EI Impacts on Unemployment Durations and Benefit Receipt

Final Report

Prepared for:
Strategic Evaluation and Monitoring
Evaluation and Data Development
Strategic Policy
Human Resources Development Canada

Prepared by:
Stephen Jones
McMaster University

October 2000

SP-AH131-03-00E
(également disponible en français)

Table of Contents

List of Tables

Abstract

This research addresses some of the effects of the move from Unemployment Insurance (UI) to Employment Insurance (EI) on individuals' behaviour. This move, which began in mid-1996 and was further implemented in legislative changes that took effect in 1997, is still underway in that several of the new provisions will take a number of years to become fully operational. Nonetheless, enough data are now available for an initial assessment of some of the behavioural effects of the move from UI to EI. Individual contributions are being recognized.

The main questions are the extent to which the move from UI to EI caused a significant change in (i) the durations that individuals remain unemployed and (ii) the durations that individuals spend in receipt of UI/EI benefits. Adopting a primarily quasi-experimental approach, the research assesses the effects of the UI to EI move as a whole, without attempting to disentangle the individual contributions of the various new legislative provisions. The methodology, which builds on job search analysis and uses duration-modelling of the determinants of the hazard out of unemployment or UI/EI benefit receipt, also has some more structural elements in the modeling of demographic and regional effects, and in the treatment of seasonality. The work uses the Canadian Out of Employment Panel (COEP) dataset, linked to UI/EI administrative records, and exploits a straightforward "before/after" methodology using different cohorts of the COEP to identify overall effects of the move from UI to EI.

Broadly speaking, the conclusions are as follows. Based on the evidence from the quasi-experimental work that used matched cohorts for the same quarters from different calendar years, before and after the introduction of EI, the principal finding is that there are small but positive effects of the move from UI to EI on the estimated hazard out of unemployment. These effects are statistically significant in some of the estimated models and in magnitude, when significant, amount to about a 20 percent higher probability of unemployment spells ending at any point during the spell; this translates into shorter expected unemployment spells. However, since the results that I regard as the most dependable on an *a priori* basis turn out to be the ones where EI effects are the smallest, caution is warranted in any strong interpretation of the results.

Using the pooled cohort results, the results for unemployment durations were somewhat stronger in terms of overall significance, although these results are conditional on the particular assumed structure for seasonality. Examining all types of job separations together, the broadest specification led to a positive effect of EI on the hazard out of unemployment with an implied upward (proportional) shift of about 10 percent. Again, this leads to lower expected unemployment durations. Interestingly, when looking at heterogeneity within the population, this type of result was also found for individuals with job separations coded as "Shortage of Work" and "Other", for men and for non-youth (age 25 plus) workers. But few significant effects from the move to EI on unemployment durations were found for persons coded as "Voluntary Quits" or "Dismissals", for women and for youth.

In contrast to the relatively clear results for unemployment durations, which showed some small but significant effects and some interesting differences for different demographic groups, the evidence for durations of time spent in receipt of UI or EI benefits is not supported by significant statistical results. Using a variety of econometric methods, no significant effect of the move to EI on these benefit durations was found, neither in the aggregate nor the sub-groups.

Finally, it will be of considerable interest and importance to use data such as the COEP in the next few years to see whether these types of results continue as the longer-term provisions of EI become fully operative.

1. Introduction

The research that has been performed under this contract and is detailed in this report addresses some of the effects of the move from Unemployment Insurance (UI) to Employment Insurance (EI) on individuals' behaviour. This move, which began in mid-1996 and was further implemented in legislative changes that took effect in 1997, is still underway in that several of the new provisions will take a number of years to become fully operational. Nonetheless, enough data is now available for an initial assessment of some of the behavioural effects of the UI to EI change.

This work has two main focus, consistent with standard patterns of analysis and the structure of past reports. These are the extent to which the move from UI to EI alters (i) the durations that individuals remain unemployed and (ii) the durations that individuals spend in receipt of UI/EI benefits. The present research addresses these two issues and examines how they have been affected by the C-12 legislation. The work thus fits naturally under the mandate of Sect. 3(1) of Bill C-12 that calls for monitoring and assessment of "how individuals, communities and the economy are adjusting to the changes made by this Act to the insurance and employment assistance programs under the *Unemployment Insurance Act*." It will also be of relevance to the issue of "whether the savings expected as a result of the changes made by this Act are being realized."

Conceptually, the types of effects we might expect on individuals' unemployment or benefit durations arising from different UI and EI program parameters may be the result of induced changes in the job search behaviour of workers. Additionally, such duration effects may also arise from the response of firms to changes in program parameters. These types of duration effects are important in econometric policy analysis for at least three reasons. First, there is natural interest in macroeconomic evaluation of the effects of UI/EI on the unemployment rate and on macroeconomic performance in general. Much past research has addressed the *aggregate* effects of UI legislative changes on the national unemployment rate, in addition to assessing the impact on unemployment rates of various demographic and regional groups. Duration effects are of course central to such issues since, jointly with the incidence of unemployment, they determine the effect of policy changes such as Bill C-12 on the macroeconomic performance of the economy. As the substantial Canada-US unemployment rate gap of the 1980s has persisted and even worsened into the 1990s, such economy-wide concerns must remain high on the policy agenda.

Second, from an efficiency standpoint, key questions concern the microeconomic effects of different unemployment and benefit durations; one example would be the de-skilling that may occur over the course of a long jobless spell. Thus, evidence of effects from UI and EI program parameters on unemployment durations may be important because of the *microeconomic* effects of lengthy unemployment durations. These types of effects might be central in the formulation of a policy response to longer-term unemployment, even if it were the case that there were little overall macroeconomic effects.

Third, evidence that UI/EI program parameters induced changes in unemployment or benefit durations would provide some indication of the importance of the *worker moral hazard* associated with subsidy of (largely unverified) job search. In the standard approach, UI/EI provides a valuable insurance function at the cost of the moral hazard associated with subsidy of (largely unverified) job search. When the heterogeneity of the job search behaviour in the unemployment population is recognized, this type of assessment is vital for appropriate policy response.

2. Methodology of the Research

The core analytical methodology builds on an earlier body of theoretical and empirical research that addresses the determinants of benefit and unemployment durations. (References to this literature are given in the Bibliography.) Theoretically, the interpretive framework derives from job search analysis, an approach widely used in labour economics, although in fact the nature of the empirical investigation is not limited to this theoretical approach.

The basic model of job search by an unemployed individual is set in continuous time and begins in a stationary environment, so there is no systematic tendency for the external situation facing a searcher to change. Thus, this basic model initially excludes change in circumstances associated with the exhaustion of UI or EI benefits. Extensions of the model incorporating such features are discussed below. In the core model, job offers arrive at random intervals (that are beyond the control of the individual searcher) according to a Poisson process with arrival rate d. If a job is located, it is permanent and yields a wage w forever. When individuals are unemployed, they receive the current level of UI/EI benefits, b. Job offers are independently drawn from a known distribution of wages (with finite mean and variance) and there is no recall of an offer if it is rejected. Individuals care about utility which is linear in income and future income streams are discounted at a constant rate r.

In such an environment, the value of accepting a job paying a wage w is given by

$$^{e}(w) = w/r$$

the present value of receipt of w forever. In contrast, the value of being unemployed over a period of length h is

$$^{u} = bh/(1+rh)+(dh/(1+rh))E[max\{V^{e}(w),V^{u}\}]+(1-dh)V^{u}/(1+rh)+o(h)$$

where the final term reflects the value of receiving *more than one offer* in the period of length h; this term vanishes in the limit as h shrinks to zero. Note that this second valuation is defined implicitly in terms of itself and the other valuation. Together, these two expressions yield a solution for the *reservation wage* w^* since $V^e(w)$ is increasing and continuous in w, while V^u is independent of w (depending only on its expectation). That is, w^* is the unique value that solves the valuation equation $^{e}(w^*)=V^u$.

One can hence derive the main result which is:

$$(w^*-b)r=d(1-F(w^*))[E(w|w\geq w^*)-w^*]$$

The left hand side can be interpreted as the imputed interest income consequent upon the rejection of an offer of w^* (and hence on receipt of b for another period); and hence, represents the marginal cost of rejection of w^*. The three right hand side terms are, respectively, the offer receipt probability (i.e., the Poisson arrival rate), the region of the offer distribution in which offers are accepted, and the marginal expected benefit of a wage offer above w^*. The reservation value that guides optimal behaviour equates the marginal cost and the expected marginal benefit of acceptance and/or rejection.

In practice, use of this search theoretic framework as a guide for empirical analysis requires some further modification. Specifically, the framework must take into account the fact that the reservation wage, the central construct in this analysis, is not typically observed (or, if reported or "observed" in some sense, may be observed with error). Thus, the model is extended to yield implications for *observables* such as unemployment durations or durations in receipt of UI/EI benefits, the distribution of acceptance wages in the next job found, or the joint distribution of such wages and durations analyzed together.

In addition, one must address the appropriate modification of the basic risk-neutral, stationary search model to incorporate more realistic and important institutional features. These features might include exhaustion of UI, potential asset depletion during a jobless spell, changes in overall economic conditions during a search spell, finite-lived jobs, time-varying search intensity, and firm behaviour that responds differently to applicants with different elapsed durations (either based on some real change that occurs with duration such as skill depletion or based on bias against the longer-term unemployed). Mortensen (1977), for example, addresses a number of these extensions and a discussion with related empirical analysis applied to UI exhaustion (using US data) is provided in Meyer (1990). In the context of the econometric analysis of durations, such extensions yield implications for duration dependence as the hazard out of unemployment — the conditional probability that a spell will end in a given period, given its continuation to this period — varies with the elapsed duration of unemployment.

Further discussion of these theoretical approaches is provided in the survey by Mortensen (1986), a reference that covers principally the theoretical model, and Devine and Kiefer (1991), a book that surveys both structural and reduced forms of econometric approaches. Moreover, other references, including some papers by the present principal investigator that illustrate the nature of the prospective investigation, are included in the selective bibliography.

3. Legislative Changes Introduced by EI

Bill C-12 introduced a large number of legislative changes, relative to the piecemeal changes to UI introduced earlier in the 1990s. Accordingly, the move from UI to EI is a major one. Of particular interest for the present study, EI-Part I involved both new insurance elements — the average earning calculation, the divisor rule, the intensity provisions and related work credit rules, and the family income supplement — as well as modifications of existing UI parameters — the move to an hours-based system, the change in new entrant and re-entrant entrance requirements, the drop in maximum benefit duration, and the reduction in maximum insurable earnings. Of course, when many factors change at the same time, there may be difficulty in *disentangling* the individual effects of each change, especially if the principal method of empirical analysis follows a natural experiment methodology. In practice, some of the EI changes were immediate, becoming effective in mid-1996, some were implemented at the start of 1997, and some, though introduced in mid-1996, will only become fully operational after several years of tracking of EI usage has taken place.

For present purposes, the main consequence of this gradual phase-in of EI is that one might expect different effects in the early period of EI coverage than subsequently. Operationally, the data we employ concern individuals with job separations in four calendar quarters of the UI system (1995Q3, 1995Q4, 1996Q1, and 1996Q2), two quarters of the initial phase-in (1996Q3 and 1996Q4), and four quarters of the period of fuller EI coverage (1997Q1, 1997Q2, 1997Q3, and 1997Q4). Individuals with separations in these various calendar quarters are labelled as being in cohorts 1-10. Cohorts 1-4 cover job separators under the UI system; cohorts 5-6 include individuals with job separations during the EI phase-in period; and cohorts 7-10 consist of job separators under the fully implemented EI system. However, one should note that, in view of the long-term effects of some of the EI provisions, such as the intensity rule, assessment of the importance of these long-term consequences will require data several years after the start of EI.

4. Indicators

To conduct the analysis of these changes, the first requirement is an indicator of the length of a benefit or unemployment duration. I present results below from the analysis of *two* principal measures: the *duration of UI/EI claims*, and the *duration of unemployment or joblessness*, whether or not this latter duration is accompanied (in part or whole) by a period of UI/EI benefit receipt.

To understand the relationship between these two main indicators, one should understand that some durations of unemployment may not be long enough to warrant the filing of a UI/EI claim, as some earlier work with the Canadian Displaced Worker Survey has indirectly suggested (Storer and Van Audenrode 1993, e.g.). There may also be other reasons why eligible persons do not make benefit claims. Other durations may also be uninsured if the applicant lacked eligibility (e.g., if classified as an unjustified voluntary quit, or if lacking sufficient weeks/hours of qualifying employment). Some claims may have a phase of benefit collection followed by a jobless period when UI/EI benefit eligibility is exhausted. While the benefit collection period will be determined from the administrative records alone, the jobless period will be determined as starting following the Record of Employment (ROE) date (assuming the individual is jobless following this separation) and ending at the date of starting work at the next job.

5. Econometric Models

In the present analysis of the EI changes using these two indicators, I draw upon two related approaches and research methodologies. The first of these is quasi-experimental and the second is a more traditional structural analysis. Although it is not feasible to review the extensive, detailed and technical literature on the benefits and potential pitfalls associated with each approach, it is nonetheless appropriate to give a brief summary of the issues. In either case, "durations" may mean either of the two main indicators discussed above.

The standard structural approach seeks to model the determinants of durations, either through simple regression techniques or by the use of duration modelling methods such as estimation of the hazard function. The hazard is the conditional probability that a given spell will end in a certain period, conditional on its not having ended prior to that point. The regression model is simple to implement but suffers from econometric problems if the true hazard varies with the duration of the spell (the case of "duration dependence") or if some spells are still in progress at the survey date and are hence right-censored (so that the end date is not observed). In addition, the regression model does not naturally fit into a choice-theoretic framework (since an individual may not *choose* at the outset how long a duration to experience), whereas the on-going and sequential nature of a jobless duration (based on a sequence of decisions as to whether or not to accept a job offer or to continue with further job search) corresponds more naturally to the underlying econometric structure of the hazard specification.

Statistical and econometric methods used to estimate the hazard function can allow for such "duration dependence" and can naturally accommodate right-censoring. In either case, the structural approach seeks to control for other determinants of the duration — factors such as education, sex, marital status, and regional characteristics — and then to assess the role played by the variable of interest (e.g., the UI/EI replacement rate).

The key problem in the standard approach is the *identification* of the effects of variation in the central variable. Typically this problem is "solved" by assuming that its effect is not completely captured by the other controls. Whether this truly solves the problem is an open issue, however, and is one that depends on the credibility of the identifying assumption. An example of this approach is the use of the legislative maximum on insurable earnings under UI/EI as a means of generating sample groups with different *ex post* replacement rates. In each case, the structural approach relies on the identifying assumption that some variation in the key variable can be used to separate its own effect from the effects of other controls.

The chief problem with such structural modelling arises from the observation that there is in fact little exogenous variation in the parameters of UI/EI programs in many countries, including Canada. If the level of weekly UI/EI benefits depends on past earnings — both the level of these earnings (subject potentially to legislative minima and maxima) and the duration of the insured employment in the qualifying period — then it may be very difficult to separate out the *direct* effects of UI on behaviour and the *indirect* effects of all of the factors that influence past earnings. Estimates of benefit effects on unemployment durations, say, may then be biased, although in principle it is hard to determine the direction of this bias. Furthermore, since Canadian UI/EI program parameters are largely national in scope (with the exception of regional aspects of benefit eligibility and the variable entrance requirement to qualify for UI/EI), something like the state-level variation exploited in some U.S. research, for example, is not available. If researchers or policy practitioners have misgivings about the ability of non-experimental data to distinguish between direct UI effects and the influence of all of the other variables that affect UI eligibility and receipt, conclusions from structural studies must be treated with caution.

The alternative approach is a *quasi-experimental* (or natural experimental) technique that exploits some variation in program parameters that can be thought of as exogenous to the individuals involved. Of course, such an approach requires appropriate data that in some way brackets a legislative change (or some other form of quasi-experimental exogenous variation in the program design). In the present case, such data are available by use of the various cohorts of the Canadian Out Of Employment Panel (referred to as the COEP96 to differentiate it from two earlier surveys by HRDC, the COEP93 and the COEP95). Essentially, the COEP96 data from the initial four cohorts can serve to provide the "before" group under the old UI system, while data from the subsequent cohorts of COEP96 provide the "after" group subject to various elements of the provisions of EI. Specifically, cohorts 5 and 6 provide data on the phase-in period of EI, when some provisions were operative but others were not, while cohorts 7-10 can serve for assessment of the initial effects of EI when fully operational. As can be seen in research on the labour market effects of Bill C-17 (e.g., Jones 1997), a reform of UI earlier in the 1990s, comparison of the durations for these "before" and "after" groups enables a quasi-experimental assessment of the overall effects of the changes. Such quasi or natural "experimental" methods have the advantage of using *exogenous variation* in UI/EI program parameters to identify key effects, something that is typically not possible with non-experimental data.

6. Initial Specifications and Results for Unemployment Durations

The framework for the initial analysis of the determinants of unemployment durations is a hazard model of the underlying transitions. As noted above, this means that I studied determinants of the probability that a given unemployment spell will terminate in the next week, conditional on that spell not having yet ended prior to that week. This approach has several statistical advantages over, say, basic regression analysis or the study of average spell lengths alone, particularly in that it permits appropriate correction for spells that are still in progress at the time of study. Within this general framework, I particularly studied a set of models due to Cox (1972), although some alternative specifications that depart from the Cox framework have also been estimated and are reported subsequently.

In this leading approach, usually called the Cox Partial Likelihood Method, the hazard out of unemployment is assumed to factor into two separate components: a *baseline* hazard $b(t, 0)$ that gives the (conditional) probability of a spell ending at a given time t when all explanatory (or control) variables are set at the value 0; and a set of explanatory (or control) variables that are assumed to act *proportionally* on this baseline. This latter feature is the reason why these Cox models represent one variety of the class of models known as *proportional hazards specifications*. The key element in the Cox framework is that, owing to the partial likelihood approach, the baseline may assume any shape and factors out of the likelihood equation; that is, the baseline is not estimated. Thus, the hazard is given by the product of the two components.

$$h(t,X(t))=b(t,0)e^{x(t)'\beta}$$

where $X(t)$ is a vector of explanatory variables and β is the associated vector of coefficients.

