since January 1997 applicants require 700 hours¹ of paid employment -- the equivalent of 20 weeks with 35 hours per week (with no minimum earnings restriction). Once eligible for benefits, birth mothers are entitled to 15 weeks of maternity benefits following a 2-week waiting period with benefits paid at a rate of 55 percent of previous earnings.² An additional 10 weeks of parental benefits which can be split between mother and father (or are available to adoptive parents) are then available on the same terms. These entitlements were unaffected by the 1997 move to Employment Insurance. However, as of January of 2001, the parental benefit period has been extended so that the full package of maternity plus parental benefits is now one year.

Compared to the amount of research directed at the UI/EI regular benefits programme, relatively little economics research has focussed upon the maternity and parental benefits component of the Canadian UI/EI system (though see Marshall, 1999; Phipps, 1994; 2000; Ten Cate, 2000). The availability of the Canadian Out-of-Employment Panel (COEP) data, together with the change from the UI to the EI system provide an excellent opportunity for additional study of the consequences of maternity/parental benefits for new Canadian mothers.³

This research investigates implications of the change from UI to EI for four aspects of women's experience of the maternity and parental benefits programme: 1) the probability of benefit receipt; 2) the probability of returning to paid employment *before* the end of the maternity/parental benefit entitlement; 3) the probability of returning to paid employment *at all* at some point during or after the benefit period; 4) the probability of returning to the *same job*. The consequences of the switch from UI to EI for the probability of receiving benefits was studied by Phipps (1994 and 2000) using Labour Market Activity Survey (LMAS) data for the 1988-90 time period and simulating likely consequences of the new programme regime. However, the COEP survey is a superior data source for the study of this issue since it provides the possibility of studying women both before and after the programme change.

¹ Since January 2001, this has been changed to 600 hours.

² Since there is a ceiling on the benefit amount payable, some higher-income women receive less than 55 percent. Some lower-income women are entitled to a family-related top-up to their benefits which would increase the replacement rate above 55 percent.

³ Although fathers are also eligible for parental benefits, these benefits are still largely utilized by mothers. Hence, for simplicity, I refer to women and mothers throughout the text and most of the analysis in fact focuses upon female claimants.

It is also important to know which characteristics are associated with a higher probability of eventual return to paid employment and especially of a return to the same job. Earlier research by Phipps, Burton and Lethbridge (2000) emphasizes that the long-run negative consequences for earnings of child-related absences from paid employment essentially disappear for women who return to the same job. Marshall (1999) and Ten Cate (2000) use the Survey of Labour and Income Dynamics (SLID) to study the role played by the Canadian maternity and parental benefits system in influencing women's return to paid work after maternity/parental leave. Both authors demonstrate that women who are *not* entitled to UI/EI return to paid work more quickly than those who are entitled. Ten Cate also emphasizes the important role played by provincial maternity leave entitlements.⁴ The recent extension of the maternity/parental benefits package to a total of one year makes it particularly important to know whether some women are forced to return to their paid work early because, for example, of financial pressures. If some women are unable to afford even a 6-month leave, then the extension of benefits to a full year would be of little value to them.

This report is organized in 5 sections. Section 2 outlines the data. Section 3 focuses upon the probability of receiving maternity/parental benefits and how this has been affected by the change from UI to EI. Section 4 focuses on return to paid work issues including: 1) returning before the end of the benefit entitlement; 2) returning by 75 weeks; 3) returning to the same job. Section 5 synthesises the findings of the study and offers a few conclusions.

⁴ The economic consequences of maternity and parental cash benefits programmes have, in general, received relatively little attention, though there has been some recent interest in parental *leave* programmes. See for example, Dalto, 1989, Gruber, 1994 and Waldfogel, 1997 who study implication of parental leaves for women's wage/earnings; Garrett, Wenk, and Lubeck, 1990 and Klerman and Leibowitz, 1994 and 1997 who study implications of parental leaves for labour force participation around the time of childbirth. Ruhm and Teague, 1997 and Ruhm, 1998 use international comparisons to study some of the broader economic consequences (e.g., for economic efficiency; for women's employment and relative wages) of variations in maternity/parental leaves and benefits.

2. Data

This project uses microdata from HRDC's Canadian Out-of-Employment Panel (COEP). The target population for the COEP survey is Canadians aged 15 and over, living in the ten provinces or the territories, who have a job separation or a break/change in employment between July 1995 and September 1998. Survey participants were selected from the HRDC Record of Employment (ROE) administrative file. Selected individuals were then contacted by telephone. The first interview occurred up to 12 months after the separation for which they were selected into the sample. Second interviews were conducted 75 to 97 weeks after the ROE job separation. This study uses eleven cohorts of the COEP survey. These cohorts include individuals who had an interruption in their employment or a job loss occurring between July to September 1995, and October to December 1997, with one additional cohort with job separations between July and September 1998. Each cohort is representative of all individuals with a separation/interruption in that quarter.

The sample selected for analysis in this paper is COEP respondents aged 15-44 who indicate maternity or parental leave as the reason for their job separation in the COEP survey. Note that while we know exactly when the job separation began and ended and why, we do not know the date of birth of the child. Some women may have chosen or been forced for medical reasons to begin their leave prior to the birth of the child. All of our analysis focuses upon the beginning of the leave, which seems reasonable since the amount of time available for the leave/benefit duration is the same regardless of whether the leave is taken before or after the birth of the child.⁵

The change from a weeks-based eligibility rule to an hours-based eligibility rule occurred on January 1, 1997. Hence, in order to study the consequences of the programme change, we will compare: 1) cohorts 1 to 6 who fall within the former UI regime with minimum eligibility requirement of 20 weeks of at least 15 hours each or weekly earnings of at least \$150 (i.e., women whose job separation occurred before January 1, 1997); 2) cohorts 7 and above with job separations which occurred after the switch to a 700 hours eligibility requirement under EI.⁶ In total, we have data available for 1164 respondents⁷ who reported that their job separation was for maternity or parental reasons.⁸ Of these job

⁵ Note that we do not distinguish twins from single births. Since the consequences of adopting an older child for the new parents labour-market behaviour may be rather different than the consequences of adopting an infant/toddler, we exclude maternity/parental separators with no children aged 0 to 2 years.

⁶ During the transition from UI to EI, some claimants had portions of their qualifying periods which occurred in 1996 and hence their weeks of work were automatically converted to hours by multiplying each week by 35 (regardless of how many hours had actually been worked). While it would thus be desirable to pay special attention to members of cohort 13 whose qualifying period falls entirely within the EI regime, the sample of maternity/parental benefits claimants in cohort 13 (68) is too small to be statistically meaningful.

⁷ In total, 1315 men and women reported maternity or parental leave as the reason for their ROE. However, we excluded anyone 45 years or older, anyone who did not have a child aged 0 to 2 years, anyone without a second interview whose leave was not completed by the time of the first interview.

⁸ Note that while the full COEP sample consists of 45,751 observations, a difficulty for research on maternity and parental benefits is that the number of families with newborns or newly adopted children in any particular year is always a small subset of the population.

separations, 631 (54 percent) occurred during the UI period (with 96.8 percent female); 533 (46 percent) occurred during the EI period (91.5 percent female).⁹

⁹ We wondered if the larger percentage of male claimants reflects increased use of the parental benefits programme by men over time. Recall that parental benefits were introduced in 1990. Our data span the period 1995 to 1998. Hence, it is possible that there has been a gradual learning/adoption to the availability of these benefits to men. We were, however, unable to obtain data about the gender composition of parental benefits claimants as this data is currently unavailable from CANSIM. (We were told that there is some question about the accuracy of the number previously available.)

3. *Who reports benefits?*

3.1 Descriptive Analysis

A first question addressed in the paper is whether the switch from UI to EI affected eligibility for maternity/parental benefits. The change from UI to EI means that every hour of paid work counts toward benefit eligibility. This should improve access to benefits for some new parents with non-standard jobs, but the switch to an hours criterion means that workers with low weekly hours must have more weeks of work in order to be eligible. For example, a woman working 20 weeks with 15 hours per week (300 hours) would have been entitled to maternity benefits under the UI system; the same woman would require over twice as many hours to qualify for maternity benefits under the EI system in the period of study.¹⁰ Thus, we expect some women to be eligible for benefits under UI but not EI; and other women to be eligible under EI but not UI. The net effect of the programme change for access to maternity/parental benefits is thus not obvious, a priori.

This is illustrated in Figure 1, re-produced from Phipps (2000). Under UI, claimants required 20 weeks of work and 15 hours per week. Thus, in Figure 1, anyone located in the upper-right quadrant of the diagram would be eligible for UI benefits. Under EI, claimants require 700 hours of employment. The 700-hour rectangular hyperbola is noted in the diagram; anyone located to the right of this curve is eligible for maternity/parental benefits under the EI system. Assuming no change in labour-supply behaviour, claimants whose entitlement status would change as a result of the switch from UI to EI are those located in any of the shaded areas. First, workers with fewer than 15 hours per week but with enough weeks to have accumulated 700 hours would qualify under EI but not under UI (see the unshaded area on the right of the diagram above the rectangular hyperbola but beneath the horizontal line).¹¹ Note, however, that a woman working 14 hours per week would require 50 weeks of paid employment to establish entitlement. A second group of workers will also benefit from the switch from UI to EI -- those with less than 20 weeks of eligible employment but sufficient hours per week to total 700 (see the shaded area on the left side of the diagram above the rectangular hyperbola but to the left of the vertical line). For example, a woman working only 18 weeks, but 40 hours per week would be eligible for maternity/parental benefits under EI but not under UI. On the other hand, disentanglement will occur for women working at least 20 weeks with at least 15 hours per week but without the 700 hours required for EI (see the shaded area underneath the rectangular hyperbola but above both the 15 hour and 20 week lines). For example, a new mother with exactly 15 hours and 20 weeks of employment will have substantially less (300 hours) than the 700 minimum hours required for benefits under the EI system.

¹⁰ Recall that since January 2001, the eligibility requirement has been altered from 700 hours to 600 hours.

¹¹ Unless they had very high earnings.

Phipps (2000), using simulation analysis with the 1988 - 1990 Labour Market Activities Survey, suggested that potential access to these benefits was unlikely to change much as a result of the adoption of EI. And, as indicated in Table 1, this basic finding is again apparent using the COEP data which spans actual implementation of EI.¹² Of maternity/parental respondents to the COEP survey, 90.4 percent report receipt of UI; 89.6 percent report receipt of EI, suggesting no change in average access to benefits.

It is possible that this result is, in part, due to women adjusting their labour supply behaviour in order to remain/become eligible for maternity benefits under the new programme rules (though Phipps 2000 provides evidence which suggests that the maternity benefits system has little impact on women's labour supply behaviour). While the current study makes no serious attempt to study the labour supply behaviour of women prior to childbirth, Table 2 does indicate that women with maternity/parental job separations in the EI period had slightly (3.6 percent) higher average hours of work (34.4 versus 33.2 hours per week for all job separators).¹³ This would be consistent with the labour supply adjustment hypothesis, though it would also be consistent with a slight change in the composition of applicants (discussed in more details below). Another difference noticeable in Table 2 which might be attributable to the switch from a weeks to an hours criterion for eligibility is that women in the EI period are more likely (11.5 percent versus 5.8 percent) to have held more than one job concurrently during the EI period. On the other hand, of course, this could simply mark a change in the composition of jobs available. Again, this study makes no serious attempt to discern the reason for the change noted.

Table 2 illustrates other changes in the characteristics of the individuals who receive benefits.¹⁴ Focussing just on women, who, as noted, make up the vast majority of maternity/parental claimants, Table 2 and Figure 2 indicate that in the EI period, there are significantly more middle-aged¹⁵ women (i.e., aged 25-34 versus 15-24 or 35-44) who report benefits (an increase from 62.5 percent to 76.7 percent); fewer young women (10.6 percent versus 5.0 percent) or old women (26.9 percent versus 18.4 percent).¹⁶

Another difference across the samples to note is that while percentages with less than high-school education are unchanged (5.3 percent versus 5.8 percent), the percentage of women with post-secondary education (either a non-university diploma/certificate or a university degree) has increased significantly in the EI period to about 30 percent in each case (from about 25 percent).

¹² Ten Cate (2000) also uses data (SLID) which spans the implementation of EI (i.e., from 1993 to 1998), however implications of this policy change are not the focus of her research (i.e., she does not make comparisons across the periods). Also, she does not know whether UI/EI benefits received are maternity/parental benefits are regular benefits, though one would assume that in the 6 months following child-birth UI/EI benefits reported would be for maternity/parental purposes.

¹³ Using COEP data for 1996 and 1997, Green and Riddell, 2000 find virtually no change in usual hours of work per week. Sweetman, 2000, finds no change in the hours distribution for all women. However, he finds that fewer *new* jobs have fewer than 15 hours per week in the EI period.

