

Individual risk factors and unemployment insurance: the case of Chile¹

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Abstract

Chile has an unemployment insurance system with a unique funding mechanism and design. It combines individual savings accounts, funded by workers and companies, with a re-distributional fund financed by companies and the State. This paper investigates the factors associated to the unemployment risk and the impact of the introduction of the unemployment insurance. We use three measures of unemployment risk: involuntary unemployment, duration of unemployment and job reintegration. To do this, we use a monthly panel data of individuals from January 2002 to December 2004 for which we observe their labor status, firm characteristics, affiliation condition to the unemployment insurance and measures of economic cycle. Using the panel data and the labor history we estimate the impact of having the insurance or being an insurance beneficiary on the probability of unemployment and duration of unemployment, controlling for other factors. We use multinomial logit, semiparametric and parametric duration models, fixed effect conditional maximum likelihood and a normal fixed effect OLS. In contrast to what the international literature has reported regarding the effects of traditional insurance programs in developed countries, we found that the introduction of the insurance program in Chile has decrease the probability of unemployment and the duration of unemployment.

Key words: unemployment insurance, risk of unemployment, duration models, panel data
JEL codes:

1 Introduction

An unemployment insurance system with a unique funding mechanism and design was established in Chile in the year 2002. It combines individual savings accounts, funded by workers and companies, with a redistributional fund financed by companies and the State. Every month workers and companies deposit a percentage of salaries into individual

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accounts and, in parallel, companies and the State make deposits to a redistributive fund called the Unemployment Solidarity Fund² for each worker³. The funds accumulated in the individual accounts and the redistributive funds are administered by a private institution which wins the fund administration rights for a period of 10 years through a public tender. Furthermore, the creation of the unemployment insurance encourages job-seeking through municipal job-search offices, which are responsible for listing vacancies and keeping a record of the unemployed. This original design for unemployment insurance substantially reduces the problems of moral risk encountered in traditional unemployment insurance, and offers protection from the risks associated to unemployment as well.

The main objective of this part of the research is to determine the risk factors associated to unemployment and the possible impact of unemployment insurance. Three risk measures associated to unemployment will be used: involuntary loss of employment, duration of unemployment and return to work. This study is also part of a broader study targeted at analyzing to what extent and at what cost that risk is covered with the instruments available, and in what areas the unemployment protection instruments would need to be modified in order to better cover that risk.

The traditional unemployment insurance systems, characteristic of industrialized countries, are based on the existence of a common redistributive fund financed by the current employers and workers, and at times by the State, which distributes the benefits to the unemployed. In general, studies have shown that this form of insurance tends to produce an overuse of the system due to problems of moral risk⁴. In other words, companies fire workers more often, and the unemployed are willing to turn down job offers more frequently. Those studies indicate that these systems lengthen the duration of unemployment and the unemployment rate in the long run. All this leads to the creation of strong, expensive control mechanisms. Consequently, these kinds of systems are out of reach for lower income countries.

Recent studies suggest that while unemployment insurance based on redistributive funds produces negative effects by increasing the duration of unemployment, it also produces indirect positive effects on the duration of subsequent employment⁵. The benefits received during the periods of unemployment allow the worker to find a job that is more suitable for them and therefore have a better job-match. This positive effect is higher in countries with more generous unemployment insurance levels. Therefore, these systems provide for a better matching between the worker and employer and make the duration in employment longer.

The Chilean unemployment insurance system also faces the problems of moral risk outlined above, since each worker owns the funds in their account needed to finance their

² Fondo de Cesantía Solidario.

³ Descripción y Evolución del Seguro de Cesantía en Chile, SAFP, Government of Chile.

⁴ See Blanchard (2004) who discusses the problems of reforming unemployment insurance mainly in Europe. Atkinson and Micklewright (1991), Devine and Kiefer (1991) who review both the empirical and theoretical literature on the effects of unemployment insurance. Katz and Meyer (1990), Card and Levine (2000), Lalive and Zweimüller (2004), research the effects on the duration of unemployment.

⁵ See, for example, Tatsiramos (2006).

unemployment periods⁶. Workers finance their unemployment periods through own resources and therefore have incentives to accept job offers and to find work promptly. However, unemployment insurance that is solely financed through individual accounts does not provide enough income for periods of unemployment if the time spent working was insufficient for workers to accumulate enough income for the unemployment periods, even for short periods.

As such, the Chilean unemployment insurance system includes the creation of a redistributive fund, which is financed by companies and the State. This fund has redistributive qualities in that it helps to group risks, distributing resources from employers and workers with greater stability to the unemployed and low income workers. To avoid problems of moral risk, it includes a range of special characteristics. First, workers can only use it once they have used up the funds in their individual accounts. Second, the benefits are low and can only be received for a maximum of 5 months. Third, private management of the redistributive fund encourages the fulfilment of the eligibility requirements by the unemployed, since any improper use is deducted from the common fund. Fourth, a mechanism was implemented in which severance payments are deducted from the individual insurance account, which would reduce the incentives to falsifying the reasons for termination of contract.

Even though the design of the Chilean unemployment insurance system is innovative and cautious by considering the problems of incentives, it still has not been evaluated. One of the main problems in evaluating it is that its design did not include the gradual incorporation of workers, less random, which does not allow the causal effect to be identified. The implementation considered that all those who signed a contract after October 2002 are signed up to the insurance and must make the corresponding contributions. Therefore, all workers in the informal labor market are excluded, as well as some groups that are not signed up to the insurance such as public sector workers and the armed forces. In other words, the condition of having the insurance is not randomly allocated and various non-observable characteristics correlated to this condition introduce bias. The option of voluntarily signing up to the insurance scheme also exists, but in practice only 2% of unemployment insurance system members are voluntary.

The Chilean labour market allows for the coexistence of two kinds of contract: open-ended contracts (which apply to 77% of contracted workers, CASEN 2006), and fixed-term or temporary contracts. Nonetheless, to date, 56% of unemployment insurance system members have temporary contracts. However, the insurance scheme design only considered that workers with permanent contracts would have access to the redistributive fund; the remaining workers only have access to the benefits in their individual capitalization accounts. Therefore, one would not expect problems of moral risk for workers with temporary contracts.

As already indicated, the objective of this part of the research is to determine the risk factors associated to unemployment and the possible impact of unemployment insurance.

⁶ See Acevedo, Esquenazi and Pages (2006) for a more detailed description of the unemployment insurance system in Chile.

The risk factors associated to unemployment depend on the worker's characteristics, the job characteristics, the labour market institutions and the economic cycle. The objective then is to try to isolate the effect of the unemployment insurance from the other explanatory variables using various econometric methodologies.

This study used the employment history longitudinal data of the 2004 Social Protection Survey. A panel of individuals is constructed and their employment condition and company characteristics are observed monthly from January 2002 to December 2004, as well as their insurance usage condition and measures of the economic cycle. Using the employment history panel data, the possible impact of having the insurance or being an insurance beneficiary is estimated on the probability of being unemployed and on the duration of unemployment, controlling for factors correlated to the condition of unemployment insurance usage. Multinomial logit models, duration models and conditional maximum likelihood methods with fixed effects will be used. Additionally, a fixed effects panel is estimated to evaluate the effects on salaries.

The multinomial logit model estimates how the introduction of unemployment insurance and the other explanatory variables affect the risk of unemployment measured by: 1) the probability of being unemployed conditional on being working in the previous period and 2) the probability of finding a job conditional on being unemployed in the previous period. Those cases are identified from period to period and then a multinomial logit regression is carried out estimating the factors associated to the probability of being working, unemployed and inactive. This probability will be a function of the individual characteristics, and the characteristics of the job and the economy in the previous month.

The duration analysis will allow us to evaluate if the introduction of unemployment insurance has increased the duration, correcting for other factors.

The fixed effects conditional logit model allows us to estimate whether being an unemployment insurance system member or beneficiary has any effect on the probability of being unemployed. This model corrects for all non-observable individual characteristics that remain fixed in the period.

Finally, the fixed effects panel allows us to evaluate if the introduction of unemployment insurance has increased salaries. This may be the result of better matching, by giving the unemployed more time to find the job for which they are best qualified.

This report is structured as follows. After this introduction, Section 2 provides a brief overview and evaluation of the performance of the unemployment insurance system made by the authorities. Section 3 outlines the empirical model. Section 4 presents the data used and descriptive statistics. Section 5 presents the results. Finally, the conclusions are presented in Section 6.

2 The Chilean labour market and unemployment insurance in Chile

The data indicate that in the Chilean labour market 69% of workers are salaried, in other words more than 4.5 million people, 23% are independent workers and 9% employers, non-remunerated relatives and domestic help workers (INE, 2007). 75% of salaried workers have an employment contract, in other words 3 million people; 25% do not have any contract (CASEN, 2006). These contracts are of two kinds: permanent or open-ended and temporary or fixed-term.

The unemployment insurance system in Chile began in the year 2002 (Law 19.728). It has a financing structure that combines individual accounts with worker and company contributions, and financing from the State through an Unemployment Solidarity fund with contributions from companies and the State⁷.

Joining the unemployment insurance system was made compulsory for all new contracts signed after 2 October 2002. It is voluntary for workers that already had contracts signed before that date. Currently, voluntary members cover 2.2% of all unemployment insurance system membership.

The financing mechanism depends on the type of contract. In the case of permanent contracts, the worker and company contribute 0.6% and 1.6% of taxable income respectively to an individual account (with a taxable income upper limit of 90 UF for the company). In addition, the employer must contribute 0.8% of taxable income to the Unemployment Solidarity Fund.

The State also contributes to the Unemployment Solidarity Fund. The State contribution is defined according to the system coverage level (measured as the percentage of contributors of all private salaried workers aged over 18). Once fully operational (year 2009), the State contribution will total 225,792 UTM (equal to 7,389 million pesos or over US\$14 million).

Meanwhile, if the contract is temporary the contribution is 3% of taxable income and is only provided by the employer (with an upper limit of 90 UF) and goes entirely to the individual account. These workers do not have access to the redistributive fund.

Eligibility depends on the fulfilment of certain minimum requirements, which are different for workers with open-ended and fixed-term contracts. Workers with open-ended contracts can opt for benefits financed through their individual account if they have 12 accredited continuous or discontinuous monthly contributions, independent of the cause of employment contract termination. The unemployment insurance funds 1 month per year worked, up to a maximum of 5 months.

Workers with temporary contracts are eligible for the benefits if they have made at least six contributions. The unemployment insurance consists of the withdrawal of all the funds accumulated in the individual account, once off, and independent of the cause of the termination of the employment contract.

⁷ Descripción y Evolución del Seguro de Cesantía en Chile, SAFP, Government of Chile.

Eligibility for the Unemployment Solidarity Fund is restricted to workers with open-ended contracts. They must have made at least 12 contributions, and lost their job involuntarily, and not have accumulated enough funds in their individual accounts to finance the benefit.

The unemployment insurance benefits are also complemented with job search and training support through the National Employment Office⁸ and include financing for training and return to work programs, administered by the Municipal Employment Information Offices.

According to the SAEP data, the number of employment insurance system members in June 2007 totalled 5 million workers. The number of contributors was over 2.5 million in May 2007; this suggests a system coverage of 70% (coverage = % of contributors out of total private salaried workers aged over 18 years).

Workers with permanent contracts represented 56% of total contributors in May 2007. Most of these were young people aged between 25 and 30, and 33% were women. The most representative work is in the construction, retail, finance, real estate, business, leasing, and agriculture sectors. These represent nearly 60% of all contributors. 60% of contributors have monthly salaries between Ch\$100,000 and Ch\$300,000⁹.

Approximately 2.5 million unemployment insurance benefits have been paid out. Only 60,000 of these have been paid using the Solidarity Fund. Most of the benefits have been paid to workers with temporary contracts. Regarding amounts, the benefits are higher for workers with open-ended contracts (\$175,000 on average approx.). Meanwhile, workers with fixed contracts average benefits of \$100,000 approx. The benefits paid using the Solidarity Fund are much higher, averaging \$350,000 approx.

3 Empirical Model

As indicated earlier, the main objective of this section is to determine the risk factors associated to unemployment and the possible impact of the unemployment insurance scheme.

This objective can be summarized as follows:

$$riesgo_{it} = \alpha + \beta X_{it} + \gamma G_i + \delta T_t + \pi (G_i \times T_t) + \varepsilon_{it}$$

Where $riesgo_{it}$ is the risk of unemployment measure that we will use for individual i in year t . This risk will be measured in various forms: 1) the probability of being unemployed, 2) the probability of being unemployed, working or inactive conditional on the individual having been working in $t-1$, 3) probability of being unemployed, working or inactive conditional on having been unemployed in $t-1$, and 4) the duration of unemployment.

⁸ Bolsa Nacional de Empleo.

⁹ The minimum salary in Chile is currently 144,000 Chilean pesos.

G_i is a binary variable equal to 1 if the individual is signed up to or a beneficiary of the unemployment insurance scheme, T_t is a binary variable equal to 1 if the period is October 2002 onwards. Therefore, if the condition of insurance usage/beneficiary had been random, the parameter associated to $(G_i \times T_t)$ would be the causal effect of unemployment insurance on the risk of unemployment.

Finally, X_{it} is a vector of several variables that also determine the risk of unemployment. Personal characteristics of the worker, job characteristics and characteristics related to the economic cycle.

The following econometric models will be used to evaluate the risk of unemployment: a multinomial logit model, parametric and semiparametric duration models, a fixed effects conditional maximum likelihood model and a traditional fixed effects panel.

A brief description of these models is presented here.

6.1. Multinomial logit model

In the case of the multinomial logit model, the equation is as follows:

$$riesgo_{it} = \alpha + \beta X_{it} + \gamma G_i + \delta T_t + \pi (G_i \times T_t) + \varepsilon_{it}$$

In this case, risk is measured through two variables: job loss and return to work.

To capture the factors affecting the risk of job loss, those who are working are identified monthly and the probability of being unemployed, working or inactive in the following period is estimated. To capture the factors affecting the risk of returning to work, the unemployed are identified monthly and the probability of being unemployed, working or inactive in the following period is estimated.

In this case, variables G_i and T_t are included as described earlier. X_{it} includes education, age, gender, marital status, years of education, age, number of children, company size, a dummy for secondary industry and one for tertiary industry (leaving primary industry as a comparison group), length of time in job, unemployment rate month-region and dummies for month.

A two equation system with binary dependent variable is estimated, where:

$$\begin{aligned} Y_{it} &= 1 \text{ si } i \text{ esta empleado en el periodo } t, \text{ condicional en } i \text{ empleado en } t-1 \\ &= 2 \text{ si } i \text{ esta desempleado en el periodo } t, \text{ condicional en } i \text{ empleado en } t-1 \\ &= 3 \text{ si } i \text{ esta inactivo en el periodo } t, \text{ condicional en } i \text{ empleado en } t-1 \end{aligned}$$

And a two-equation system with binary dependent variable, where:

$Y_{it} = 1$ si i esta empleado en el periodo t , condicional en i desempleado en $t-1$
 $= 2$ si i esta desempleado en el periodo t , condicional en i desempleado en $t-1$

Estimates are made distinguishing by type of contract.