I presented the results of this type of Cox proportional hazard model on unemployment durations first (measured since the Record of Employment (ROE) date that is derived from the Canadian Out of Employment Panel (COEP)97 dataset). Specifically, I matched up pairs of cohorts from the COEP96 on a seasonal basis (those with job separation and ROE date in 1995Q3 were matched up with those from 1996Q3, and so on), thereby matching cohorts 1 and 5, cohorts 2 and 6, cohorts 3 and 7, and cohorts 4 and 8 in four separate datasets. The first two of these four datasets provide a quasi-experimental comparison of the UI period before July 1996 with the EI phase-in period in the third and fourth quarters of 1996, while the last two of the four datasets give comparison of UI and EI periods between 1996Q1/Q2 and 1997Q1/Q2 respectively. In addition, with the recent availability of data from the final two cohorts of COEP96, I have also been able to construct datasets that match up cohorts 1 and 9 (both in calendar Q3) and cohorts 2 and 10 (both in calendar Q4). These newer datasets span spells that are two years apart (1995 and 1997, respectively) and can serve as one check on the results from the datasets for cohorts that are only one year apart.

Initially, it is important to allow for the maximum flexibility in the seasonal influence on these durations. This is best performed by permitting the exact match of quarters across calendar years. My earlier work (Jones, 1997) investigating Canadian unemployment insurance data from the 1990s (using the COEP93 and the COEP95) suggested that such seasonal factors were of considerable importance and could easily outweigh program effects if the policy changes involved were comparatively small. However, I also address an alternative empirical strategy below by pooling the datasets, restricting the seasonal effects to be of a particular uniform nature, and thereby gaining the advantages that may accrue to a larger sample size. The sample sizes for the pre-EI period (cohorts 1-4) are now fixed. These samples may be too small for some of the demographic breakdowns one might wish to address (effects on youth, on women, and on different regions, for example). In this regard, there seems to be no alternative but to adopt some sort of parameterized seasonal structure and utilize datasets that pool individuals from different cohorts.

The initial results for unemployment durations are contained in a set of Tables, with three Tables for each pairwise-cohort dataset. Within each paired dataset, the three Tables present the results for the overall sample, for those categorized as having had a separation for reasons of ShortWork/Other, and for those categorized as having had separation reasons of Voluntary Quit/Dismissal. Such heterogeneity in separation reason is potentially very important and is hence investigated by allowing *all* estimated parameters to vary according to the reason code. The small samples for many of the VQ/Dismissal datasets are noted at the outset. Overall with four year-on-year comparisons, and two two-years-apart comparisons, and with each model having three Tables, these initial results for the hazard models of the determinants of unemployment duration are contained in Tables 1-18.

In each case, four specifications of the explanatory variables were employed. First, I used only a dummy variable that takes the value 1 for an individual in the *later* cohort, and 0 otherwise. These dummy variables are termed coh05, coh06, ..., coh09 in the respective Tables. Second, I added the local unemployment rate to this dummy variable. Third, I instead added indicators of sex (male=1, 0 otherwise), marital status (married=1, 0 otherwise), age, education (less than [high school], college, university), and four regional indicators (Atlantic, Quebec, Prairies, and British Columbia and the Territories). The omitted (baseline) case thus represents an unmarried female with a high school education living in Ontario. Finally, model 4 in each of these Tables gives the nesting specification that includes all of these demographic variables, the cohort dummy variable, and the measure of local labour market conditions.

6.1 UI and the EI Phase-in Period

I address first the comparison of the UI period and the EI phase-in period by examining Tables 1 and 4 that give the full sample results for the cohorts 1 & 5 and 2 & 6 datasets, respectively. The results in Table 1 display a positive and significant coefficient on the coh05 dummy variable across all four models. This means that the hazard out of unemployment is *significantly higher* for the cohort 5 (1996Q3) group than for the cohort

1 (1995Q3) group. Since the effect of an explanatory variable X operates on the baseline hazard as exp(X'b), given the above specification, the point estimate from model 1 of 0.185 implies that the baseline hazard is shifted up proportionally by a factor of exp(0.185)=1.20, compared to the case when coh05=0 (i.e., for members of cohort 1). With no other controls, this is the quasi-experimental effect in the context of this Cox specification. Since the hazard is the conditional probability that the spell will end in a given time period, a higher probability of the spell ending implies a small but significant tendency for unemployment durations to fall in the EI phase-in period.

In the other three models reported in Table 1, as the other controls are added sequentially, there is a slight tendency for this estimated cohort coefficient to rise. Model 2 adds the local unemployment rate at the time of the ROE separation, an indicator of overall economic conditions (as well as a factor that affects qualification requirements). Its effect is small, though significant. The coh05 effect is essentially unchanged. Model 3 adds the demographic controls and these tend to raise the cohort effect, with the resulting point estimate of 0.335 implying a proportional hazard shift upwards of 1.40. According to this specification, the two major demographic effects are for the age and the Atlantic provinces variables, both of which tend to lower the estimated hazard and hence raise expected unemployment durations. Nonetheless, only the age variable would be regarded as significantly different from zero at a 5 percent level. The local unemployment rate is added to Model 4. The cohort and age coefficients remain sizeable and significant, although relative to Model 2, the effect from local labour market conditions is less striking (and now no longer significant), given the other regional controls.

Table 4 reports the analogous results for the UI/EI phase-in analysis using the cohorts 2 & 6 dataset, and while there is no *a priori* reason to favour either set of results over the other, for brevity only the main points and important departures from Table 1 will be discussed. The cohort effect in model 1 (labelled coh06) is now numerically slightly smaller, with the point estimate of .155 implying a hazard shift of 1.17. This effect remains statistically significantly different from zero in the first two models (but not in the final two). The age and Atlantic effects are again clear in models 3 and 4. In addition, there is a pattern of significantly negative coefficients for Quebec. Finally, there is some evidence that being a male raises the hazard out of unemployment, although this effect is only significantly different from zero at a 10 percent confidence level.

Tables 2 and 3 and Tables 5 and 6 report, respectively, the results for these two datasets using the SW/Other and VQ/Dismissal breakdown of the sample by reason code. In each case, however, the SW/Other group comprises the vast majority of the overall sample and the results for this group hence match up closely with those already discussed, while the small VQ/Dismissal samples probably preclude significant results when there are many explanatory variables. Interestingly, though, even when the cohort effect is estimated alone for the VQ/Dis sample (model 1 in Tables 3 and 6), the estimate is small and insignificant. Below, I will investigate whether this effect persists when datasets are pooled in an effort to overcome the very small sample sizes for the VQ/Dis groups.

6.2 UI and Fully-implemented EI

I now turn to the four datasets that compare the final four quarters of experience under UI (1995Q3 to 1996Q2) with the first four quarters of the fully implemented EI system (1997Q1 to 1997Q4). To allow for seasonal comparison, cohorts in the same quarters before and after EI were matched. First, cohorts with initial job separations that are *two* years apart (cohorts 1 & 9, and cohorts 2 & 10) were matched. Second, cohorts with initial separations that are one year apart (cohorts 3 & 7, and cohorts 4 & 8) were matched. As before, there is no particular reason to favour one set of these results over another — their overall pattern is of much greater importance than any one result or coefficient — so I present the full results in each case. With the breakdown by reason for job separation as before, the relevant results are given in Tables 7-9 (cohorts 1 & 9), Tables 10-12 (cohorts 2 & 10), Tables 13-15 (cohorts 3 & 7), and Tables 16-18 (cohorts 4 & 8).

The basic quasi-experimental effects in Tables 7 and 10 are estimated as 0.192 and 0.174 respectively, both effects being significant at the 5 percent level. This implies that the proportional hazard shifts upward by 1.21 in Table 7 and by 1.19 in Table 10. In both cases, this effect remains positive and significant across the four estimated model specifications, with the coefficient on the later cohort dummy variable (coh09 and coh10, respectively) tending to rise as the other controls are added in Table 7 but not in Table 10. Local unemployment conditions play some role, tending to lower the hazard and hence lengthen unemployment spells. However, these effects are greatly diminished by the presence of other regional variables. As before, age plays a significant role, with a small but significant coefficient in models 3 and 4 in both cases.

The breakdown by reason for job separation given in Tables 8 and 9 and in Tables 11 and 12 once again illustrates the dominance of the SW/Oth group which accounts for the vast majority of the overall sample in both cases. The VQ/Dis results are based on small samples and are largely insignificantly different from zero, with some point estimates (e.g., models 3 and 4 in Table 12) even having the “wrong” sign relative to the pattern of results to date.

When we turn to the set of results for the cohorts with job separations only one year apart, as reported in Tables 13-15 (cohorts 3 & 7) and Tables 16-18 (cohorts 4 & 8), a different pattern in the results emerges. If we begin by examining the basic quasi-experimental effect (model 1 in each case) for the full sample, we see that in both Table 13 and Table 16 the estimated coefficient is negative, is numerically small, and is insignificantly different from zero, even at a 10 percent confidence level. Moreover, this pattern of small and insignificant coefficients holds up across the four estimated models in each Table; the sign changes in the coh07 estimate for models 3 and 4 of Table 13 are unimportant, given their insignificance. In aggregate, this framework implies *little or no overall effect* in the initial period of full EI implementation, relative to that in the matching quarter of the previous calendar year (that is, in the six months preceding the change). The patterns of the other estimated coefficients are somewhat inconsistent between the two datasets, with some local labour market effects in Table 13 but not in Table 16, and with some other differing demographic effects. As before, the reason code subsample results in Tables 14 and 15 and in Tables 17 and 18 largely confirm the full sample results for the SW/Other group and suggest acute sample size problems for the VQ/Dismissal subsample.

Overall, to give the initial conclusions from these results, the determinants of unemployment duration contained in Tables 1-6 suggest a small effect of the UI/EI move in the phase-in period, raising the hazard and hence lowering expected unemployment durations. However, sample sizes definitely hamper our ability to sort out any differential effects according to the reason for the past job separation. The results fail to confirm the existence of such an effect for the fully implemented EI system. While the estimated effects were in line with those for the phase-in period using the sample of cohorts two years apart (Tables 7-12), these same estimated effects were small and insignificant for the sample of cohorts that are only one calendar year apart (Tables 13-18). If anything, one would prefer the latter estimates. Since the plausibility of the quasi-experimental framework is greater when the two groups being considered are closer, one would prefer to obtain significant results for the latter estimates. In other words, more factors that are not being fully controlled for may change between calendar quarters two years apart than between calendar quarters only one year apart. Thus, the failure of the results from the Cox model for cohorts 3 & 7 and cohorts 4 & 8 is important, and probably outweighs the previous results based on cohorts 1 & 9 and cohorts 2 & 10. Certainly, one would initially conclude that the evidence of clear and consistent behavioural effects of the move from UI to EI is not present.

7. UI/EI Effects Using Pooled Datasets

One issue that arises in the preceding analysis is the ability of the COEP96 data to address several important issues owing to the size of the sample, particularly for the cohorts with job separations before the introduction of EI. For some types of job separations, such as the VQ/Dis group, this problem may have masked genuine underlying effects which might be present in the data. Furthermore, if we wish to consider other sub-populations, such as whether the move to EI had differential behavioural effects on women or on younger members of the labour force (effects that might go beyond the inclusion of a simple dummy variable in the earlier Tables), sample issues again become central.

Accordingly, I have also estimated a number of models on pooled datasets where several cohorts are grouped together. In this approach, one cannot adopt the best, unrestricted approach to handle seasonality, since the simple match-up of job separations in the same calendar quarter is no longer available. Instead, the price paid for the larger sample size is that the seasonal effects on duration are modelled in a parametric manner, with quarterly dummy variables allowing the hazard to shift (proportionally) according to the quarter in which the initial job separation occurred. Since this approach is more restrictive and imposes more structure than the quasi-experimental match-up of cohorts above, I regard the two research methodologies as complementary.

The first set of results from this approach are reported in Tables 19-21, dealing with the full sample and the SW/Oth and VQ/Dis separation reason code groups, respectively. In each case, the four estimated models include a dummy variable named "ei" for the period of full EI implementation (since January 1997), a dummy variable named "intro" for the period when EI was being phased-in (July 1996 to December 1996), and three dummy variables representing the first three calendar quarters when the job separation occurred. In addition, as before, the four models are built up by the addition of a local labour market conditions indicator (localu in model 2), by the addition of a set of demographic variables (model 3), and by an encompassing model that includes all these variables (model 4).

For the full sample, the Table 19 results show a small positive effect on the hazard from the "ei" variable. In models 1 and 2, the effect is numerically quite small and statistically insignificant at a 5 percent level, though in the richer specifications of models 3 and 4 the point estimate rises and the t-statistics are well above 2. In terms of the upward shift of the hazard, the final column's estimate of 0.102 translates into a rise of just over 10 percent, relative to the pre-EI period. Note also that these models find significant estimates of the phase-in variable "intro" with coefficients that are in fact slightly larger than the "ei" coefficient. In all four models, the quarterly effects are strong and consistent, being significantly positive for calendar Q1 and significantly negative for calendar Q3. Finally, the local unemployment rate has a negative coefficient in model 2 (as it did, for example, in Table 1), although with the addition of regional controls and other demographics in model 4, the estimated coefficient falls and becomes insignificant at the 5 percent level. Overall, the pooled results for this sample are largely consistent with the quasi-experimental results in the earlier Tables, finding small but significantly positive effects on the hazard from both the phase-in and the fully implemented EI variables.

To exploit the advantage of the larger sample size, I next address the breakdown by job separation reason code, as reported in Tables 20 and 21. The SW/Oth results again largely match the full sample results, which is to be expected since this reason code accounts for the majority of the overall sample. There is some sign in Table 20 that the "ei" coefficient is larger than in Table 19, although I doubt that this difference in estimates would be significant. For the smaller VQ/Dis group, however, even when we move to these pooled data and to a potential sample size approaching 600 for the basic models 1 and 2, we fail to find any significant effect from either "ei" or the "intro" variable. This suggests more strongly than the earlier results that there is indeed something different about the VQ/Dis group, relative to the SW/Oth population, and that the VQ/Dis group is comparatively unresponsive to changes in UI/EI program parameters.

7.1 Estimates of the Pooled Model on Sub-Populations

I have also estimated this same set of models for some other sub-populations that are likely to be of research and policy interests. Tables 22-24 and 25-27 report the results of estimating these models for females and males, respectively, still using three separation reason subsamples in each case, while Tables 28-30 and 31-33 give a similar breakdown for "old" (age 25 plus) and "young" workers (age less than 25). These models allow for greater flexibility in the effects of sex or age on the hazard than in the basic model. In the basic model, the sex or age enters as a dummy variable but in these models, the whole structure of the hazard, including the nature of the behavioural response to UI/EI, can vary by sex or age.

The main result is that these sub-populations have quite different estimated behavioural effects. For women, who comprise slightly under half of the overall sample, Table 22 reports that the estimated effects for both the phase-in and the fully implemented EI are small and insignificantly different from zero in all four model specifications. In contrast, the leading two rows of Table 25 show that, for men, the estimated EI effects are always positive, are significant at the 10 percent level in models 1 and 2, and are strongly significant in models 3 and 4. Moreover, the phase-in effects are positive and significant for the male sample, but negative and insignificant for the female population. The quarterly effects also differ somewhat between the two groups, with the positive Q1 effect for men in Table 25 being completely absent for the women, although the negative Q3 effect on the hazard is present for both sexes. Finally, this difference between the two sexes also holds for the SW/Oth sample, as comparison of Tables 23 and 26 reveals, although any pattern of point estimate difference for the VQ/Dis groups (comparing Tables 24 and 27) is undermined by the statistical insignificance of these estimated coefficients.

By broad age group, I also find important differences in the model estimates. Comparing the full sample results for the old and young in Tables 28 and 31 respectively, the older group — which comprises most of the overall sample — has EI effects that are positive and are statistically significant (in models 3 and 4). Meanwhile, the "ei" variable for the much smaller young group is uniformly negative and insignificant. Again, as for the females, the calendar Q1 effect is not present for the young group, although it is for the older group (as it is for the males). These results also hold up for the SW/Oth subsample (Tables 29 and 32), but there are no significant "ei" effects found in the VQ/Dis group results of Tables 30 and 33.

In view of these interesting differences influenced by sex and age, I have also estimated these models with the additional constraint that the "ei" and the "intro" variables share the same effect. The results of this procedure are reported in Table 34, where the joint EI and phase-in variable is termed "eipi". For brevity, other estimated coefficients are not reported in this case, although the four model specifications match those of the preceding Table. The effect of this added constraint is that the eipi effect is now positive and significant (usually at the 5 percent level) for the full sample, for men, and for the old population. The behavioural effect is small, sometimes positive and sometimes negative but never statistically significant, for women and youth. While the move to EI tended to lower unemployment durations for men and for non-youth, holding other factors constant, this evidence suggests that such an effect on the hazard and duration does not operate for women or youth.

8. Alternative Models of Unemployment Duration

The final element in the analysis of unemployment durations is to investigate the robustness of these results to model specification. To do this, I have estimated a variety of alternative models of the determinants of duration. These are reported in Tables 35-38.

First, I addressed a set of leading alternatives to the Cox partial likelihood approach, a set that includes a variety of parametric models of duration. That is, the overall hazard is now viewed as

$$h(t,X(t))=b(t,0)e^{x(1)'\beta}$$

where $X(t)$ is a vector of explanatory variables and β is the associated vector of coefficients, but $b(t,0)$ is now taken to follow a particular parametric form. The exponential model obtains when

$$b(t,0)=$$

and the related Weibull model adds a shape parameter p so that

$$b(t,0)=pt^{p-1}.$$

The Gompertz model, still in the proportional hazard framework, has

$$b(t,0)=e^{\gamma t}$$

so that the overall (proportional) hazard is

$$h(t,X(t))=e^{\gamma t}e^{x(t)'\beta}.$$

In contrast, the three other functional forms I estimated are all in the "accelerated failure time" (AFT) framework. This means that larger values of the control variables translate into an "acceleration" of the failure time, rather than a proportional shift of the entire estimated hazard. Specifically, these models are estimated as

$$\ln t=X(t)'\beta+z$$

and the nature of the model depends on the assumed distribution for the error term z. I estimated three possibilities, according to whether this distribution was LogNormal (the natural logarithm of time is assumed to follow a Normal distribution), LogLogistic (the natural logarithm of time follows a Logistic distribution), or Gamma.