¹⁴ These means are for all who answered a particular question.

¹⁵ This terminology is adopted for convenience. However, since it puts the author into the old category, it should be noted that 25-34 years old are of course not generally considered middle-aged.

¹⁶ If discussed, the differences are significantly so in the sense that the EI figure is more than two standard errors from the UI figure.

Corresponding with the changes in the age composition of the populations noted above, EI maternity/parental benefits claimants are more likely (46.5 versus 38.5 percent) to have other pre-schoolers (i.e., children in addition to the newborn). The proportion of benefit recipients who were single at the time of the ROE is unchanged (11.2 percent in the UI sample and 10.2 percent in the EI sample). Of women who were married at the time of the ROE, fewer women in the EI period had partners working less than 30 hours per week (5.1 percent versus 10.6 percent). On average, EI maternity/parental benefit recipients had significantly more liquid assets¹⁷ (12,801 versus 10,284 constant 1997 dollars).¹⁸ Women in the EI sample are also more likely to be homeowners (80.7 percent versus 73.0 percent, a significant result).¹⁹

In terms of job characteristics, maternity/parental benefits claimants in the EI period are more likely (47.7 percent versus 38.4 percent) to work for large firms (i.e., those employing more than 100 workers). Average hourly wages on the ROE job increased from \$15.12 to \$16.38 (7.2 percent). However, most other job-related characteristics are not significantly different. For example, rates of unionization are roughly the same across the period (about 30 percent), as is the proportion who report themselves to have been permanent employees in their ROE jobs (over 90 percent in both cases). The likelihood of having had a gap in paid employment (or a spell away from the same employer) during the approximately 30 week reference period prior to the maternity/parental separation²⁰ is about the same across the periods (about 16 percent). The probability of having started the ROE job during the reference period is unchanged (about 5 percent).

Although the proportion of women with a maternity-related job separation who received benefits was the same in both periods, this descriptive analysis suggests that there has been a shuffling of who actually qualifies which is not apparent when we simply look at mean receipt of benefits, though the differences have generally more to do with the characteristics of the women than with their jobs. That is, some women who were not previously eligible have become eligible for benefits while other women who were eligible for benefits under UI are no longer eligible under EI. While the numbers moving in either direction are about the same, it appears that the women who became eligible under EI were, on average, more affluent, better-educated, more likely to be aged 25 to 34, more likely to be employed by a large firm and more likely to have held more than one job in the period preceding the birth.²¹

¹⁷ Respondents are asked if they or anyone in the household have liquid assets such as money in the bank, RRSPs, savings bonds which they can draw upon. A second question asks for the dollar amount of these assets.

¹⁸ These figures adjust for inflation using an all-items Consumer Price Index (CANSIM P100,000).

¹⁹ Owning a home mortgage free is relatively rare (about 6 percent) at this stage of the life-cycle and there is no difference across periods in this figure. Hence, we combine respondents who own homes with or without a mortgage.

²⁰ All respondents to the COEP have a reference period of about 30 weeks *before* their job separations occur. The reference period begins at exactly the same time for all respondents in the same quarterly cohort, but because job separations occur in different weeks, the length of the reference period varies from 26 to 40 weeks.

²¹ It is possible that these differences merely reflect sampling variability across small samples. However, we are analysing 1164 observations. This is roughly equivalent to the 957 observations Ten Cate (2000) uses from the SLID or the 1080 observations Phipps (2000) uses from the LMAS.

It is also important to note that only women for whom ROEs were filed are included in the sample. Thus, for example, the self-employed, who would not be eligible for benefits under either regime, are not included.²² Or, women who, knowing themselves to be ineligible for benefits and unable to afford unpaid leave, might simply, for example, take paid vacation time and thus not have a job separation (or a ROE). Such women would also not be included in the sample. Approximately 10 percent of our sample who do not receive benefits are all women who had a job separation but did not receive benefits, presumably because: 1) they were entitled to and able to afford unpaid leave or they were not entitled to unpaid leave but simply quit their jobs, 2) they had mistakenly expected to be eligible for UI/EI; or 3) they had medical complications making unpaid leave essential.

Using microdata from the LMAS, Phipps finds that 73 percent of women who had been in the labour force in 1989 and gave birth in 1990 were eligible for benefits.²³ Using SLID data from 1993 to 1998, Ten Cate finds that 77 percent of women with some employment in the 16 weeks prior to giving birth received benefits. These comparisons with alternative data sources emphasize that the COEP estimate that 90 percent of *job separators* who report benefits is very likely an over-estimate of the percentage of Canadian new mothers with some labour force attachment who receive benefits. Again, the key is that a ROE must have been filed for the woman to be included in the COEP sample.

It is quite possible that with changes in the regulations, a slightly different set of women knew they would be eligible/ineligible and behaved accordingly.²⁴ That is, if it is true that many women know ahead of time whether or not they will be eligible and only take leave/apply for benefits if they think they are likely to receive benefits, then part of the impact of the programme change may have been to change the pool of people who applied rather than the probability that those who applied received benefits.²⁵

3.2 Multivariate Analysis

Using the sub-sample of female COEP respondents whose job separation occurred for maternity or parental reasons, we estimate a probit model of the probability of receiving benefits where the key explanatory variable is a dummy 1 if the respondents ROE

²² Using SLID data, Ten Cate (2000) finds that 10 percent of new mothers with any paid work in the 16 weeks prior to giving birth were self employed.

²³ From the same source, Phipps finds that 62 percent of *all* women giving birth in 1990 were eligible for maternity benefits based on 1989 work history.

²⁴ If we compare the characteristics of all women aged 15 to 44 in the 1994 and 1997 Survey of Consumer Finance data sets available through the Luxembourg Income Study, we find little change between the two years. However, if we focus upon women in this age range who have a youngest child aged less than one year, there does appear to have been a change in mean characteristics generally in the same direction noted in the COEP data. For example, more women have university level education (17.9 percent in 1997 versus 14.8 percent in 1994); hourly wages are slightly higher (\$18.25 versus \$17.08); annual earnings are slightly higher \$12,380 versus \$11,374); however, rates of home ownership are slightly lower (61.2 percent in 1997 versus 64.1 percent in 1994). Thus, it may be that the population of new mothers is slightly different, even in the short period of time discussed here (or given the relatively small population of new mothers, that, by chance, the populations differ slightly in the two time periods).

²⁵ Note that the same point would not generally be true for regular UI claimants.

occurred during the EI period (versus the UI period). Other explanatory variables include family related characteristics, job related characteristics, policy and regional variables. Specifically, we include: the woman's age (dummies to indicate she is aged 15 to 24 years or 35 to 44 years as compared to a base of 25 to 34 years); dummies to indicate the presence of children *other* than the newborn (distinguishing pre-schoolers (0-5) and school-aged (6-17) children); a dummy to indicate that the woman was single at the time of her job separation and a dummy to indicate that she is married but her partner works fewer than 30 hours per week (versus a base case in which the woman is married and her spouse works full-time); home-ownership status; education level; hourly wage and usual weekly hours from the ROE job; a dummy to indicate that the woman worked at more than one job in the period leading up to her maternity/parental separation; a dummy to indicate that she had a period of non-employment in the (roughly) 30 week period prior to the maternity/parental separation (followed either by a return to the same or a different employer); a dummy to indicate that tenure at the ROE job was less than the survey reference period (on average about 30 weeks); establishment size at the ROE job (fewer than 20 employees or more than 100 employees compared to a base of 20 to 99); union status; permanent employee status;²⁶ and region.

Regression results are presented in Table 3.²⁷ Consider, first, the personal/family-related characteristics. Here, the most important association apparent is that older women (i.e., those aged 35-44) are more likely to be eligible for benefits than younger women, presumably since they have had more time to acquire the labour-market experience necessary to gain eligibility. Since it is not possible to know the magnitude of estimated effects merely from examining a table of estimated probit coefficients, Figure 3 presents estimated marginal effects. Thus, we use the estimated probit coefficients to calculate the base case²⁸ probability of receiving UI or EI benefits and then estimate the *change* in that probability we would expect for a woman with different characteristics. As indicated in Figure 3, the probability of reporting UI/EI for the base case woman is 70.8 percent. The probability of reporting UI/EI for a woman aged 35 to 44 is 91.2 percent (an increase of 20.4 percentage points).

Women with children other than the newborn who are school-aged (i.e., 6 to 17 years) are also more likely (than first-time mothers) to be eligible, though this association is only significant at the 10 percent level. The estimated magnitude of the effect (see Figure 3) is an increase of 13.6 percentage points above the base. Presumably women whose other child/children are school aged have had sufficient time between births to re-establish eligibility for benefits. There is no significant difference in the probability of being eligible for benefits for women with another child/children who are pre-school age and women for whom the current birth is the first.

²⁶ Permanent employees are respondents who define themselves as permanent rather than temporary or term, a seasonal employee, on contract, working through a temporary help agency.

²⁷ Non-response to questions used to construct the explanatory variables reduced sample size for estimation to 867 observations.

²⁸ We define the base woman by setting all categorical variables 0 and all continuous variables equal to the sample mean.

Job-related characteristics are important correlates of the probability of being eligible for maternity/parental benefits. First, women who classify their ROE jobs as permanent are much more likely to be eligible -- the probability of reporting benefits is 90.8 percent compared to 70.8 for the base case. Second, employment at a large rather than small or mid-sized establishment is associated with a higher probability of receiving benefits -- an increase of 14.9 percentage points compared to the base. Women whose ROE jobs started in the approximately 30 week period prior to the separation (i.e., women with less than 30 weeks tenure at their ROE job) are less likely to be eligible for benefits. The probability of reporting UI/EI is only 47.6 percent for a woman with less than 30 weeks tenure, a reduction of 23.2 percentage points compared to the base. Having held more than one job concurrently with the ROE job or having had a gap or absence in the 30 weeks prior to the maternity/parental separation do not have statistically significant associations with the probability of receiving benefits, other things equal. Usual weekly hours at the ROE job is also insignificant.²⁹

Finally, the dummy variable indicating that the maternity/parental separation occurred during the EI period is not statistically significant.³⁰ That is, other things equal, there is no apparent difference in the over-all probability of being eligible for maternity/parental benefits after the introduction of EI.

We had hypothesized that women with low hours on the ROE job (less than 15) would benefit from the move to EI (since they would not have been eligible under UI), and we had expected women with high hours (more than 35 hours per week) to benefit from EI (since they would be eligible with fewer weeks). However, when we interacted the dummy variable indicating that the job separation occurred in the EI period with dummy variables for low and high hours, no significant association was apparent. Similarly, we had expected women holding more than one job during the period leading up to the birth of their child to be more likely to be eligible under EI, but again, an interaction of the concurrent jobs dummy variable with the EI-period dummy was not statistically significant.³¹

²⁹ The estimated coefficient on union coverage is negative and statistically significant (though women who are in unions have many other characteristics likely to increase the probability of receiving benefits). In fact, sample size for union workers not reporting benefits is rather small (only 29 observations) so little emphasis should be placed on this finding.

³⁰ This finding is reasonably robust to specification. In 11 of 12 variants of the model reported in Table 3, we find the EI dummy to be negative but insignificant. If we do not control for tenure on the ROE job, employment concurrent with the ROE job and gaps and absences during the 30 weeks prior to the ROE job, then we find women in the EI period are *less* likely to be eligible for benefits.

³¹ A relatively small sample size meant that we had to use some regional rather than provincial dummies. Thus, we are unable to do a thorough analysis of the impacts of the programme change by province. We also estimated all models using quarterly female provincial unemployment rates rather than regional dummies. This variable was not statistically significant in a specification otherwise similar to that reported in Table 3, which controls for the woman's individual experience of unemployment in the period preceding birth of her child. If the tenure and gap/absence variables are eliminated from the specification, then, not surprisingly, a higher unemployment rate is associated with a lower probability of receiving maternity/parental benefits.

4. A Return to Paid Work?

4.1 Descriptive Analysis

Unlike regular UI/EI recipients, once eligible, all new mothers are entitled to the *same* benefit period. Birth mothers are entitled to 15 weeks following a 2-week waiting period. Additionally, women are entitled to 10 weeks of parental benefits, though this can potentially be shared with a spouse. Thus, the total entitlement of paid maternity/parental benefits is 25 weeks following a 2-week waiting period. This entitlement period did not change as a result of the move from UI to EI in 1997. However, since January of 2001, parental benefits have been extended so that the total entitlement is now 52 weeks. Given this major change in policy, it is particularly interesting to study which characteristics are associated with women returning to paid employment *before* their entitlement has been exhausted.