6.2. Unemployment Duration model

In the case of duration analysis, the equation is as follows:

$$riesgo_{it} = \alpha + \beta X_{it} + \gamma G_i + \delta T_t + \pi (G_i \times T_t) + \varepsilon_{it}$$

In this case, risk is measured by the duration of involuntary unemployment. The state of involuntary unemployment is considered finished when the person finds a job. In this case, variables G_i and T_t are included as described earlier. X_{it} includes education, age, gender, marital status, years of education, age, number of children, company size, dummies for industry, and dummies for month for agriculture among others, if training was received.

In order to study the characteristics and determinants of the time that a person is out of work, the well-known empirical strategy of duration analysis will be used. In this approach, the time that the person remains in a given state (in this case, time unemployed) is modelled as a random variable $T \geq 0$, which is distributed in some way among the population; with t as a particular value of T .

The following functions that are important in the subsequent analysis are detailed below:

- $F(t) = P(T \leq t)$, with $t \geq 0$, is the accumulated distribution function.
- $S(t) = 1 - F(t) = P(T > t)$, is called the survival function and expresses the probability of continuing or remaining in a state (survive) past a certain time.
- $\lambda(t)$, is termed hazard ratio, and is simply the instantaneous probability (risk) that an individual leaves their state in time “ t ”.
- $H(t)$ is the function of accumulated risk (integral of $\lambda(t)$) and is interpreted as the number of times that an individual moves from one state to another (fails), over a given time “ t ”.

The duration analysis, or the duration models, are concentrated in the $S(t)$, $\lambda(t)$, and $H(t)$ estimates. Several approaches can be used for this, with their respective approaches and assumptions. We concentrate on two of them in this paper: non-parametric and semi-parametric models.

The parametric models¹⁰ provide for a simple characterization of the duration of the variable or phenomenon being studied. This is because they calculate the three functions described earlier without imposing a given structure on the duration distribution, as well as not requiring more data than the durations themselves. As such, they are of great use when we do not have other explanatory variables or when they are qualitative. However in the

¹⁰ For further details see Methodological Appendix.

latter case, this type of model does not need any assumption on how the explanatory variables affect or shift the durations.

Nevertheless, despite the usefulness of non-parametric models, they are not the best choice when we have explanatory variables (especially if they are continuous) and when we require a more complete or multivariate analysis as is often the case. A more flexible and in many ways more attractive choice is the Cox model¹¹. With this approach, distributive assumptions are not necessary. The key to exploiting this flexibility is to consider that events occur at given times, which may be ordered. Therefore, the analysis may be carried out solely using the order of the durations. In practical terms, this is equivalent to estimating and combining a discrete dependent variable models (for each period). In this case, time does not play a greater role than that of ordering observations.

However, whatever the choice, these strategies face two aspects that make the analysis of the duration models somewhat unconventional: censorship and the not-normal distribution of the T distribution. These aspects make it unwise to use OLS type models (and their derivatives) or face censorship in the usual form (tobit or heckman), since the distributions of a variable associated to time can be quite different from normal; it is typically asymmetrical, and may well be bimodal, and the linear regression models are not robust to these deviations in the underlying assumptions.

6.3. Conditional maximum likelihood model with fixed effects

In the case of the conditional fixed effects model, the equation is as follows:

$$riesgo_{it} = \alpha_i + f_t + \beta W_{it} + \pi(G_i \times T_t) + \varepsilon_{it}$$

Where $riesgo_{it}$ is the probability of unemployment of individual i in year t , α_i is an individual fixed effect that includes all the characteristics of the worker that remain constant over time; as such it includes their condition of being an unemployment insurance system member/beneficiary. f_t is a fixed effect over time, and therefore corrects for all the shocks that affect each individual i in the same way at each moment in time, as such it includes the binary variable from 2002 onwards.

Since it is a panel model with dependent binary variable, it is estimated through maximum likelihood¹².

The problem is to estimate how the set of explanatory variables affects the probability of being unemployed after controlling for the non-observable heterogeneity captured by α_i . We are particularly interested in evaluating how being signed up to unemployment insurance affects the probability of being unemployed after implementation.

In this estimate, X_{it} includes number of children, company size, a dummy for secondary industry and one for tertiary industry (leaving primary industry as a comparison group),

¹¹ For further details see Methodological Appendix.

¹² Card and Sullivan (1988).

length of time in job, unemployment rate month-region, dummies for month, and dummies for year. Given the available data, several other individual characteristics are assumed to be fixed such as gender, education and marital status. However, education and marital status are not necessarily fixed effects, and not considering them may bias the estimates significantly, since the structure of the model excludes individuals whose status in the labour market (employed, unemployed) remains constant during the whole period. If this condition is correlated with the probability of being employed or unemployed, the estimates will be biased.

Since the dependent variable is discrete, we cannot use the usual techniques for panel data estimates. As such, the conditional likelihood model¹³ which has been implemented in STATA as the conditional fixed effects logistical estimate¹⁴.

A panel for months is constructed using the employment history of the Social Protection Survey, and the model is estimated with panel data.

The control variables include a binary variable, which indicates whether the person is signed up or not to the unemployment insurance. It also includes other factors related to individual characteristics that change over time, since the fixed characteristics will be corrected with the individual fixed effect. Examples are the number of children born between 2002 and 2004, and the average duration in the job. Variables related to company such as the type of economic activity and company size are added. Finally, indicators per month are included to capture cyclical factors and the unemployment rate of the region.

6.4.Fixed effects panel

A final specification summarizes the effects on salaries:

$$\log w_{it} = \alpha + \beta X_{it} + \gamma G_i + \delta T_t + \pi(G_i \times T_t) + \varepsilon_{it}$$

which results in the following after estimating with fixed effects:

$$\log w_{it} = \alpha_i + f_t + \beta W_{it} + \pi(G_i \times T_t) + \varepsilon_{it}$$

Where $\log w$ is the income logarithm, and X_{it} includes number of children, company size, a dummy for secondary industry and one for tertiary industry (leaving primary industry as a comparison group), length of time in job, unemployment rate month-region, dummies for month, dummies for year. Like in the conditional fixed effects model, α_i is an individual fixed effect that includes all the worker's characteristics that remain fixed over time. As such, it includes their condition of being signed up to the unemployment insurance/insurance beneficiary. f_t is a fixed effect over time, and therefore corrects for all

¹³ Chamberlain (1980).

¹⁴ For further details see Methodological Appendix.

the shocks that affect each i equally at each moment in time. Consequently, it includes the binary variable from October 2002 onwards.

4 Data

The present study is based on the Social Protection Survey (SPS). The SPS is a longitudinal survey of approximately 20,000 people. The first round of the SPS was implemented in the year 2002 and the second round at the end of 2004 and the beginning of 2005.

The 2002 SPS was designed as a representative sample of the population aged 15 and over, covered by the pension system. The main innovation of the 2004 SPS was to include the population without pension system coverage. A small modification was to adjust the new sample to individuals that were aged at least 18 years of age at December 2003. Additionally, the coverage for new pension system members was extended by approximately 1,000 people. In effect, the 2004 SPS covered the sample interviewed in 2002, as well as non-pension system members and finally the new system members, all totalling 21,000 people.

The main modules applied in the 2002-2004 SPS and used as inputs in this study are Employment History, General Information, Health, Training, Personal History and other modules.

The Employment History module includes detailed information on all employment activities reported by respondents since January 2002 (2004 SPS), characterizing jobs in detail, periods of inactivity and unemployment. In the case of individuals who were not interviewed in the year 2002 (either because they are new unemployment insurance system members or system non-members), employee histories cover the period from January 1980 to date, and thereby cover the same period of self-reporting as the system members in the 2002 SPS.

Each row includes individual employee histories, which report the starting and ending period of the employment activity as well as its characteristics. For example, in the periods when working, a series of questions are asked on the job characteristics (activity, profession, type of job – be it temporary or permanent-, with a contract, etc.). Meanwhile, in the periods of unemployment, questions are asked on whether the individual received unemployment insurance or subsidies, and inactive individual are asked about the reason for their inactivity.

The General Information module captures the main socioeconomic characteristics, such as relationship to the head of household, gender, age, state of health and education. The Training module reports the main training activities of the respondent over time, the methods of financing used and the employment dividends received.

The Personal History module characterizes marriages and co-habitation reported by respondents, as well as a range of information on the children. The latter variables are crucial for our analysis.

This study required bringing together the databases from 2002 and 2004 with the information from the modules described early. Regarding the sample, this database is comprised of the system-members interviewed in 2002 and 2004 and also of the sample included in 2004 (system non-members and new members), totalling 16,727 people. Notice that when considering the employee histories of each one, the total observations increase since they may have more than one employment history.

The unified database has been used to estimate the duration models. To estimate the panel models with discrete dependent variables, the 2002-2004 database was transformed to make it into a balanced panel, in other words, a panel which reflects all the individual employee histories monthly.

The averages of the main variables used in the estimates are reported here below, separating results by the employment situation of the respondent: employed, unemployed or inactive¹⁵.

In Table 2, the first three rows report the variables that will then be used to identify the effect of UI¹⁶ on the various employment phenomena of interest.

The payment amounts received are around 50,000 pesos per month (100 dollars), with around 5% of the sample receiving it (by the end of the period being studied, 2004). Meanwhile, system members approached 30%.

The duration of unemployment and employment is reported below. In the case of unemployment, it is 4 months (median) and in the case of the latter it approaches 20 months for those working, and 7 months for the unemployed (duration of last job). The percentage of unskilled population exceeds 80%; most inactive people are women and the young; 7% worked part-time; 6% left their last job for reasons attributable to the worker; 60% of contracts were permanent; 27% reported having received benefits; 12% of women had children between 2002 and 2004; 30% indicate they have bad health; 2% worked in emergency employment plans (PEM).

5 Descriptive statistics of the risks of unemployment

Tables E1 to E6 present the percentage of workers that shift from employment to unemployment. The workers are classified according to various characteristics such as gender, educational level, type of job, and reasons for leaving job.

¹⁵ Table 1 presents the definitions of the main variables used in the subsequent estimates.

¹⁶ The Unemployment Insurance (Seguro de Cesantía).

For example, Table E1 shows that the highest percentage of unemployed workers is found in December 2002 and December 2003. This shows a relatively increasing trend over time. Meanwhile, Table E2 shows the proportion of unemployed workers and classifies them by reasons for leaving their job, mainly separating by involuntary dismissal and reasons attributable to the worker. In general, involuntary dismissal is found to predominate.

Tables E3 and E4 show the shift of the worker from employed to unemployed according to gender and educational level characteristics. There are no significant differences between men and women except in December 2003 when 7.23% of women were unemployed and only 3.41% of men were in the same situation. There are no significant differences in terms of educational level.

Tables E7 to E9 capture the percentage of workers that move from unemployment to employment. In contrast to the earlier tables, they focus on returning to work.

Tables E10 to E14 focus on the average salaries of those who shifted from employment to unemployment highlighting the main characteristics such as gender, educational level, type of job and reasons for leaving the job.

Tables E15 to E23 show the duration of unemployment, highlighting the main differences in gender, educational level, type of job, among others. For example, Table E15 shows that women have longer periods of unemployment. Surprisingly, there are no significant differences as a result of educational level (see Table E16).

Table E17 shows the duration of unemployment by different economic sectors. It reveals that the duration of unemployment was higher for workers in the financial and transport sectors.

Meanwhile, workers whose last job was permanent have shorter periods of unemployment (Table E19), while those whose last job was with fixed-term contracts have shorter periods (Table E20).

Table E21 focuses on the reasons for leaving the job, and reveals that workers who lost their job for reasons attributable to themselves face longer periods of unemployment. Workers who had children in January 2002 and December 2004 also show longer periods of unemployment (Table E22).

Finally, Table E23 compares salaries to unemployment insurance. It shows that even though the unemployment insurance amount is higher for workers with higher salaries, the growth rate is very low. For example, while workers that earn around Ch\$70,000 receive Ch\$35,000 on average, those who earn Ch\$600,000 receive little more than Ch\$50,000.

Therefore, the substitution rate for those with lower salaries is relatively generous at around 50% (for workers earning less than Ch\$100,000). Meanwhile, for workers who earn more than Ch\$350,000 (the highest bracket) the rate is 10%. In other words, the system may be

deemed progressive, since while lower salaried workers receive a relatively optimum coverage¹⁷, for medium and high income workers, it is a forced savings¹⁸.

6 Econometric Results

The results of the estimates of the models described in Section 3 are reported here below. The tables and figures are found in Section 7.

6.1. Conditional maximum likelihood model with fixed effects

This section describes the results of the fixed effects or conditional logit logistical model. The sample used for these estimates corresponds to individuals who report employment and unemployment events between January 2002 and December 2004. All of this is based on the SPS.

Differentiated estimates were carried out for each treatment indicator: ui1_sc (beneficiary of UI after the program) and ui1_anio (unemployment insurance system members (SC) after the program).

Tables 3 and 4 report the coefficients corresponding to those estimates. Table 3 reports them for those with temporary contracts and Table 4 presents the results for those with permanent contracts. 4 columns are presented. The first two use unemployment insurance system members as the insurance impact indicator, in other words those with a fixed term contract after October 2002. On the other hand, the second two columns show the results using the system beneficiaries as the insurance impact indicator, in other words, those who indicated having received unemployment insurance benefits after October 2002. It also distinguishes whether the estimate used or did not use expansion factors¹⁹.

The model explains why an individual who is identified as unemployed (employed) in the estimate period conditional on being identified as working (unemployed) at least once. As we already stated, individuals whose condition does not change do not contribute to the estimate and are automatically discarded in the estimate process.

¹⁷ This applies for those who actually receive it, and it should be highlighted that many of those in this bracket are fixed-term workers, who as soon as they change contract (not necessarily employer) immediately claim the unemployment insurance, which could be detrimental in times of real crisis, since their individual accounts will be empty. In addition, for these types of workers, it is the employer who deposits the entire amount of the contribution, which, as we know, is in many cases, already internalized in the salary, and so could be considered a forced savings.

¹⁸ In addition, these workers, who normally have permanent contracts, are potential recipients of the Solidarity Unemployment Insurance. However, as we know, they have very few incentives to claim it since the prevailing strategy is to take out all you can from your own individual account.

¹⁹ The equation has not been convergent in the case of permanent contracts with expansion factors for beneficiaries. As such, the results have not been reported in this Preliminary Report.

The coefficients presented are only gross coefficients. We can only interpret their sign, but the size of those coefficients does not mean much.

All the variables presented further ahead in the MNL or the duration analysis and that were not considered in this estimate, were not considered due to a lack of information on changes over time.