The key results of this investigation are reported in Table 35, although other coefficient estimates are not reported for brevity. For the three proportional hazard models, the first three reported in the Table, the results are quite robust. The estimated effects of "ei" and "intro" are always positive and significant, at least for models 3 and 4. This suggests that the Cox partial likelihood results reported above would not be seriously modified if one of these alternative models of duration is used. In contrast, the three AFT models produce mixed and inconsistent results, so we are inclined to put less weight on these specifications.

With the proportional hazard framework, I have also addressed some richer models of the determinants of unemployment duration. In Table 36, I report the results from a Cox partial likelihood model where I explicitly model a phase of *uninsured* unemployment (a period in which UI/EI coverage has been exhausted). This time-varying covariate allows the hazard to shift up or down when UI/EI expires and is estimated within the context of the pooled data with quarterly dummy variables for the seasonal effects. The results of the full sample for "ei" and "intro" are very similar to those reported in Table 19. Small positive and significant effects on "ei" are reported for models 3 and 4. Significant positive effects for all four model specifications for the phase-in variable "intro" are reported. Interestingly, the "unins" variable that captures the uninsured period of unemployment has a positive coefficient (significantly so for models 1 and 2), so that the hazard is raised in the period when coverage has been exhausted.

Relatedly, I address issues of anticipated benefit exhaustion in Table 37. A set of time-varying covariates are included to account for the possibility of 1-3, 4-6 and 7-9 weeks of UI/EI coverage remaining in the unemployment spell (ben13, ben46, and ben79, respectively). Again, there is no essential change in the coefficients on "ei" and "intro" for any of the four model specifications, relative to the basic Cox model without the benefit exhaustion variables, suggesting that those results are quite robust. The benefit exhaustion effects exert a rising influence on the hazard as UI/EI exhaustion approaches (the coefficient on ben13 exceeds that on ben46, which in turn exceeds that on ben79). This is true for each specification. Of the three exhaustion variables, only ben13 is individually significant, but this effect is strong and fairly constant across models 2-4.

The final variant I have examined is an alternative set of duration models in a PGM framework after Prentice and Gloeckler (1978) and Meyer (1990). These models are estimated for the full sample and the VQ/Dis and SW/Oth groups and incorporate three alternative approaches to duration. First, I incorporated the logarithm of duration in addition to the "ei" and "intro" variables. Second, I used a fourth-order polynomial in duration as a flexible means of capturing non-monotonicity of the hazard with respect to duration. Third, I estimated a fully non-parametric model where each duration in the grid (from 1 week to 54 weeks) has its own dummy variable, thereby permitting any pattern whatsoever to the estimated duration effects. The results from these procedures are reported in Table 38, where the six model specifications correspond to the three duration methods, each estimated with and without the set of demographics and the local labour market conditions variable. The estimated "ei" and "intro" effects are very stable across all six models, with significantly positive point estimates for the "ei" coefficient in the 0.06 to 0.16 range. In each case, the duration controls alone result in an estimate under 0.10 while the addition of the demographics raises the estimate to the 0.13-0.16 range. For the phase-in variable "intro", this pattern of higher UI/EI effects when demographics are controlled for is also present, although the range of variation of the key coefficient is small.

I have also estimated the log duration and the polynomial in duration models (models 1 and 3, respectively) in this framework with allowance for Gamma distributed unobserved heterogeneity. This may control for unobserved factors that might influence the hazard and lead to a bias in the estimated duration effects, together with the potential of bias in the estimated effects of the set of control variables. For model 1, the "ei" coefficient drops to 0.036 (t-statistic of 1.10) and the "intro" variable coefficient drops to 0.090 (2.16), while for model 3, the respective estimates allowing for unobserved heterogeneity are 0.031 (0.80) and 0.094 (1.90). Thus, there is some sign that allowance for unobserved heterogeneity lowers the estimated effects, particularly for the "ei" variable. Estimated models with unobserved heterogeneity for the other specifications in Table 38 failed to converge, however.

Overall, although these final two sets of results led to smaller point estimates than the earlier models without unobserved heterogeneity, I find the broad consistency of these full sample results with those from the Cox partial likelihood model (Table 19) striking. It suggests that these conclusions on the behavioural effects of UI/EI are robust.

9. Initial Specifications and Results for Durations of UI/EI Benefit Receipt

I now turn to the proportional hazard models of the determinants of the length of Unemployment Insurance (UI)/Employment Insurance (EI) receipt. In this case, the object of study is the length of the first period of continuous UI or EI benefit receipt since the Record of Employment (ROE) date, as derived from the administrative data linked to the Canadian Out of Employment Panel (COEP)96 survey information. The Cox partial likelihood model is again employed in the first instance and the first round of results are again presented in a set of Tables, three for each matched dataset.

Tables 39-41 give the estimates for the full sample and the two separation reason subsamples (SW/Oth and VQ/Dis) from the cohorts 1 & 5 dataset, and again I studied the four model specifications. For these data, however, there is essentially no effect from the cohort dummy variable, coh05, and this absence of a significant result holds across all four models. Although some of the demographics have identifiable effects — such as the negative coefficient of the male dummy variable — these equations give little indication of an effect in the move from UI to the phase-in EI period. Similar conclusions follow from Tables 40 and 41 for the subsamples.

Comparing the same initial cohort 1 with the matched cohort two years later, so that the "after" component of the quasi-experiment is in the period of full EI implementation, Table 42 provides little more evidence of significant UI/EI effects. Although the point estimates on the coh09 variable are now positive, they still have t-statistics well below 2 so that one cannot infer statistical significance at standard levels. The same is true for the SW/Oth subsample for which results are presented in Table 43, although surprisingly the small VQ/Dis subsample in Table 44 does show one coefficient that is significant at the 5 percent level (model 4). I doubt that there is much to be made of this, however, given the very tiny sample.

One can also compare these results with those from the other matched cohorts, as presented in Tables 45-47 (for cohorts 2 & 6), Tables 48-50 (for cohorts 2 & 10), and Tables 51-53 and 54-56 (for cohorts 3 & 7, and cohorts 4 & 8). Both comparisons with cohort 2 as the UI group yield little significant effects on UI/EI duration for the sample as a whole, and this holds true for all four model specifications. It also holds true for the cohorts 3 & 7 quasi-experiment in Table 51 and the analogous Table 54 for cohorts 4 & 8. Thus, across all of the matched cohort samples, these Cox partial likelihood models fail to show evidence of statistically significant effects on the durations spent in UI/EI receipt resulting from the change from UI to EI. The estimated effects are uniformly small and one cannot reasonably conclude that they are different from zero.

10. Pooled Data Analysis of UI/EI Duration Effects

I next estimated models on the sample pooled across the cohorts, thereby gaining sample size at the cost of requiring a more restrictive modelling of seasonality. This follows the pattern of investigation for the unemployment durations above.

For the full sample results shown in Table 57, there is no evidence that there is a significant effect for either the "ei" or the "intro" variable. However, there is a clear pattern of seasonality, especially for calendar quarters 1 and 3 in the more parsimonious models 1 and 2. Furthermore, while the local labour market conditions variable has no significant effect, some of the other demographics do play a role, notably being male and some of the regional variables. This overall conclusion on the "ei" and "intro" effects is consistent across the SW/Oth and VQ/Dis subsamples, as reported in Tables 58 and 59.

The results for female in Tables 60-62 and the results for male in Tables 63-65 show little difference from the overall results of Table 57. That is, none of the "ei" or "intro" variables are statistically significantly different from zero and their respective point estimates are always numerically small. Similarly, by age, the old results in Tables 66-68 and the young results in Tables 69-71 fail to show a significant effect.

In addition, when I constrained the "ei" and "intro" effects to be equal, the same pattern of small and statistically insignificant results is found, as detailed for the full sample and the four population subgroups in Table 72.

Thus, within the context of this Cox Partial Likelihood Framework, the overall finding of little significant effect is *not* masking effects at the level of the subsample (by sex or age) that are cancelling each other in the aggregate. Rather, the conclusion from these many results on the subpopulations is that the estimates from the overall sample have considerable validity and show essentially no significant behavioural effect.

11. Alternative Models of UI/EI Benefit Duration

The final variant in the analysis of Unemployment Insurance (UI)/Employment Insurance (EI) durations is to investigate the robustness of these results to model specification, as was done above for the unemployment spells. I have accordingly again estimated a variety of alternative models of the determinants of duration, allowing both proportional hazards and accelerated failure time (AFT) parametric models of duration. The key coefficient estimates from these investigations are reported in Table 73.

In the exponential case, when the baseline hazard is restricted to be a constant (as a function of the elapsed duration of the spell), there are small positive "ei" effects with t-statistics around 1.3. While not significant at the usual 5 percent level, these effects are probably sensible and in line with some of the results for unemployment spells. However, when I move to the Weibull model, which introduces one further parameter and allows for a non-constant (but monotonic) baseline hazard, these "ei" effects become much smaller and are surely insignificant. In both models, the phase-in variable had no discernible effect. Similarly, the Gompertz framework also led to very small estimates of the "ei" and "intro" coefficients.

Within the AFT structure, most of these conclusions held up unaltered. For the LogNormal and the LogLogistic distributions of the error term in the log duration regression outline above, the "intro" effect was small, positive and had a t-statistic of around 1.6, but overall the results showed little significance. Finally, the Gamma distribution yielded both "ei" and "intro" effects that were almost exactly zero, consistent with the other results, although the estimates of some of the incidental parameters of the Gamma model suggest that it may not fit these data well.

12. Conclusions

The effects of the move from Unemployment Insurance (UI) to Employment Insurance (EI) on both unemployment duration and the lengths of spells of UI/EI benefit receipt are quite small. Nonetheless, one can detect behavioural effects on unemployment duration with some reliability, whereas the same cannot be said of the UI/EI benefit durations.

Methodologically, the effect on both unemployment and benefit durations of the move from UI to EI was estimated in two basic frameworks. The first was a quasi-experimental approach where cohorts from the Canadian Out of Employment Panel (COEP)96 were matched up according to the calendar quarter in which the job separation occurred. The second was a model with pooled cohort data where greater structure was necessarily imposed on the seasonal effects. In addition, considerable attention was paid to the robustness of the results depending upon the reason for the job separation. All behavioural effects allowing for the difference between separations due to voluntary quits and dismissals (VQ/Dis) and the shortage of work and other (SW/Oth) separation reason code groups were studied. The models also allowed for demographic effects and local labour market conditions. When appropriate and where sample sizes permitted — typically with the pooled cohort datasets — I estimated the full structure of the model separately for women and men, and for youth and non-youth members of the labour force. I further estimated a variety of alternative duration models, including allowance for periods of uninsured unemployment, and I studied the behavioural effects of anticipated UI/EI benefit exhaustion. Finally, several other parametric models of duration were studied, together with models that allowed one to estimate an arbitrary structure for the underlying baseline hazard. With some fairly minor exceptions, the results I found were consistent and robust to these alternative models.

Using matched cohorts in the same quarters of different calendar years before and after the introduction of EI, the principal finding indicates small but positive effects of the move from UI to EI on the estimated hazard out of unemployment. These effects are statistically significant in some of the estimated models. When these effects are statistically significant, they amount to about a 20 percent higher probability of the unemployment spell ending at any point during the spell; this translates into shorter expected unemployment spells. This effect was strongest when comparing the job separations from the UI with job separations from the phase-in period of EI. This effect was present in moderate form comparing the UI period with the EI period two years later. The effect was weakest when comparing the UI with the initial period of fully-implemented EI. Since these results are probably the most reliable in this last set when comparison points are only one year apart and when the legislative reference point is full EI, I conclude that caution is warranted in any strong interpretation of the results. The effects are small and suggest that no dramatic shift occurred in the determinants of unemployment durations associated with the move from UI to EI. Finally, one should note that although many attempts were made to investigate a differential structure for individuals with different types of job separations, sample sizes were such that one could not reasonably conclude that such differences were present and important.

The pooled results for unemployment durations were somewhat stronger in terms of overall significance. Of course, as cautioned above, these results are conditional on the assumed structure for the seasonal effects on the hazard out of unemployment and should be interpreted in this light. Treating all job separations together, the broadest specification led to a positive effect of EI on the hazard out of unemployment with an implied upward (proportional) shift of about 10 percent; again, this leads to lower expected unemployment durations. Interestingly, this type of result is also obtained for the job separations coded as Shortage of Work and Other reasons, but not for persons coded as Voluntary Quits or Dismissals. Indeed, I could find no evidence of significant effects from the move from UI to EI on the determinants of unemployment durations for these groups.

In the earlier quasi-experimental work, age and sex were used as control variables that could each shift the overall estimated hazard, but the *structure* of the hazard — the way in which the hazard might alter given the move to EI, for example — was determined to be common to each sex and each age group. However, the greater sample sizes in the pooled cohort data case permitted separate analysis of the determinants of unemployment duration by sex and by age group. Broadly speaking, the conclusions were that men had much clearer effects from the introduction of EI than women, with male unemployment durations being more strongly affected by the shift than those for women (and with the estimates on both sexes together, as above, being in between the two). While the non-youth group (aged 25 and higher) had clear and positive effects from EI on the hazard out of unemployment, the youth group (aged less than 25) had estimated effects that were of the opposite sign and insignificantly different from zero. Thus, although I find that the move to EI raised the hazard and reduced unemployment durations for men and for non-youth workers, the pooled cohort analysis suggests that this effect was weak or absent for women and youth.

In contrast to these results for unemployment durations, which showed some small but significant effects and some interesting differences for different demographic groups, the evidence for durations of time spent in receipt of UI or EI — benefit durations — is very weak. Using identical econometric approaches to modelling these benefit durations, the results from both the quasi-experimental work and the pooled cohorts analysis are uniformly small. Although some of the other demographic control variables play a significant role, was unable to identify any significant effect of the move to EI on these benefit durations, and this negative conclusion held up both in the aggregate and for sub-groups (so that it was not the result of two cancelling effects for two different sub-groups, for example).

It is always hard to know what to make of a largely negative finding such as this, where an apparent exogenous variation in program parameters produces a very small change in the variables of interest, given the specification and the set of controls. At a minimum, the researcher wishes to ensure that the finding is robust to alternative model and econometric specifications. Therefore, in addition to the many estimated models in the quasi-experimental and the pooled cohort approaches, I have addressed a set of alternative models of benefit durations that impose greater structure on the underlying shape of the hazard. If this imposed structure is valid, it can permit better estimates of the program effects and enable identification of small coefficients that might otherwise have been masked in the results. However, when I estimated several models of this type, the pattern in the results remained very stable with small or negligible effects from EI and a consistent lack of statistical significance.

In summary, this initial assessment of some of the behavioural effects of the move from UI to EI has found some small but significant effects on unemployment durations, but little evidence of significant effects for the lengths of time spent in receipt of UI/EI benefits. Of the many results, perhaps the most striking was that the effect on unemployment durations appeared to operate more strongly and more consistently for men and for non-youth workers, and that this effect was much weaker for both women and youth. It will be of considerable interest to see whether these results continue in the next few years as the longer-term provisions of EI become fully operative.

Bibliography

Browning, Martin, Stephen R.G. Jones and Peter Kuhn. *Studies of Unemployment Insurance based on the Out-of-Employment Panel Survey.* Prepared for Human Resources Development Canada. 1994.

Burdett, K., and T. Vishwanath. “Declining Reservation Wages and Learning”. *Review of Economic Studies*, 55, pp. 655-666, October 1988.

Corak, Miles. “Unemployment Insurance, Work Disincentives, and the Canadian Labor Market: An Overview,” in *Unemployment Insurance: How to Make it Work*, published collective work under the direction of Christopher Green, Fred Lazar, Miles Corak and Dominique Gross, The Social Policy Challenge, C.D. Howe Institute, Volume 2, pp. 86-159. (b), Toronto, 1994.

Corak, Miles, and Stephen R.G. Jones. “The Persistence of Unemployment: How Important Were Regionally Extended Unemployment Insurance Benefits?”. *Canadian Journal of Economics*, 1995.

Cox, David R. “Regression Models and Life-Tables (with discussion)”. *Journal of the Royal Statistical Society,* Series B, 34, pp. 187-220, 1972.

Cox, David R., and David Oakes. *Analysis of Survival Data*. Chapman and Hall, London, 1984.

Devine, T. J., and N. M. Kiefer. *Empirical Labor Economics: The Search Approach*. Oxford: Oxford UP, 1991.

Eckstein, Z., and K. I. Wolpin. “Estimating a Market Equilibrium Search Model from Panel Data on Individuals”. *Econometrica*, 58, pp. 783-808, July 1990.

Heckman, James J., and B. Singer. “A Method of Minimizing the Impact of Distributional Assumptions in Econometric Models for Duration Data”. *Econometrica*, 52, pp. 271-320, 1984.

Jones, Stephen R. G. and W. Craig Riddell. “Regional Aspects of Labour Force Attachment and Labour Market Flows in Canada” in *Aspects of Labour Market Behaviour: Essays in Honour of John Vanderkamp*, published collective work under the direction of Christofides, L., Grant, K., and Swidinsky, R., eds. University of Toronto Press, Toronto, 1995.

Jones, Stephen R. G., and W. Riddell Craig. “Unemployment and Labor Force Attachment: A Multistate Analysis of Nonemployment” in *Labor Statistics Measurement Issues*, published collective work under the direction of Haltiwanger, J., Manser, M. and Topel, R., eds. NBER Conference on Research in Income and Wealth Series, University of Chicago Press, pp. 123-52, 1998.

Jones, Stephen R. G. and W. Craig Riddell. “The Measurement of Unemployment: An Empirical Approach”. *Econometrica*, 67, pp. 147-61, 1999.

Jones, Stephen R. G., and W. Craig Riddell. “The Measurement of Labour Market Dynamics with Longitudinal Data: The LMAS Filter”. *Journal of Labor Economics*, 13, pp. 351-85, 1995. (with W. Craig Riddell).

Jones, Stephen R. G. “Job Search Methods, Intensity and Effects”. *Oxford Bulletin of Economics and Statistics*, 51, pp. 277-96, 1989.