The average duration of all maternity/parental job separations taken by our sample of women in the period 1995 to 1998 was 35.0 weeks (including separations which were still in progress at the time of the second COEP interview).³² This is slightly longer than the estimates obtained with SLID data by Ten Cate (2000) and Marshall (1999) (33.4 weeks and 6.4 months, respectively). This again illustrates the point that the COEP sample is missing women who took only a very short time off after giving birth. The average duration of separations reported in the COEP during the UI period was 34.2 weeks while the average duration during the EI period was 35.8 weeks (a statistically significant increase). If we consider only leaves which were complete at the time of the second interview (i.e., the woman had returned to paid employment), the average duration was 28.7 weeks in the UI period and increased to 29.7 weeks in the EI period.³³

Figures 9 and 10 illustrate the frequency pattern of leaves for all maternity/parental separators and just for women, respectively.³⁴ These charts suggest a concentration of leave durations around the benefit entitlement period. Since a two-week waiting period is required before benefit payment begins, a woman who took the full amount of maternity and parental benefits available would have a total job separation of 27 weeks, and the modal frequency is, in fact, 27 weeks both before and after the programme change. During the UI period, 14 percent of all respondents reported a total separation of 27 weeks; during the EI period only 9 percent reported a separation of exactly

³² As noted by Ten Cate (2000), the average duration of provincial maternity leaves is 35 weeks, emphasizing the potential importance of the legal entitlement to take leave in influencing women's market work patterns after childbirth.

³³ Durations are much shorter for men (who would only have access to 10 weeks of parental benefits). See Table 1.

³⁴ Despite the small number of men who take parental leaves, there is a noticeable spike around 10 weeks when men are included in the sample, particularly in the EI period.

27 weeks.³⁵ It is also clear that large numbers of women returned to paid work either a few weeks before or after the 27-week entitlement.

Despite the spikes around 27 weeks, it is still true that 31.0 percent of women returned to paid work before they had used up their full 27-week benefit entitlement in the UI period; 32.2 percent did not exhaust in the EI period (this is not a significant difference).

On the other hand, while a majority of new mothers return to paid employment at some stage after their leave, COEP data indicate that 75 weeks after the maternity/parental separation began,³⁶ about 9 percent of respondents had not returned to paid work (and this was true for both the UI and the EI samples. Note that this is dramatically different from similar results for European countries where longer durations of maternity/parental benefits have been available for some time. Gustafsson, et al. (1996) report that 18 months after the birth of a first child, 62 percent of women in West Germany had still not returned to paid employment; 34 percent of women in Sweden had not returned; 66 percent of women in the UK had not returned.³⁷ On the other hand, Garrett, et al., 1990, using NLSY data for the US for the period 1979 to 1986 find that 25 percent of women did not ever leave the labour force; 74 percent had returned by 1 year.

The final dimension of women's labour market experiences post child-birth which we study in this research is whether or not they return to the same job. Previous research (Phipps, Burton and Lethbridge, 2000) suggests that women who return to the same job after having a child-related interruption to paid employment do not suffer the same future income penalty as those who change jobs. Hence, another important question which can be asked using the COEP data is how many women return to the same job following their maternity job separation and how this has changed as a result of the move from UI to EI. Table 1 indicates that, of those who had returned to paid work, 85.8 percent returned to the same job in the UI period; 84.0 percent returned to the same job in the EI period (this is not a statistically significant difference).

4.2 Multivariate Analysis

Whether or not a woman who has recently given birth returns to paid employment and when she returns to paid employment must be the net result of a complicated interaction of processes. Others who have studied this issue in the past (e.g., Garrett, et al., 1990; Gustafsson, et al., 1996; Marshall, 1999) have emphasized the importance of opportunity cost, predicting that women with more human capital (e.g., higher levels of education or more work experience, potentially proxied by age) will return to paid work more quickly

³⁵ Again, notice that the COEP frequency distribution lacks the same spike at less than 1 month total duration apparent in SLID data for 1993/94. Marshall (1999) finds that 21 percent of women are back at work within one month of giving birth. This set of women presumably includes the self-employed as well as some other women who know they are not eligible and so do not take more than vacation time; hence our sample is not entirely representative of the entire population of women/men with new babies.

³⁶ Since the time between the ROE and the second interview can vary across respondents, we calculated the number of respondents who had not yet returned to paid work at the end of 75 weeks (the shortest period of time between a ROE and second interview apparent for our sample).

³⁷ Sweden and Germany offer very long-term benefits, though the UK does not, so the UK result is interesting.

because they lose more for each additional week they remain away from their paid jobs. This effect could be heightened in the Canadian case by the fact that higher-income women receive lower effective replacement rates than the nominal 55 percent and in some cases may even be required to pay back some benefits at tax time. Note that even a 55 percent replacement rate is much lower than is offered in many European countries (see Phipps, 1995).

We might also expect women with good jobs to be more likely to want to return to them. In addition, some good jobs might have implicit expectations about professional performance requiring a relatively early resumption of responsibilities. On the other hand, if sufficiently bad, some jobs might actually disappear (i.e., be offered to someone else) despite the legal requirement that they be held for a woman on maternity leave. Either way, characteristics of the job, rather than simply of the woman may be important for explaining when/if she returns to paid work.

Tastes with respect to work inside or outside the home will presumably also affect a woman's decision about return to paid work after childbirth. Some women may be more attached to the paid labour market than others and thus would be expected to return more quickly. "Attachment" is not observable, though it may be indicated by job tenure or hours usually worked on the job prior to child-birth.

Women with fewer additional financial resources (e.g., lower other family income due to single-parenthood or low spouses income; few liquid assets) may not be able to afford long absences from paid employment. Or, despite reasonable levels of resources, women who have significant financial commitments (e.g., to making mortgage payments) may feel pressure to return to paid work more quickly.

Additional children in the family would increase the value of staying at home, though they would also increase financial need so the net implications of having other children is somewhat ambiguous. Presumably, the consequences of having other pre-school children will be different from the consequences of having other school-aged children (e.g., staying home means time with the pre-schooler as well as savings in terms of daycare for *both* the pre-schooler and the newborn). Lack of suitable childcare could deter return to paid employment.³⁸

4.2.1 Returning Early

We begin our multivariate analysis by estimating a probit model of the probability of a new mother returning to paid employment early (i.e., before benefit entitlement is

³⁸ Poor health (e.g., post-partum depression) might be expected to limit the possibility of returning to paid work. We experimented with including this variable, but did not find health to be significantly associated with the duration of maternity/parental separations. However, information about health status was only collected at the time of the second interview (i.e., at least 75 weeks after the job separation). We do not have earlier measures of health status, so there may be a timing problem in the information we have available. Thus, since maintaining health status in the analysis meant a further restriction of sample size which did not seem worthwhile. It is also worth noting that only 1.5 percent of those reporting health status reported less than good health.

exhausted at 27 weeks).³⁹ As noted above, this issue seems particularly relevant in light of the recent expansion of the maternity/parental benefit package to one year. If, for example, financial hardship is deterring some women from taking a full 27-week entitlement, then it seems unlikely they will be able to afford a full year away from their paid work, no matter how much they may wish to do so.

Explanatory variables included in this regression are motivated by the discussion above. Thus, we include measures of: 1) opportunity cost (e.g., education, age as a proxy for experience and hourly wage on the ROE job prior to the separation); 2) financial resources/pressures (e.g., liquid assets available to the household, home-ownership;⁴⁰ presence of a husband with a full-time job); 3) family status (presence of pre-school children other than the newborn or school-age children⁴¹); 4) job characteristics of the job held prior to the leave (e.g., permanent employee status, firm size, union status); 5) work history/labour market attachment (e.g., less than 30 weeks tenure on the ROE job; usual weekly hours on the ROE job, experience of spells without paid work during the period preceding the birth; multiple concurrent job-holding in the period preceding the birth); 6) region; 7) policy parameters (benefit replacement rate, receipt of UI/EI, UI versus EI dummy).⁴²

Regression results are available in Table 4. Consider, first, human capital characteristics. Younger women are more likely to return to work early; older women are less likely to return to paid employment before they have exhausted their entitlements. Estimated marginal effects are illustrated in Figure 4. The base case woman has a 47.5 percent probability of returning to paid work before 27 weeks. In contrast, a younger woman (15 to 24 years versus 25 to 34 years, other characteristics constant) has a 64.2 percent probability of returning early; an older woman (aged 35 to 44 years) has a 34.0 percent probability of returning early. These findings may well reflect the fact that younger women are in the building stage of their careers and fear that a long absence from paid work may be detrimental to career progress. These results resemble findings for Sweden and Germany obtained by Gustafson, et al., 1996. In contrast, these authors find that older women return more quickly in the UK.

Table 4 also indicates that women with less than a high-school education are less likely to return to work early; women with post-secondary educations are more likely to return to

³⁹ We say a woman has returned early if the total duration of her separation from the ROE job is less than 27 weeks.

⁴⁰ Although we would have liked to include other household income as a measure of financial resources available, this variable may not be particularly well-measured in the COEP. First, we have only a 4-week rather than an annual measure. Second, for 5.1 percent of our sample, the woman's annual earnings are reported to be greater than an annualized version of household income.

⁴¹ Waldfogel et.al., 1999, for example, include a dummy variable to indicate whether or not the current birth is the woman's first. As noted also by Ten Cate (2000), women with other children who have been in the labour force again prior to the birth of an additional child have already demonstrated significant attachment to the paid labour force. Our two dummy variables which indicate, respectively, presence of other pre-schoolers and presence of other school-aged children also distinguish women for whom the current birth is the first, but also indicate the *age* of other children as this seems likely to be an important determinant of return to work.

⁴² Ten Cate (2000) has emphasized the importance of differences in provincial regulations concerning the length of maternity leave available in influencing women's labour-market behaviour after childbirth. However, all provinces except Alberta provided at least 27 weeks of leave during the period 1995-98 so this should not be an issue for returning early. We do follow Ten Cate and pay attention to provincial leaves in subsequent regressions.

paid employment early.⁴³ Figure 4 provides an indication of the size of the estimated effects: 1) relative to a base probability of returning early of 47.5 percent, women with less than a high-school education have a 14.7 percent probability of returning early; 2) women with a university degree have a 62.5 percent probability of returning early, other factors constant. These findings are consistent with the idea of opportunity cost. Perhaps surprisingly, in view of the opportunity cost argument, the woman's hourly wage prior to the maternity/parental leave is not a statistically significant predictor of an early return to paid work (though we are controlling for many other characteristics of her job).⁴⁴

Having school-aged children increases the probability of returning early from 47.5 percent for the base case to 74.0 percent, perhaps because of greater financial need associated with additional children without the same benefit in terms of time at home with the child (see Figure 4). Having other pre-schoolers reduces the probability of returning early from 47.5 percent to 39.2 percent, presumably as a result of the increased value of the woman's time at home.

Financial pressure variables also appear to have an important association with early returns. First, women who were single at the time of the ROE job separation are more likely to return to their paid work prior to exhaustion of benefits (an increase of 15.7 percentage points -- see Figure 5) than women who are married to men with full-time jobs. Although the estimated coefficient for women with husbands who work less than full-time has the expected positive sign, it is not statistically significant at conventional levels (e.g., 10 percent). Second, the higher are household liquid assets, the lower the probability of an early return. For example, if liquid assets are \$10,000 higher than the mean for the sample, the probability of returning to paid work early falls from 47.5 percent to 44.0 percent. Third, women who are home-owners are more likely to return early (an increase of 10.9 percentage points relative to the base). Since, at this life stage, most home-owners are committed to mortgage payments, this finding is likely evidence of financial pressure to return.⁴⁵

Characteristics of the woman's job appear less important in determining her early return to work than in establishing her eligibility for benefits. The only variable here which is statistically significant is union status B women who held unionized jobs prior to having a baby are more likely to return to work early. The woman's previous work

⁴³ Joshi et al., 1996 and Gustafson, 1996 both consider the possibility that maternity benefits may serve to accentuate earnings differences among women. That is, for example, women with higher levels of education are likely to have better jobs and hence are more likely to be eligible for benefits. If they are likely to take benefits and then return quickly to their old jobs, job experience and future earnings will be little affected by the birth of a child. If women with lower levels of education are unlikely to be eligible for benefits and have to quit their jobs and then to stay out of the labour market for a longer period of time, the long-term consequences of having a child will be much larger. According to Joshi et al., this effect is evident in the UK.

⁴⁴ Ten Cate, 2000, finds that the probability of returning to work within one month of childbirth has no statistically significant association with own income. The probability of returning within one year of childbirth is positively associated with own income.

⁴⁵ It is possible to distinguish homeowners with and without mortgages. In an earlier specification, we identified home-owners with mortgages on the basis of mortgage payments reported; home-owners without mortgages report paying property taxes but not making mortgage payments. However, we found no significant difference between the two, so have combined all home-owners in our final specification.

history/attachment matters insofar as women who experienced at least one jobless spell in the period preceding the birth of their child are less likely than others to return to paid work before the end of the benefit entitlement period.