Table 3 shows that in the group of workers with temporary contracts in the period being studied, there is a positive (negative) and significant effect of unemployment insurance on the probability of being unemployed (employed). This is conditional on all the unobserved fixed individual characteristics (for example, gender). The number of children does not affect that condition, nor does company size. However, working in a secondary industry affects it negatively, compared to a primary industry. The longer the length of time in a job, the lower the probability of being unemployed. Monthly and annual dummies correct for cyclical effects in the economy. Finally, the higher the regional unemployment rate, the higher the probability of being unemployed.

Table 4 shows that in the group of workers with permanent contracts in the period being studied, there is a positive (negative) and significant effect of unemployment insurance on the probability of being unemployed (employed) when we use the condition of unemployment insurance system member as an indicator, but it is not significant when we use the condition of beneficiary. Once again, it is conditional on all the unobserved individual fixed characteristics. Only some monthly dummies and the length of time in job are significant. Unemployment is more likely in the second semester of the year compared to January. Years 2003 and 2004 also show a higher impact on the probability of being unemployed.

6.2. Multinomial logit model

The first results of the MNL models are presented here below. Tables 5 and 6 present the results for the risk of job loss. Table 5 covers permanent contracts and Table 6 temporary contracts. Tables 7 and 8 present the results for the risk of returning to work. Table 7 covers permanent contracts and Table 8 temporary contracts. Only one logit model was estimated in this case with two possible results: working or unemployed, since the observations for those shifting from unemployed to inactive were insufficient for the multinomial estimates.

The estimates take the condition of being employed as the base. As such, all parameters must be interpreted relative to the reference group. The standard interpretation is that for one unit of change in the explanatory variable, the logit of the unemployed/inactive condition relative to being employed is expected to change in the respective parameter, since the other variables remain constant. There are marginal effects.

Therefore, Tables 5 and 6 show the results (with the model described in Section 3.2) of the factors that raise the probability of being unemployed and inactive relative to being employed, conditional on having been employed in the previous month. This applies for those with an open-ended contract and a fixed-term contract respectively. Table 5 shows, for example, that being a woman reduces the probability of being inactive relative to being

employed. The number of children reduces the probability of being unemployed relative to being employed. The longer the length of time in the job, the lower the probability of being unemployed or inactive relative to being employed. The first variable that measures the impact of unemployment insurance (unemployment insurance system member x Oct2002) shows a reduction effect on the probability of being unemployed or inactive relative to being employed. The second variable that measures the impact of unemployment insurance (beneficiary x Oct2002) does not show effects on being unemployed, but shows negative effects on the probability of being inactive. Table 6 shows the results for those with fixed-term contracts.

Tables 7 and 8 show the results (with the model described in Section 3.2) of the factors that increase the probability of being unemployed and inactive relative to being employed, conditional on having been unemployed in the previous month, for workers with temporary and fixed-term contracts respectively. Both tables show that being signed up to unemployment insurance reduces the probability of being unemployed relative to that of being employed. However, the effect of unemployment insurance measured by the beneficiary condition has no effects on the probability of being unemployed.

6.3.Duration Model

This section describes the results of the duration analysis. The sample used for these estimates corresponds to individuals whose periods of unemployment were shorter than 14 months, starting in January 2002, and with more than one employment history (they were not unemployed for the whole period, which is a sign of inactivity). All of this is based on the SPS.

Firstly, the results of the non-parametric analysis are described, and we then proceed with the semiparametric Cox analysis. In the latter case, socioeconomic variables are included (gender, age, head of household, children), as well as other more personal variables (health, disability, height, weight, schooling, social capital, etc.). Finally, a range of especially significant variables are those that capture several characteristics of the last job before ending up unemployed (duration, cause of termination, company characteristics, etc.).

We estimate differentiated equations for each treatment indicator: *ui_sc* (UI beneficiary) and *ui1* (unemployment insurance system members).

Non-Parametric Estimates

The non-parametric results are presented below and are merely a first approach to the phenomenon being studied. It should obviously include various factors together that can affect the estimated probabilities. This is tackled in the semiparametric estimates.

Figure 1 (Kaplan-Meier) indicates the probability of remaining unemployed, conditional on having completed “t” months in that condition. For example, those who are 5 months

unemployed have a probability equal to 0.5 of continuing in that state (this would be interpreted as the median duration), at 8 months that probability is only 0.25.

Figure 2 (Nelson-Aalen) indicates the accumulated probability over time of leaving the state of unemployment. It could be interpreted as an approximation (expected value) of the time it takes a person to leave the state of unemployment or, from another point of view, as the expected value of 'failures' that a person can have over time (assuming that the phenomenon being studied allows 'failing' more than once). In this case, the failure is defined as leaving unemployment. As such, the model predicts that after the sixth month of unemployment, the average person will most likely have left the state of unemployment.

Figure 3 (Smoothed hazard) is probably the most significant, since it indicates how the hazard rate evolves or the instantaneous probability that individuals leave unemployment as a function of (and conditional on) the duration of unemployment. Thus, we observe that in this case the probability increases with duration, but only until 10 months of unemployment, after which it starts to decrease slowly. One possible interpretation is that individuals who remain over 10 months unemployed become potential candidates for inactivity and/or discharged unemployment. However, these individuals have a higher probability of getting a job than those less than 6 months unemployed. The point being that after 10 months that probability decreases.

Since the sample used corresponds to individuals less than 14 months unemployed, the curve only reaches that level. However, if the estimate used the whole sample, one would observe that the probability moves to zero at around 20 months.

Several hazard rate estimates are presented here below separated by some of the variables of greatest interest in the semiparametric estimates indicated further ahead. Firstly, we have the variable "ui_sc" which indicates if the worker claimed unemployment insurance (ui_sc=1) or not (ui_sc=0) (see Figure 4). It shows that even though the probability of leaving unemployment is higher for those claiming UI, its decline starts several months before that of those who did not claim (around the sixth month compared to the tenth month). In fact, at around the eighth month of unemployment, those who did not claim UI start to have a higher probability of leaving that state.

When we carry out the same analysis, distinguishing between UI system members and non-members shown in Figure 5, we observe that members have an advantage of several points in terms of the possibility of leaving unemployment than their peers. Even the decrease point starts one month later.

Figure 6 shows differences when we separate between those whose last job was reported as permanent versus temporary. It shows that the latter are more likely to leave unemployment from the fourth month. At first, this may seem to be noteworthy, but one possible explanation is the lower reserve salary of those with fixed-term or pay per-contract jobs. In addition, if we associate the relatively early decrease point of the ui_sc=1 curve with workers whose last job was permanent, maybe we could speculate about their higher level of difficulty for returning to the labor market, once they have spent too much time unemployed (specificity of human capital, age, etc).

Figure 7 shows differences by gender. Men are found to have an advantage which begins to change from the ninth month.

Semiparametric estimates (Cox Ratios)

Table 9 indicates the semiparametric estimate (Cox ratios) of the first group of duration models. These estimates correspond to the same sample used to obtain the non-parametric results. The variance estimates were carried out based on strata by region and the “*tied failures*” were tackled with the Efron approximation.

As Table 9 shows, the greatest difference in the specifications lies in the use of variables *ui_sc* versus the range of dummies that tries to capture the impact of the implementation of the policy: *ui_ano*=1 if the period is greater than or equal to October 2002 (implementation); *ui1*=1 if signed up to unemployment insurance (irrespective of period); *ui1_ano*=1 if both are 1. In *g1_m1_ec4*, the only difference with regard to *g1_m1_ec1* is the elimination of ‘frictional’ unemployment (1 or 2 months). On the other hand, in the last two specifications, models 1 and 2 were estimated again, but with a different variance specification, since intra-group correlation was assumed (frailty), with the groups being defined based on regions (in the context of the Cox model, this is equivalent to using random effects).

In general terms, certain sensitivity is observed in the estimates, particularly in the duration in the last job (*ult_trab_dur1*), which is a parameter of high interest. The coefficient of *ui1* also becomes not-significant when accompanied by *ui_ano*. This is surely due to the high degree of colinearity found between these variables. The interpretation of the variables is that of ratios. For example, the coefficient of *ui_sc* in specification 1 indicates that those who claimed UI have 20% higher probability of leaving unemployment than those that did not claim it. Meanwhile, specification 2 shows that UI system members have 60% higher probability of leaving unemployment than their non-system member peers.

In the following analysis, we will mainly focus on the specifications based on *ui_sc*, since it showed (albeit slightly) the best fit based on the Cox-Snell indicator (see Figures 8, 9 and 10)²⁰.

Table 10 presents a complete report of the parameters. The most significant difference between model 1 and 2 is that for the specification that uses *ui1*, the duration of the last job and whether benefits were received (*ult_trab_i~m*) are not-significant. The other variables show that those who did not receive training in the 2002-2004 period have 18 points lower probability of leaving unemployment than their trained peers; women have 22 points less than men, and those who had children in that period have nearly 30 points less; in terms of

²⁰ Cox & Snell (1968), showed that if the Cox regression model adequately adjusts the data, then the real accumulated risk function conditional on the covariate vector has an exponential distribution with a hazard rate of 1. Thus, the accumulated risk function of the Cox-Snell residuals should be a 45° line. To verify how our model fit the data, we should first estimate our Nelson-Aalen accumulated risk function based on the Cox-Snell residuals. Thus, the adjustment-fit will depend on how far our empirical estimate is from the 45° line.

age groups, those aged 65 and over have lower employment possibilities; heads of household have 25 points more; those who do not need help to move around (disability) have nearly 35 points more; those who report bad health have 14 points less; men who measure less than 170cm have 12 points less; and those who have participated in emergency employment programs have 25 points less.

Finally, a range of variables related to the characteristics of the last job are analyzed. This shows that workers from the agricultural sector seem to have higher probabilities between May and November, while those who worked in the mining, industrial, construction and community services sectors have higher probabilities of leaving unemployment than their counterparts in the retail sector. Those whose last job was part-time (less than 30 hours a week, *ult_trab_m~t*) have approximately 30 points less; those who were fired for reasons attributable to the worker (*ult_trab_c~a*) have 40 points less. Interestingly (and reinforcing the results of the non-parametric analysis) those whose last job was permanent have 22 points less (which in some way reinforces the not-very-robust coefficient associated to the duration of the last job, *ult_trab_d~1*). Those who report having received severance payments in their last job have 16 points more.

Finally, Figures 11, 12 and 13 are identical to those reported in the non-parametric analysis, but in this case they are derived from the semiparametric estimates. The conclusions hold, although the differences in impact on the duration of unemployment may be smaller and more homogenous over time.

6.4.Fixed effects panel

This section shows the results of the fixed effects panel for evaluating effects on salaries. Table 9 presents the results.

The variable that measures the effect of unemployment insurance (measured by UI system members) has a positive and significant effect on salaries. This only applies for those who have a permanent job. The effect measured by beneficiaries is not statistically significant.

7 Conclusions

An unemployment insurance system with a unique funding mechanism and design was established in Chile in the year 2002. It combines individual savings accounts, funded by workers and companies with a redistributive fund financed by companies and the State. Every month workers and companies deposit a percentage of salaries into individual accounts, and in parallel companies and the State make deposits to a redistributive fund called the Unemployment Solidarity Fund for each worker²¹. The funds accumulated in the individual accounts and the redistributive funds are administered by a private institution which wins the fund administration rights for a period of 10 years through a public tender. Furthermore, the creation of unemployment insurance encourages job-seeking through municipal job-search offices, which are responsible for listing vacancies and keeping a

²¹ Descripción y Evolución del Seguro de Cesantía en Chile, SAFF, Government of Chile.

record of the unemployed. This original design for unemployment insurance allows for a substantial reduction of the problems of moral risk associated to traditional unemployment insurance, as well as offering protection from the risks associated to unemployment.

As indicated earlier, the main objective of this part of the research is to determine the risk factors associated to unemployment and the possible impact of unemployment insurance. The factors behind the risks associated to unemployment depend on the characteristics of the worker, the job, the labour market institutions and the economic cycle. The objective is to try to isolate the effect of unemployment insurance from the other explanatory variables using various econometric methodologies.

This study used the employment history longitudinal data of the 2004 Social Protection Survey. A panel of individuals is constructed and their employment condition and company characteristics are observed monthly from January 2002 to December 2004, as well as their UI usage condition and measures of the economic cycle. Using the employment history panel data, the possible impact on the probability of being unemployed and on the duration of unemployment of having UI or of being an insurance beneficiary is estimated, controlling for factors related to the condition of UI usage. Multinomial logit models, duration models and conditional maximum likelihood methods with fixed effects will be used. Additionally, a fixed effects panel is estimated to evaluate the effects on salaries.

In contrast to the findings in the international literature on the effects of the traditional unemployment insurance systems, individuals who receive unemployment insurance benefits or those who are merely system members have a lower probability of being unemployed and have shorter unemployment periods than their peers. This may be interpreted as a positive trait of the current Chilean system, or as a reflection of the segmentation of the labor market, in which the beneficiaries are those who are most employable. Given that the amounts paid out are not very high, they do not constitute incentives to remaining unemployed; indeed their effect is quite to the contrary.

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Methodological Appendix

Non-parametric models

In this paper, we will follow the traditional non-parametric methods²². Since the remaining functions of interest -h(t) and H(t)- can be derived from the survival function-S(t), a brief description is provided on how the former is calculated.

For a range of data (durations): t_1, \dots, t_k , where k is the number of different durations observed in the data, the Kaplan-Meier estimator at any time t is given by:

$$\hat{S}(t) = \prod_{j: t_j \leq t} \left(\frac{n_j - d_j}{n_j} \right)$$

where n_j is the number of individuals at risk (remaining in one state) in time t_j , and d_j is the number of failures (leaving the state) at that time.

Cox Semiparametric models

More concretely, if the hazard rate for individual “j” is:

$$h(t \setminus x_j) = h_0(t) e^{x_j \beta_x}$$

where the betas are estimated from the data, the key aspect (and attractive aspect) of the Cox model is that the baseline hazard (which captures the time ‘effect’ in the risk rate) – $h_0(t)$ - does not get any particular parameterization and, in fact, is not estimated. In other words, the model does not make any assumption on the trajectory of the hazard rate over time (constant, decreasing, non-monotonic, etc.); the key aspect is that no matter the trajectory, it is the same for all individuals. From another perspective, the hazard rate of an individual is a multiplicative of the other. If we compare individual “j” with “m”, the model establishes that:

$$\frac{h(t \setminus x_j)}{h(t \setminus x_m)} = \frac{e^{x_j \beta_x}}{e^{x_m \beta_x}}$$

which is constant, assuming that x_j and x_m do not change over time. Thus, we see that it is not necessary to make any assumption regarding h_0 .

²² Kaplan & Meier (1958), Nelson (1972) and Aalen (1978). See Lancaster, as a modern reference of the duration models.