Jones, Stephen R. G. The Relationship between Unemployment Spells and Reservation Wages as a Test of Search Theory”. *Quarterly Journal of Economics*, 103, pp. 741-65, 1988.

Jones, Stephen R. G. “Reservation Wages and the Cost of Unemployment”. *Economica*, 56, pp. 225-46, 1989.

Jones, Stephen R.G. *Evaluation of the Effects of Bill C-17: Unemployment and Benefit Durations.* Report to HRDC under Contract 9132-5-0003, June 1997.

Kiefer, N. M., and G. R. Neumann. “An Empirical Job Search Model, with a Test of the Constant Reservation Wage Hypothesis”. *Journal of Political Economy*, pp. 89-104, 1979.

Lancaster, T., and A. Chesher. “An Econometric Model of Reservation Wages”. *Econometrica*, 1983.

Meyer, Bruce D. “Unemployment Insurance and Unemployment Spells”. *Econometrica*, 58, pp. 757-82, 1990.

Mortensen, D. “Unemployment Insurance and Job Search Decisions”. *Industrial and Labor Relations Review*, 30, pp. 505-17, 1987.

Mortensen, D. “Job Search and Labor Market Analysis”. *Handbook of Labor Economics*, Ch. 15, North Holland, 1986.

Prentice, R., and L. Gloeckler. “Regression Analysis of Grouped Survival Data with Application to Breast Cancer Data”. *Biometrics*, 34, pp. 57-67, 1978.

Storer, Paul, and Marc A. Van Audenrode. *Unemployment Insurance Take-up Rates in Canada: Facts, Determinants, and Implications.* Mimeo, UQAM, August 1993.

Tables

Notes to Tables

Based on author's calculations using the Canadian Out of Employment Panel (COEP) dataset. t-statistics are given in parentheses for all coefficients. For incidental parameters in the parametric duration models (Tables 35 and 73), standard errors are given in parentheses. All estimates include the demographic controls according to the model number (1-4), as in Table 1, even when for brevity only key coefficient estimates are reported in the Table (see Tables 34 and 72).

TABLE 1
Cox Partial Likelihood Determinants of Unemployment Spells

Full Sample
Cohorts 1 and 5 Experiment

Model: **# obs:**	**1** **1,121**	**2** **1,121**	**3** **654**	**4** **654**
coh05	0.185 (2.30)	0.183 (2.28)	0.335 (3.08)	0.332 (3.06)
localu		-0.026 (-3.56)		-0.013 (-1.09)
male			0.057 (0.57)	0.045 (0.44)
marr			-0.082 (-0.35)	-0.091 (-0.39)
age			-0.016 (-3.25)	-0.016 (-3.32)
less			-0.105 (-0.77)	-0.089 (-0.65)
coll			-0.171 (-1.20)	-0.170 (-1.19)
univ			0.065 (0.50)	0.062 (0.48)
atl			-0.243 (-1.43)	-0.174 (-0.96)
que			0.002 (0.01)	0.046 (0.23)
pra			0.218 (1.27)	0.222 (1.29)
bct			0.247 (1.28)	0.264 (1.36)

TABLE 2
Cox Partial Likelihood Determinants of Unemployment Spells

SW/Oth Sample
Cohorts 1 and 5 Experiment

Model: **# obs:**	**1** **996**	**2** **996**	**3** **581**	**4** **581**
coh05	0.196 (2.33)	0.195 (2.31)	0.289 (2.52)	0.286 (2.49)
localu		-0.027 (-3.58)		-0.017 (-1.33)
male			0.079 (0.73)	0.060 (0.55)
marr			-0.152 (-0.53)	-0.148 (-0.51)
age			-0.014 (-2.73)	-0.014 (-2.83)
less			-0.087 (-0.62)	-0.063 (-0.44)
coll			-0.183 (-1.18)	-0.177 (-1.15)
univ			0.084 (0.59)	0.086 (0.60)
atl			-0.247 (-1.37)	-0.155 (-0.81)
que			0.028 (0.14)	0.087 (0.41)
pra			0.265 (1.43)	0.276 (1.49)
bct			0.245 (1.15)	0.274 (1.28)

TABLE 3
Cox Partial Likelihood Determinants of Unemployment Spells

VQ/Dis Sample
Cohorts 1 and 5 Experiment

Model: **# obs:**	**1** **119**	**2** **119**	**3** **70**	**4** **70**
coh05	-0.008 (-0.03)	-0.006 (-0.02)	0.552 (1.41)	0.524 (1.33)
localu		-0.003 (-0.10)		0.031 (0.59)
male			-0.091 (-0.29)	-0.037 (-0.11)
marr			0.230 (0.51)	0.374 (0.72)
age			-0.027 (-1.53)	-0.026 (-1.49)
less			-0.504 (-0.75)	-0.353 (-0.49)
coll			-0.116 (-0.29)	-0.042 (-0.10)
univ			-0.089 (-0.25)	-0.025 (-0.07)
atl			-0.125 (-0.22)	-0.255 (-0.41)
que			-0.074 (-0.11)	-0.275 (-0.36)
pra			-0.068 (-0.14)	-0.057 (-0.12)
bct			0.126 (0.24)	0.132 (0.25)

TABLE 4
Cox Partial Likelihood Determinants of Unemployment Spells

Full Sample
Cohorts 2 and 6 Experiment

Model: **# obs:**	**1** **1,469**	**2** **1,469**	**3** **921**	**4** **921**
coh06	0.155 (2.68)	0.151 (2.60)	0.114 (1.52)	0.114 (1.52)
localu		-0.018 (-2.77)		-0.003 (-0.26)
male			0.153 (1.89)	0.154 (1.89)
marr			0.246 (1.42)	0.247 (1.43)
age			-0.010 (-2.90)	-0.010 (-2.90)
less			-0.163 (-1.67)	-0.162 (-1.67)
coll			-0.146 (-1.34)	-0.144 (-1.31)
univ			-0.015 (-0.14)	-0.016 (-0.15)
atl			-0.502 (-4.13)	-0.488 (-3.67)
que			-0.404 (-2.71)	-0.396 (-2.59)
pra			-0.109 (-0.87)	-0.109 (-0.87)
bct			-0.276 (-1.82)	-0.273 (-1.79)

TABLE 5
Cox Partial Likelihood Determinants of Unemployment Spells

SW/Oth Sample
Cohorts 2 and 6 Experiment

Model: **# obs:**	**1** **1,372**	**2** **1,372**	**3** **867**	**4** **867**
coh06	0.155 (2.57)	0.150 (2.49)	0.123 (1.59)	0.123 (1.59)
localu		-0.018 (-2.73)		-0.005 (-0.47)
male			0.135 (1.60)	0.136 (1.60)
marr			0.232 (1.27)	0.232 (1.27)
age			-0.010 (-2.67)	-0.010 (-2.67)
less			-0.143 (-1.43)	-0.142 (-1.43)
coll			-0.137 (-1.22)	-0.134 (-1.19)
univ			0.007 (0.06)	0.005 (0.04)
atl			-0.467 (-3.74)	-0.440 (-3.21)
que			-0.392 (-2.56)	-0.376 (-2.40)
pra			-0.066 (-0.51)	-0.066 (-0.51)
bct			-0.257 (-1.63)	-0.252 (-1.59)

TABLE 6
Cox Partial Likelihood Determinants of Unemployment Spells

VQ/Dis Sample
Cohorts 2 and 6 Experiment

Model: **# obs:**	**1** **92**	**2** **92**	**3** **51**	**4** **51**
coh06	0.098 (0.43)	0.096 (0.42)	-0.174 (-0.48)	-0.223 (-0.59)
localu		0.003 (0.12)		0.085 (1.13)
male			0.499 (1.35)	0.419 (1.08)
marr			0.669 (0.98)	0.613 (0.87)
age			-0.018 (-1.04)	-0.013 (-0.75)
less			-0.713 (-1.35)	-0.824 (-1.53)
coll			-0.177 (-0.34)	-0.20 (-0.38)
univ			-0.152 (-0.36)	-0.202 (-0.47)
atl			-1.931 (-2.79)	-2.057 (-2.95)
que			-1.228 (-1.35)	-1.470 (-1.56)
pra			-1.240 (-2.21)	-1.212 (-2.17)
bct			-1.264 (-1.77)	-1.304 (-1.77)

TABLE 7
Cox Partial Likelihood Determinants of Unemployment Spells

Full Sample
Cohorts 1 and 9 Experiment

Model: **# obs:**	**1** **969**	**2** **969**	**3** **575**	**4** **575**
coh09	0.192 (2.27)	0.204 (2.41)	0.376 (3.27)	0.364 (3.16)
localu		-0.041 (-5.03)		-0.022 (-1.68)
male			-0.113 (-1.06)	-0.130 (-1.21)
marr			-0.577 (-2.23)	-0.587 (-2.26)
age			-0.017 (-3.03)	-0.017 (-2.97)
less			-0.159 (-1.14)	-0.137 (-0.98)
coll			-0.015 (-0.09)	0.007 (0.04)
univ			-0.153 (-1.00)	-0.147 (-0.97)
atl			-0.384 (-1.91)	-0.277 (-1.32)
que			-0.255 (-1.10)	-0.197 (-0.84)
pra			0.071 (0.35)	0.030 (0.15)
bct			-0.375 (-1.49)	-0.384 (-1.53)

TABLE 8
Cox Partial Likelihood Determinants of Unemployment Spells

SW/Oth Sample
Cohorts 1 and 9 Experiment

Model: **# obs:**	**1** **863**	**2** **863**	**3** **529**	**4** **529**
coh09	0.186 (2.09)	0.209 (2.34)	0.373 (3.11)	0.360 (3.00)
localu		-0.042 (-4.83)		-0.024 (-1.78)
male			-0.116 (-1.04)	-0.139 (-1.23)
marr			-0.570 (-2.06)	-0.579 (-2.09)
age			-0.019 (-3.21)	-0.019 (-3.18)
less			-0.126 (-0.87)	-0.102 (-0.71)
coll			0.051 (0.31)	0.075 (0.46)
univ			-0.103 (-0.64)	-0.096 (-0.60)
atl			-0.324 (-1.52)	-0.207 (-0.93)
que			-0.223 (-0.91)	-0.161 (-0.65)
pra			0.216 (0.99)	0.175 (0.80)
bct			-0.216 (-0.81)	-0.224 (-0.84)

TABLE 9
Cox Partial Likelihood Determinants of Unemployment Spells

VQ/Dis Sample
Cohorts 1 and 9 Experiment

Model: **# obs:**	**1** **103**	**2** **103**	**3** **44**	**4** **44**
coh09	0.112 (0.41)	0.076 (0.28)	0.253 (0.52)	0.131 (0.25)
localu		-0.035 (-1.05)		-0.074 (-0.61)
male			0.063 (0.14)	0.066 (0.15)
marr			-0.533 (-0.54)	-0.459 (-0.46)
age			-0.011 (-0.36)	-0.008 (-0.25)
less			-1.076 (-1.46)	-1.062 (-1.43)
coll			-0.732 (-1.19)	-0.743 (-1.20)
univ			-0.760 (-1.22)	-0.801 (-1.28)
atl			-1.399 (-1.52)	-1.348 (-1.44)
que			-0.696 (-0.81)	-0.535 (-0.58)
pra			-0.741 (-1.14)	-0.903 (-1.27)
bct			-1.557 (-1.84)	-1.604 (-1.88)

TABLE 10
Cox Partial Likelihood Determinants of Unemployment Spells

Full Sample
Cohorts 2 and 10 Experiment

Model: **# obs:**	**1** **1,335**	**2** **1,335**	**3** **816**	**4** **816**
coh10	0.174 (2.85)	0.164 (2.68)	0.168 (2.11)	0.166 (2.09)
localu		-0.013 (-1.95)		-0.004 (-0.34)
male			0.095 (1.11)	0.096 (1.12)
marr			0.203 (1.16)	0.205 (1.17)
age			-0.011 (-2.85)	-0.011 (-2.83)
less			-0.150 (-1.47)	-0.149 (-1.47)
coll			-0.196 (-1.75)	-0.195 (-1.74)
univ			-0.168 (-1.38)	-0.171 (-1.40)
atl			-0.258 (-1.85)	-0.237 (-1.56)
que			-0.201 (-1.19)	-0.189 (-1.09)
pra			-0.064 (-0.44)	-0.064 (-0.45)
bct			-0.303 (-1.82)	-0.299 (-1.79)

TABLE 11
Cox Partial Likelihood Determinants of Unemployment Spells

SW/Oth Sample
Cohorts 2 and 10 Experiment

Model: **# obs:**	**1** **1,240**	**2** **1,240**	**3** **763**	**4** **763**
coh10	0.182 (2.88)	0.171 (2.69)	0.204 (2.47)	0.202 (2.43)
localu		-0.016 (-2.34)		-0.006 (-0.54)
male			0.074 (0.82)	0.075 (0.83)
marr			0.206 (1.12)	0.207 (1.13)
age			-0.012 (-2.95)	-0.012 (-2.93)
less			-0.134 (-1.29)	-0.134 (-1.28)
coll			-0.225 (-1.95)	-0.224 (-1.94)
univ			-0.044 (-0.34)	-0.050 (-0.39)
atl			-0.214 (-1.46)	-0.180 (-1.13)
que			-0.173 (-0.98)	-0.153 (-0.84)
pra			0.023 (0.15)	0.022 (0.15)
bct			-0.229 (-1.31)	-0.222 (-1.26)

TABLE 12
Cox Partial Likelihood Determinants of Unemployment Spells

VQ/Dis Sample
Cohorts 2 and 10 Experiment

Model: **# obs:**	**1** **92**	**2** **92**	**3** **52**	**4** **52**
coh10	0.052 (0.22)	0.072 (0.31)	-0.218 (-0.61)	-0.190 (-0.54)
localu		0.054 (1.80)		0.136 (1.29)
male			0.686 (1.77)	0.522 (1.30)
marr			0.689 (0.92)	0.804 (1.02)
age			-0.005 (-0.25)	-0.003 (-0.13)
less			-0.186 (-0.37)	-0.275 (-0.54)
coll			0.527 (0.99)	0.243 (0.43)
univ			-0.967 (-2.03)	-0.896 (-1.90)
atl			-0.905 (-1.40)	-1.135 (-1.67)
que			-1.180 (-1.33)	-1.199 (-1.34)
pra			-1.262 (-2.46)	-1.082 (-2.09)
bct			-1.561 (-2.30)	-1.503 (-2.31)

TABLE 13
Cox Partial Likelihood Determinants of Unemployment Spells

Full Sample
Cohorts 3 and 7 Experiment

Model: **# obs:**	**1** **1,362**	**2** **1,362**	**3** **834**	**4** **834**
coh07	-0.057 (-0.91)	-0.047 (-0.75)	0.055 (0.67)	0.066 (0.79)
localu		-0.014 (-2.16)		-0.009 (-0.93)
male			0.238 (2.82)	0.232 (2.75)
marr			-0.029 (-0.16)	-0.027 (-0.15)
age			-0.004 (-1.08)	-0.004 (-1.07)
less			-0.084 (-0.79)	-0.079 (-0.74)
coll			0.120 (1.04)	0.121 (1.05)
univ			-0.060 (-0.52)	-0.068 (-0.59)
atl			-0.087 (-0.62)	-0.037 (-0.25)
que			-0.226 (-1.33)	-0.193 (-1.10)
pra			0.045 (0.32)	0.052 (0.36)
bct			0.005 (0.03)	0.017 (0.10)

TABLE 14
Cox Partial Likelihood Determinants of Unemployment Spells

SW/Oth Sample
Cohorts 3 and 7 Experiment

Model: **# obs:**	**1** **1,240**	**2** **1,240**	**3** **771**	**4** **771**
coh07	-0.065 (-0.98)	-0.055 (-0.84)	0.059 (0.69)	0.073 (0.83)
localu		-0.014 (-2.03)		-0.010 (-1.02)
male			0.223 (2.52)	0.215 (2.42)
marr			-0.147 (-0.77)	-0.148 (-0.78)
age			-0.003 (-0.66)	-0.003 (-0.67)
less			-0.090 (-0.80)	-0.082 (-0.73)
coll			0.151 (1.25)	0.153 (1.27)
univ			-0.056 (-0.47)	-0.065 (-0.54)
atl			-0.045 (-0.31)	0.014 (0.09)
que			-0.148 (-0.84)	-0.107 (-0.59)
pra			0.103 (0.69)	0.112 (0.75)
bct			-0.015 (-0.08)	0.000 (0.00)

TABLE 15
Cox Partial Likelihood Determinants of Unemployment Spells

VQ/Dis Sample
Cohorts 3 and 7 Experiment

Model: **# obs:**	**1** **119**	**2** **119**	**3** **61**	**4** **61**
coh07	0.009 (0.04)	0.031 (0.15)	-0.137 (-0.45)	-0.115 (-0.37)
localu		-0.022 (-0.63)		-0.035 (-0.64)
male			0.669 (1.93)	0.664 (1.90)
marr			0.698 (1.25)	0.797 (1.37)
age			-0.026 (-1.68)	-0.027 (-1.72)
less			-0.074 (-0.16)	-0.196 (-0.39)
coll			-0.30 (-0.68)	-0.386 (-0.83)
univ			-0.061 (-0.14)	-0.122 (-0.27)
atl			-1.090 (-1.66)	-1.179 (-1.75)
que			-1.961 (-2.79)	-1.935 (-2.75)
pra			-1.389 (-2.34)	-1.481 (-2.42)
bct			-0.633 (-0.87)	-0.756 (-1.01)

TABLE 16
Cox Partial Likelihood Determinants of Unemployment Spells

Full Sample
Cohorts 4 and 8 Experiment

Model: **# obs:**	**1** **1,394**	**2** **1,394**	**3** **883**	**4** **883**
coh08	-0.072 (-1.13)	-0.071 (-1.12)	-0.015 (-0.19)	-0.013 (-0.16)
localu		-0.006 (-1.02)		-0.006 (-0.61)
male			-0.140 (-1.71)	-0.140 (-1.71)
marr			0.070 (0.29)	0.069 (0.29)
age			-0.003 (-0.86)	-0.003 (-0.89)
less			-0.065 (-0.60)	-0.061 (-0.55)
coll			-0.174 (-1.47)	-0.174 (-1.47)
univ			0.085 (0.78)	0.082 (0.76)
atl			0.152 (1.07)	0.186 (1.23)
que			0.332 (1.95)	0.346 (2.01)
pra			0.431 (3.03)	0.433 (3.04)
bct			0.226 (1.33)	0.235 (1.38)