Finally, consider the policy variables. First, other things equal, there is no apparent difference between women with maternity/parental separations in the UI and EI periods. Since there was no change to actual weeks of entitlement for those eligible, this should not be surprising (though there may have been indirect changes in benefit levels through, for example, the change from the dependency rate to the family income supplement could have affected the probability of return). Benefit/replacement rates⁴⁶ do not appear to play a significant role. Finally, however, being eligible for benefits is extremely important. As emphasized by both Marshall (1999) and Ten Cate (2000), we find that women who are *not* eligible for benefits are much *more* likely than others to return early to paid employment.⁴⁷ As indicated in Figure 6, the probability of returning to work early for a woman who reports UI/EI is only 19.5 percent (a reduction of 28 percentage points compared to an otherwise identical woman who does not report UI/EI).

4.2.2 Returning to Paid Employment?

Joshi et al. (1996) and Phipps (et al., 2000) have emphasized that continuity of labour market behaviour around child-birth can have important implications for longer-term employment outcomes. On the other hand, of course, staying home to care for children can be a rewarding life choice for many mothers (stay at home fathers are still rather rare). Particularly in view of the recent major extension of the total duration of the paid maternity/parental benefits entitlement, it seems worthwhile to use multivariate techniques to analyse which factors are associated with an eventual return to paid work. The longest period of time about which we have information for almost all COEP respondents is 75 weeks. Hence, we next conduct a probit analysis of the probability that a woman has returned to paid employment by 75 weeks after her maternity/parental job separation *and* that she is engaged in paid work at the time of the second interview. (8.1 percent of all women who had returned to paid work, had either lost their jobs, lost their child care or just decided they would prefer to stay home with their babies by the time of the second interview. 5.4 percent of all women who had returned to paid work at some point prior to 75 weeks, were not working at the second interview *and* reported that they were not looking for work).

The specification employed is almost identical to that used in the previous model of the probability of returning early to paid employment. The one important difference is that we now also take account of whether or not the woman experienced difficulties in finding childcare. As argued above, lack of suitable childcare may restrict some women's

⁴⁶ We do not know the benefit amount received in the COEP survey. Hence, we simply work out the benefit/replacement ratio based on programme regulations.

⁴⁷ Although it seems important to control for the availability of childcare, this information is only available from the second interview. And, since the problems with childcare question refers to the 12-month period prior to the second interview, which occurred *at least* 75 weeks after the job separation, it does not really refer to childcare problems experienced in the first 27 weeks after childbirth.

options of returning to paid work. At the second interview (i.e., at least 75 weeks after the maternity/parental separation started) women with children aged less than 12 years (which would necessarily include all of the women in our sample who have just had children) were asked if they had used or looked for childcare in the past 12 months. Those responding “yes were then asked if “difficulties making suitable child care arrangements had stopped them from finding a good job or taking a better job? We can thus divide our sample into four groups: 1) 13.6 percent of these women had looked for or used childcare in the past 12 months and experienced problems; 2) 66.1 percent had looked for or used childcare in the past 12 months with no problems; and 3) 11.8 percent had *not* looked for or used childcare but had nonetheless returned to paid work (presumably because, for example, husbands or mothers were available to care for the newborn when the mother returned to paid work); 8.5 percent who had *not* looked for or used childcare and had not returned to paid work by 75 weeks after the ROE job separation. For purposes of estimation, we drop from our sample women who did not answer the childcare question, though we have also run models which include these women and found little difference in estimated coefficients.

Results are presented in Table 5, with calculated marginal effects illustrated in Figure 7. A first point to make about these results is that while some of the included explanatory variables have a statistically significant association with the probability that a woman has returned and stayed in paid employment by 75 weeks, the estimated magnitude of many of these variables is extremely small. As illustrated in Figure 7, the base case woman has a 98.9 percent probability of being back in paid work and few things reduce this probability substantially. It would seem that the opportunity cost and financial pressure arguments which had important associations with an early return have all played their role well before the 75-week point.

Thus, for example, women aged 15 to 24 years are less likely to have returned to paid employment than women aged 25 to 34, with the estimated size of the association a reduction in the probability of returning of 4.6 percentage points (from 98.9 to 94.3 percent). And, women whose ROE jobs began relatively recently (i.e., less than 30 weeks before the ROE job separation) are less likely to have returned to paid work (a reduction of 8.2 percentage points from 98.9 to 90.7). Taken together, these results could suggest that younger and less experienced workers have a harder time returning to the paid labour force post child-birth. On the other hand, women living in owner-occupied housing are less likely to have returned (a reduction from 98.9 to 95.0 percent). As illustrated in Figure 7, while other variables (e.g., working in a larger firm; holding concurrent jobs prior to the leave) have statistically significant associations with the probability of having returned and stayed in paid work, the size of the estimated associations are very small. It should also be noted that the policy variables (e.g., benefit-replacement rate; reporting of UI/EI; change to EI) are not statistically significant in this model. Again, it seems likely that their impact would be stronger in the time period closer to the birth/adoption of the child.

Childcare issues, on the other hand, are extremely important. Women who reported difficulties with childcare are less likely than those who reported no difficulties to have returned to paid employment by 75 weeks after their maternity/parental leave began.

Figure 7 indicates that there is a 17.8 percentage point reduction (from 98.9 to 81.1 percent) in the probability of a woman having returned to and stayed in paid employment after her maternity/parental leave if she has experienced difficulties with childcare.

4.3 Returning to the Same Job?

Basic results for a probit model of the probability of returning to the same job after a maternity/parental absence are reported in Table 6. This model is estimated only for women who have returned to paid employment.

Women with post-secondary credentials (either a college diploma or a university degree) are more likely to return to the same job than women with high-school level education. Figure 8 indicates that the probability of returning to the same job increases from 87.7 percent for the base case woman with a high-school level of education to 93.7 percent for an otherwise identical woman with a university-level education. Otherwise, the most important variables associated with a return to the same job appear to be characteristics of the job rather than of the woman. Women in jobs covered by unions are more likely to return to the same job (an increase of 6.7 percentage points relative to the base); women working for firms with more than 100 employees are more likely to return to the same job (an increase of 4.7 percentage points relative to the base). These findings are consistent with the idea that women in good jobs are more likely to return to them – perhaps both because this is the woman’s wish and because the job is actually still available to them.

In terms of policy variables, we find no association between receipt of UI/EI and the probability that a woman will return to the same job post maternity/parental separation, nor is there any significant impact of the move to EI on the probability of a return to the same job. Finally, following Ten Cate (2000) we added a dummy variable indicating that the woman’s total leave duration exceeded the provincial leave allowable in her province and at the time of her job separation. As noted in Table 2, about one third of the sample took leaves which exceeded their legal right under provincial law. Consistent with Ten Cates (2000) findings, the variable has an important negative relationship with the probability a woman will return to the same job (the probability of returning to the same job falls from 87.7 percent to 61.3 percent) – emphasizing the importance of ensuring the legal right to return to the same job. This point is also highlighted by Waldfogel, et al. (1999) who find that family leave coverage increases the probability a woman will return to her employer by 12 months after childbirth in the US, the UK and Japan.

5. Conclusions

This research uses the Canadian Out-of Employment Panel (1995-1998) to investigate implications of the change from UI to EI for four aspects of women's experience of the maternity and parental benefits programme: 1) the probability of benefit receipt; 2) the probability of returning to paid employment *before* the end of the maternity/parental benefit entitlement; 3) the probability of returning to paid employment *at all* at some point during or after the benefit period; 4) the probability of returning to the *same job*.

COEP data indicate that 90.4 percent of maternity/parental respondents to the COEP survey reported benefits under UI; 89.6 percent reported benefits under EI (not a statistically significant difference). However, there may have been a shuffling of who actually qualifies (see Figure 1). That is, some women who were not eligible under UI have become eligible under EI; some women who were eligible under UI are no longer eligible under EI. While the numbers who changed eligibility status appear to roughly cancel one another out, it appears that the women who became eligible for benefits under EI were, on average, more affluent, better-educated, more likely to be aged 25 to 34, more likely to be employed by a large firm and more likely to have held more than one job in the period preceding the birth.

For a woman who takes maternity or parental leave, the probability of receiving UI/EI benefits depends upon many factors. Our econometric work shows that: 1) women aged 35 to 44 are more likely to be eligible; 2) women who are permanent employees are more likely to be eligible; 3) women who worked for larger firms (more than 100 employees) are more likely to be eligible; 4) women whose ROE job started less than 30 weeks before the separation are less likely to be eligible; 5) the switch from UI to EI did not have a statistically significant impact on the probability of benefit receipt, controlling for other relevant characteristics.

COEP data indicate that 31.0 percent of women with a maternity or parental job separation returned to paid work before 27 weeks (the maximum entitlement period) under UI; 32.2 percent returned early under EI. About 9 percent had not yet returned to paid employment by 75 weeks after the job separation began (under either system). 85.8 percent returned to the same job under UI; 84.0 percent returned to the same job under EI.

Further econometric work on the probability of returning to paid employment early (i.e., before the end of the EI/UI entitlement period) indicates that: 1) younger women are more likely to return early and older women are less likely to return early; 2) women with less than high-school education are less likely to return early and women with post-secondary educations are more likely to return early; 3) financial pressure can increase the probability of returning early (e.g., women who are single at the time of the ROE or whose husbands are not working full-time are more likely to return early; low liquid assets are associated with an early return to paid work; women with mortgages to pay are more likely to return early); 4) women who receive UI or EI benefits are less likely to

return early; 5) there has been no apparent impact of the switch from UI to EI on the probability of an early return to paid employment.

The principal results of a probit analysis of the probability of returning to and staying in paid employment by 75 weeks after the maternity/parental separation began show that: 1) younger and less experienced women are less likely to have returned; 2) women experiencing problems in finding suitable childcare are particularly less likely to have returned.

Finally, the probability of returning to the same job (for those who returned to paid employment) is determined by slightly different factors: 1) women with higher educations have a higher probability of returning to the same job; 2) characteristics of the pre-birth job are important (e.g., unionized workers are more likely to return to the same job; women working for larger firms are more likely to return); 3) having received UI or EI is not important for return to the same job; 4) the switch from UI to EI did not influence the probability of returning to the same job; 5) women whose leaves exceeded provincially available leaves were less likely to return to the same job.

Table 1
Descriptive Analysis of the Impact of EI on the Probability of Receiving
Maternity/Parental Benefits, the Duration of Completed Maternity/Parental Absences,
and the Probability of Returning to the Same Job, Before Entitlement, Within One Month
and Within 75 Weeks

	Unemployment Insurance (ROE occurred before Jan. 97)	Employment Insurance (ROE occurred on or after Jan. 97)
Number of Observations with Maternity/Parental Leave as a Reason	631	533
% Female	96.8%	91.5%
% Reporting Receipt of Benefits		
All	90.4%	89.6%
Females	90.3%	90.0%
Males	92.9% (n19)	85.1% (n32)
Average Duration (in weeks) Completed ¹ Maternity/Parental Leaves		
All	28.7	29.7
Females	29.5	31.5
Males	8.2 (n18)	9.4 (n31)
% Returning Within One Month of ROE		
All	1.7%	3.3%
Females	1.0%	1.5%
Males	20.7% (n19)	22.4% (n32)
% Returning Before 25 Weeks (females), 10 Weeks (males) [those who received UI/EI]		
Females	28.6%	30.1%
Males	70.1% (n17)	43.1% (n28)
% Returning to the Same Job (those who completed absence)		
All	86.1%	85.2%
Females	85.8%	84.0%
Males	94.5% (n18)	98.8% (n31)
% Still in Leave at the Second Interview		
All	8.5%	8.6%
Females	8.7%	8.3%
Males	2.3% (n19)	11.4% (n32)
% Returned to Work Before 75 Weeks		
All	90.9%	90.9%
Females	90.7%	91.2%
Males	97.7% (n19)	88.6% (n32)
Note: excludes those where no duration could be computed from data (32 observations)		
¹ Absence completed before second interview.		