Fixed effects Conditional Model

Consider the following problem. We have $i = 1 \dots N$ individuals; $t = 1 \dots T$ periods in which the individual is observed; we observe the employment status for each individual in each period:

$$Y_{it} = 1 \text{ si } i \text{ esta desempleado en el periodo } t \\ = 0 \text{ si } i \text{ esta empleado en el periodo } t$$

We also observe a set of explanatory variables of employment status X_{it} ; we assume that the observed binary variables Y_{it} are independent conditional on X_{it} and on an unobservable fixed-effect of each individual α_i ; the probability that individual i is employed in period t is assumed to be a logit:

$$\Pr(Y_{it} = 1 | X_{it}, \alpha_i) = \frac{e^{\alpha_i + X_{it}\beta}}{1 + e^{\alpha_i + X_{it}\beta}}$$

The proposed solution is to maximize the conditional version of the verisimilitude function. The intuition is that F_i disappears from the likelihood function if the probability of a sequence of unemployment for a particular individual is calculated conditional on the total number of unemployment periods of this individual.

For example, in the case of $T = 2$, the likelihood function can be expressed as:

$$L = \prod_{i=1}^N \Pr(\{0,1\}|\dots)^{W_{01}} \Pr(\{1,0\}|\dots)^{W_{10}} \Pr(\{0,0\}|\dots)^{W_{00}} \Pr(\{1,1\}|\dots)^{W_{11}} \\ = \prod_{i=1}^N \left(\frac{e^{(X_{i1}-X_{i2})\beta}}{1 + e^{(X_{i1}-X_{i2})\beta}} \right)^{W_{01}} \left(\frac{e^{(X_{i2}-X_{i1})\beta}}{1 + e^{(X_{i2}-X_{i1})\beta}} \right)^{W_{10}} (1)^{W_{00}} (1)^{W_{11}}$$

where:

$W_{01} = 1$ for the individual whose sequence is $\{0,1\}$, in other words, who is employed in period 1 and unemployed in period 2; $W_{10} = 1$ for the individual whose sequence is $\{1,0\}$; $W_{00} = 1$ for the individual whose sequence is $\{0,0\}$; $W_{11} = 1$ for the individual whose sequence is $\{1,1\}$.

For the sequences $\{0,0\}$ and $\{1,1\}$ the probability is 1, since:

$$\Pr\left(\{Y_{i1}, Y_{i2}\} | X, \alpha_i, \sum_{t=1}^2 Y_{it}\right) = \frac{e^{(\alpha_i - X_{i2})\beta - (\alpha_i - X_{i1})\beta}}{1 + e^{(\alpha_i - X_{i2})\beta - (\alpha_i - X_{i1})\beta}} = \frac{e^{(X_{i2} - X_{i1})\beta}}{1 + e^{(X_{i2} - X_{i1})\beta}}$$

Then:

$$\Pr\left(\{0,0\} \mid X; \alpha_i; \sum_{t=1}^2 Y_{it}\right) = 1 = \Pr(\{0,0\})$$

$$\Pr\left(\{1,1\} \mid X; \alpha_i; \sum_{t=1}^2 Y_{it}\right) = 1 = \Pr(\{1,1\})$$

The fixed effect is eliminated analogously to the panel in first differences. Individuals whose dependent variable status does not change do not contribute to the verisimilitude function. This may be a defect, since it implies that its status does not depend on the explanatory factors; in addition that information is not used and may represent a high percentage of the sample.

Tables and Figures

Table 1: Definition of variables

Variables	Description
ui_sc	Dummy variable: 1 if indicates having used the unemployment insurance upon job termination
ui1	Dummy variable: 1 if signed up for unemployment insurance and 0 if not. In line with the impact evaluation scheme, this variable reflects those who are "treated" and therefore, is 1 for UI members whatever the period.
c19_06	Unemployment insurance amount
ui_anio	Dummy variable: 1 if greater than or equal to October 2002 and 0 if less at the date indicated.
ui1_anio	$ui1 * ui_anio$
ui1_sc	$ui_sc * ui_anio$
ult_trab_dur1	Measures the duration of the last job
* ó DUR_EMP	
capacita	Dummy variable: 1 if indicates not having received training and 0 if has received it
mujer	Dummy variable: 1 if a woman and 0 if not
n_hijo04	Dummy variable: 1 if a woman who had children between 2002-2004, 0 if not
edad_16_21	Dummy variable: 1 if the age of the interviewee is less than or equal to 21 and 0 otherwise. Note that the interviewee sample is aged 16 years or older
edad_22_31	Dummy variable: 1 if the age of the interviewee is greater than or equal to 22 years and less than or equal to 31 years, 0 if otherwise.
edad_32_41	Dummy variable: 1 if the age of the interviewee is greater than or equal to 32 years and less than or equal to 41 years, 0 if otherwise.
edad_42_51	Dummy variable: 1 if the age of the interviewee is greater than or equal to 42 years and less than or equal to 51 years, 0 if otherwise.
edad_52_64	Dummy variable: 1 if the age of the interviewee is greater than or equal to 52 years and less than or equal to 64 years, 0 if otherwise.
jefe	Dummy variable: 1 if head of household and 0 if otherwise
ayuda	Dummy variable: 1 if indicates needing help to carry out any kind of activity and 0 if not. The corresponding activities include, for example, bathing, climbing stairs, eating, getting dressed, etc.
salud	Dummy variable: 1 if indicates health to be regular, bad and very bad, 0 if otherwise.
hombre_bajo	Dummy variable: 1 if a man and measures less than 170cm., 0 if otherwise.

Table 1. (Continuation): Description of variables

Variables	Description
pem	Dummy variable: 1 if indicates having participated in emergency employment programs, 0 if otherwise.
agri	Dummy variable: 1 if indicates that the economic sector of the last job is agriculture, hunting, forestry and fishing, 0 if otherwise.
minas	Dummy variable: 1 if indicates that the economic sector of the last job is mining and quarrying, 0 if otherwise.
indust	Dummy variable: 1 if indicates that the economic sector of the last job is manufacturing industries, 0 if otherwise.
comercio	Dummy variable: 1 if indicates that the economic sector of the last job is retail, restaurants and hotels, 0 if otherwise.
electric	Dummy variable: 1 if indicates that the economic sector of the last job is electricity, water and gas, 0 if otherwise.
construc	Dummy variable: 1 if indicates that the economic sector of the last job is construction, 0 if otherwise.
transport	Dummy variable: 1 if indicates that the economic sector of the last job is transport, storage and communication, 0 if otherwise.
serv_fin	Dummy variable: 1 if indicates that the economic sector of the last job is financial services, insurance, goods, 0 if otherwise.
serv_com	Dummy variable: 1 if indicates that the economic sector of the last job is community, socials and personal services, 0 if otherwise.
nobien_espe c	Dummy variable: 1 if indicates that the economic sector of the last job is non-specified activities, 0 if otherwise.
ult_trab_med iot*	Dummy variable: 1 if last job was part-time, 0 if otherwise. Part-time is ó defined as more than 1 hour but less than 30 hours worked.
MEDIO_TIE MPO	
ult_trab_caus a*	Dummy variable: 1 if the reason for dismissal from the last job was ó caused by the worker, 0 other reasons.
CAUSAL	
ult_trab_per m*	Variable dummy: 1 if the last job was permanent, 0 if otherwise. ó
PERMANEN TE	
ult_trab_inde m*	Dummy variable: 1 if received severance payment in the last job, 0 if ó otherwise.
INDEM	

* Los nombres que se encuentran señalados en mayúsculas constan en la base de los modelos Logit de fixed effects and multinomial and representan las mismas variables denotadas en minúscula pero con nombres different, es decir, estas variables son operativas en cualquiera de los estados.

Table 2
Descriptive Statistics

Variables	Employment Status		
	Working	Unemployed	Inactive
c19_06	51869,37	48309,37	33736
ui_sc	0,96%	4,63%	0,00%
ui1	32,20%	33,00%	21,69%
ult_trab_dur1	19,80465	6,931606	4,921823
* ó			
DUR_EMP			
capacita	84,20%	88,82%	90,74%
mujer	39,20%	48,67%	68,03%
n_hijo04	11,94%	8,20%	9,83%
edad_16_21	3,24%	2,43%	9,63%
edad_22_31	29,48%	30,36%	26,45%
edad_32_41	30,01%	28,25%	20,57%
edad_42_51	21,65%	22,65%	12,27%
edad_52_64	12,35%	13,67%	15,47%
jefe	54,50%	45,72%	37,13%
ayuda	2,09%	1,82%	8,25%
salud	28,84%	35,76%	49,66%
hombre_bajo	34,62%	31,72%	18,50%
pem	2,10%	2,48%	0,91%
agri	14,36%	15,86%	0,00%
minas	1,52%	0,35%	0,00%
indust	13,73%	7,73%	0,00%
comercio	18,89%	8,75%	0,00%
electric	0,58%	0,16%	0,00%
construc	15,28%	8,32%	0,00%
transport	6,87%	2,73%	0,00%
serv_fin	6,01%	2,28%	0,00%
serv_com	21,73%	9,32%	0,00%
nobien_espe	1,04%	0,39%	0,00%
c			
ult_trab_med	7,12%	3,60%	0,00%
iot* ó			
MEDIO_TIE			
MPO			
ult_trab_caus	5,69%	2,16%	0,00%
a* ó			
CAUSAL			
ult_trab_per	60,32%	17,41%	0,00%
m* ó			
PERMANEN			
TE			
ult_trab_inde	26,75%	18,00%	0,00%
m* ó			
INDEM			

Table 3
Fixed-effects logit model
Permanent Jobs, Coefficients

	(1)	(2)	(3)	(4)
	Not Weighted	Weighted	Not Weighted	Weighted
UI membersxOct2002	2.559 [0.283]**	2.611 [0.011]**		
BeneficiariesxOct2002			21.094 [1,073.613]	21.431 [46.100]
Number of children	18.153 [23,007.706]	24.442 [21,510.326]	18.281 [27,285.373]	19.000 [1,628.755]
Company size	25.711 [912.662]	35.242 [947.728]	36.526 [1,528.472]	36.700 [65.846]
Secondary Industry	-10.484 [1,111.552]	-15.506 [676.910]	-15.378 [6,789.066]	-15.403 [305.562]
Tertiary Industry	-6.223 [1,111.552]	-11.238 [676.910]	-11.763 [6,789.066]	-11.773 [305.562]
Length of time in job	-0.009 [0.026]	0.003 [0.001]**	-0.095 [0.025]**	-0.096 [0.001]**
Month=2	0.190 [0.258]	0.175 [0.011]**	0.278 [0.256]	0.257 [0.011]**
Month=3	0.097 [0.259]	0.088 [0.011]**	0.248 [0.257]	0.228 [0.011]**
Month=4	-0.061 [0.263]	-0.078 [0.011]**	0.206 [0.260]	0.200 [0.011]**
Month=5	0.097 [0.263]	0.068 [0.011]**	0.327 [0.260]	0.354 [0.011]**
Month=6	0.345 [0.261]	0.327 [0.011]**	0.585 [0.259]*	0.629 [0.011]**
Month=7	0.495 [0.262]	0.501 [0.011]**	0.713 [0.261]**	0.780 [0.011]**
Month=8	0.753 [0.261]**	0.753 [0.011]**	0.939 [0.261]**	0.995 [0.011]**
Month=9	1.125 [0.260]**	1.140 [0.011]**	1.306 [0.261]**	1.362 [0.011]**
Month=10	1.682 [0.259]**	1.655 [0.011]**	1.843 [0.261]**	1.877 [0.011]**
Month=11	1.803 [0.261]**	1.729 [0.011]**	1.957 [0.264]**	1.920 [0.011]**
Month=12	1.939 [0.263]**	1.926 [0.011]**	2.174 [0.267]**	2.213 [0.011]**
Year=2003	3.046 [0.201]**	2.978 [0.008]**	3.603 [0.201]**	3.567 [0.008]**
Year=2004	4.421 [0.236]**	4.333 [0.010]**	5.231 [0.238]**	5.217 [0.010]**
Unemployment rate Month-Reg	-5.024 [6.676]	-10.382 [0.278]**	3.567 [6.812]	-1.228 [0.284]**
Observations	16923	1080000	16923	1080000

Standard errors in brackets

* significant at 5%; ** significant at 1%

Table 4
Fixed-effects logit model
Temporal Jobs, Coefficients

	(1)	(2)	(4)	(3)
	Weighted	Not Weighted	Weighted	Not Weighted
UI membersxOct2002	0.365 [0.210]	0.524 [0.009]**		
BeneficiariesxOct2002			1.676 [0.378]**	1.783 [0.017]**
Number of children	19.645 [11,479.419]	26.734 [16,658.942]	20.546 [18,217.771]	26.625 [15,976.126]
Company size	22.515 [485.162]	29.586 [708.586]	23.525 [753.089]	29.580 [664.206]
Secondary Industry	1.509 [0.403]**	1.655 [0.017]**	1.710 [0.420]**	1.922 [0.018]**
Tertiary Industry	-0.712 [0.360]*	-1.029 [0.016]**	-0.563 [0.362]	-0.828 [0.016]**
Length of time in job	-0.219 [0.021]**	-0.217 [0.001]**	-0.221 [0.021]**	-0.221 [0.001]**
Month=2	-0.031 [0.234]	-0.057 [0.010]**	-0.009 [0.236]	-0.029 [0.010]**
Month=3	0.019 [0.236]	0.022 [0.010]*	0.041 [0.237]	0.053 [0.010]**
Month=4	0.537 [0.234]*	0.580 [0.010]**	0.560 [0.235]*	0.614 [0.010]**
Month=5	0.559 [0.233]*	0.610 [0.010]**	0.595 [0.234]*	0.658 [0.010]**
Month=6	0.535 [0.235]*	0.562 [0.010]**	0.583 [0.235]*	0.630 [0.010]**
Month=7	0.712 [0.237]**	0.735 [0.010]**	0.753 [0.238]**	0.797 [0.010]**
Month=8	0.861 [0.235]**	0.844 [0.010]**	0.902 [0.236]**	0.908 [0.010]**
Month=9	0.937 [0.237]**	0.907 [0.010]**	0.972 [0.238]**	0.964 [0.010]**
Month=10	1.139 [0.237]**	1.136 [0.010]**	1.140 [0.238]**	1.155 [0.010]**
Month=11	1.031 [0.236]**	1.034 [0.010]**	1.058 [0.236]**	1.083 [0.010]**
Month=12	0.944 [0.240]**	0.986 [0.010]**	0.987 [0.239]**	1.054 [0.010]**
Year=2003	1.658 [0.178]**	1.675 [0.007]**	1.806 [0.142]**	1.891 [0.006]**
Year=2004	2.064 [0.206]**	2.082 [0.009]**	2.229 [0.158]**	2.344 [0.007]**
Unemployment rate Month-Reg	39.785 [3.924]**	36.711 [0.167]**	39.440 [3.901]**	35.702 [0.166]**
Observations	24960	14300000	24960	14300000