TABLE 17
Cox Partial Likelihood Determinants of Unemployment Spells

SW/Oth Sample
Cohorts 4 and 8 Experiment

Model: **# obs:**	**1** **1,240**	**2** **1,240**	**3** **802**	**4** **802**
coh08	-0.048 (-0.71)	-0.045 (-0.67)	-0.016 (-0.19)	-0.013 (-0.15)
localu		-0.011 (-1.69)		-0.005 (-0.57)
male			-0.187 (-2.17)	-0.186 (-2.17)
marr			0.052 (0.21)	0.051 (0.20)
age			-0.003 (-0.63)	-0.003 (-0.65)
less			-0.034 (-0.30)	-0.029 (-0.25)
coll			-0.064 (-0.51)	-0.065 (-0.52)
univ			0.141 (1.24)	0.139 (1.23)
atl			0.081 (0.54)	0.114 (0.71)
que			0.310 (1.75)	0.323 (1.80)
pra			0.418 (2.77)	0.420 (2.78)
bct			0.205 (1.15)	0.212 (1.19)

TABLE 18
Cox Partial Likelihood Determinants of Unemployment Spells

VQ/Dis Sample
Cohorts 4 and 8 Experiment

Model: **# obs:**	**1** **148**	**2** **148**	**3** **79**	**4** **79**
coh08	-0.169 (-0.83)	-0.154 (-0.75)	0.113 (0.36)	0.113 (0.35)
localu		0.025 (1.16)		-0.001 (-0.02)
male			0.603 (1.89)	0.603 (1.89)
marr			-0.402 (-0.40)	-0.403 (-0.40)
age			-0.028 (-1.91)	-0.028 (-1.91)
less			-0.304 (-0.58)	-0.305 (-0.58)
coll			-0.687 (-1.74)	-0.686 (-1.74)
univ			-0.784 (-1.93)	-0.784 (-1.93)
atl			0.805 (1.68)	0.808 (1.60)
que			-0.258 (-0.31)	-0.256 (-0.30)
pra			0.477 (1.01)	0.478 (1.01)
bct			-0.022 (-0.03)	-0.019 (-0.03)

TABLE 19
Cox Partial Likelihood Determinants of Unemployment Spells

Full Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **6,564**	**2** **6,564**	**3** **4,022**	**4** **4,022**
ei	0.036 (1.10)	0.038 (1.14)	0.099 (2.36)	0.102 (2.41)
intro	0.089 (2.12)	0.088 (2.11)	0.133 (2.46)	0.134 (2.49)
q1	0.113 (2.71)	0.117 (2.80)	0.116 (2.15)	0.117 (2.18)
q2	0.061 (1.45)	0.061 (1.45)	0.049 (0.91)	0.050 (0.92)
q3	-0.325 (-8.46)	-0.308 (-7.99)	-0.297 (-5.96)	-0.294 (-5.89)
localu		-0.017 (-5.82)		-0.008 (-1.80)
male			0.075 (1.96)	0.072 (1.89)
marr			0.026 (0.30)	0.027 (0.31)
age			-0.008 (-4.52)	-0.008 (-4.53)
less			-0.107 (-2.19)	-0.102 (-2.09)
coll			-0.054 (-1.01)	-0.052 (-0.98)
univ			-0.005 (-0.10)	-0.009 (-0.17)
atl			-0.165 (-2.58)	-0.119 (-1.73)
que			-0.068 (-0.89)	-0.040 (-0.51)
pra			0.119 (1.84)	0.120 (1.85)
bct			-0.014 (-0.18)	-0.002 (-0.03)

TABLE 20
Cox Partial Likelihood Determinants of Unemployment Spells

SW/Oth Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **5,942**	**2** **5,942**	**3** **3,697**	**4** **3,697**
ei	0.042 (1.22)	0.045 (1.31)	0.109 (2.48)	0.112 (2.56)
intro	0.097 (2.22)	0.097 (2.20)	0.118 (2.10)	0.120 (2.14)
q1	0.121 (2.77)	0.126 (2.87)	0.101 (1.80)	0.103 (1.84)
q2	0.097 (2.19)	0.098 (2.22)	0.064 (1.12)	0.064 (1.13)
q3	-0.339 (-8.37)	-0.317 (-7.80)	-0.321 (-6.15)	-0.317 (-6.06)
localu		-0.019 (-6.12)		-0.010 (-2.12)
male			0.059 (1.48)	0.055 (1.37)
marr			-0.005 (-0.05)	-0.004 (-0.04)
age			-0.007 (-3.97)	-0.007 (-3.98)
less			-0.097 (-1.91)	-0.090 (-1.78)
coll			-0.027 (-0.49)	-0.024 (-0.43)
univ			0.034 (0.63)	0.031 (0.56)
atl			-0.166 (-2.49)	-0.108 (-1.51)
que			-0.058 (-0.73)	-0.024 (-0.29)
pra			0.154 (2.25)	0.156 (2.27)
bct			-0.022 (-0.27)	-0.008 (-0.10)

TABLE 21
Cox Partial Likelihood Determinants of Unemployment Spells

VQ/Dis Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **599**	**2** **599**	**3** **314**	**4** **314**
ei	-0.026 (-0.23)	-0.025 (-0.22)	0.020 (0.13)	0.024 (0.15)
intro	-0.029 (-0.19)	-0.037 (-0.25)	0.185 (0.90)	0.175 (0.85)
q1	0.039 (0.27)	0.033 (0.23)	0.316 (1.53)	0.313 (1.52)
q2	-0.253 (-1.75)	-0.262 (-1.81)	-0.114 (-0.54)	-0.150 (-0.71)
q3	-0.218 (-1.68)	-0.219 (-1.69)	-0.029 (-0.16)	-0.025 (-0.14)
localu		0.009 (0.77)		0.022 (1.09)
male			0.313 (2.28)	0.323 (2.34)
marr			0.323 (1.25)	0.348 (1.34)
age			-0.020 (-2.87)	-0.019 (-2.73)
less			-0.241 (-1.16)	-0.222 (-1.06)
coll			-0.199 (-1.08)	-0.181 (-0.98)
univ			-0.338 (-1.93)	-0.317 (-1.80)
atl			-0.218 (-0.91)	-0.282 (-1.14)
que			-0.469 (-1.55)	-0.542 (-1.76)
pra			-0.254 (-1.18)	-0.260 (-1.21)
bct			-0.192 (-0.73)	-0.228 (-0.87)

TABLE 22
Cox Partial Likelihood Determinants of Unemployment Spells

Full Female Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **2,968**	**2** **2,968**	**3** **1,668**	**4** **1,668**
ei	-0.012 (-0.25)	-0.005 (-0.11)	0.047 (0.73)	0.052 (0.80)
intro	-0.032 (-0.50)	-0.034 (-0.53)	-0.018 (-0.20)	-0.015 (-0.16)
q1	0.038 (0.60)	0.046 (0.71)	-0.025 (-0.28)	-0.017 (-0.19)
q2	0.119 (1.94)	0.113 (1.84)	0.099 (1.19)	0.101 (1.22)
q3	-0.269 (-4.57)	-0.243 (-4.10)	-0.232 (-2.80)	-0.219 (-2.62)
localu		-0.018 (-4.09)		-0.012 (-1.77)
marr			-0.114 (-0.83)	-0.110 (-0.80)
age			-0.003 (-1.13)	-0.003 (-1.09)
less			-0.152 (-1.92)	-0.145 (-1.83)
coll			-0.107 (-1.23)	-0.105 (-1.22)
univ			0.045 (0.56)	0.040 (0.50)
atl			-0.133 (-1.41)	-0.059 (-0.57)
que			-0.129 (-1.10)	-0.094 (-0.79)
pra			0.084 (0.88)	0.085 (0.89)
bct			-0.130 (-1.05)	-0.106 (-0.86)

TABLE 23
Cox Partial Likelihood Determinants of Unemployment Spells

SW/Oth Female Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **2,641**	**2** **2,641**	**3** **1,496**	**4** **1,496**
ei	-0.015 (-0.30)	-0.006 (-0.12)	0.049 (0.72)	0.057 (0.84)
intro	-0.023 (-0.34)	-0.027 (-0.39)	-0.045 (-0.47)	-0.040 (-0.41)
q1	0.054 (0.80)	0.060 (0.89)	-0.046 (-0.49)	-0.035 (-0.37)
q2	0.195 (3.03)	0.187 (2.90)	0.137 (1.56)	0.136 (1.56)
q3	-0.306 (-4.85)	-0.276 (-4.35)	-0.280 (-3.14)	-0.261 (-2.93)
localu		-0.020 (-4.38)		-0.017 (-2.29)
marr			-0.162 (-1.10)	-0.155 (-1.06)
age			-0.002 (-0.76)	-0.002 (-0.73)
less			-0.137 (-1.65)	-0.125 (-1.50)
coll			-0.040 (-0.43)	-0.038 (-0.41)
univ			0.088 (1.03)	0.084 (0.98)
atl			-0.160 (-1.60)	-0.057 (-0.52)
que			-0.146 (-1.19)	-0.098 (-0.79)
pra			0.105 (1.03)	0.109 (1.08)
bct			-0.186 (-1.40)	-0.157 (-1.18)

TABLE 24
Cox Partial Likelihood Determinants of Unemployment Spells

VQ/Dis Female Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **312**	**2** **312**	**3** **166**	**4** **166**
ei	0.058 (0.37)	0.057 (0.36)	0.247 (1.03)	0.265 (1.10)
intro	-0.072 (-0.36)	-0.083 (-0.42)	0.289 (1.02)	0.248 (0.87)
q1	-0.042 (-0.20)	-0.051 (-0.24)	0.233 (0.72)	0.218 (0.67)
q2	-0.433 (-2.11)	-0.447 (-2.16)	-0.239 (-0.79)	-0.322 (-1.04)
q3	-0.015 (-0.09)	-0.025 (-0.15)	0.214 (0.84)	0.206 (0.81)
localu		0.009 (0.54)		0.035 (1.42)
marr			0.415 (0.97)	0.498 (1.15)
age			-0.024 (-2.20)	-0.022 (-2.05)
less			-0.246 (-0.86)	-0.169 (-0.58)
coll			-0.368 (-1.34)	-0.337 (-1.22)
univ			-0.346 (-1.29)	-0.273 (-0.99)
atl			-0.214 (-0.63)	-0.298 (-0.86)
que			-0.266 (-0.56)	-0.324 (-0.68)
pra			-0.201 (-0.64)	-0.166 (-0.53)
bct			-0.040 (-0.11)	-0.112 (-0.29)

TABLE 25
Cox Partial Likelihood Determinants of Unemployment Spells

Full Male Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **3,598**	**2** **3,598**	**3** **2,356**	**4** **2,356**
ei	0.083 (1.86)	0.080 (1.79)	0.143 (2.57)	0.144 (2.58)
intro	0.182 (3.29)	0.181 (3.28)	0.230 (3.37)	0.230 (3.38)
q1	0.192 (3.48)	0.193 (3.49)	0.236 (3.50)	0.235 (3.49)
q2	0.001 (0.01)	0.007 (0.12)	-0.039 (-0.52)	-0.038 (-0.50)
q3	-0.357 (-6.99)	-0.346 (-6.77)	-0.335 (-5.32)	-0.335 (-5.32)
localu		-0.016 (-4.05)		-0.005 (-0.83)
marr			0.089 (0.77)	0.089 (0.78)
age			-0.012 (-5.11)	-0.012 (-5.14)
less			-0.067 (-1.08)	-0.064 (-1.03)
coll			-0.020 (-0.29)	-0.018 (-0.26)
univ			-0.060 (-0.89)	-0.063 (-0.93)
atl			-0.167 (-1.92)	-0.140 (-1.50)
que			-0.011 (-0.11)	0.008 (0.07)
pra			0.151 (1.70)	0.151 (1.70)
bct			0.069 (0.67)	0.074 (0.72)

TABLE 26 **Cox Partial Likelihood Determinants of Unemployment Spells**				
SW/Oth Male Sample **Pooled dataset, phase-in and fully implemented EI**				
Model: **# obs:**	**1** **3,302**	**2** **3,302**	**3** **2,201**	**4** **2,201**
ei	0.097 (2.08)	0.095 (2.04)	0.167 (2.88)	0.167 (2.89)
intro	0.188 (3.29)	0.189 (3.30)	0.223 (3.18)	0.224 (3.18)
q1	0.194 (3.37)	0.196 (3.40)	0.224 (3.21)	0.224 (3.20)
q2	-0.007 (-0.11)	0.003 (0.04)	-0.062 (-0.78)	-0.061 (-0.77)
q3	-0.348 (-6.56)	-0.332 (-6.24)	-0.339 (-5.18)	-0.338 (-5.17)
localu		-0.017 (-4.07)		-0.004 (-0.70)
marr			0.063 (0.51)	0.064 (0.52)
age			-0.011 (-4.67)	-0.011 (-4.69)
less			-0.056 (-0.88)	-0.054 (-0.84)
coll			-0.026 (-0.37)	-0.024 (-0.34)
univ			-0.017 (-0.24)	-0.020 (-0.27)
atl			-0.143 (-1.57)	-0.119 (-1.23)
que			0.023 (0.22)	0.039 (0.36)
pra			0.189 (2.02)	0.190 (2.02)
bct			0.094 (0.88)	0.098 (0.92)

TABLE 27
Cox Partial Likelihood Determinants of Unemployment Spells

VQ/Dis Male Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **288**	**2** **288**	**3** **150**	**4** **150**
ei	-0.142 (-0.91)	-0.141 (-0.90)	-0.212 (-0.96)	-0.213 (-0.96)
intro	0.080 (0.36)	0.079 (0.35)	0.187 (0.59)	0.189 (0.59)
q1	0.119 (0.59)	0.119 (0.59)	0.443 (1.58)	0.446 (1.59)
q2	-0.027 (-0.13)	-0.027 (-0.13)	0.064 (0.21)	0.075 (0.24)
q3	-0.494 (-2.48)	-0.491 (-2.45)	-0.364 (-1.25)	-0.366 (-1.26)
localu		0.003 (0.14)		-0.013 (-0.30)
marr			0.388 (1.17)	0.386 (1.16)
age			-0.021 (-2.22)	-0.021 (-2.23)
less			-0.264 (-0.82)	-0.258 (-0.80)
coll			0.079 (0.30)	0.071 (0.27)
univ			-0.396 (-1.60)	-0.399 (-1.61)
atl			-0.187 (-0.52)	-0.162 (-0.43)
que			-0.424 (-1.01)	-0.376 (-0.84)
pra			-0.198 (-0.63)	-0.193 (-0.62)
bct			-0.206 (-0.54)	-0.203 (-0.54)

TABLE 28
Cox Partial Likelihood Determinants of Unemployment Spells

Full Old (>24 years) Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **5,422**	**2** **5,422**	**3** **3,751**	**4** **3,751**
ei	0.054 (1.49)	0.056 (1.55)	0.101 (2.33)	0.104 (2.39)
intro	0.092 (1.98)	0.091 (1.96)	0.118 (2.09)	0.120 (2.13)
q1	0.126 (2.76)	0.130 (2.84)	0.108 (1.94)	0.110 (1.97)
q2	0.049 (1.04)	0.046 (0.97)	0.037 (0.66)	0.038 (0.68)
q3	-0.329 (-7.73)	-0.311 (-7.30)	-0.310 (-5.98)	-0.306 (-5.91)
localu		-0.017 (-5.29)		-0.008 (-1.72)
male			0.091 (2.32)	0.088 (2.23)
marr			0.062 (0.60)	0.064 (0.62)
less			-0.131 (-2.65)	-0.127 (-2.55)
coll			0.000 (0.00)	0.001 (0.02)
univ			0.032 (0.60)	0.028 (0.52)
atl			-0.144 (-2.20)	-0.099 (-1.40)
que			-0.076 (-0.96)	-0.048 (-0.60)
pra			0.126 (1.88)	0.126 (1.89)
bct			-0.024 (-0.30)	-0.013 (-0.16)

TABLE 29
Cox Partial Likelihood Determinants of Unemployment Spells

SW/Oth Old (>24 years) Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **4,926**	**2** **4,926**	**3** **3,472**	**4** **3,472**
ei	0.057 (1.49)	0.061 (1.61)	0.107 (2.37)	0.111 (2.46)
intro	0.102 (2.11)	0.102 (2.10)	0.108 (1.85)	0.111 (1.91)
q1	0.140 (2.93)	0.145 (3.04)	0.098 (1.70)	0.101 (1.75)
q2	0.076 (1.54)	0.074 (1.50)	0.054 (0.92)	0.055 (0.94)
q3	-0.334 (-7.48)	-0.311 (-6.95)	-0.330 (-6.09)	-0.325 (-6.00)
localu		-0.019 (-5.71)		-0.010 (-2.18)
male			0.074 (1.82)	0.069 (1.68)
marr			-0.005 (-0.05)	-0.004 (-0.03)
less			-0.121 (-2.37)	-0.114 (-2.23)
coll			0.017 (0.29)	0.020 (0.34)
univ			0.060 (1.07)	0.056 (1.00)
atl			-0.151 (-2.20)	-0.090 (-1.22)
que			-0.061 (-0.75)	-0.025 (-0.30)
pra			0.156 (2.22)	0.158 (2.24)
bct			-0.042 (-0.50)	-0.028 (-0.33)