Table 2
Means - Females Aged 15-44 With Maternity/Parental Leave

	All ⁵		All Reporting UI/EI ⁶	
	Pre-Jan 1997	Post-Jan 1997	Pre-Jan 1997	Post-Jan 1997
Those Who Report UI/EI	90.3%	90.0%	100.0%	100.0%
Those Whose Duration of Leave < 27 Weeks	31.0%	32.2%	28.6%	30.1%
Those Whose Leave < 75 Weeks	90.7%	91.2%	90.3%	91.2%
Those Who Returned to the Same Job as Before Leave ³	85.8%	84.0%	86.4%	85.7%
Those Aged 15-24	12.8%	5.8%*	10.6%	5.0%*
Those Aged 25-34	62.4%	76.9%*	62.5%	76.7%*
Those Aged 35-44	24.7%	17.4%*	26.9%	18.4%*
Those Who Have Less than a High School Education	5.2%	5.5%	5.3%	5.8%
Those Who Have a High School Diploma	45.7%	32.9%*	43.6%	33.2%*
Those Who Have Non-University Credentials	24.1%	30.2%*	25.2%	30.8%*
Those Who Have a University Degree	25.1%	31.4%*	25.9%	30.2%*
Those Who Are Single at ROE	13.3%	9.4%*	11.2%	10.2%
Those Who Are Married at ROE and Spouse works < 30 hours/week	9.6%	5.9%*	10.6%	5.1%*
Those With Children Aged 0-5 in House (excluding new baby)	37.8%	45.2%*	38.5%	46.5%*
Those With Children Aged 6-17 in the Home	16.8%	13.8%	17.8%	15.0%
Those Who Reside in Atlantic Canada	7.6%	7.3%	8.0%	7.6%
Those Who Reside in Quebec	19.9%	23.4%*	18.2%	23.3%*
Those Who Reside in Ontario	38.4%	34.4%*	39.5%	34.1%*
Those Who Reside in the Prairies	21.9%	21.2%	21.8%	20.9%
Those Who Reside in BC	12.2%	13.7%	12.5%	14.1%
Value of Liquid Assets (1997 \$)	9,880	12,640*	10,284	12,801*
Those Whose Home is Owned	72.7%	78.9%*	73.0%	80.7%*
Benefit Replacement Ratio	54.1%	53.3%*	54.1%	53.3%*
Respondent's Hourly Wage at ROE (1997 \$)	15.12	16.38*	15.26	16.51*
Hours per Week usually Worked by Respondent (ROE job)	33.2	34.4*	33.6	34.5*
Those Who are a Permanent Employee ¹	90.6%	94.5%*	92.5%	94.1%
Those Whose Employer has < 20 Employees ¹	32.7%	27.6%*	33.6%	26.8%*
Those Whose Employer has 20-99 Employees ¹	28.7%	27.7%	28.0%	25.6%
Those Whose Employer has 100+ Employees ¹	38.6%	44.7%*	38.4%	47.7%*
Those Who are in a Union Job ¹	31.8%	30.0%	30.1%	29.0%

Table 2 (cont'd)
Means - Females Aged 15-44 With Maternity/Parental Leave

	All ⁵		All Reporting UI/EI ⁶	
	Pre-Jan 1997	Post-Jan 1997	Pre-Jan 1997	Post-Jan 1997
Those Who Take More Weeks Leave than is Job-Protected under Provincial Legislation	32.0%	35.9%*	33.8%	35.1%
Those Who Had a Gap in Employment of a Week or More in Reference Period ⁴ Before ROE	16.8%	17.2%	16.1%	16.4%
Those Who Worked Jobs Concurrently in Reference Period ⁴ Before ROE	5.8%	11.5%*	6.0%	10.5%*
Those Whose ROE Job Started During Reference Period ⁴	6.6%	7.1%	6.5%	4.9%
Those Who Report Child Care Problems (second interview)	13.3%	14.0%	13.5%	14.5%
Those Who Report No Child Care Problems	64.2%	68.3%	64.3%	69.6%*
Those Who Didn't Look for Child Care and are Employed	12.9%	10.6%	13.3%	9.2%*
Those Who Didn't Look for Child Care and are not Employed	9.6%	7.2%	8.9%	6.6%
Quarterly Provincial Female Unemployment Rate ²	9.1	8.7	9.0	8.7
Number of observations	612	501	555	462
¹ Refers to ROE job. ² Source: CANSIM matrices 3452, 3454, 3456, 3458, 3460, 3462, 3464, 3466, 3468, 3470. ³ Those who went back to paid employment. ⁴ Reference period is the 26-40 week (depending on the exact ROE week) Period before the ROE week. Some job information about the respondent was gathered for the COEP survey in this period. ⁵ Sample statistics include all those in the survey (i.e. those with a ROE). ⁶ Sample statistics include only those with a ROE who report receiving UI/EI benefits. * indicates that the EI period estimate is more than two standard errors from the UI period estimate.				

Table 3
Probit Estimate of the Probability of Reporting (Un)Employment Benefits
Females aged 15-44 Who Took Maternity/Parental Leave From Job
number of observations 975

Variable	Parameter Estimate	Standard Error	Pr Chi-Square
Intercept	0.162	0.394	0.680
Those Aged 15-24	-0.306	0.228	0.180
Those Aged 35-44	0.803*	0.230	0.001
Those Who Have Children Aged 0-5 Present (excluding new baby)	0.103	0.140	0.464
Those Who Have Children Aged 6-17 present	0.464***	0.252	0.066
Those Who Are Single at ROE	-0.033	0.212	0.875
Those Who Are Married at ROE and Spouse Works < 30 Hours per Week	0.251	0.255	0.325
Those Who Have Less than High School	0.211	0.323	0.514
Those Who Have Non-University Credentials	0.212	0.168	0.209
Those Who Have a University Degree	-0.201	0.177	0.255
Hours per Week at ROE Job	0.007	0.008	0.365
Hourly Wage (ROE job)	0.010	0.013	0.443
Those Whose Home is Owned by Household Member	0.136	0.162	0.401
Those Whose ROE Date Was Post Jan 1997	-0.159	0.134	0.236
Those Who Reside in Atlantic Canada	0.431	0.308	0.161
Those Who Reside in Quebec	-0.3178***	0.170	0.061
Those Who Reside in Manitoba/Saskatchewan	0.131	0.248	0.598
Those Who Reside in Alberta	-0.100	0.210	0.634
Those Who Reside in British Columbia	0.158	0.220	0.472
Those Whose ROE Job is Permanent	0.781*	0.212	0.000
Those Whose ROE Employer Has < 20 Employees	0.055	0.165	0.738
Those Whose ROE Employer Has > 100 Employees	0.517*	0.163	0.002
Those Whose ROE Job is a Union Job	-0.638*	0.158	0.000
Those Who Worked Concurrent Jobs in Reference Period ¹ Before ROE	-0.185	0.213	0.385
Those Who Had a Gap/Absence 1 Week in Reference Period ¹ Before ROE	0.026	0.186	0.888
Those Whose ROE Job Began in Reference Period ¹	-0.608*	0.232	0.009
Generalized R ² 0.098			Max-rescaled R ² 0.212
			McFadden R ² 0.166
Likelihood ratio test (Null: All slope coefficients 0) Chi ² 99.98 (p-value 0.0001)			
* significant with 99% confidence			
** significant with 95% confidence			
*** significant with 90% confidence			
¹ Reference period is the 26-40 week (depending on the exact ROE week) period before the ROE week. Some job information about the respondent was gathered for the COEP survey in this period.			

Table 3a
Sensitivity Check of EI Coefficient to Alternative Specifications

Specification	Coefficient	Standard error	Significance
Full	-0.159	0.134	not significant
Without job variables	-0.1187	0.1190	not significant
Without family variables	-0.1117	0.1284	not significant
Without region variables	-0.1306	0.1314	not significant
Without hours/week	-0.1474	0.1333	not significant
Without the variable indicating a permanent job	-0.1157	0.1290	not significant
Without the variable indicating job beginning in reference period ¹	-0.2110	0.1325	not significant
Without the variable indicating for having a gap/absence of more than one week in reference period	-0.1593	0.1339	not significant
Without the variable indicating having concurrent jobs	-0.1748	0.1323	not significant
Without: hours/week, variables indicating: permanent job, job started in reference period ¹ , gap/absence, concurrent jobs	-0.1532	0.1238	not significant
Without: hours/week, variables indicating: job started in reference period ¹ , gap/absence, concurrent jobs	-0.2293	0.1295	significant

¹Reference period is the 26-40 week (depending on the exact ROE week) period before the ROE week. Some job information about the respondent was gathered for the COEP survey in this period.

Table 4
Probit Estimate of the Probability of Returning Before 27 Weeks
(Before UI/EI covered period expires)
Females aged 15-44 Who Took Maternity/Parental Leave From Job
number of observations 862

Variable	Parameter Estimate	Standard Error	Pr Chi-Square
Intercept	-0.254	1.177	0.830
Those Aged 15-24	0.426**	0.192	0.027
Those Aged 35-44	-0.348**	0.147	0.018
Value of Liquid Assets (1997 \$)	-0.088*	0.031	0.004
Benefit Replacement Ratio	0.429	1.735	0.805
Those Who Have Children Aged 0-5 Present (excluding new baby)	-0.211***	0.109	0.053
Those Who Have Children Aged 6-17 present	0.706*	0.146	0.000
Those Who Are Single at ROE	0.405**	0.166	0.015
Those Who Are Married at ROE and Spouse Works < 30 Hours/Wk	0.259	0.184	0.158
Those Who Have Less than High School	-0.985*	0.288	0.001
Those Who Have Non-University Credentials	0.168	0.124	0.175
Those Who Have a University Degree	0.382*	0.139	0.006
Hours per Week at ROE Job	0.000	0.007	0.960
Hourly Wage (ROE job)	0.004	0.012	0.713
Those Whose Home is Owned by Household Member	0.275**	0.129	0.033
Those Whose ROE Date Was Post Jan 1997	0.028	0.102	0.784
Those Who Reported UI/EI	-0.7945*	0.167	0.000
Those Who Reside in Atlantic Canada	0.190	0.195	0.331
Those Who Reside in Quebec	-0.617*	0.146	0.000
Those Who Reside in Manitoba/Saskatchewan	-0.081	0.180	0.651
Those Who Reside in Alberta	0.046	0.158	0.770
Those Who Reside in British Columbia	-0.121	0.168	0.472
Those Whose ROE Job is Permanent	0.007	0.208	0.975
Those Whose ROE Employer Has < 20 Employees	0.022	0.134	0.867
Those Whose ROE Employer Has > 100 Employees	0.104	0.127	0.415
Those Whose ROE job is a Union Job	0.203***	0.122	0.096
Those Who Worked Concurrent Jobs in Reference Period ¹ Before	0.041	0.178	0.819
Those Who Have a Gap/Absence 1 Week in Reference Period ¹ Before	-0.714*	0.156	0.000
Those Whose ROE Job Began in Reference Period ¹	0.285	0.235	0.225
Generalized R ² 0.145			Max-rescaled R ² 0.205
			McFadden R ² 0.128
Likelihood ratio test (Null: All slope coefficients 0) Chi ² 134.92 (p-value0.0001)			
* significant with 99% confidence			
** significant with 95% confidence			
*** significant with 90% confidence			
¹ Reference period is the 26-40 week (depending on the exact ROE week) period before the ROE week. Some job information about the respondent was gathered for the COEP survey in this period.			

Table 5
Probit Estimate of the Probability of Returning to Paid Employment
Before 75 Weeks and Working at Second Interview
Females aged 15-44 Who Took Maternity/Parental Leave From Job
number of observations 602

Variable	Parameter Estimate	Standard Error	Pr Chi-Square
Intercept	3.883	0.767	0.000
Those Aged 15-24	-0.714***	0.368	0.052
Those Aged 35-44	-0.087	0.236	0.713
Value of Liquid Assets (1997 \$)	0.064	0.060	0.286
Those Who Have Children Aged 0-5 Present (excluding new baby)	-0.043	0.192	0.825
Those Who Have Children Aged 6-17 present	-0.222	0.252	0.378
Those Who Are Single at ROE	-0.430	0.315	0.173
Those Who Are Married at ROE and Spouse Works < 30 Hours/Wk	0.052	0.332	0.875
Those Who Have Less than High School	0.082	0.361	0.820
Those Who Have Non-University Credentials	0.488**	0.243	0.044
Those Who Have a University Degree	0.227	0.253	0.369
Hours per Week at ROE Job	-0.038*	0.013	0.003
Hourly Wage (ROE job)	-0.023	0.017	0.178
Those Whose Home is Owned by Household Member	-0.645**	0.272	0.018
Those Who Reside in Atlantic Canada	-0.233	0.370	0.529
Those Who Reside in Quebec	-0.818*	0.275	0.003
Those Who Reside in Manitoba/Saskatchewan	-0.489	0.313	0.117
Those Who Reside in Alberta	-0.368*	0.308	0.233
Those Who Reside in British Columbia	-0.363	0.310	0.241
Those Whose ROE Date Was Post Jan 1997	0.070	0.181	0.697
Those Who Reported UI/EI	0.132	0.320	0.680
Those Whose ROE Job is Permanent	-0.081	0.337	0.811
Those Whose ROE Employer Has < 20 Employees	-0.064	0.226	0.777
Those Whose ROE Employer Has 100 Employees	0.635*	0.228	0.005
Those Whose ROE job is a Union Job	-0.365***	0.220	0.097
Those Who Worked Concurrent Jobs in Reference Period ¹ Before	1.176**	0.535	0.028
Those Who Had a Gap/Absence 1 Week in Reference Period ¹ Before	0.101	0.293	0.730
Those Whose ROE Job Began in Reference Period ¹	-0.967**	0.455	0.034
Those Who Had Child Care Problems Which Prevented Respondent from Finding/Taking a Suitable Job	-1.410*	0.221	0.000
Generalized R ² 0.177 Max-rescaled R ² 0.3676 McFadden R ² 0.297 Likelihood ratio test (Null: All slope coefficients 0) Chi ² 117.15 (p-value0.0001)			
* significant with 99% confidence ** significant with 95% confidence *** significant with 90% confidence ¹ Reference period is the 26-40 week (depending on the exact ROE week) period before the ROE week. Some job information about the respondent was gathered for the COEP survey in this period.			