Standard errors in brackets

* significant at 5%; ** significant at 1%

Table 5

Multinomial Logit				
Permanent Job				
	(1)	(2)	(3)	(4)
	Unemployed	Inactive	Unemployed	Inactive
UI members x Oct2002	-0.012 [0.001]**	-0.003 [0.001]**		
Beneficiary x Oct2002			0.003 [0.004]	-0.002 [0.001]**
UI members	0.009 [0.001]**	-0.000 [0.001]		
Beneficiary			0.010 [0.004]*	-0.062 [0.007]**
Oct2002 onwards	0.010 [0.001]**	0.003 [0.001]**	0.007 [0.001]**	0.001 [0.000]**
Woman	0.001 [0.001]	0.002 [0.000]**	0.000 [0.001]	0.001 [0.000]**
Single	-0.000 [0.001]	0.001 [0.000]	-0.000 [0.001]	0.000 [0.000]
Education	-0.000 [0.000]	0.000 [0.000]	-0.000 [0.000]	0.000 [0.000]
Age	-0.000 [0.000]	0.000 [0.000]**	-0.000 [0.000]	0.000 [0.000]**
Number of children	-0.002 [0.001]**	-0.000 [0.000]	-0.002 [0.001]**	-0.000 [0.000]
Company size	0.000 [0.000]	0.000 [0.000]	0.000 [0.000]	0.000 [0.000]
Secondary Industry	0.003 [0.001]*	0.001 [0.001]	0.003 [0.002]	0.001 [0.001]
Tertiary Industry	0.002 [0.001]	0.001 [0.001]	0.001 [0.002]	0.000 [0.001]
Length of time in job	-0.001 [0.000]**	-0.000 [0.000]**	-0.001 [0.000]**	-0.000 [0.000]**
Unemployment month-region	-0.030 [0.011]**	-0.011 [0.008]	-0.038 [0.013]**	-0.010 [0.006]
Month=2	0.001 [0.002]	-0.001 [0.001]	0.000 [0.002]	-0.001 [0.001]
Month=3	-0.003 [0.002]	0.001 [0.001]	-0.004 [0.002]*	0.001 [0.001]
Month=4	-0.002 [0.002]	-0.001 [0.001]	-0.004 [0.002]*	-0.001 [0.001]
Month=5	-0.001 [0.002]	-0.002 [0.001]	-0.002 [0.002]	-0.001 [0.001]
Month=6	0.003 [0.002]*	-0.001 [0.001]	0.003 [0.002]	-0.001 [0.001]
Month=7	0.001 [0.001]	0.000 [0.001]	-0.000 [0.002]	0.000 [0.001]
Month=8	0.001 [0.001]	0.001 [0.001]	-0.000 [0.002]	0.000 [0.001]
Month=9	0.003 [0.001]*	-0.001 [0.001]	0.002 [0.002]	-0.001 [0.001]
Month=10	-0.003 [0.002]	0.000 [0.001]	-0.002 [0.002]	0.000 [0.001]
Month=11	-0.000 [0.002]	-0.000 [0.001]	0.001 [0.002]	-0.000 [0.001]
Month=12	0.004 [0.001]*	0.004 [0.001]**	0.006 [0.002]**	0.003 [0.001]**
Constant	-0.022 [0.003]**	-0.016 [0.003]**	-0.020 [0.004]**	-0.012 [0.002]**
Observations	44538	44538	44538	44538

Standard errors in brackets

* significant at 5%; ** significant at 1%

Table 6

Multinomial Logit Temporary Job				
	(1)	(2)	(3)	(4)
	Unemployed	Inactive	Unemployed	Inactive
UI members x Oct2002	0.009 [0.002]**	-0.001 [0.000]		
Beneficiary x Oct2002			0.008 [0.005]	-0.046 [0.010]**
UI members	0.010 [0.002]**	0.002 [0.001]**	0.003 [0.001]*	0.001 [0.000]*
Beneficiary	-0.014 [0.002]**	-0.002 [0.001]**		
Oct2002 onwards			0.005 [0.006]	-0.001 [0.000]*
Woman	0.003 [0.001]*	0.002 [0.001]**	0.002 [0.001]	0.001 [0.000]**
Single	0.002 [0.001]	0.001 [0.000]**	0.002 [0.001]	0.001 [0.000]**
Education	-0.000 [0.000]	0.000 [0.000]*	-0.000 [0.000]	0.000 [0.000]*
Age	-0.000 [0.000]	0.000 [0.000]	0.000 [0.000]	0.000 [0.000]
Number of children	-0.002 [0.001]*	0.000 [0.000]	-0.002 [0.001]	0.000 [0.000]
Company size	0.001 [0.000]*	0.000 [0.000]	0.000 [0.000]*	-0.000 [0.000]
Secondary Industry	-0.002 [0.001]	-0.001 [0.000]	-0.002 [0.001]	-0.001 [0.000]*
Tertiary Industry	-0.004 [0.001]**	-0.000 [0.000]	-0.005 [0.002]**	-0.000 [0.000]
Length of time in job	-0.003 [0.000]**	-0.001 [0.000]**	-0.003 [0.000]**	-0.000 [0.000]**
Unemployment month-region	-0.067 [0.016]**	-0.004 [0.004]	-0.068 [0.017]**	-0.001 [0.003]
Month=2	0.009 [0.003]**	0.003 [0.001]**	0.010 [0.003]**	0.002 [0.000]**
Month=3	0.028 [0.003]**	0.003 [0.001]**	0.030 [0.003]**	0.002 [0.001]**
Month=4	0.032 [0.003]**	0.002 [0.001]**	0.033 [0.003]**	0.001 [0.000]**
Month=5	0.031 [0.003]**	0.002 [0.001]*	0.032 [0.003]**	0.001 [0.000]
Month=6	0.022 [0.003]**	0.001 [0.001]	0.022 [0.003]**	0.001 [0.000]
Month=7	0.020 [0.003]**	-0.003 [0.001]*	0.020 [0.004]**	-0.002 [0.001]*
Month=8	0.022 [0.003]**	0.001 [0.001]	0.022 [0.004]**	0.001 [0.000]
Month=9	0.019 [0.003]**	-0.000 [0.001]	0.019 [0.003]**	-0.000 [0.001]
Month=10	0.014 [0.003]**	-0.001 [0.001]	0.018 [0.004]**	-0.001 [0.001]
Month=11	0.014 [0.003]**	-0.001 [0.001]	0.016 [0.003]**	-0.000 [0.000]
Month=12	0.028 [0.003]**	0.003 [0.001]**	0.031 [0.004]**	0.002 [0.001]**
Constant	-0.041 [0.005]**	-0.009 [0.002]**	-0.040 [0.005]**	-0.006 [0.002]**
Observations	29279	29279	29279	29279

Standard errors in brackets

* significant at 5%; ** significant at 1%

Table 7

Multinomial Logit
Permanent Job

	(1)	(2)
	Unemployed	Unemployed
UI members x Oct2002	-0.062 [0.011]**	
Beneficiary x Oct2002		-0.024 [0.054]
UI members	0.011 [0.014]	0.011 [0.014]
Beneficiary	-0.001 [0.011]	
Oct2002 onwards		0.014 [0.056]
Woman	0.004 [0.006]	0.011 [0.007]
Single	0.009 [0.008]	0.012 [0.009]
Education	0.001 [0.001]	0.001 [0.001]
Age	0.001 [0.000]**	0.002 [0.000]**
Number of children	0.000 [0.007]	-0.003 [0.008]
Company size	-0.032 [0.016]*	-0.017 [0.019]
Secondary Industry	-0.032 [0.016]*	-0.017 [0.019]
Tertiary Industry	-0.000 [0.000]	0.000 [0.000]
Length of time in job	0.176 [0.131]	0.210 [0.143]
Unemployment month-region	0.017 [0.014]	0.021 [0.016]
Month=2	-0.007 [0.015]	-0.006 [0.017]
Month=3	0.032 [0.015]*	0.039 [0.017]*
Month=4	0.040 [0.015]**	0.049 [0.017]**
Month=5	0.024 [0.014]	0.031 [0.016]
Month=6	0.037 [0.015]*	0.044 [0.017]*
Month=7	0.029 [0.015]*	0.035 [0.017]*
Month=8	0.015 [0.012]	0.019 [0.014]
Month=9	0.022 [0.014]	0.031 [0.016]*
Month=10	0.022 [0.013]	0.032 [0.015]*
Month=11	0.004 [0.013]	0.004 [0.015]
Month=12	0.083 [0.032]**	0.003 [0.032]
Constant	4586	4586

Standard errors in brackets

* significant at 5%; ** significant at 1%

Table 8

Multinomial Logit
Temporary Job

	(1)	(2)
	Unemployed	Unemployed
UI members x Oct2002	-0.072 [0.009]**	
Beneficiary x Oct2002		-0.027 [0.044]
UI members	-0.002 [0.009]	
Beneficiary		0.007 [0.042]
Oct2002 onwards	0.011 [0.011]	0.011 [0.010]
Woman	0.032 [0.006]**	0.027 [0.006]**
Single	0.008 [0.006]	0.012 [0.007]
Education	-0.001 [0.001]	-0.003 [0.001]**
Age	0.000 [0.000]	0.001 [0.000]**
Number of children	0.008 [0.006]	0.008 [0.006]
Company size	0.023 [0.007]**	0.026 [0.007]**
Secondary Industry	0.033 [0.007]**	0.053 [0.007]**
Tertiary Industry	0.002 [0.001]**	0.003 [0.001]**
Length of time in job	0.013 [0.092]	0.098 [0.096]
Unemployment month-region	0.011 [0.017]	0.011 [0.018]
Month=2	-0.005 [0.015]	-0.006 [0.016]
Month=3	0.058 [0.017]**	0.060 [0.018]**
Month=4	0.043 [0.015]**	0.044 [0.017]**
Month=5	0.037 [0.016]*	0.039 [0.017]*
Month=6	0.062 [0.016]**	0.064 [0.017]**
Month=7	0.032 [0.014]*	0.031 [0.015]*
Month=8	-0.007 [0.013]	-0.009 [0.014]
Month=9	-0.039 [0.013]**	-0.041 [0.014]**
Month=10	-0.041 [0.013]**	-0.040 [0.014]**
Month=11	-0.073 [0.014]**	-0.074 [0.015]**
Month=12	0.139 [0.025]**	0.090 [0.026]**
Constant	10206	10206