TABLE 30
Cox Partial Likelihood Determinants of Unemployment Spells

VQ/Dis Old (>24 years) Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **476**	**2** **476**	**3** **268**	**4** **268**
ei	0.011 (0.09)	0.013 (0.11)	0.023 (0.13)	0.028 (0.16)
intro	-0.053 (-0.32)	-0.065 (-0.39)	0.040 (0.17)	0.030 (0.13)
q1	-0.017 (-0.11)	-0.031 (-0.19)	0.318 (1.38)	0.312 (1.36)
q2	-0.220 (-1.37)	-0.234 (-1.45)	-0.174 (-0.76)	-0.245 (-1.06)
q3	-0.302 (-2.04)	-0.313 (-2.11)	0.048 (0.23)	0.056 (0.27)
localu		0.021 (1.48)		0.052 (2.29)
male			0.404 (2.68)	0.433 (2.85)
marr			0.725 (1.97)	0.838 (2.23)
less			-0.286 (-1.25)	-0.245 (-1.07)
coll			0.000 (0.00)	0.053 (0.26)
univ			-0.259 (-1.33)	-0.205 (-1.04)
atl			-0.060 (-0.23)	-0.196 (-0.73)
que			-0.658 (-1.86)	-0.860 (-2.35)
pra			-0.288 (-1.26)	-0.302 (-1.33)
bct			-0.170 (-0.61)	-0.255 (-0.91)

TABLE 31
Cox Partial Likelihood Determinants of Unemployment Spells

Full Young (<25 years) Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **1,142**	**2** **1,142**	**3** **271**	**4** **271**
ei	-0.045 (-0.58)	-0.049 (-0.63)	-0.029 (-0.16)	-0.036 (-0.20)
intro	0.063 (0.66)	0.066 (0.68)	0.254 (1.29)	0.250 (1.27)
q1	0.059 (0.58)	0.061 (0.60)	0.176 (0.80)	0.169 (0.77)
q2	0.108 (1.13)	0.123 (1.29)	0.177 (0.84)	0.170 (0.81)
q3	-0.304 (-3.38)	-0.289 (-3.21)	-0.080 (-0.43)	-0.082 (-0.44)
localu		-0.018 (-2.44)		-0.009 (-0.41)
male			-0.150 (-0.82)	-0.147 (-0.81)
marr			-0.104 (-0.57)	-0.105 (-0.57)
less			-0.262 (-1.12)	-0.257 (-1.09)
coll			-0.449 (-2.47)	-0.445 (-2.44)
univ			-0.256 (-1.36)	-0.250 (-1.33)
atl			-0.591 (-1.94)	-0.547 (-1.70)
que			-0.075 (-0.23)	-0.050 (-0.15)
pra			0.000 (0.00)	-0.003 (-0.01)
bct			0.033 (0.10)	0.041 (0.12)

TABLE 32
Cox Partial Likelihood Determinants of Unemployment Spells

SW/Oth Young (<25 years) Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **1,016**	**2** **1,016**	**3** **225**	**4** **225**
ei	-0.028 (-0.34)	-0.030 (-0.37)	0.000 (0.00)	0.000 (0.00)
intro	0.063 (0.62)	0.063 (0.62)	0.210 (0.97)	0.213 (0.98)
q1	0.035 (0.33)	0.036 (0.33)	0.141 (0.58)	0.146 (0.60)
q2	0.183 (1.83)	0.199 (1.98)	0.160 (0.70)	0.167 (0.72)
q3	-0.359 (-3.73)	-0.339 (-3.51)	-0.165 (-0.80)	-0.166 (-0.80)
localu		-0.017 (-2.22)		0.006 (0.25)
male			-0.120 (-0.56)	-0.122 (-0.57)
marr			-0.083 (-0.41)	-0.084 (-0.41)
less			-0.329 (-1.24)	-0.333 (-1.26)
coll			-0.374 (-1.88)	-0.377 (-1.90)
univ			-0.147 (-0.71)	-0.151 (-0.73)
atl			-0.531 (-1.59)	-0.564 (-1.57)
que			-0.173 (-0.46)	-0.192 (-0.50)
pra			0.069 (0.21)	0.070 (0.21)
bct			0.136 (0.38)	0.128 (0.35)

TABLE 33
Cox Partial Likelihood Determinants of Unemployment Spells

VQ/Dis Young (<25 years) Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **123**	**2** **123**	**3** **46**	**4** **46**
ei	-0.155 (-0.60)	-0.149 (-0.57)	-0.397 (-0.75)	-0.661 (-1.18)
intro	0.112 (0.34)	0.165 (0.50)	0.963 (1.72)	0.781 (1.37)
q1	0.259 (0.75)	0.282 (0.81)	0.838 (1.38)	0.745 (1.23)
q2	-0.442 (-1.33)	-0.407 (-1.22)	0.414 (0.62)	0.367 (0.57)
q3	0.008 (0.03)	-0.022 (-0.08)	0.561 (1.01)	0.345 (0.61)
localu		-0.024 (-0.88)		-0.089 (-1.27)
male			-0.520 (-1.17)	-0.574 (-1.29)
marr			0.593 (1.04)	0.493 (0.86)
less			0.233 (0.31)	0.309 (0.42)
coll			-1.045 (-1.92)	-1.003 (-1.82)
univ			-0.393 (-0.77)	-0.360 (-0.72)
atl			-0.078 (-0.08)	-0.085 (-0.09)
que			1.475 (1.22)	1.322 (1.10)
pra			0.537 (0.60)	0.365 (0.40)
bct			-0.217 (-0.18)	-0.499 (-0.42)

TABLE 34
Cox Partial Likelihood Determinants of Unemployment Spells

Full Sample
Pooled dataset, EI & phase-in with equal effects

	Model:	**1**	**2**	**3**	**4**
Sample					
Full	eipi	0.052 (1.71)	0.053 (1.74)	0.109 (2.80)	0.111 (2.85)
	# obs:	6,564	6,564	4,022	4,022
Female	eipi	-0.018 (-0.39)	-0.014 (-0.30)	0.030 (0.49)	0.034 (0.56)
	# obs:	2,968	2,968	1,668	1,668
Male	eipi	0.114 (2.78)	0.112 (2.72)	0.171 (3.32)	0.171 (3.33)
	# obs:	3,598	3,598	2,356	2,356
Old	eipi	0.065 (1.94)	0.066 (1.98)	0.106 (2.62)	0.109 (2.68)
	# obs:	5,422	5,422	3,751	3,751
Young	eipi	-0.010 (-0.15)	-0.013 (-0.18)	0.088 (0.57)	0.083 (0.54)
	# obs:	1,142	1,142	271	271

TABLE 35
Alternative Parametric Models of Likelihood to Study Determinants of Unemployment Spells

Full Sample
Pooled dataset, fully implemented EI since January 1997

Parametric Model	Model: # obs:	1 6,564	2 6,564	3 4,022	4 4,022
Exponential	ei	0.039 (1.19)	0.040 (1.23)	0.102 (2.44)	0.105 (2.50)
	intro	0.093 (2.24)	0.093 (2.22)	0.136 (2.54)	0.138 (2.57)
Weibull	ei	0.040 (1.23)	0.042 (1.27)	0.105 (2.50)	0.108 (2.56)
	intro	0.096 (2.29)	0.095 (2.27)	0.140 (2.60)	0.142 (2.64)
	p	1.039 (0.01)	1.041 (0.01)	1.049 (0.02)	1.05 (0.02)
Gompertz	ei	0.039 (1.19)	0.040 (1.23)	0.103 (2.45)	0.106 (2.51)
	intro	0.094 (2.24)	0.093 (2.23)	0.137 (2.55)	0.139 (2.58)
	gamma	0.000 (0.00)	0.000 (0.00)	0.001 (0.00)	0.001 (0.00)
LogNormal	ei	0.000 (0.00)	-0.001 (-0.04)	-0.077 (-1.62)	-0.080 (-1.69)
	intro	-0.061 (-1.26)	-0.063 (-1.31)	-0.113 (-1.85)	-0.117 (-1.91)
	sigma	1.264 (0.01)	1.260 (0.01)	1.248 (0.02)	1.246 (0.02)
LogLogistic	ei	-0.003 (-0.09)	-0.004 (-0.12)	-0.083 (-1.77)	-0.085 (-1.83)
	intro	-0.064 (-1.35)	-0.064 (-1.35)	-0.118 (-1.96)	-0.120 (-2.00)
	gamma	0.731 (0.01)	0.727 (0.01)	0.719 (0.01)	0.718 (0.01)
Gamma	ei	-0.021 (-0.59)	-0.021 (-0.60)	-0.092 (-2.07)	-0.094 (-2.12)
	intro	-0.079 (-1.76)	-0.078 (-1.74)	-0.126 (-2.22)	-0.128 (-2.25)
	sigma	1.128 (0.02)	1.131 (0.02)	1.118 (0.03)	1.121 (0.03)
	kappa	0.501 (0.05)	0.480 (0.05)	0.489 (0.07)	0.478 (0.07)

TABLE 36
Cox Partial Likelihood Model of Determinants of Unemployment Spells: Model of Time-Varying Uninsured Spells

Full Sample **Pooled dataset, fully implemented EI since January 1997**				
Model:	**1**	**2**	**3**	**4**
ei	0.039 (1.18)	0.040 (1.21)	0.10 (2.37)	0.102 (2.42)
intro	0.091 (2.16)	0.090 (2.15)	0.133 (2.47)	0.135 (2.50)
unins	0.204 (3.29)	0.176 (2.84)	0.124 (1.47)	0.118 (1.40)
q1	0.119 (2.85)	0.122 (2.92)	0.118 (2.19)	0.119 (2.21)
q2	0.063 (1.51)	0.063 (1.50)	0.050 (0.91)	0.051 (0.93)
q3	-0.324 (-8.43)	-0.307 (-7.98)	-0.297 (-5.97)	-0.294 (-5.90)
localu		-0.017 (-5.59)		-0.008 (-1.74)
male			0.074 (1.93)	0.071 (1.87)
marr			0.028 (0.32)	0.029 (0.33)
age			-0.008 (-4.49)	-0.008 (-4.50)
less			-0.108 (-2.22)	-0.104 (-2.12)
coll			-0.054 (-1.01)	-0.052 (-0.98)
univ			-0.005 (-0.10)	-0.009 (-0.17)
atl			-0.162 (-2.53)	-0.117 (-1.70)
que			-0.063 (-0.82)	-0.036 (-0.46)
pra			0.119 (1.83)	0.120 (1.84)
bct			-0.013 (-0.16)	-0.002 (-0.02)

TABLE 37
Cox Partial Likelihood Model of Determinants of Unemployed Spells: Model of Time-Varying Benefit Exhaustion Effects

Full Sample
Pooled dataset, fully implemented EI since January 1997

Model:	1	2	3	4
ei	0.036 (1.10)	0.038 (1.16)	0.10 (2.37)	0.102 (2.42)
intro	0.089 (2.12)	0.090 (2.14)	0.135 (2.50)	0.136 (2.53)
q1	0.113 (2.71)	0.120 (2.88)	0.119 (2.20)	0.120 (2.23)
q2	0.061 (1.45)	0.063 (1.49)	0.050 (0.92)	0.051 (0.93)
q3	-0.325 (-8.46)	-0.308 (-7.99)	-0.298 (-5.98)	-0.295 (-5.92)
ben13		0.240 (2.86)	0.286 (2.62)	0.283 (2.59)
ben46		0.115 (1.49)	0.148 (1.50)	0.146 (1.48)
ben79		0.010 (0.14)	-0.012 (-0.13)	-0.013 (-0.13)
localu		-0.017 (-5.71)		-0.008 (-1.75)
male			0.075 (1.95)	0.072 (1.89)
marr			0.027 (0.30)	0.028 (0.32)
age			-0.008 (-4.48)	-0.008 (-4.49)
less			-0.108 (-2.22)	-0.104 (-2.12)
coll			-0.054 (-1.00)	-0.052 (-0.97)
univ			-0.005 (-0.09)	-0.008 (-0.16)
atl			-0.163 (-2.55)	-0.118 (-1.72)
que			-0.065 (-0.85)	-0.038 (-0.48)
pra			0.116 (1.78)	0.117 (1.80)
bct			-0.014 (-0.19)	-0.003 (-0.04)

TABLE 38
PGM Semiparametric Hazard Model of the Determinants of Unemployment Spells

Full Sample

Model:	**1**	**2**	**3**	**4**	**5**	**6**
ei	0.091 (9.94)	0.161 (13.53)	0.064 (7.02)	0.131 (11.05)	0.065 (7.03)	0.132 (11.07)
intro	0.134 (12.09)	0.166 (11.47)	0.108 (9.63)	0.141 (9.64)	0.108 (9.66)	0.141 (9.68)
q1	-0.323 (-27.50)	-0.325 (-21.25)	-0.344 (-29.25)	-0.345 (-22.58)	-0.344 (-29.25)	-0.346 (-22.58)
q2	-0.579 (-47.78)	-0.569 (-36.25)	-0.605 (-49.93)	-0.595 (-37.92)	-0.606 (-49.95)	-0.595 (-37.95)
q3	-0.533 (-53.54)	-0.534 (-40.69)	-0.531 (-53.06)	-0.532 (-40.32)	-0.531 (-53.07)	-0.532 (-40.34)
logdur	-0.363 (-91.35)	-0.367 (-70.94)				
localu		0.004 (3.33)		0.004 (2.95)		0.004 (2.95)
male		0.195 (18.36)		0.181 (17.02)		0.182 (17.04)
marr		-0.069 (-2.81)		-0.065 (-2.65)		-0.065 (-2.64)
age		-0.011 (-22.54)		-0.011 (-21.77)		-0.011 (-21.77)
less		-0.028 (-2.08)		-0.030 (-2.23)		-0.030 (-2.26)
coll		-0.138 (-9.01)		-0.130 (-8.52)		-0.131 (-8.52)
univ		0.048 (3.27)		0.051 (3.44)		0.051 (3.43)
atl		-0.020 (-1.00)		-0.020 (-1.02)		-0.020 (-1.03)
que		-0.036 (-1.63)		-0.040 (-1.82)		-0.040 (-1.82)
pra		0.204 (10.75)		0.187 (9.85)		0.187 (9.85)
bct		-0.071 (-3.16)		-0.077 (-3.43)		-0.077 (-3.42)
d1		-0.040 (-7.15)	-0.042 (-5.93)			
d2		0.002 (3.00)	0.002 (2.89)			
d3		0.000 (-3.28)	0.000 (-3.35)			
d4		0.000 (1.76)	0.000 (2.34)			

duration included
dummy included variables

TABLE 39
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

Full Sample
Cohorts 1 and 5 Experiment

Model: **# obs:**	**1** **1,121**	**2** **1,121**	**3** **654**	**4** **654**
coh05	-0.026 (-0.30)	-0.025 (-0.30)	-0.044 (-0.40)	-0.045 (-0.40)
localu		-0.003 (-0.36)		-0.003 (-0.27)
male			-0.245 (-2.27)	-0.244 (-2.25)
marr			-0.338 (-0.86)	-0.341 (-0.87)
age			-0.003 (-0.56)	-0.003 (-0.56)
less			0.024 (0.17)	0.030 (0.21)
coll			-0.264 (-1.64)	-0.263 (-1.63)
univ			-0.138 (-0.88)	-0.137 (-0.88)
atl			0.270 (1.38)	0.287 (1.40)
que			-0.010 (-0.04)	-0.002 (-0.01)
pra			0.149 (0.73)	0.150 (0.73)
bct			-0.10 (-0.41)	-0.098 (-0.40)

TABLE 40
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

SW/Oth Sample
Cohorts 1 and 5 Experiment

Model: **# obs:**	**1** **996**	**2** **996**	**3** **581**	**4** **581**
coh05	-0.031 (-0.35)	-0.031 (-0.35)	-0.038 (-0.33)	-0.040 (-0.34)
localu		-0.005 (-0.59)		-0.009 (-0.67)
male			-0.273 (-2.42)	-0.270 (-2.40)
marr			-0.367 (-0.87)	-0.367 (-0.87)
age			-0.002 (-0.42)	-0.002 (-0.43)
less			0.044 (0.30)	0.061 (0.41)
coll			-0.193 (-1.15)	-0.186 (-1.11)
univ			-0.097 (-0.59)	-0.093 (-0.56)
atl			0.317 (1.57)	0.359 (1.70)
que			-0.010 (-0.04)	0.012 (0.05)
pra			0.182 (0.85)	0.186 (0.87)
bct			-0.061 (-0.24)	-0.052 (-0.21)

TABLE 41
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

VQ/Dis Sample
Cohorts 1 and 5 Experiment

Model: **# obs:**	**1** **119**	**2** **119**	**3** **70**	**4** **70**
coh05	0.247 (0.73)	0.212 (0.62)	-0.010 (-0.02)	-0.142 (-0.22)
localu		0.026 (0.76)		0.106 (1.48)
male			0.459 (0.63)	0.511 (0.71)
marr			-0.460 (-0.32)	0.059 (0.04)
age			-0.014 (-0.48)	-0.014 (-0.47)
less			-1.296 (-1.13)	-1.259 (-1.08)
coll			-1.798 (-1.96)	-1.786 (-1.86)
univ			-1.431 (-1.83)	-1.380 (-1.70)
atl			-1.175 (-0.99)	-1.549 (-1.25)
que			-0.319 (-0.29)	-0.542 (-0.48)
pra			-0.661 (-0.79)	-0.551 (-0.66)
bct			-1.438 (-1.17)	-1.445 (-1.17)

TABLE 42
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

Full Sample
Cohorts 1 and 9 Experiment

Model: **# obs:**	**1** **969**	**2** **969**	**3** **575**	**4** **575**
coh09	0.105 (1.22)	0.106 (1.23)	0.069 (0.61)	0.072 (0.63)
localu		0.008 (1.02)		0.005 (0.44)
male			-0.232 (-2.13)	-0.227 (-2.07)
marr			-0.362 (-1.03)	-0.356 (-1.01)
age			0.000 (0.05)	0.000 (0.03)
less			0.179 (1.31)	0.174 (1.27)
coll			-0.005 (-0.03)	-0.015 (-0.09)
univ			-0.018 (-0.11)	-0.019 (-0.12)
atl			0.479 (2.00)	0.456 (1.86)
que			0.353 (1.35)	0.342 (1.30)
pra			0.461 (1.86)	0.470 (1.89)
bct			0.312 (1.04)	0.313 (1.05)