Table 6
Probit Estimate of the Probability of Returning to the Same Job (those who returned)
Females aged 15-44 Who Took Maternity/Parental Leave From Job
number of observations 789

Variable	Parameter Estimate	Standard Error	Pr Chi-Square
Intercept	1.010***	0.496	0.042
Those Aged 15-24	-0.352	0.231	0.128
Those Aged 35-44	-0.045	0.177	0.799
Value of Liquid Assets (1997 \$)	0.037	0.038	0.326
Those Who Have Children Aged 0-5 Present (excluding new baby)	0.218	0.146	0.135
Those Who Have Children Aged 6-17 present	-0.344***	0.176	0.051
Those Who Are Single at ROE	0.178	0.210	0.397
Those Who Are Married at ROE and Spouse Works < 30 Hours/Wk	1.092*	0.402	0.007
Those Who Have Less than High School	0.132	0.266	0.619
Those Who Have Non-University Credentials	0.501*	0.161	0.002
Those Who Have a University Degree	0.372**	0.186	0.046
Hours per Week at ROE Job	0.006	0.008	0.436
Hourly Wage (ROE job)	-0.007	0.012	0.568
Those Whose Home is Owned by Household Member	0.042	0.158	0.793
Those Whose ROE Date Was Post Jan 1997	-0.159	0.257	0.537
Those Who Reported UI/EI	-0.217	0.192	0.258
Those Who Reside in Atlantic Canada	-0.083	0.237	0.726
Those Who Reside in Quebec	-0.062	0.217	0.774
Those Who Reside in Manitoba/Saskatchewan	0.033	0.213	0.877
Those Who Reside in Alberta	-0.273**	0.133	0.040
Those Who Reside in British Columbia	0.090	0.208	0.666
Those Whose ROE Job is Permanent	-0.157	0.274	0.565
Those Whose ROE Employer Has < 20 Employees	-0.123	0.157	0.435
Those Whose ROE Employer Has > 100 Employees	0.276***	0.167	0.099
Those Whose ROE job is a Union Job	0.431**	0.169	0.011
Those Who Take More Weeks Leave than is Job-Protected under Provincial Legislation	-0.871*	0.163	0.000
Those Who Worked Concurrent Jobs in Reference Period ¹ Before	-0.135	0.217	0.533
Those Who Had a Gap/Absence 1 Week in Reference Period ¹ Before	0.142	0.187	0.446
Those Whose ROE Job Began in Reference Period ¹	-0.663**	0.268	0.013
Generalized R ² 0.148 Max-rescaled R ² 0.257 McFadden R ² 0.187			
Likelihood ratio test (Null: All slope coefficients 0) Chi ² 126.49 (p-value0.0001)			
* significant with 99% confidence			
** significant with 95% confidence			
*** significant with 90% confidence			
¹ Reference period is the 26-40 week (depending on the exact ROE week) period before the ROE week. Some job information about the respondent was gathered for the COEP survey in this period.			

Figure 1
Eligibility Requirements: Comparing the UI and the EI systems

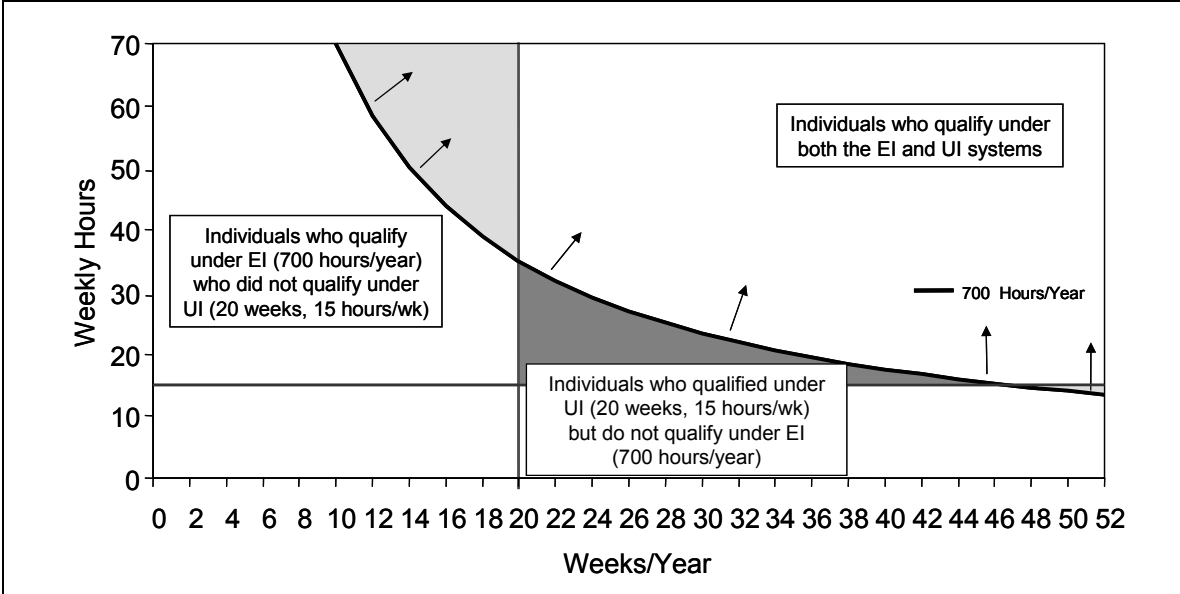
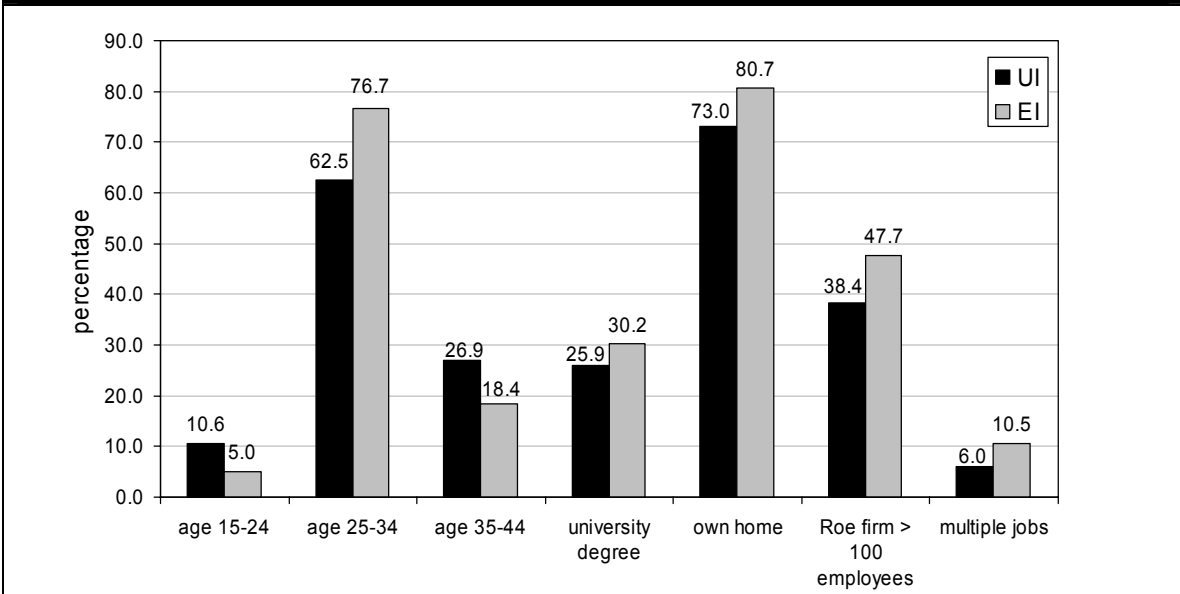


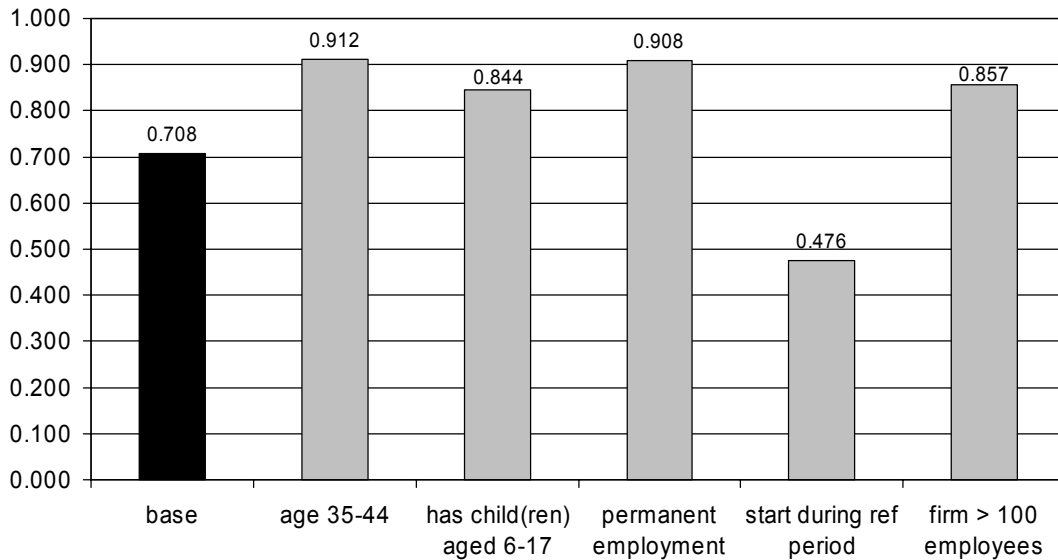
Figure 2
A Comparison of Characteristics of Respondents in the EI and UI Periods for Maternity/Parental Leavers (only includes those reporting having received EI/UI benefits)



Note: Difference are significant with 95% confidence.

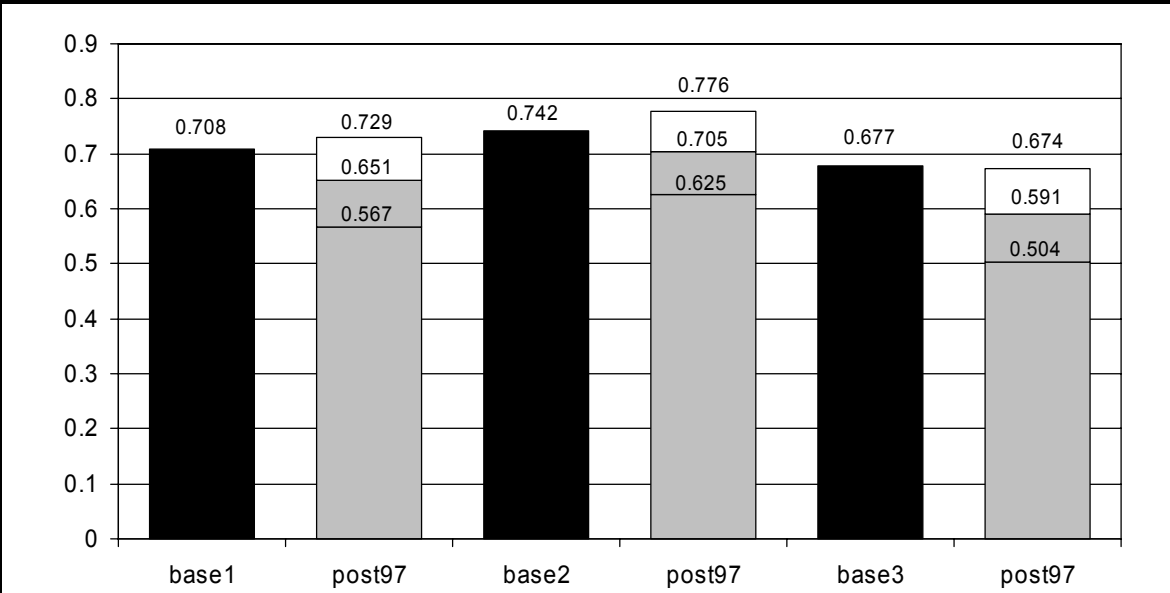
Source: See table 2.