Standard errors in brackets

* significant at 5%; ** significant at 1%

Figure 1: Duration analysis
Non-parametric Estimates

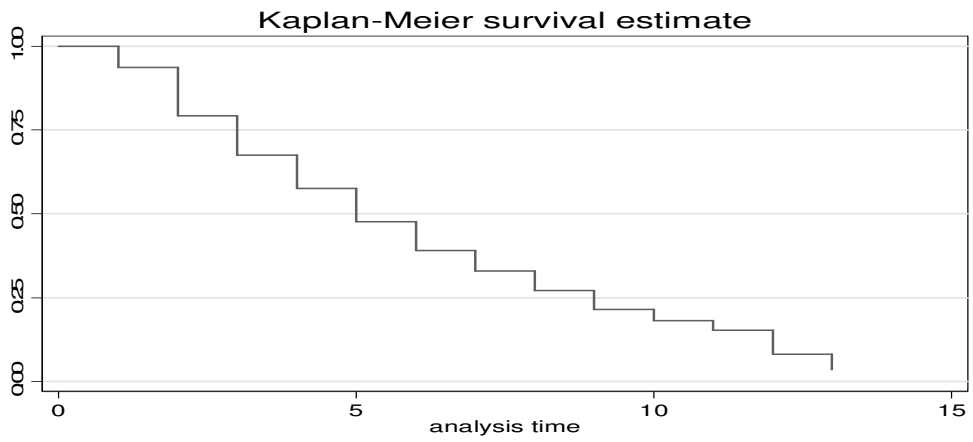


Figure 2: Duration analysis
Non-parametric Estimates

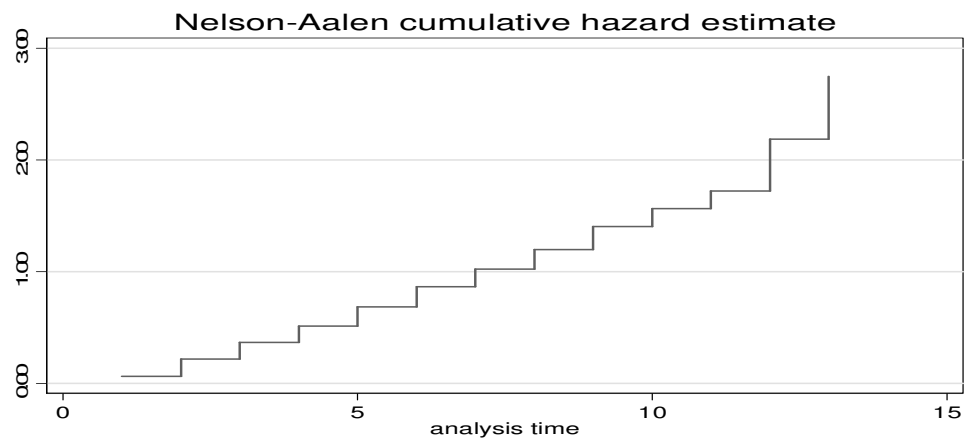


Figure 3: Duration analysis
Non-parametric Estimates

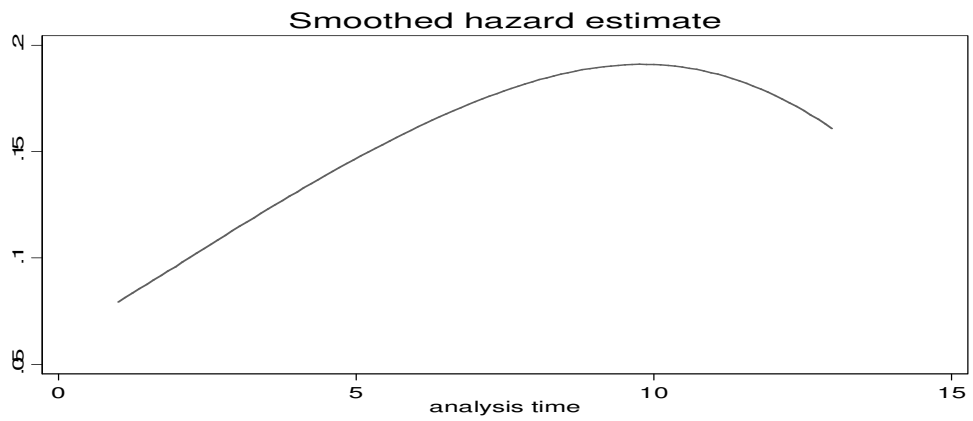


Figure 4: Duration analysis
Beneficiaries, Non-beneficiaries

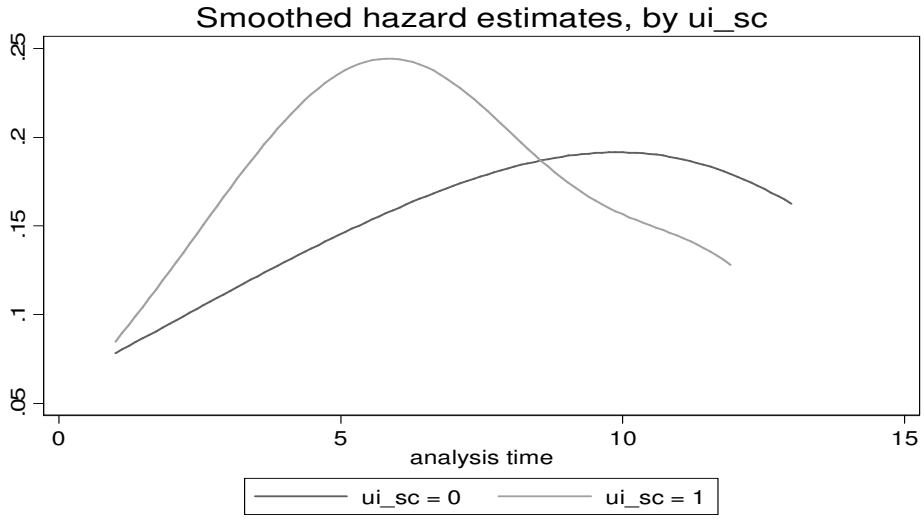


Figure 5: Duration analysis
System members, Non members

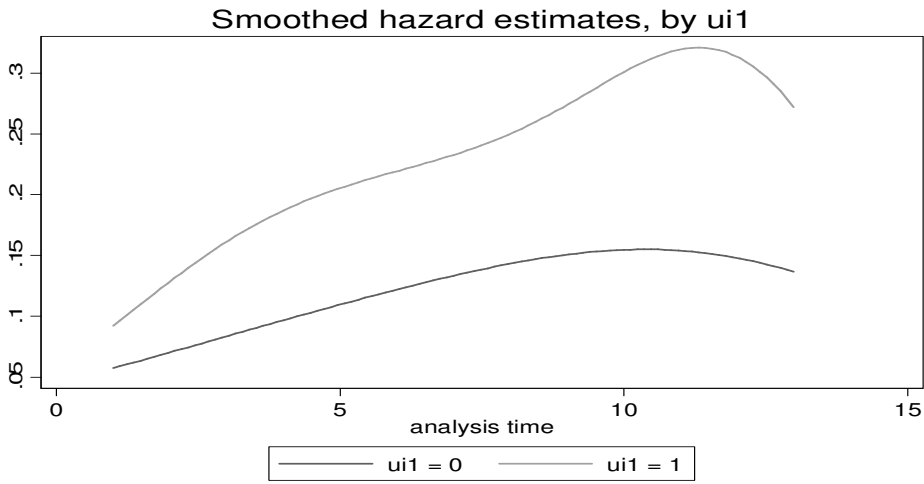


Figure 6: Duration analysis
Permanent contract, Temporary contract

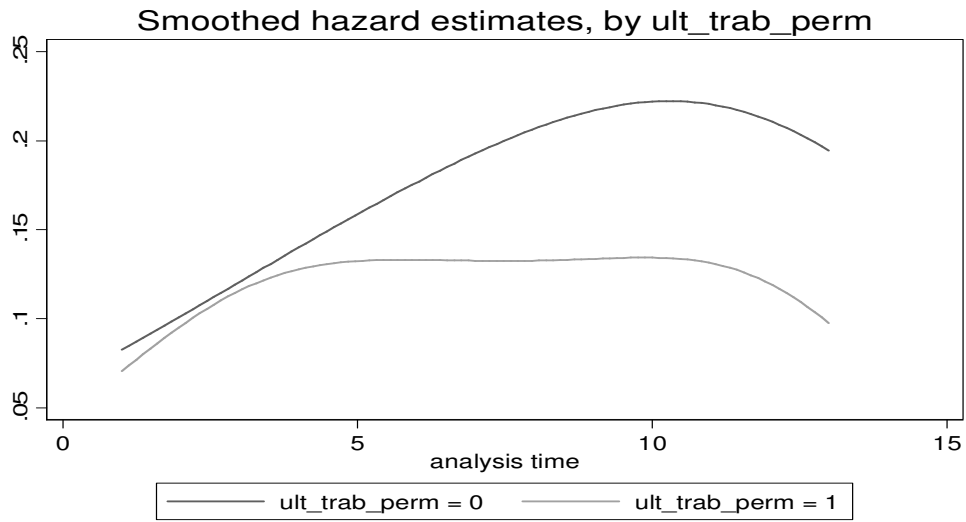


Figure 7: Duration analysis
Gender

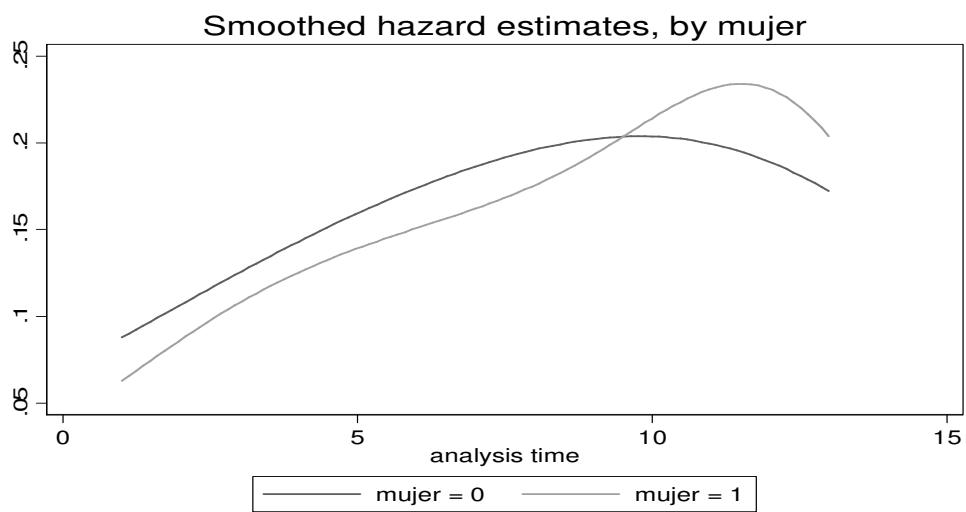


Table 9: Duration analysis
Semiparametric Estimates (Cox Ratios)

Variable	g1_m1_ec1	g1_m1_ec2	g1_m1_ec3	g1_m1_ec4	g1_m1_ec5	g1_m1_ec6
ui_sc	1.200*			1.261*		
ui1		1.598***	1.113		2.624***	1.095
ui1_anio			1.878***			1.835***
ui_anio			0.514***			0.538***
ult_trab_d~1	0.990***	0.997	0.998	0.992**	1.031***	0.998
N	2829	2829	2829	1981	3607	2829
ll	-10335.29	-10293.950	-10258.059	-7193.674	-18905.401	-14885.223
aic	20748.584	20665.900	20598.117	14465.348	37888.802	29852.446
bic	20980.544	20897.860	20841.972	14683.411	38130.237	30096.301
legend: *p<.1 **p<.05 *** p<.01						

Figure 8: Duration analysis
Cox Snell with ui_sc

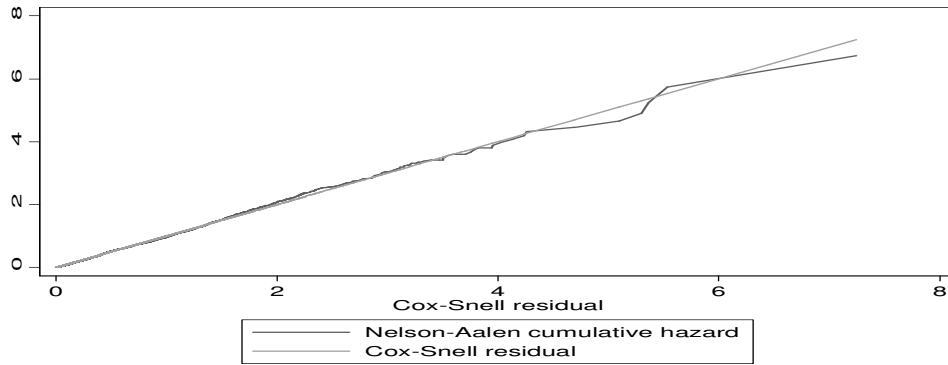


Figure 9: Duration analysis
Cox Snell with ui1

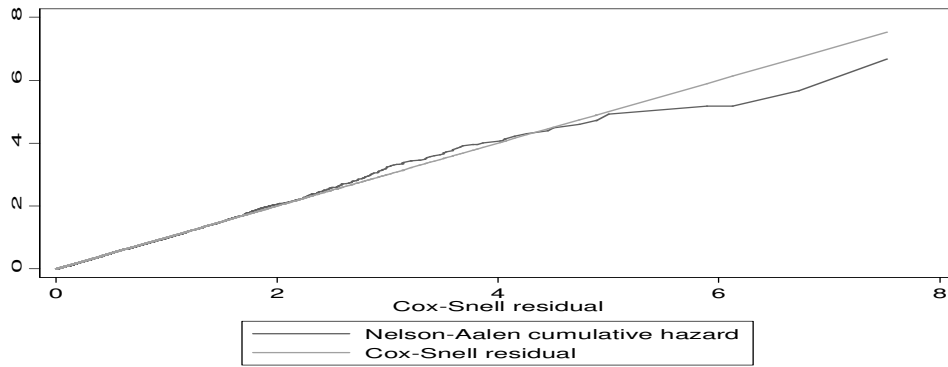


Figure 10: Duration analysis
Cox Snell with ui1, ui_ano, ui1_ano

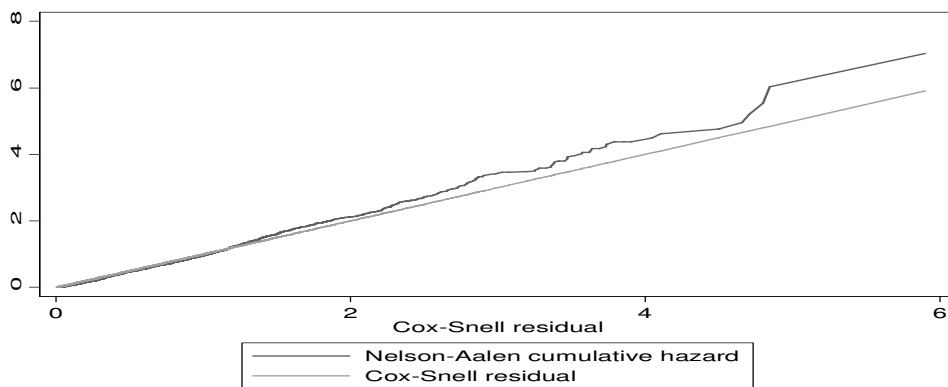


Table 10: Duration analysis
Semiparametric Estimates

Variable	g1_m1_ec1	g1_m1_ec2	g1_m1_ec3	g1_m1_ec4	g1_m1_ec5	g1_m1_ec6
ui_sc	1.1996*			1.2615*		
ui1		1.5984***	1.1130		2.6237***	1.0946
ui1_anio			1.8780***			1.8348***
ui_anio			0.5135***			0.5383***
ult_trab_d~1	0.9896***	0.9969	0.9977	0.9924**	1.0315***	0.9976
capacita	0.8212***	0.8363***	0.8825*	0.8448**	0.7966***	0.8968*
mujer	0.7830***	0.7860***	0.8068***	0.7711***	0.8255***	0.8416***
mujer_nhi~04	0.7121**	0.7469*	0.7855	0.6872**	0.7547**	0.7912
edad_16_21	2.2580***	1.8882***	1.7315**	1.9158**	1.7649***	1.7128**
edad_22_31	2.5840***	2.2740***	2.0569***	2.5443***	1.9043***	1.9195***
edad_32_41	2.4942***	2.2519***	2.0417***	2.3453***	1.7717***	1.9064***
edad_42_51	2.2105***	2.0419***	1.8743***	2.1074***	1.6034***	1.8167***
edad_52_64	1.8384***	1.7354**	1.6429**	1.8025**	1.3952*	1.5932**
jefe	1.2455***	1.2299***	1.2095***	1.1899***	1.1683***	1.1964***
ayuda	1.3470*	1.3417*	1.3336*	1.2923	1.4148**	1.2645
salud	0.8614***	0.8699***	0.8806**	0.9167	0.9524	0.8835**
hombre_bajo	0.8841**	0.8897*	0.9023*	0.8901	1.0001	0.9055*
pem	0.7549*	0.7361*	0.7393*	0.8709	0.7563**	0.7774
agri_mes_1	1.2632	1.0904	1.3512	0.9460	1.5709**	1.3866*
agri_mes_2	1.0317	0.9779	1.1562	0.8489	1.0899	1.2880
agri_mes_3	1.2024	1.1273	1.3324*	1.2277	1.4792***	1.3985**
agri_mes_4	1.0798	0.9990	1.1690	1.1630	1.4530***	1.1921
agri_mes_5	1.5020***	1.4037***	1.6236***	1.8340***	1.9823***	1.5318***
agri_mes_6	1.2903**	1.1651	1.4306***	1.7067***	1.5078***	1.3601**
agri_mes_7	2.3023***	1.9958***	2.4050***	2.5485***	2.3618***	2.0937***
agri_mes_8	4.1072***	3.6316***	4.4897***	4.6377***	3.4454***	3.7284***
agri_mes_9	3.5302***	3.5797***	4.1183***	2.8377***	2.0501***	2.9323***
agri_mes_10	2.0635***	1.7138**	2.0727***	1.3625	2.0763***	2.1438***
agri_mes_11	2.5678***	2.1974***	2.6968***	1.5185	2.4176***	2.4164***
minas	1.8111**	1.6316**	2.0132***	2.0257**	1.5728*	1.8206**
indust	1.1985**	1.1139	1.3529***	1.1716	1.4816***	1.3649***
comercio	1.1083	1.0340	1.2643**	1.0266	1.3515***	1.2501**
electric	2.0282*	1.7927	2.2102**	2.0608	1.8680	1.9375*
construc	1.4423***	1.3199***	1.5987***	1.2939**	1.6181***	1.5817***
transport	0.9348	0.8680	1.0777	0.9309	1.2347*	1.1073
serv_fin	1.1075	1.0333	1.2642	1.0127	1.3293**	1.2622
serv_com	1.2186**	1.1570	1.4341***	1.0233	1.3307***	1.3856***
nobien_espec	0.9907	0.9367	1.1868	1.1196	1.0673	1.1461
ult_trab_m~t	0.6974**	0.7446**	0.7712*	0.6923**	0.9253	0.8115
ult_trab_c~a	0.5691***	0.6124***	0.6599**	0.6143**	0.5234***	0.6883**
ult_trab_p~m	0.7849***	0.8076***	0.8410**	0.7391***	0.7056***	0.8691**
ult_trab_i~m	1.1619***	1.0599	1.0406	1.1800**	0.9741	1.0200
N	2829	2829	2829	1981	3607	2829
ll	-10335.2921	-10293.9501	-10258.0585	-7193.6742	-18905.4012	-14885.2232
aic	20748.5842	20665.9003	20598.1171	14465.3485	37888.8024	29852.4463
bic	20980.5437	20897.8597	20841.9719	14683.4114	38130.2371	30096.3012
legend: *p<.1 **p<.05 *** p<.01						