TABLE 43
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

SW/Oth Sample
Cohorts 1 and 9 Experiment

Model: **# obs:**	**1** **863**	**2** **863**	**3** **529**	**4** **529**
coh09	0.091 (1.02)	0.092 (1.02)	0.039 (0.33)	0.041 (0.35)
localu		0.010 (1.20)		0.004 (0.37)
male			-0.228 (-2.00)	-0.223 (-1.94)
marr			-0.394 (-1.11)	-0.390 (-1.10)
age			0.002 (0.37)	0.002 (0.35)
less			0.194 (1.37)	0.190 (1.34)
coll			0.035 (0.20)	0.025 (0.14)
univ			-0.008 (-0.05)	-0.009 (-0.05)
atl			0.471 (1.92)	0.451 (1.79)
que			0.341 (1.26)	0.331 (1.21)
pra			0.455 (1.77)	0.461 (1.79)
bct			0.259 (0.84)	0.260 (0.84)

TABLE 44
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

VQ/Dis Sample
Cohorts 1 and 9 Experiment

Model: **# obs:**	**1** **103**	**2** **103**	**3** **44**	**4** **44**
coh09	0.308 (0.95)	0.325 (1.00)	1.620 (1.91)	1.892 (2.06)
localu		-0.028 (-0.81)		0.283 (1.52)
male			-0.347 (-0.53)	-0.450 (-0.53)
marr			0.000 (0.0)	1.001 (0.0)
age			-0.081 (-2.11)	-0.106 (-2.59)
less			0.802 (0.92)	0.980 (1.09)
coll			-0.026 (-0.03)	0.136 (0.15)
univ			0.579 (0.72)	0.967 (1.11)
atl			0.943 (0.76)	0.358 (0.27)
que			-0.048 (-0.04)	-0.307 (-0.25)
pra			0.583 (0.48)	1.654 (1.18)
bct			2.350 (1.65)	2.836 (1.89)

TABLE 45
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

Full Sample
Cohorts 2 and 6 Experiment

Model: **# obs:**	**1** **1,469**	**2** **1,469**	**3** **921**	**4** **921**
coh06	0.018 (0.25)	0.015 (0.20)	0.006 (0.06)	0.005 (0.06)
localu		-0.007 (-0.81)		-0.001 (-0.05)
male			-0.058 (-0.57)	-0.058 (-0.57)
marr			0.275 (1.25)	0.275 (1.25)
age			-0.010 (-1.96)	-0.010 (-1.96)
less			0.272 (2.25)	0.272 (2.25)
coll			0.110 (0.79)	0.111 (0.79)
univ			0.076 (0.51)	0.076 (0.51)
atl			0.289 (1.62)	0.292 (1.54)
que			0.152 (0.74)	0.154 (0.73)
pra			0.338 (1.80)	0.338 (1.80)
bct			0.233 (1.08)	0.233 (1.08)

TABLE 46
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

SW/Oth Sample Cohorts 2 and 6 Experiment				
Model: # obs:	**1 1,372**	**2 1,372**	**3 867**	**4 867**
coh06	0.043 (0.56)	0.039 (0.52)	0.036 (0.37)	0.036 (0.36)
localu		-0.009 (-1.04)		-0.002 (-0.14)
male			-0.076 (-0.71)	-0.076 (-0.72)
marr			0.343 (1.47)	0.344 (1.47)
age			-0.010 (-2.00)	-0.010 (-2.00)
less			0.288 (2.34)	0.286 (2.32)
coll			0.119 (0.84)	0.120 (0.84)
univ			0.090 (0.58)	0.089 (0.57)
atl			0.295 (1.65)	0.304 (1.59)
que			0.146 (0.71)	0.152 (0.72)
pra			0.325 (1.70)	0.324 (1.70)
bct			0.199 (0.90)	0.20 (0.91)

TABLE 47
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

VQ/Dis Sample
Cohorts 2 and 6 Experiment

Model: **# obs:**	**1** **92**	**2** **92**	**3** **51**	**4** **51**
coh06	-0.345 (-1.02)	-0.346 (-1.02)	-0.602 (-1.02)	-0.552 (-0.84)
localu		-0.003 (-0.05)		0.031 (0.18)
male			0.172 (0.27)	0.239 (0.32)
marr			-22.735 (0.0)	-22.808 (-13.18)
age			0.015 (0.50)	0.017 (0.54)
less			-0.075 (-0.06)	-0.081 (-0.06)
coll			0.633 (0.64)	0.656 (0.66)
univ			0.401 (0.63)	0.365 (0.55)
atl			-0.841 (-0.64)	-0.577 (-0.37)
que			-0.477 (0.0)	-0.370 (0.0)
pra			21.246 (16.08)	21.565 (26.19)
bct			21.870 (15.84)	22.242 (0.0)

TABLE 48
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

Full Sample
Cohorts 2 and 10 Experiment

Model: **# obs:**	**1** **1,335**	**2** **1,335**	**3** **816**	**4** **816**
coh10	0.038 (0.50)	0.031 (0.41)	-0.012 (-0.12)	-0.013 (-0.13)
localu		-0.010 (-1.18)		-0.006 (-0.51)
male			-0.066 (-0.60)	-0.065 (-0.59)
marr			0.149 (0.65)	0.149 (0.66)
age			-0.002 (-0.50)	-0.002 (-0.48)
less			0.199 (1.59)	0.190 (1.50)
coll			0.036 (0.25)	0.033 (0.23)
univ			0.064 (0.41)	0.059 (0.37)
atl			-0.044 (-0.23)	-0.008 (-0.04)
que			-0.239 (-1.08)	-0.215 (-0.95)
pra			0.055 (0.27)	0.059 (0.29)
bct			-0.119 (-0.53)	-0.111 (-0.50)

TABLE 49
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

SW/Oth Sample
Cohorts 2 and 10 Experiment

Model: **# obs:**	**1** **1,240**	**2** **1,240**	**3** **763**	**4** **763**
coh10	0.077 (1.00)	0.071 (0.91)	0.042 (0.41)	0.041 (0.41)
localu		-0.010 (-1.12)		-0.008 (-0.66)
male			-0.079 (-0.70)	-0.079 (-0.70)
marr			0.184 (0.77)	0.186 (0.78)
age			-0.004 (-0.74)	-0.004 (-0.71)
less			0.221 (1.71)	0.208 (1.60)
coll			0.031 (0.21)	0.026 (0.18)
univ			0.054 (0.32)	0.049 (0.29)
atl			-0.045 (-0.23)	0.003 (0.02)
que			-0.246 (-1.10)	-0.213 (-0.93)
pra			0.033 (0.16)	0.040 (0.19)
bct			-0.156 (-0.68)	-0.144 (-0.63)

TABLE 50
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

VQ/Dis Sample
Cohorts 2 and 10 Experiment

Model: **# obs:**	**1** **92**	**2** **92**	**3** **52**	**4** **52**
coh10	-0.663 (-1.86)	-0.585 (-1.61)	-1.859 (-2.23)	-1.923 (-2.27)
localu		-0.058 (-1.01)		0.237 (1.00)
male			-0.108 (-0.13)	0.040 (0.05)
marr			-1.253 (-1.02)	-1.175 (-0.89)
age			-0.032 (-0.89)	-0.026 (-0.73)
less			0.235 (0.23)	0.393 (0.39)
coll			1.098 (0.97)	1.109 (0.98)
univ			1.388 (1.66)	1.524 (1.81)
atl			-2.434 (-1.54)	-2.880 (-1.77)
que			-1.868 (-0.99)	-2.769 (-1.29)
pra			-0.845 (-0.54)	-1.016 (-0.64)
bct			-0.880 (-0.62)	-1.197 (-0.82)

TABLE 51
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

Full Sample
Cohorts 3 and 7 Experiment

Model: **# obs:**	**1** **1,362**	**2** **1,362**	**3** **834**	**4** **834**
coh07	-0.037 (-0.49)	-0.030 (-0.40)	-0.075 (-0.77)	-0.064 (-0.65)
localu		-0.009 (-1.12)		-0.008 (-0.73)
male			-0.264 (-2.67)	-0.268 (-2.70)
marr			-0.124 (-0.57)	-0.121 (-0.56)
age			0.001 (0.30)	0.001 (0.27)
less			-0.004 (-0.03)	0.003 (0.03)
coll			0.026 (0.18)	0.029 (0.20)
univ			-0.174 (-1.25)	-0.177 (-1.27)
atl			0.138 (0.73)	0.175 (0.89)
que			0.198 (0.91)	0.221 (1.01)
pra			0.282 (1.40)	0.281 (1.39)
bct			0.169 (0.75)	0.175 (0.78)

TABLE 52
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

SW/Oth Sample
Cohorts 3 and 7 Experiment

Model: **# obs:**	**1** **1,240**	**2** **1,240**	**3** **771**	**4** **771**
coh07	-0.031 (-0.39)	-0.025 (-0.32)	-0.096 (-0.96)	-0.088 (-0.86)
localu		-0.006 (-0.82)		-0.006 (-0.55)
male			-0.264 (-2.56)	-0.269 (-2.59)
marr			-0.056 (-0.24)	-0.053 (-0.22)
age			0.003 (0.67)	0.003 (0.63)
less			-0.052 (-0.41)	-0.045 (-0.36)
coll			-0.027 (-0.18)	-0.024 (-0.17)
univ			-0.220 (-1.53)	-0.223 (-1.54)
atl			0.137 (0.72)	0.167 (0.84)
que			0.161 (0.73)	0.179 (0.80)
pra			0.238 (1.16)	0.239 (1.16)
bct			0.193 (0.86)	0.199 (0.88)

TABLE 53
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

VQ/Dis Sample
Cohorts 3 and 7 Experiment

Model: **# obs:**	**1** **119**	**2** **119**	**3** **61**	**4** **61**
coh07	-0.194 (-0.67)	-0.149 (-0.51)	0.105 (0.22)	0.326 (0.58)
localu		-0.029 (-0.75)		-0.076 (-0.97)
male			-0.257 (-0.52)	0.049 (0.08)
marr			-0.952 (-1.41)	-0.594 (-0.79)
age			-0.022 (-0.92)	-0.020 (-0.82)
less			0.661 (1.25)	0.388 (0.65)
coll			1.081 (1.34)	1.089 (1.34)
univ			0.235 (0.37)	-0.004 (-0.01)
atl			19.836 (0.0)	20.820 (0.0)
que			20.223 (27.58)	21.450 (27.44)
pra			20.686 (34.02)	21.475 (32.88)
bct			-24.371 (0.0)	-22.019 (0.00)

TABLE 54
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

Full Sample
Cohorts 4 and 8 Experiment

Model: **# obs:**	**1** **1,394**	**2** **1,394**	**3** **883**	**4** **883**
coh08	-0.073 (-0.92)	-0.073 (-0.93)	-0.011 (-0.11)	-0.012 (-0.12)
localu		0.002 (0.27)		0.002 (0.22)
male			-0.004 (-0.04)	-0.003 (-0.03)
marr			-0.530 (-1.77)	-0.528 (-1.77)
age			0.002 (0.38)	0.002 (0.40)
less			0.005 (0.04)	0.003 (0.03)
coll			0.150 (1.01)	0.152 (1.02)
univ			-0.063 (-0.45)	-0.060 (-0.43)
atl			0.049 (0.29)	0.034 (0.19)
que			-0.348 (-1.63)	-0.352 (-1.65)
pra			0.155 (0.84)	0.158 (0.85)
bct			-0.137 (-0.70)	-0.139 (-0.71)

TABLE 55
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

SW/Oth Sample
Cohorts 4 and 8 Experiment

Model: **# obs:**	**1** **1,240**	**2** **1,240**	**3** **802**	**4** **802**
coh08	-0.073 (-0.88)	-0.074 (-0.89)	-0.053 (-0.50)	-0.057 (-0.55)
localu		0.004 (0.58)		0.007 (0.57)
male			-0.015 (-0.15)	-0.014 (-0.13)
marr			-0.436 (-1.33)	-0.434 (-1.33)
age			0.001 (0.18)	0.001 (0.21)
less			-0.033 (-0.25)	-0.038 (-0.28)
coll			0.091 (0.57)	0.094 (0.60)
univ			-0.097 (-0.65)	-0.091 (-0.60)
atl			0.102 (0.56)	0.062 (0.32)
que			-0.271 (-1.19)	-0.281 (-1.24)
pra			0.123 (0.61)	0.133 (0.65)
bct			-0.083 (-0.39)	-0.087 (-0.41)

TABLE 56
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

VQ/Dis Sample
Cohorts 4 and 8 Experiment

Model: **# obs:**	**1** **148**	**2** **148**	**3** **79**	**4** **79**
coh08	-0.074 (-0.31)	-0.095 (-0.39)	0.008 (0.02)	-0.007 (-0.02)
localu		-0.022 (-0.86)		-0.059 (-1.14)
male			-0.080 (-0.22)	-0.134 (-0.36)
marr			-2.964 (-1.55)	-2.989 (-1.59)
age			0.018 (1.07)	0.013 (0.71)
less			0.251 (0.44)	0.280 (0.49)
coll			0.264 (0.46)	0.219 (0.38)
univ			0.047 (0.09)	-0.039 (-0.08)
atl			-0.275 (-0.54)	-0.040 (-0.07)
que			-2.715 (-1.45)	-2.609 (-1.41)
pra			0.553 (1.03)	0.527 (0.99)
bct			-0.685 (-0.98)	-0.536 (-0.76)

TABLE 57
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

Full Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **6,564**	**2** **6,564**	**3** **4,022**	**4** **4,022**
ei	0.011 (0.29)	0.012 (0.30)	0.005 (0.11)	0.006 (0.12)
intro	-0.040 (-0.79)	-0.040 (-0.79)	-0.054 (-0.83)	-0.054 (-0.83)
q1	-0.102 (-2.02)	-0.101 (-2.00)	-0.041 (-0.64)	-0.041 (-0.64)
q2	0.006 (0.11)	0.007 (0.13)	0.057 (0.86)	0.057 (0.86)
q3	0.099 (2.24)	0.10 (2.27)	0.132 (2.32)	0.133 (2.32)
localu		-0.002 (-0.70)		-0.001 (-0.22)
male			-0.133 (-2.94)	-0.133 (-2.94)
marr			-0.106 (-0.93)	-0.106 (-0.93)
age			-0.002 (-0.79)	-0.002 (-0.80)
less			0.107 (1.91)	0.108 (1.92)
coll			0.023 (0.35)	0.023 (0.35)
univ			-0.047 (-0.73)	-0.048 (-0.73)
atl			0.166 (2.03)	0.172 (2.00)
que			0.023 (0.24)	0.026 (0.27)
pra			0.213 (2.46)	0.213 (2.45)
bct			0.064 (0.66)	0.065 (0.67)

TABLE 58
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

SW/Oth Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **5,942**	**2** **5,942**	**3** **3,697**	**4** **3,697**
ei	0.023 (0.55)	0.023 (0.56)	0.002 (0.04)	0.003 (0.05)
intro	-0.029 (-0.55)	-0.028 (-0.55)	-0.041 (-0.61)	-0.040 (-0.61)
q1	-0.123 (-2.35)	-0.122 (-2.33)	-0.055 (-0.82)	-0.055 (-0.82)
q2	-0.007 (-0.12)	-0.006 (-0.11)	0.035 (0.51)	0.036 (0.51)
q3	0.090 (1.97)	0.091 (1.99)	0.119 (2.02)	0.119 (2.02)
localu		-0.002 (-0.44)		-0.001 (-0.25)
male			-0.146 (-3.09)	-0.147 (-3.10)
marr			-0.055 (-0.45)	-0.055 (-0.45)
age			-0.002 (-0.70)	-0.002 (-0.70)
less			0.102 (1.77)	0.102 (1.78)
coll			0.020 (0.29)	0.020 (0.30)
univ			-0.049 (-0.72)	-0.050 (-0.73)
atl			0.186 (2.20)	0.193 (2.17)
que			0.024 (0.25)	0.028 (0.28)
pra			0.206 (2.27)	0.206 (2.27)
bct			0.082 (0.81)	0.083 (0.82)

TABLE 59
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

VQ/Dis Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **599**	**2** **599**	**3** **314**	**4** **314**
ei	-0.117 (-0.82)	-0.108 (-0.75)	0.005 (0.02)	0.012 (0.06)
intro	-0.105 (-0.53)	-0.095 (-0.47)	-0.247 (-0.80)	-0.222 (-0.71)
q1	0.251 (1.20)	0.261 (1.24)	0.212 (0.73)	0.221 (0.76)
q2	0.228 (1.17)	0.264 (1.35)	0.393 (1.38)	0.425 (1.48)
q3	0.238 (1.35)	0.246 (1.39)	0.358 (1.31)	0.364 (1.33)
localu		-0.024 (-1.59)		-0.017 (-0.67)
male			-0.125 (-0.62)	-0.116 (-0.57)
marr			-0.620 (-1.76)	-0.607 (-1.72)
age			-0.008 (-0.82)	-0.008 (-0.90)
less			0.151 (0.59)	0.129 (0.50)
coll			0.042 (0.15)	0.032 (0.11)
univ			0.018 (0.07)	-0.009 (-0.03)
atl			-0.201 (-0.55)	-0.145 (-0.39)
que			-0.129 (-0.31)	-0.076 (-0.18)
pra			0.271 (0.79)	0.260 (0.76)
bct			-0.080 (-0.19)	-0.048 (-0.11)

TABLE 60
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

Full Female Sample
Pooled dataset, phase-in and fully implemented EI

Model: # obs:	1 2,968	2 2,968	3 1,668	4 1,668
ei	0.007 (0.12)	0.004 (0.07)	-0.041 (-0.52)	-0.048 (-0.62)
intro	-0.092 (-1.20)	-0.094 (-1.23)	-0.162 (-1.56)	-0.160 (-1.54)
q1	-0.135 (-1.77)	-0.139 (-1.82)	0.049 (0.46)	0.047 (0.44)
q2	-0.043 (-0.56)	-0.048 (-0.62)	0.004 (0.04)	0.003 (0.02)
q3	0.118 (1.73)	0.114 (1.67)	0.228 (2.38)	0.222 (2.32)
localu		0.006 (1.15)		0.010 (1.29)
marr			-0.174 (-1.02)	-0.184 (-1.08)
age			-0.004 (-1.08)	-0.004 (-1.07)
less			0.249 (2.77)	0.245 (2.71)
coll			0.116 (1.07)	0.117 (1.08)
univ			0.002 (0.02)	0.007 (0.07)
atl			0.249 (2.03)	0.195 (1.50)
que			0.064 (0.45)	0.040 (0.28)
pra			0.208 (1.59)	0.212 (1.62)
bct			0.276 (1.77)	0.263 (1.69)