Figure 3
Probability of Reporting (Un)Employment Benefits



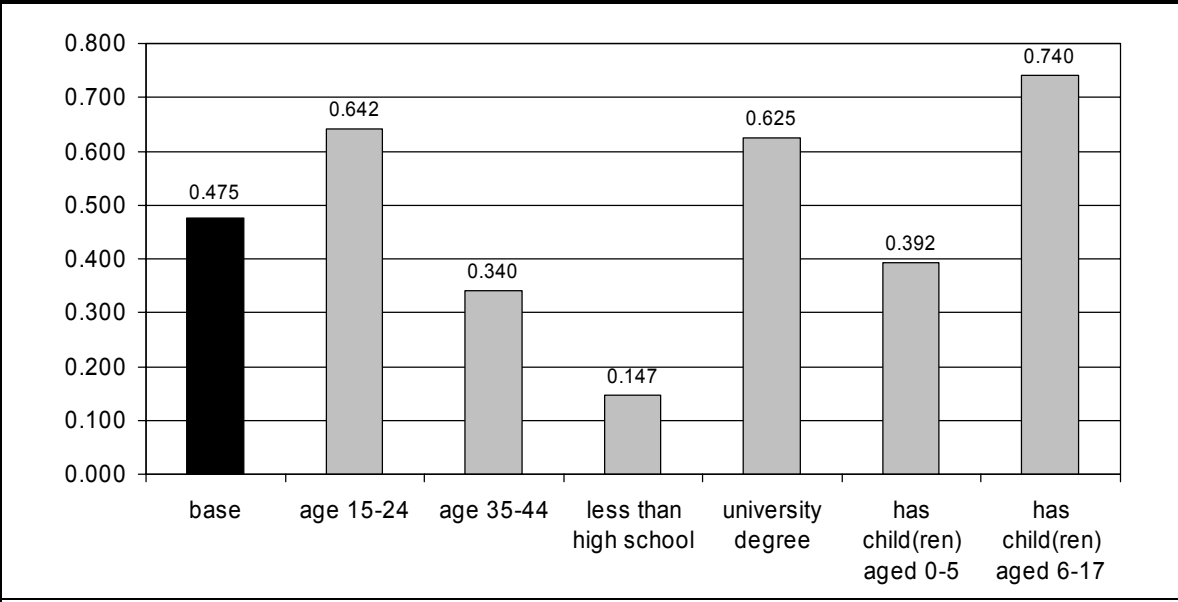
Note: Base case is a female aged 25-34, with no other children present (besides new baby), is married at ROE with spouse working more than 30 hours /week. She has a high school degree, works 33.7 hours per week and earns 15.72 \$ per hour, rents, her ROE is pre Jan 97, and she lives in Ontario. Her ROE employer has 20-100 people, is not permanent or a union job. As well, she did not work jobs concurrently in reference period before ROE nor have any gaps or absences and the job began before the reference period.

Figure 3a
Sensitivity Check of EI Coefficient to Alternative Specifications
Probability of Collecting UI/EI



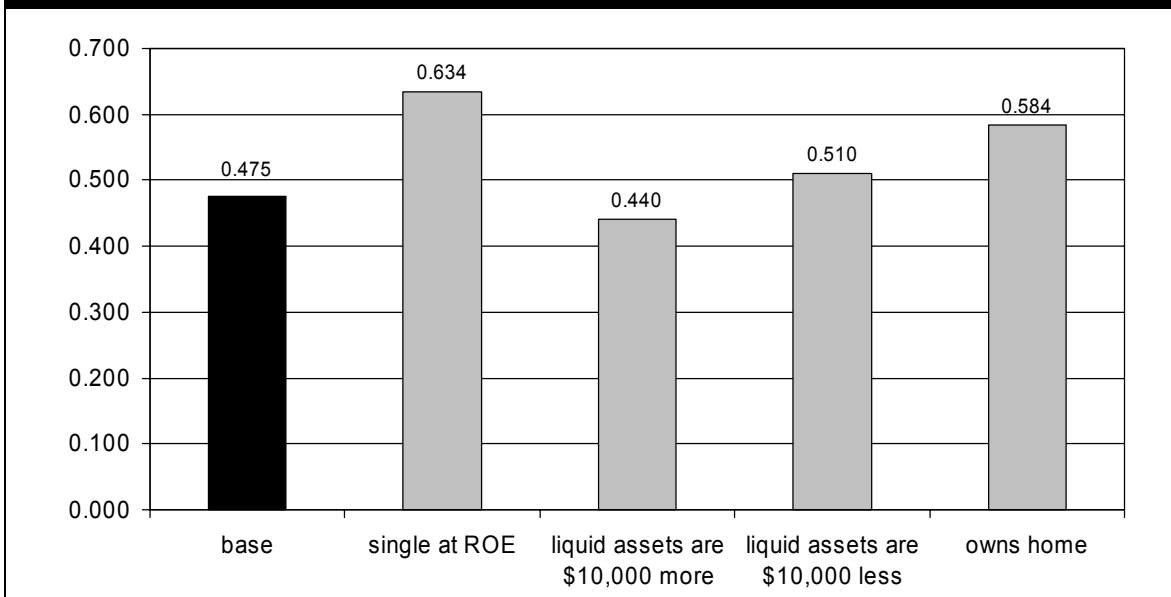
Note: Base1 case is a female aged 25-34, with no other children present (besides new baby), is married at ROE with spouse working more than 30 hours /week. She has a high school degree, works 33.7 hours per week and earns 15.72 \$ per hour, rents, her ROE is pre Jan 97, and she lives in Ontario. Her ROE employer has 20-100 people, is not permanent or a union job. As well, she did not work jobs concurrently in reference period before ROE nor have any gaps or absences and the job began before the reference period. Base 2 is the same but excludes "family " variables. Base3 includes family but excludes hours and dummies for started in reference, gaps/absence and concurrent jobs.

Figure 4
Probability of Returning Before 27 Weeks



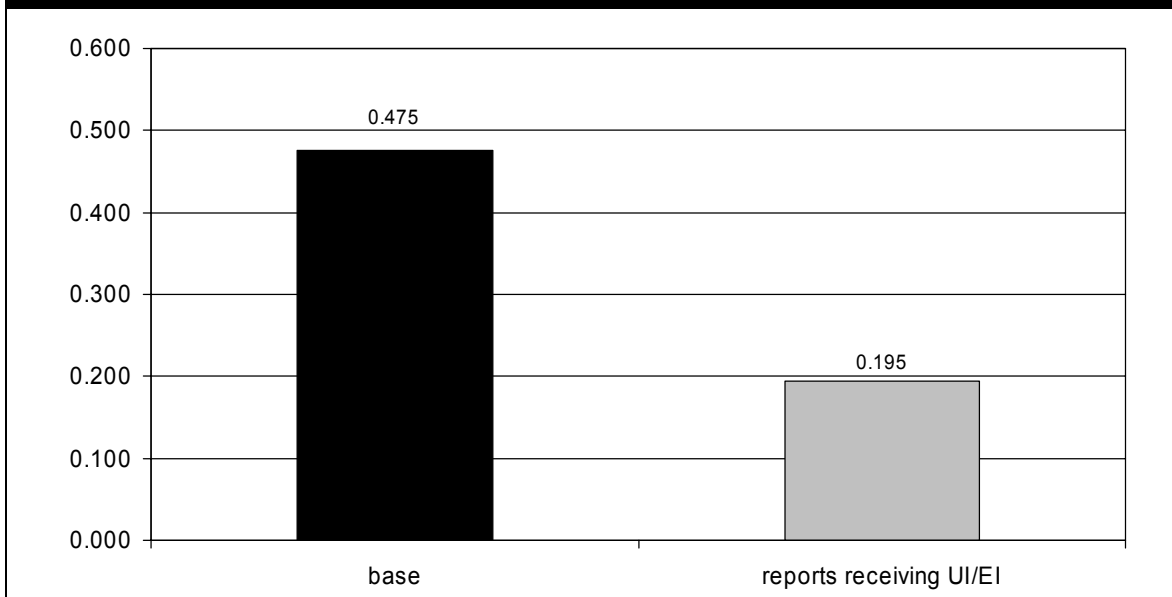
Note: Base case is a female aged 25-34, with no other children present (besides new baby), is married at ROE with spouse working more than 30 hours /week. She has a high school degree, works 33.7 hours per week and earns 15.72 \$ per hour, rents, her ROE is pre Jan 97, and she lives in Ontario. Her ROE employer has 20-100 people, is not permanent or a union job. As well, she did not work jobs concurrently in reference period before ROE nor have any gaps or absences and the job began before the reference period. Finally, her liquid assets are valued at \$11,211 in 1997 dollars and the benefit replacement ratio is 0.5372.

Figure 5
Probability of Returning to Job Before 27 Weeks



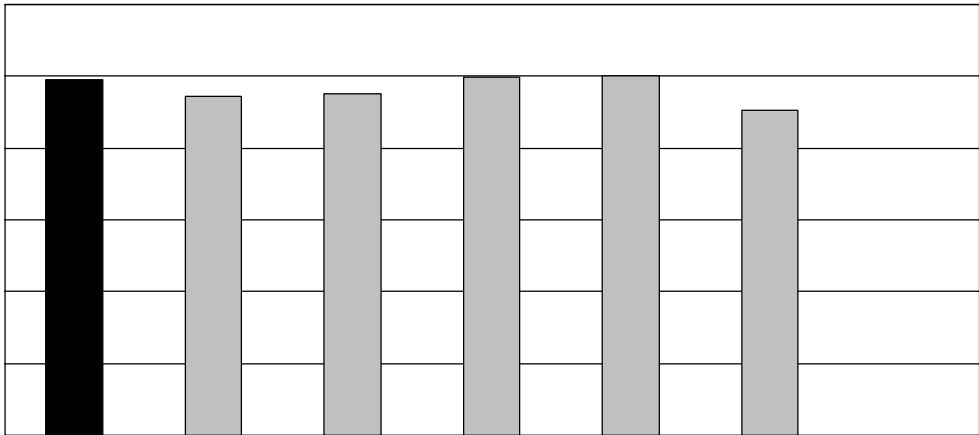
Note: Base case is a female aged 25-34, with no other children present (besides new baby), is married at ROE with spouse working more than 30 hours/week. She has a high school degree, works 33.7 hours per week and earns 15.72 \$ per hour, rents, her ROE is pre Jan 97, and she lives in Ontario. Her ROE employer has 20-100 people, is not permanent or a union job. As well, she did not work jobs concurrently in reference period before ROE nor have any gaps or absences and the job began before the reference period. Finally, her liquid assets are valued at \$11,211 in 1997 dollars and the benefit replacement ratio is 0.5372.

Figure 6
Probability of Returning to Job Before 27 Weeks



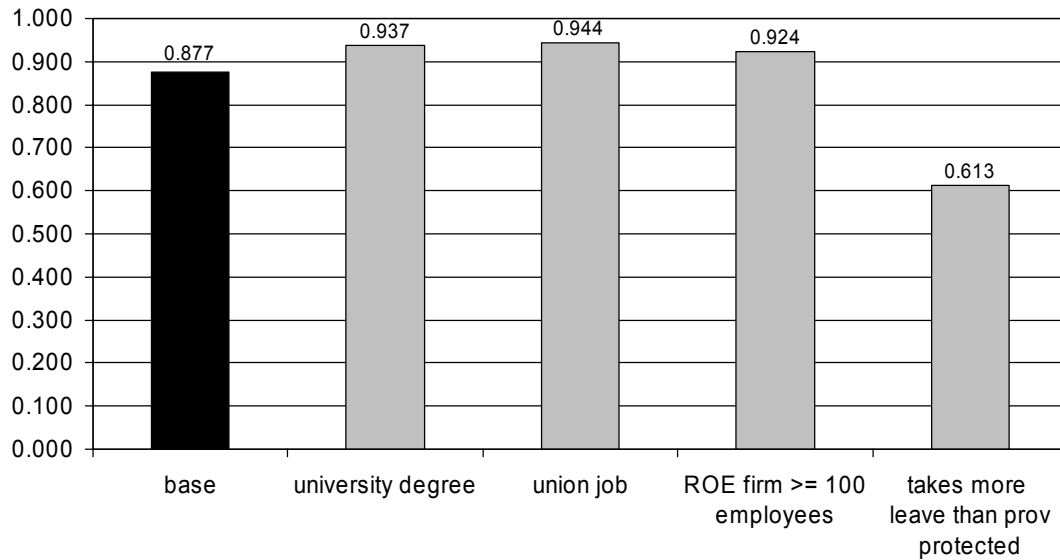
Note: Base case is a female aged 25-34, with no other children present (besides new baby), is married at ROE with spouse working more than 30 hours /week. She has a high school degree, works 33.7 hours per week and earns 15.72 \$ per hour, rents, her ROE is pre Jan 97, and she lives in Ontario. Her ROE employer has 20-100 people, is not permanent or a union job. As well, she did not work jobs concurrently in reference period before ROE nor have any gaps or absences and the job began before the reference period. Finally, her liquid assets are valued at \$11,211 in 1997 dollars and the benefit replacement ratio is 0.5372.