Figure 11: Duration analysis

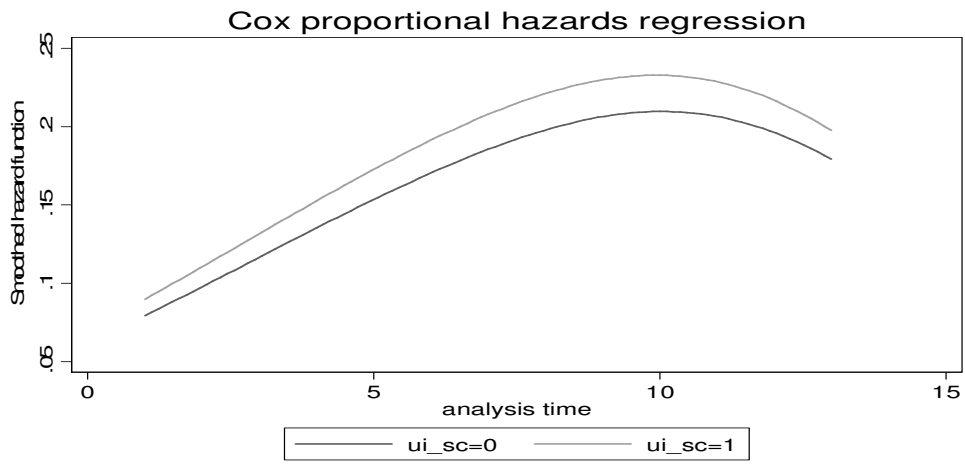


Figure 12: Duration analysis

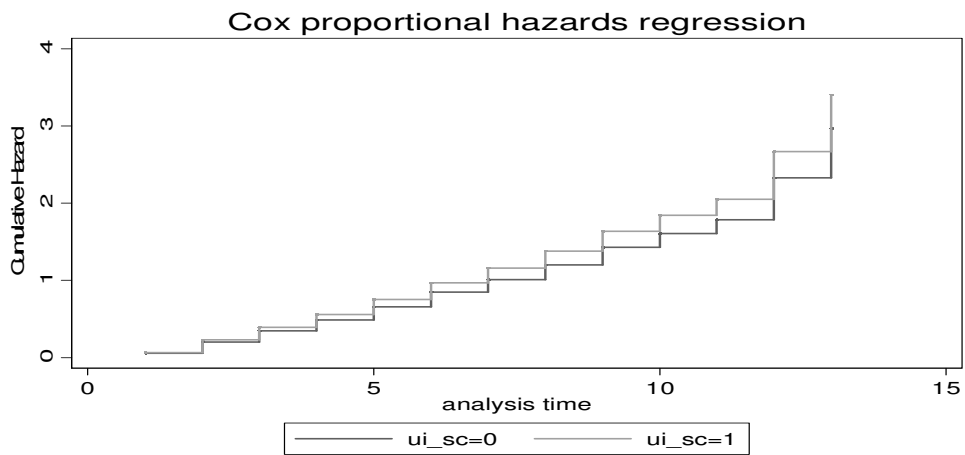


Figure 13: Duration analysis

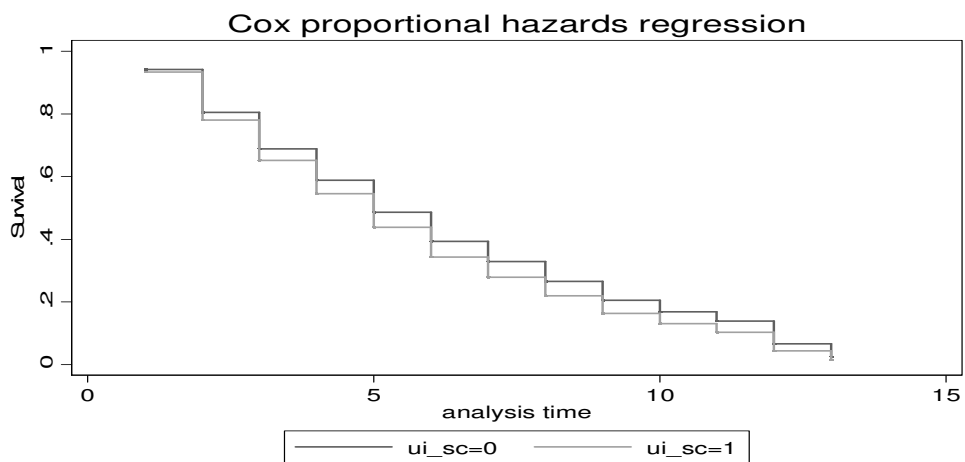


Table 11
Panel Data model

	(1)	(2)	(3)	(4)
	Permanent Jobs	Permanent Jobs	Temporal Jobs	Temporal Jobs
UI membersxOct2002	0.027 [0.005]**		0.034 [0.005]**	
BeneficiariesxOct2002		0.002 [0.006]		0.005 [0.008]
Number of children	0.003 [0.010]	0.003 [0.010]	-0.016 [0.012]	-0.015 [0.012]
Company size	0.003 [0.001]**	0.004 [0.001]**	0.008 [0.001]**	0.007 [0.001]**
Secondary Industry	-0.068 [0.022]**	-0.065 [0.022]**	0.125 [0.014]**	0.128 [0.014]**
Tertiary Industry	-0.056 [0.021]**	-0.054 [0.021]*	-0.063 [0.016]**	-0.060 [0.016]**
Length of time in job	0.003 [0.001]**	0.003 [0.001]**	0.001 [0.001]	0.001 [0.001]
Month=2	0.000 [0.003]	0.000 [0.003]	0.001 [0.004]	0.001 [0.004]
Month=3	-0.000 [0.003]	0.000 [0.003]	-0.001 [0.004]	-0.000 [0.004]
Month=4	-0.001 [0.003]	-0.000 [0.003]	-0.001 [0.004]	-0.000 [0.004]
Month=5	0.001 [0.003]	0.002 [0.003]	-0.004 [0.004]	-0.002 [0.004]
Month=6	0.003 [0.003]	0.004 [0.003]	-0.002 [0.004]	-0.000 [0.004]
Month=7	0.004 [0.003]	0.005 [0.003]	-0.002 [0.004]	0.000 [0.004]
Month=8	0.005 [0.003]	0.005 [0.003]	-0.004 [0.004]	-0.003 [0.004]
Month=9	0.005 [0.003]	0.006 [0.003]*	-0.003 [0.004]	-0.001 [0.004]
Month=10	0.007 [0.003]*	0.007 [0.003]*	-0.001 [0.004]	0.001 [0.004]
Month=11	0.008 [0.003]**	0.009 [0.003]**	-0.001 [0.004]	0.001 [0.004]
Month=12	0.008 [0.003]**	0.009 [0.003]**	-0.001 [0.005]	0.003 [0.004]
Year=2003	0.003 [0.001]*	0.006 [0.001]**	-0.008 [0.002]**	0.002 [0.002]
Year=2004	0.013 [0.002]**	0.018 [0.002]**	0.012 [0.003]**	0.025 [0.003]**
Unemployment rate Month-Region	0.934 [0.164]**	0.962 [0.163]**	-0.552 [0.104]**	-0.598 [0.104]**
Costant	11.867 [0.025]**	11.867 [0.025]**	11.646 [0.015]**	11.652 [0.015]**
Observations	53627	53627	45341	45341
Folio Number	2100	2100	2039	2039
R-squared	0.01	0.01	0.03	0.03

Robust standard errors in brackets
* significant at 5%; ** significant at 1%

Table E1
Percentage of workers who lost jobs

Year	Month	% workers
2002	January	0,76%
	February	1,58%
	March	3,20%
	April	3,35%
	May	2,85%
	June	2,26%
	July	1,83%
	August	2,25%
	September	2,17%
	October	2,13%
	November	1,97%
	December	4,14%
2003	January	2,11%
	February	2,45%
	March	3,55%
	April	3,55%
	May	2,58%
	June	2,61%
	July	2,06%
	August	1,67%
	September	2,29%
	October	1,93%
	November	2,69%
	December	5,01%
2004	January	2,11%
	February	2,45%
	March	4,22%
	April	3,83%
	May	3,69%
	June	2,92%
	July	2,50%
	August	2,85%
	September	2,78%
	October	2,96%
	November	3,92%
	December	

Table E2
Percentage of workers leaving jobs
by reason for leaving

Year	Month	Involuntary Dismissal	Caused by the worker
2002	January	26,32%	10,53%
	February	9,52%	9,52%
	March	10,64%	3,19%
	April	14,74%	3,16%
	May	15,71%	0,00%
	June	20,00%	1,82%
	July	15,22%	0,00%
	August	21,82%	1,82%
	September	25,49%	0,00%
	October	17,02%	2,13%
	November	19,15%	4,26%
	December	17,48%	3,88%
2003	January	30,77%	1,92%
	February	12,50%	5,36%
	March	9,30%	2,33%
	April	9,89%	1,10%
	May	12,12%	3,03%
	June	15,79%	5,26%
	July	8,33%	4,17%
	August	18,92%	2,70%
	September	23,08%	1,92%
	October	31,91%	4,26%
	November	33,33%	3,70%
	December	23,48%	2,61%
2004	January	29,17%	2,08%
	February	14,29%	3,57%
	March	7,22%	0,00%
	April	13,58%	2,47%
	May	12,82%	1,28%
	June	25,00%	0,00%
	July	30,43%	0,00%
	August	19,61%	3,92%
	September	31,25%	6,25%
	October	26,53%	6,12%
	November	27,87%	1,64%
	December		

Table E3
Percentage of workers leaving jobs
by gender

Year	Month	Men	Women	Total
2002	January	0,70%	0,83%	0,76%
	February	1,63%	1,51%	1,58%
	March	3,26%	3,12%	3,20%
	April	3,65%	2,92%	3,35%
	May	3,11%	2,49%	2,85%
	June	2,40%	2,07%	2,26%
	July	2,00%	1,58%	1,83%
	August	2,51%	1,87%	2,25%
	September	2,38%	1,86%	2,17%
	October	2,43%	1,69%	2,13%
	November	1,99%	1,94%	1,97%
	December	3,41%	5,14%	4,14%
2003	January	2,28%	1,85%	2,11%
	February	2,24%	2,75%	2,45%
	March	3,69%	3,35%	3,55%
	April	3,12%	4,17%	3,55%
	May	2,91%	2,09%	2,58%
	June	2,21%	3,18%	2,61%
	July	2,00%	2,15%	2,06%
	August	1,81%	1,48%	1,67%
	September	2,73%	1,66%	2,29%
	October	1,86%	2,02%	1,93%
	November	2,66%	2,74%	2,69%
	December	3,41%	7,23%	5,01%
2004	January	1,96%	2,32%	2,11%
	February	2,30%	2,66%	2,45%
	March	4,00%	4,52%	4,22%
	April	3,97%	3,63%	3,83%
	May	3,51%	3,95%	3,69%
	June	2,77%	3,13%	2,92%
	July	3,27%	1,38%	2,50%
	August	2,77%	2,97%	2,85%
	September	2,67%	2,94%	2,78%
	October	2,91%	3,02%	2,96%
	November	4,05%	3,76%	3,92%
	December			

Table E4
Percentage of workers leaving job
by educational level

Year	Month	None	PrimaryInc	PrimaryCom	SecondInc	SecondCom	TechnHigher	UnivInc	UnivCom
2002	January	0,00%	0,90%	0,00%	1,00%	0,45%	1,56%	2,31%	0,00%
	February	5,01%	2,28%	0,22%	1,36%	1,85%	1,73%	1,92%	0,00%
	March	10,56%	5,36%	5,50%	2,61%	2,26%	1,05%	0,59%	2,26%
	April	3,14%	6,80%	5,80%	2,19%	2,31%	1,75%	0,55%	1,10%
	May	3,31%	3,96%	4,15%	2,58%	2,18%	2,32%	4,42%	0,00%
	June	7,73%	2,53%	2,39%	1,97%	2,17%	1,64%	4,09%	0,00%
	July	0,00%	1,55%	1,45%	3,60%	1,53%	1,35%	1,82%	0,00%
	August	0,00%	2,05%	2,18%	3,47%	1,68%	2,10%	2,15%	3,83%
	September	0,00%	1,90%	4,94%	2,34%	2,24%	0,00%	0,59%	1,67%
	October	0,00%	2,56%	1,74%	1,07%	2,74%	1,31%	3,78%	1,62%
	November	4,34%	2,47%	2,82%	2,15%	1,68%	1,16%	0,73%	1,79%
	December	2,88%	3,47%	6,16%	5,26%	3,85%	2,86%	3,80%	2,34%
2003	January	5,65%	1,31%	2,51%	2,01%	2,11%	2,12%	2,52%	3,06%
	February	11,60%	2,98%	2,56%	2,42%	1,93%	0,87%	3,32%	4,07%
	March	15,14%	4,94%	5,73%	3,15%	3,07%	2,58%	1,25%	0,00%
	April	9,67%	6,84%	5,17%	3,16%	2,34%	2,70%	0,00%	2,75%
	May	0,00%	5,13%	2,97%	1,49%	2,82%	1,48%	0,67%	0,72%
	June	8,44%	2,55%	3,21%	2,02%	3,16%	0,66%	2,90%	2,81%
	July	0,00%	1,18%	1,51%	2,98%	2,71%	1,29%	0,64%	1,92%
	August	0,00%	1,26%	2,03%	0,94%	2,28%	1,04%	1,92%	2,34%
	September	0,00%	3,22%	2,08%	2,53%	2,20%	1,12%	3,24%	0,67%
	October	4,41%	1,83%	2,28%	2,17%	2,12%	1,81%	0,76%	0,76%
	November	0,00%	3,71%	3,11%	2,08%	3,29%	1,14%	0,00%	2,81%
	December	9,10%	6,21%	5,91%	3,69%	4,95%	3,53%	3,89%	7,85%
2004	January	0,00%	2,18%	2,35%	1,70%	2,15%	1,58%	5,29%	0,00%
	February	0,00%	2,99%	2,28%	2,48%	2,35%	0,41%	5,93%	2,54%
	March	4,47%	8,11%	6,64%	2,60%	4,34%	1,61%	0,66%	0,00%
	April	6,52%	8,68%	3,75%	3,95%	2,70%	3,35%	0,00%	0,52%
	May	0,00%	7,19%	3,73%	3,71%	3,24%	3,05%	1,02%	1,49%
	June	0,00%	3,54%	3,59%	2,51%	4,02%	1,52%	0,00%	0,89%
	July	0,00%	2,53%	3,54%	2,23%	2,62%	1,71%	1,52%	2,93%
	August	10,81%	4,40%	4,41%	2,94%	2,04%	1,23%	2,98%	1,37%
	September	4,78%	4,39%	0,95%	4,32%	2,72%	1,48%	2,35%	0,86%
	October	4,03%	4,23%	5,88%	3,17%	1,73%	2,29%	0,00%	3,25%
	November	0,00%	2,82%	3,21%	4,49%	5,02%	1,55%	2,38%	7,34%
	December								
Total		3,71%	3,51%	3,26%	2,55%	2,51%	1,64%	2,02%	1,83%