TABLE 61
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

SW/Oth Female Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **2,641**	**2** **2,641**	**3** **1,496**	**4** **1,496**
ei	0.006 (0.09)	0.002 (0.03)	-0.071 (-0.87)	-0.078 (-0.96)
intro	-0.079 (-0.99)	-0.084 (-1.04)	-0.150 (-1.37)	-0.149 (-1.36)
q1	-0.150 (-1.88)	-0.155 (-1.95)	0.032 (0.29)	0.029 (0.27)
q2	-0.059 (-0.72)	-0.064 (-0.79)	-0.017 (-0.16)	-0.016 (-0.15)
q3	0.126 (1.76)	0.121 (1.68)	0.221 (2.21)	0.217 (2.17)
localu		0.008 (1.49)		0.009 (1.12)
marr			-0.082 (-0.44)	-0.093 (-0.50)
age			-0.004 (-1.09)	-0.004 (-1.08)
less			0.214 (2.28)	0.209 (2.22)
coll			0.090 (0.79)	0.091 (0.80)
univ			-0.030 (-0.27)	-0.026 (-0.24)
atl			0.304 (2.35)	0.252 (1.84)
que			0.10 (0.67)	0.078 (0.52)
pra			0.211 (1.51)	0.212 (1.52)
bct			0.309 (1.88)	0.298 (1.82)

TABLE 62 Cox Partial Likelihood Determinants of UI/EI Benefit Spells				
VQ/Dis Female Sample **Pooled dataset, phase-in and fully implemented EI**				
Model: **# obs:**	**1** **312**	**2** **312**	**3** **166**	**4** **166**
ei	-0.032 (-0.16)	-0.012 (-0.06)	0.40 (1.29)	0.403 (1.31)
intro	-0.134 (-0.50)	-0.124 (-0.47)	-0.382 (-0.97)	-0.464 (-1.15)
q1	0.040 (0.14)	0.043 (0.15)	0.361 (0.81)	0.377 (0.85)
q2	0.121 (0.46)	0.171 (0.64)	0.162 (0.41)	0.057 (0.14)
q3	0.027 (0.11)	0.053 (0.22)	0.336 (0.90)	0.309 (0.83)
localu		-0.022 (-1.13)		0.034 (1.09)
marr			-1.460 (-2.76)	-1.566 (-2.90)
age			-0.010 (-0.71)	-0.009 (-0.66)
less			0.80 (2.07)	0.962 (2.31)
coll			0.483 (1.22)	0.550 (1.36)
univ			0.503 (1.31)	0.642 (1.57)
atl			-0.551 (-1.18)	-0.706 (-1.44)
que			-0.625 (-1.14)	-0.758 (-1.35)
pra			0.107 (0.23)	0.104 (0.22)
bct			0.113 (0.21)	-0.007 (-0.01)

TABLE 63
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

Full Male Sample
Pooled dataset, phase-in and fully implemented EI

Model: # obs:	1 3,598	2 3,598	3 2,356	4 2,356
ei	0.018 (0.34)	0.015 (0.28)	0.039 (0.59)	0.041 (0.63)
intro	-0.006 (-0.09)	-0.008 (-0.13)	-0.005 (-0.06)	-0.002 (-0.02)
q1	-0.086 (-1.28)	-0.084 (-1.24)	-0.102 (-1.23)	-0.102 (-1.23)
q2	0.026 (0.37)	0.028 (0.40)	0.123 (1.38)	0.125 (1.41)
q3	0.077 (1.32)	0.081 (1.40)	0.068 (0.94)	0.068 (0.94)
localu		-0.009 (-1.88)		-0.009 (-1.41)
marr			-0.041 (-0.26)	-0.044 (-0.29)
age			0.000 (-0.03)	0.000 (-0.08)
less			0.003 (0.04)	0.007 (0.10)
coll			-0.028 (-0.34)	-0.024 (-0.29)
univ			-0.057 (-0.67)	-0.060 (-0.70)
atl			0.106 (0.95)	0.154 (1.33)
que			-0.013 (-0.10)	0.019 (0.14)
pra			0.211 (1.80)	0.209 (1.79)
bct			-0.075 (-0.58)	-0.067 (-0.52)

TABLE 64
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

SW/Oth Male Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **3,302**	**2** **3,302**	**3** **2,201**	**4** **2,201**
ei	0.039 (0.72)	0.037 (0.68)	0.048 (0.72)	0.051 (0.75)
intro	0.004 (0.06)	0.002 (0.03)	-0.001 (-0.01)	0.002 (0.02)
q1	-0.110 (-1.59)	-0.108 (-1.56)	-0.109 (-1.28)	-0.109 (-1.28)
q2	0.020 (0.27)	0.023 (0.31)	0.107 (1.17)	0.109 (1.20)
q3	0.057 (0.95)	0.062 (1.03)	0.053 (0.72)	0.053 (0.72)
localu		-0.009 (-1.80)		-0.008 (-1.24)
marr			-0.017 (-0.11)	-0.021 (-0.13)
age			0.000 (0.05)	0.000 (0.01)
less			0.019 (0.26)	0.023 (0.31)
coll			-0.015 (-0.18)	-0.011 (-0.13)
univ			-0.043 (-0.48)	-0.045 (-0.51)
atl			0.108 (0.95)	0.152 (1.28)
que			-0.031 (-0.24)	-0.003 (-0.02)
pra			0.206 (1.71)	0.204 (1.69)
bct			-0.058 (-0.44)	-0.050 (-0.38)

TABLE 65
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

VQ/Dis Male Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **288**	**2** **288**	**3** **150**	**4** **150**
ei	-0.215 (-0.99)	-0.219 (-1.01)	-0.063 (-0.17)	-0.153 (-0.39)
intro	-0.055 (-0.18)	-0.049 (-0.16)	0.206 (0.35)	0.299 (0.51)
q1	0.497 (1.61)	0.525 (1.68)	0.033 (0.08)	0.350 (0.78)
q2	0.314 (1.08)	0.330 (1.13)	0.461 (1.03)	0.567 (1.24)
q3	0.465 (1.77)	0.443 (1.68)	0.486 (1.07)	0.566 (1.24)
localu		-0.032 (-1.24)		-0.115 (-1.90)
marr			-0.049 (-0.10)	0.008 (0.02)
age			0.004 (0.27)	0.002 (0.13)
less			-0.769 (-1.66)	-0.632 (-1.34)
coll			-0.598 (-1.13)	-0.635 (-1.21)
univ			-0.668 (-1.73)	-0.621 (-1.63)
atl			0.076 (0.12)	0.248 (0.39)
que			0.620 (0.89)	1.019 (1.41)
pra			0.171 (0.28)	0.131 (0.21)
bct			-1.077 (-1.26)	-1.105 (-1.26)

TABLE 66
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

Full Old (>24 years) Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **5,422**	**2** **5,422**	**3** **3,751**	**4** **3,751**
ei	0.020 (0.47)	0.020 (0.47)	0.014 (0.28)	0.014 (0.28)
intro	-0.055 (-1.00)	-0.055 (-1.00)	-0.069 (-1.04)	-0.069 (-1.04)
q1	-0.090 (-1.63)	-0.089 (-1.63)	-0.042 (-0.64)	-0.042 (-0.64)
q2	0.034 (0.60)	0.035 (0.61)	0.063 (0.92)	0.063 (0.92)
q3	0.114 (2.37)	0.115 (2.38)	0.129 (2.20)	0.129 (2.19)
localu		-0.001 (-0.32)		0.000 (0.00)
male			-0.129 (-2.81)	-0.129 (-2.81)
marr			-0.161 (-1.26)	-0.161 (-1.26)
less			0.093 (1.66)	0.093 (1.66)
coll			0.025 (0.37)	0.025 (0.37)
univ			-0.046 (-0.69)	-0.046 (-0.69)
atl			0.168 (2.03)	0.168 (1.93)
que			0.022 (0.23)	0.022 (0.23)
pra			0.204 (2.31)	0.204 (2.31)
bct			0.066 (0.67)	0.066 (0.66)

TABLE 67
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

SW/Oth Old (>24 years) Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **4,926**	**2** **4,926**	**3** **3,472**	**4** **3,472**
ei	0.030 (0.68)	0.030 (0.68)	0.009 (0.18)	0.009 (0.18)
intro	-0.042 (-0.73)	-0.042 (-0.73)	-0.058 (-0.85)	-0.058 (-0.85)
q1	-0.115 (-2.03)	-0.115 (-2.02)	-0.060 (-0.88)	-0.060 (-0.88)
q2	0.020 (0.33)	0.020 (0.33)	0.038 (0.54)	0.038 (0.54)
q3	0.098 (1.96)	0.098 (1.97)	0.114 (1.88)	0.114 (1.88)
localu		-0.001 (-0.17)		0.000 (-0.06)
male			-0.140 (-2.94)	-0.140 (-2.94)
marr			-0.126 (-0.94)	-0.126 (-0.94)
less			0.097 (1.69)	0.097 (1.69)
coll			0.032 (0.46)	0.033 (0.46)
univ			-0.037 (-0.53)	-0.037 (-0.53)
atl			0.184 (2.15)	0.186 (2.07)
que			0.014 (0.14)	0.015 (0.15)
pra			0.195 (2.12)	0.195 (2.12)
bct			0.088 (0.86)	0.088 (0.86)

TABLE 68
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

VQ/Dis Old (>24 years) Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **476**	**2** **476**	**3** **268**	**4** **268**
ei	-0.114 (-0.70)	-0.122 (-0.74)	0.032 (0.14)	0.041 (0.18)
intro	-0.132 (-0.59)	-0.142 (-0.63)	-0.158 (-0.48)	-0.131 (-0.39)
q1	0.347 (1.45)	0.349 (1.45)	0.225 (0.69)	0.229 (0.70)
q2	0.320 (1.40)	0.339 (1.48)	0.576 (1.74)	0.608 (1.81)
q3	0.380 (1.86)	0.398 (1.94)	0.347 (1.19)	0.347 (1.19)
localu		-0.018 (-1.03)		-0.015 (-0.56)
male			-0.051 (-0.24)	-0.042 (-0.20)
marr			-0.193 (-0.42)	-0.181 (-0.39)
less			-0.115 (-0.41)	-0.142 (-0.50)
coll			-0.298 (-0.96)	-0.319 (-1.02)
univ			-0.294 (-1.06)	-0.327 (-1.16)
atl			0.019 (0.05)	0.080 (0.20)
que			0.313 (0.72)	0.379 (0.84)
pra			0.456 (1.25)	0.456 (1.25)
bct			-0.216 (-0.50)	-0.191 (-0.44)

TABLE 69
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

Full Young (<25 years) Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **1,142**	**2** **1,142**	**3** **271**	**4** **271**
ei	-0.030 (-0.30)	-0.030 (-0.30)	-0.257 (-1.10)	-0.274 (-1.17)
intro	0.031 (0.26)	0.040 (0.33)	0.163 (0.59)	0.140 (0.51)
q1	-0.164 (-1.25)	-0.156 (-1.18)	-0.010 (-0.04)	-0.001 (0.00)
q2	-0.121 (-0.96)	-0.103 (-0.81)	-0.058 (-0.20)	-0.079 (-0.27)
q3	0.021 (0.19)	0.023 (0.21)	0.229 (0.89)	0.214 (0.83)
localu		-0.009 (-1.02)		-0.038 (-1.20)
male			-0.096 (-0.36)	-0.085 (-0.31)
marr			0.017 (0.06)	0.068 (0.25)
less			0.290 (0.92)	0.278 (0.88)
coll			0.071 (0.29)	0.113 (0.46)
univ			0.050 (0.19)	0.072 (0.28)
atl			0.201 (0.27)	0.436 (0.57)
que			0.012 (0.02)	0.105 (0.14)
pra			0.425 (0.58)	0.407 (0.55)
bct			-0.084 (-0.11)	-0.031 (-0.04)

TABLE 70
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

SW/Oth Young (<25 years) Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **1,016**	**2** **1,016**	**3** **225**	**4** **225**
ei	-0.016 (-0.15)	-0.017 (-0.16)	-0.254 (-0.95)	-0.256 (-0.96)
intro	0.033 (0.26)	0.037 (0.29)	0.211 (0.72)	0.204 (0.69)
q1	-0.162 (-1.18)	-0.157 (-1.14)	0.041 (0.13)	0.055 (0.18)
q2	-0.130 (-0.96)	-0.119 (-0.87)	-0.061 (-0.19)	-0.082 (-0.25)
q3	0.047 (0.42)	0.051 (0.45)	0.232 (0.84)	0.207 (0.75)
localu		-0.006 (-0.67)		-0.034 (-0.93)
male			-0.146 (-0.45)	-0.170 (-0.52)
marr			0.187 (0.60)	0.223 (0.71)
less			0.226 (0.62)	0.195 (0.53)
coll			-0.126 (-0.45)	-0.104 (-0.37)
univ			-0.122 (-0.43)	-0.110 (-0.39)
atl			0.286 (0.38)	0.512 (0.65)
que			0.240 (0.30)	0.334 (0.41)
pra			0.431 (0.58)	0.425 (0.57)
bct			-0.120 (-0.15)	-0.060 (-0.08)

TABLE 71
Cox Partial Likelihood Determinants of UI/EI Benefit Spells

VQ/Dis Young (<25 years) Sample
Pooled dataset, phase-in and fully implemented EI

Model: **# obs:**	**1** **123**	**2** **123**	**3** **46**	**4** **46**
ei	-0.134 (-0.42)	-0.013 (-0.04)	1.182 (1.06)	1.903 (1.63)
intro	0.025 (0.05)	0.176 (0.37)	-0.393 (-0.25)	0.937 (0.52)
q1	-0.088 (-0.18)	-0.016 (-0.03)	0.393 (0.31)	0.618 (0.43)
q2	-0.025 (-0.07)	0.112 (0.29)	0.694 (0.62)	1.315 (1.03)
q3	-0.210 (-0.57)	-0.320 (-0.85)	1.353 (0.92)	0.680 (0.49)
localu		-0.059 (-1.73)		-0.246 (-1.57)
male			-1.706 (-1.51)	-2.240 (-1.95)
marr			-2.986 (-2.16)	-2.467 (-1.86)
less			0.461 (0.24)	1.429 (0.68)
coll			3.411 (2.24)	4.424 (2.40)
univ			2.713 (2.32)	3.259 (2.40)
atl			-1.957 (-1.26)	-2.452 (-1.43)
que			-1.353 (-0.74)	-1.356 (0.0)
pra			0.542 (0.38)	-0.10 (-0.06)
bct			-0.140 (0.0)	-0.337 (-0.17)

TABLE 72
Cox Partial Likelihood Determinants of Unemployment Spells

Full Sample
Pooled dataset, EI & Phase-in (since July 1996)

	Model:	**1**	**2**	**3**	**4**
Sample					
Full	eipi	-0.004 (-0.10)	-0.003 (-0.09)	-0.011 (-0.24)	-0.011 (-0.24)
	# obs:	6,564	6,564	4,022	4,022
Female	eipi	-0.021 (-0.39)	-0.024 (-0.44)	-0.074 (-1.03)	-0.080 (-1.10)
	# obs:	2,968	2,968	1,668	1,668
Male	eipi	0.011 (0.22)	0.008 (0.16)	0.026 (0.43)	0.029 (0.47)
	# obs:	3,598	3,598	2,356	2,356
Old	eipi	-0.002 (-0.04)	-0.002 (-0.04)	-0.009 (-0.19)	-0.009 (-0.19)
	# obs:	5,422	5,422	3,751	3,751
Young	eipi	-0.010 (-0.11)	-0.008 (-0.08)	-0.109 (-0.53)	-0.129 (-0.62)
	# obs:	1,142	1,142	271	271

TABLE 73
Alternative Parametric Models of Likelihood to Study Determinants of Unemployment Spells

Full Sample
Pooled dataset, fully implemented EI since January 1997

Parametric Model	**Model: # obs:**	**1 6,564**	**2 6,564**	**3 4,022**	**4 4,022**
Exponential	ei	0.053 (1.36)	0.053 (1.36)	0.063 (1.28)	0.065 (1.30)
	intro	-0.021 (-0.42)	-0.021 (-0.42)	-0.047 (-0.72)	-0.046 (-0.71)
Weibull	ei	0.010 (0.25)	0.010 (0.26)	0.020 (0.41)	0.022 (0.44)
	intro	-0.037 (-0.73)	-0.037 (-0.73)	-0.049 (-0.76)	-0.049 (-0.75)
	p	6.635 (0.10)	6.634 (0.10)	7.022 (0.13)	7.021 (0.13)
Gompertz	ei	0.009 (0.23)	0.009 (0.24)	0.016 (0.32)	0.017 (0.33)
	intro	-0.036 (-0.72)	-0.036 (-0.72)	-0.049 (-0.76)	-0.049 (-0.75)
	gamma	0.171 (0.00)	0.171 (0.00)	0.181 (0.00)	0.181 (0.00)
LogNormal	ei	0.006 (0.53)	0.006 (0.55)	-0.005 (-0.37)	-0.006 (-0.44)
	intro	0.024 (1.76)	0.025 (1.81)	0.028 (1.62)	0.027 (1.60)
	sigma	0.300 (0.00)	0.299 (0.00)	0.291 (0.00)	0.291 (0.00)
LogLogistic	ei	0.004 (0.46)	0.004 (0.45)	0.000 (-0.03)	-0.001 (-0.07)
	intro	0.018 (1.66)	0.018 (1.68)	0.017 (1.33)	0.017 (1.31)
	gamma	0.138 (0.00)	0.138 (0.00)	0.130 (0.00)	0.130 (0.00)
Gamma	ei	0.000 (0.00)	0.000 (0.00)	0.000 (-0.31)	0.000 (-0.09)
	intro	0.000 (0.00)	0.000 (0.00)	0.000 (-0.17)	-0.001 (-0.04)
	sigma	0.304 (0.00)	0.304 (0.00)	0.001 (0.00)	0.001 (0.00)
	kappa	-0.010 (0.00)	-0.010 (0.00)	149.371 (1.86)	204.822 (0.00)