Figure 7
Probability of Returning Before 75 Weeks and Working at the second Interview



Note: Base case is a female aged 25-34, with no other children present (besides new baby), is married at ROE with spouse working more than 30 hours/week. She has a high school degree, works 34.1 hours per week and earns 16.52 \$ per hour, rents, her ROE is pre Jan 97, and she lives in Ontario. Her ROE employer has 20-100 people, is not permanent or a union job. As well, she did not work jobs concurrently in reference period before ROE nor have any gaps or absences and the job began before the reference period. Finally, her liquid assets are valued at \$12,131 in 1997 dollars .

Figure 8
Probability of Returning to the Same Job (for those who returned)



Note: Base case is a female aged 25-34, with no other children present (besides new baby), is married at ROE with spouse working more than 30 hours/week. She has a high school degree, works 33.7 hours per week and earns 15.72 \$ per hour, rents, her ROE is pre Jan 97, and she lives in Ontario. Her ROE employer has 20-100 people, is not permanent or a union job. As well, she did not work jobs concurrently in reference period before ROE nor have any gaps or absences and the job began before the reference period. Finally, her liquid assets are valued at \$11,211 in 1997 dollars and the benefit replacement ratio is 0.5372.

Figure 9
Duration of Maternity/Parental Leave Under UI and Under EI

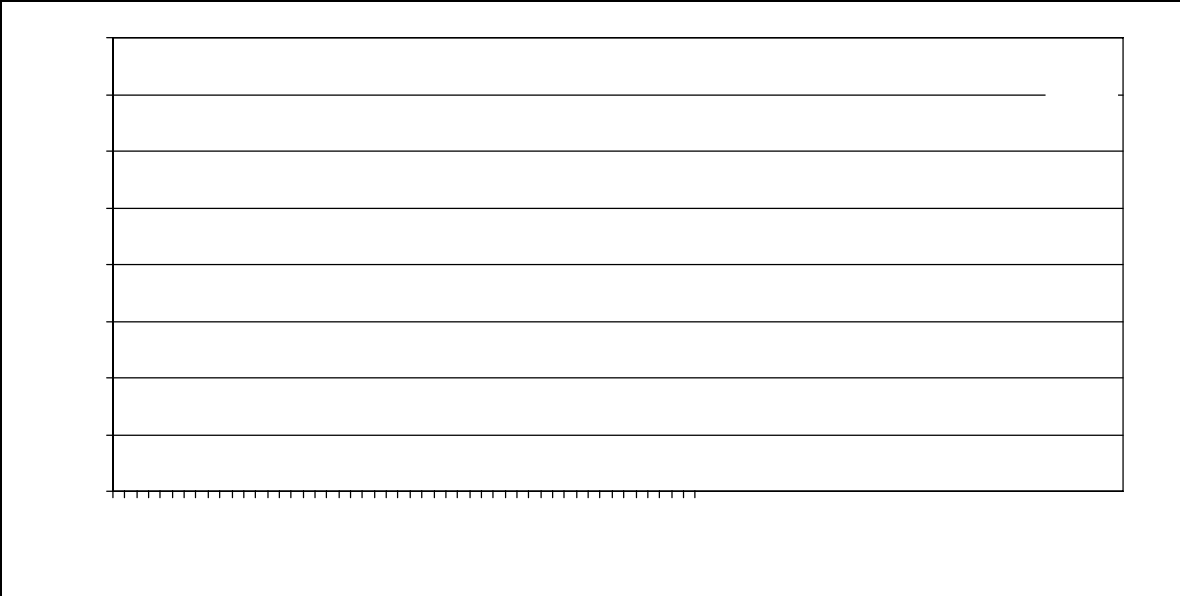
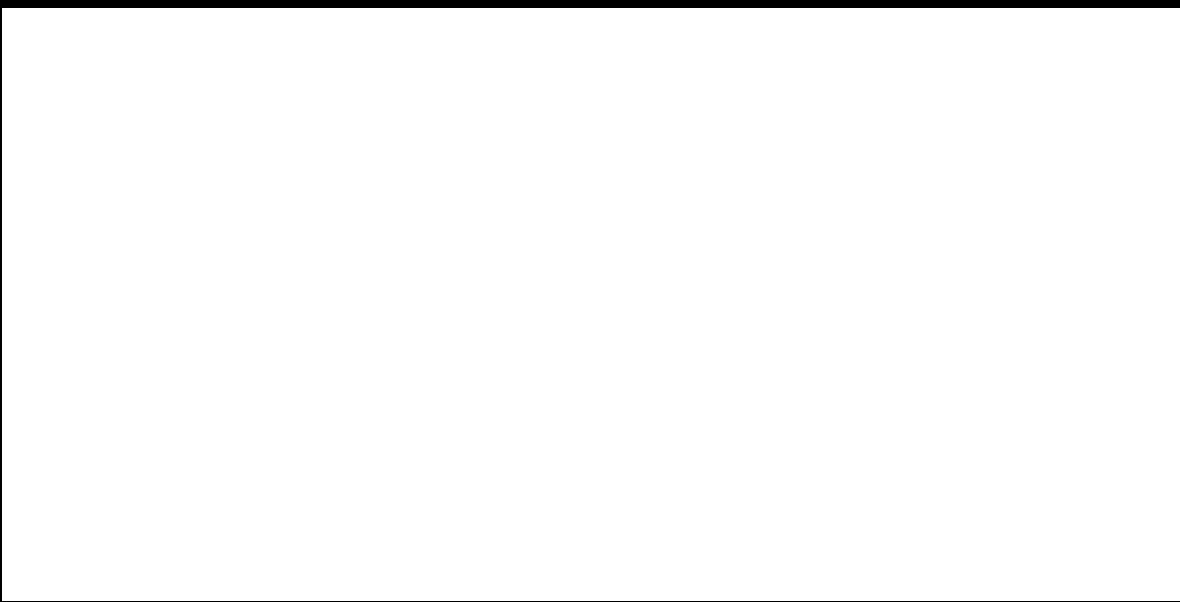


Figure 10
Duration of Maternity/Parental Leave Under UI and Under EI
Just Females



Bibliography

- Becker, Gary S. 1981. *A Treatise on the Family*. Cambridge: Harvard University Press.
- Dalto, Guy C. 1989. "A Structural Approach to Women's Hometime and Experience-Earnings Profiles: Maternity Leave and Public Policy." *Population Research and Policy Review*. 8, 247-266.
- Desai, Sonalde and Linda J. Waite. 1991. "Women's Employment During Pregnancy and After the First Birth: Occupational Characteristics and Work Commitment." *American Sociological Review*. 56 (August), 551-566.
- Garret, Patricia, Wenk, Deeann and Lubeck, Sally. 1990. "Working Around Childbirth: Comparative and Empirical Perspectives on Parental-Leave Policy." *Child Welfare*. 69:5, 401-413.
- Green, David A. and W. Craig Riddell. 2000. "The Effects of the Shift to an Hours-Based Entrance Requirement Human Resources Development." Strategic Evaluation and Monitoring. Evaluation and Data Development. Strategic Policy. Discussion Paper SP-AH138-11-00E.
- Gruber, Jonathan. 1994. "The Incidence of Mandated Maternity Benefits." *The American Economic Review*. 84:3, 622-641.
- Gustafsson, Siv. S. Cecile M.M.P Wetzels, Jan Dirk Vlasbolm. 1996. "Women's labor force transitions in connection with childbirth: A panel data comparison between Germany, Sweden and Great Britain." *Journal of Population Economics*, 9: 223-246.
- Hoem, Jan M. 1990. "Social Policy and Recent Fertility Change in Sweden." *Population and Development Review*. 16:4, 735-748.
- Hyatt, Douglas E. and Milne, William J. 1991. "Can Public Policy Affect Fertility." *Canadian Public Policy*. 17:1, 77-85.
- Joesch, Jutta M. 1994. "Children and the Timing of Women's Paid Work After Childbirth: A Further Specification of the Relationship." *Journal of Marriage and the Family*, 56 (May), 429-440.
- Joshi, Heather. Susan Macran and Shirley Dex. 1996. "Employment after childbearing and women's subsequent labour force participation: Evidence from the British 1958 birth cohort." *Journal of Population Economics*, 9:325-348.
- Klerman, Jacob Alex and Leibowitz, Arleen. 1997. "Labour Supply Effects of State Maternity Leave Legislation", in *Gender & Family Issues in the Workplace*. Francine D. Blau and Ronald G. Ehrenberg. Eds. New York: Russell Sage Foundation. 65-85.
- Klerman, Jacob Alex and Leibowitz, Arleen. 1994. "The Work-Employment Distinction Among New Mothers." *The Journal of Human Resources*. 29:2, 277-303.

- Moloney, Joanne. 1989a. Maternity *Canadian Social Trends*. 30-34.
- Moloney, Joanne. 1989b. "On Maternity Leave." *Perspectives on Labour and Income*. Ottawa: Statistics Canada. 1, 27-46.
- Ondrich, Jan. C.Katharina Spiess and Qing Yang. 1996. "Barefoot and in a German kitchen: Federal parental leave and benefit policy and the return to work after childbirth in Germany." *Journal of Population Economics*. 9:247-266.
- Pal, Leslie A. 1985. "Maternity Benefits and Unemployment Insurance: A question of Policy Design." *Canadian Public Policy*. 11:3, 551-560.
- Phipps, Shelley. 1995. "Maternity and parental leaves and allowances: An international comparison." Insurance Programs Directorate, Human Resources Development Canada, Ottawa. Final Report.
- Phipps, Shelley. 1994. "Potential Access to Maternity and Parental Benefits." Report prepared for Human Resources Development Canada.
- Phipps, Shelley. 2000. "Maternity and Parental Benefits in Canada: Are there Behavioural Implications?" *Canadian Public Policy*, forthcoming.
- Phipps, Shelley. Peter Burton and Lynn Lethbridge. "In and Out of the Labour Market: Long-Term Income Consequences of Child-Related Interruptions to Women's Paid Work." *The Canadian Journal of Economics*, forthcoming.
- Routhier, Anne and Labowka, Stephanie. 1994. "Unemployment Insurance Provision of Special Benefits: Evaluation Synthesis and Issues." Human Resources Development Canada, Insurance Programs Directorate Evaluation Branch, Strategic Policy. (First draft)
- Ruhm, Christopher J. 1998. "The Economic Consequences of Parental Leave Mandates: Lessons from Europe." *The Quarterly Journal of Economics*, 285-317.
- Ruhm, Christopher J. and Teague, Jackqueline L. 1997. "Parental Leave Policies in Europe and North America." in *Gender & Family Issues in the Workplace*. Francine D. Blau and Ronald G. Ehrenberg. Eds. New York: Russell Sage Foundation. 92-126.
- Sweetman, Arthur. 2000. "The Impact of EI on Those Working Less than 15 Hours Per Week." Human Resources Development. Strategic Evaluation and Monitoring. Evaluation and Data Development. Strategic Policy. Discussion Paper No. SP-AH137-11-00E.
- Ten Cate, Adrienne. 2000. "Labour Market Effects of Maternity and Parental Leave Policy in Canada." Paper presented at the 2000 meetings of the Canadian International Labour Network. Burlington, Ontario.
- Waldfoegel, Jane. 1997. "Working Mothers Then and Now: A Cross-Cohort Analysis of the Effects of Maternity Leave on Women's Pay." in *Gender & Family Issues in the Workplace*. Francine D. Blau and Ronald G. Ehrenberg. Eds. New York: Russell Sage Foundation. 92-126.

Waldfoegel, Jane. Yoshio Higuchi and Abe Masahiro. 1999. "A Family Leave Policies and Women's Retention After Childbirth: Evidence from the United States, Britain and Japan." *Journal of Population Economics*. 12:523-545.

Wenk, Deeann and Patricia Garrett. 1992. "Having a Baby: Some Predictions of Maternal Employment Around Childbirth." *Gender and Society*. 6:1, 49-65.

Zhang, Junsen, Quan, Jason and Van Meerbergen, Peter. 1994. "The Effect of Tax-Transfer Policies on Fertility in Canada, 1921-88." *The Journal of Human Resources*. 29:1, 181-201.