Table E5
Percentage of workers leaving jobs
by type of job

Year	Month	permanent	temporary	self-employed	Total
2002	January	0,42%	1,53%	1,47%	0,76%
	February	0,64%	3,76%	1,03%	1,58%
	March	0,30%	9,35%	1,66%	3,20%
	April	0,53%	10,67%	2,76%	3,35%
	May	0,76%	8,83%	2,46%	2,85%
	June	1,55%	3,85%	1,39%	2,26%
	July	0,75%	5,29%	0,42%	1,83%
	August	1,40%	4,50%	1,39%	2,25%
	September	1,41%	4,05%	0,23%	2,17%
	October	0,93%	4,26%	0,39%	2,13%
	November	1,00%	3,61%	0,80%	1,97%
	December	2,04%	7,65%	2,80%	4,14%
2003	January	1,69%	2,82%	0,35%	2,11%
	February	1,88%	4,16%	0,31%	2,45%
	March	1,11%	8,24%	4,16%	3,55%
	April	1,14%	9,48%	1,92%	3,55%
	May	0,95%	7,93%	2,08%	2,58%
	June	1,80%	5,17%	0,68%	2,61%
	July	1,19%	3,99%	0,56%	2,06%
	August	0,72%	3,58%	0,55%	1,67%
	September	1,44%	3,70%	1,64%	2,29%
	October	1,35%	2,92%	0,38%	1,93%
	November	2,18%	4,06%	0,76%	2,69%
	December	3,36%	8,17%	1,95%	5,01%
2004	January	1,91%	2,90%	1,49%	2,11%
	February	1,54%	4,39%	0,93%	2,45%
	March	0,98%	9,41%	2,32%	4,22%
	April	0,94%	10,03%	2,17%	3,83%
	May	1,80%	9,11%	2,71%	3,69%
	June	2,32%	5,24%	0,00%	2,92%
	July	2,10%	3,74%	0,56%	2,50%
	August	1,78%	5,53%	0,66%	2,85%
	September	2,57%	3,45%	0,00%	2,78%
	October	1,91%	5,23%	0,00%	2,96%
	November	2,83%	4,93%	1,88%	3,92%
	December				

Table E6
Percentage of workers leaving jobs
by pension system participation

Year	Month	Non-contributor	contributor	Total
2002	January	1,06%	0,65%	0,76%
	February	1,85%	1,48%	1,58%
	March	3,48%	3,10%	3,20%
	April	4,10%	3,07%	3,35%
	May	3,85%	2,48%	2,85%
	June	1,86%	2,41%	2,26%
	July	1,79%	1,84%	1,83%
	August	1,07%	2,69%	2,25%
	September	1,59%	2,40%	2,17%
	October	1,80%	2,26%	2,13%
	November	1,49%	2,17%	1,97%
	December	5,18%	3,69%	4,14%
2003	January	1,51%	2,36%	2,11%
	February	2,29%	2,52%	2,45%
	March	4,45%	3,15%	3,55%
	April	3,88%	3,41%	3,55%
	May	2,75%	2,50%	2,58%
	June	1,38%	3,14%	2,61%
	July	1,26%	2,43%	2,06%
	August	1,29%	1,86%	1,67%
	September	1,89%	2,48%	2,29%
	October	1,88%	1,95%	1,93%
	November	1,65%	3,19%	2,69%
	December	4,34%	5,35%	5,01%
2004	January	2,35%	1,98%	2,11%
	February	1,77%	2,80%	2,45%
	March	4,58%	4,02%	4,22%
	April	3,82%	3,83%	3,83%
	May	3,35%	3,87%	3,69%
	June	1,02%	3,98%	2,92%
	July	2,45%	2,54%	2,50%
	August	2,10%	3,28%	2,85%
	September	2,81%	2,76%	2,78%
	October	1,68%	3,75%	2,96%
	November	3,56%	4,15%	3,92%
	December			

Table E7**Returning to work**

Year	Month	% workers
2002	January	1,01%
	February	3,44%
	March	7,48%
	April	5,33%
	May	4,05%
	June	4,95%
	July	5,21%
	August	5,20%
	September	7,97%
	October	7,71%
	November	6,99%
	December	11,55%
2003	January	6,06%
	February	6,28%
	March	8,30%
	April	3,70%
	May	4,50%
	June	5,12%
	July	3,32%
	August	3,83%
	September	6,80%
	October	9,89%
	November	8,66%
	December	13,65%
2004	January	7,42%
	February	6,31%
	March	7,98%
	April	4,79%
	May	5,21%
	June	4,98%
	July	4,82%
	August	7,63%
	September	8,79%
	October	10,51%
	November	11,42%
	December	

Table E8
Percentage of workers returning to work
by gender

Year	Month	Men	Women	Total
2002	January	1,15%	0,85%	1,01%
	February	3,76%	3,12%	3,44%
	March	6,81%	8,18%	7,48%
	April	5,61%	5,02%	5,33%
	May	4,65%	3,35%	4,05%
	June	6,77%	2,81%	4,95%
	July	6,17%	4,10%	5,21%
	August	7,32%	2,76%	5,20%
	September	9,48%	6,27%	7,97%
	October	7,75%	7,67%	7,71%
	November	7,84%	6,01%	6,99%
	December	13,88%	8,86%	11,55%
2003	January	7,29%	4,78%	6,06%
	February	6,35%	6,20%	6,28%
	March	7,96%	8,66%	8,30%
	April	4,93%	2,38%	3,70%
	May	4,59%	4,41%	4,50%
	June	5,86%	4,30%	5,12%
	July	3,84%	2,76%	3,32%
	August	5,17%	2,44%	3,83%
	September	7,99%	5,57%	6,80%
	October	9,86%	9,93%	9,89%
	November	10,48%	6,78%	8,66%
	December	14,65%	12,63%	13,65%
2004	January	8,39%	6,52%	7,42%
	February	4,38%	8,09%	6,31%
	March	7,53%	8,42%	7,98%
	April	5,38%	4,21%	4,79%
	May	6,83%	3,55%	5,21%
	June	6,34%	3,60%	4,98%
	July	6,12%	3,51%	4,82%
	August	7,98%	7,25%	7,63%
	September	10,40%	7,10%	8,79%
	October	13,48%	7,58%	10,51%
	November	11,82%	11,05%	11,42%
	December			

Table E9

**Percentage of workers returning to work
by educational level**

Year	Month	None	PrimaryInc	PrimaryCom	SecondInc	SecondCom	TechnHigher	UnivInc	UnivCom
2002	January	6,51%	0,00%	2,73%	1,44%	0,34%	0,00%	3,33%	0,00%
	February	0,00%	6,08%	1,22%	2,25%	4,15%	3,25%	2,73%	0,00%
	March	6,55%	5,69%	12,62%	9,84%	7,51%	0,00%	2,05%	13,60%
	April	0,00%	6,30%	4,71%	9,76%	3,97%	4,71%	2,25%	3,16%
	May	0,00%	3,29%	3,21%	8,65%	3,62%	1,24%	5,24%	4,50%
	June	5,14%	6,46%	6,86%	1,65%	4,85%	5,41%	1,61%	4,42%
	July	21,05%	4,84%	3,92%	2,40%	4,63%	4,30%	14,04%	9,80%
	August	0,00%	4,62%	7,33%	7,72%	4,73%	1,39%	0,00%	14,24%
	September	0,00%	6,03%	13,90%	10,85%	6,29%	1,22%	12,91%	10,72%
	October	0,00%	9,11%	7,70%	11,84%	5,03%	9,78%	5,19%	4,09%
	November	6,01%	9,24%	5,72%	6,78%	5,82%	10,37%	3,46%	0,00%
	December	11,22%	12,13%	16,05%	10,09%	9,85%	8,90%	11,70%	18,64%
2003	January	9,94%	4,56%	6,30%	6,03%	7,10%	10,91%	0,00%	0,00%
	February	0,00%	5,97%	5,56%	8,67%	6,47%	0,00%	11,59%	7,27%
	March	0,00%	4,50%	6,07%	12,13%	9,13%	11,73%	3,85%	19,78%
	April	9,18%	3,53%	4,80%	4,62%	3,25%	2,71%	0,00%	4,55%
	May	0,00%	5,14%	3,17%	7,54%	4,33%	1,27%	6,03%	0,00%
	June	0,00%	7,37%	3,94%	3,45%	4,98%	4,33%	10,41%	0,00%
	July	4,24%	2,69%	0,63%	6,91%	3,91%	2,46%	2,00%	3,26%
	August	7,42%	3,59%	4,23%	5,27%	4,06%	1,15%	0,00%	4,69%
	September	0,00%	6,27%	9,62%	9,07%	5,83%	4,42%	4,78%	9,41%
	October	5,07%	11,16%	6,46%	9,04%	13,47%	3,24%	2,47%	14,66%
	November	9,04%	10,87%	9,61%	6,78%	9,19%	7,52%	0,00%	10,48%
	December	4,36%	13,24%	15,97%	16,35%	13,83%	13,66%	8,53%	8,26%
2004	January	7,37%	2,69%	11,04%	12,52%	7,53%	8,66%	3,89%	4,90%
	February	5,31%	5,40%	1,92%	10,11%	6,93%	5,18%	13,20%	0,00%
	March	16,61%	3,30%	13,14%	12,18%	7,30%	12,64%	0,00%	5,94%
	April	0,00%	2,47%	6,60%	6,56%	4,23%	3,75%	15,19%	0,00%
	May	0,00%	8,18%	4,05%	1,61%	4,89%	7,46%	0,00%	8,78%
	June	0,00%	4,87%	5,64%	9,51%	4,00%	2,86%	6,92%	0,00%
	July	0,00%	3,79%	6,53%	8,22%	4,45%	7,91%	0,00%	0,00%
	August	14,32%	3,61%	5,36%	12,02%	8,75%	4,92%	2,38%	26,58%
	September	5,28%	7,15%	11,25%	10,82%	10,05%	4,94%	2,65%	10,32%
	October	28,44%	13,69%	10,12%	12,42%	9,14%	6,99%	0,00%	4,68%
	November	8,12%	13,40%	6,70%	14,58%	12,23%	9,44%	2,63%	16,99%
	December								

Table E10

**Average salary of those moving from
employment to unemployment**

Year	Month	salary
2002	January	157.683
	February	174.634
	March	131.313
	April	133.247
	May	148.278
	June	154.393
	July	165.146
	August	187.491
	September	182.130
	October	153.356
	November	164.742
	December	148.187
2003	January	162.013
	February	133.417
	March	130.251
	April	143.113
	May	158.282
	June	202.558
	July	158.798
	August	159.786
	September	171.328
	October	142.376
	November	232.393
	December	152.155
2004	January	182.935
	February	166.060
	March	130.495
	April	149.449
	May	169.374
	June	151.231
	July	173.875
	August	149.163
	September	153.776
	October	156.946
	November	184.844
	December	

Table E11**Average salary of those moving from employment to unemployment
by gender**

Year	Month	Men	Women	Total
2002	January	140.942	178.248	157.683
	February	215.030	111.756	174.634
	March	138.462	120.504	131.313
	April	139.135	122.666	133.247
	May	159.757	127.666	148.278
	June	188.528	97.919	154.393
	July	174.404	148.441	165.146
	August	212.225	140.355	187.491
	September	193.008	162.232	182.130
	October	163.902	131.773	153.356
	November	212.236	96.969	164.742
	December	178.069	120.722	148.187
2003	January	172.858	142.765	162.013
	February	130.614	136.660	133.417
	March	132.038	127.446	130.251
	April	132.024	154.932	143.113
	May	176.620	121.145	158.282
	June	185.651	219.473	202.558
	July	187.422	119.807	158.798
	August	181.458	121.422	159.786
	September	192.935	119.637	171.328
	October	167.212	109.761	142.376
	November	181.323	300.799	232.393
	December	176.458	136.362	152.155
2004	January	180.612	185.806	182.935
	February	178.044	151.051	166.060
	March	135.112	124.648	130.495
	April	165.547	123.870	149.449
	May	199.023	131.557	169.374
	June	182.159	112.004	151.231
	July	186.249	131.139	173.875
	August	172.063	119.255	149.163
	September	170.946	132.627	153.776
	October	201.166	101.152	156.946
	November	224.671	128.570	184.844
	December			

Table E12

**Average salary of those moving from employment to unemployment
by educational level**

Year	Month	None	PrimaryInc	PrimaryCom	SecondInc	SecondCom	TechnHigher	UnivInc	UnivCom
2002	January		173.016		113.815	124.388	247.387	118.402	
	February	86.313	92.501	145.000	147.666	247.342	208.826	180.000	
	March	102.499	120.759	105.830	162.857	146.694	123.541	130.000	216.755
	April	70.000	128.222	131.734	117.275	148.467	163.474	115.000	128.000
	May	120.000	122.329	122.004	110.734	160.735	319.890	153.593	
	June	35.541	119.791	138.298	110.751	114.850	284.030	386.265	
	July		157.139	143.866	155.561	176.076	224.998	167.479	
	August		115.098	90.521	161.464	146.389	319.954	297.483	467.700
	September		126.562	157.344	136.470	211.683		600.000	401.794
	October		116.077	176.631	119.830	167.017	130.939	154.649	260.483
	November	10.000	135.589	133.144	202.955	136.291	160.340	200.000	500.000
	December	80.000	111.223	138.465	152.941	123.972	136.635	336.537	346.241
2003	January	350.000	111.263	135.555	141.263	156.293	256.814	158.497	156.320
	February	141.751	83.726	103.174	158.569	137.616	232.444	100.000	230.000
	March	97.319	112.559	122.054	134.809	141.645	152.412	223.072	
	April	82.726	104.928	124.968	119.044	162.468	182.927		469.293
	May		95.896	122.841	120.073	157.407	138.458	200.000	2.200.000
	June	107.500	161.531	117.011	163.311	170.842	58.279	118.069	1.058.252
	July		118.751	96.964	105.826	172.741	119.321	111.000	599.107
	August		95.013	117.227	101.781	168.674	110.559	233.992	356.452
	September		112.241	128.611	184.727	143.138	203.647	303.665	200.000
	October	100.000	98.552	123.698	124.637	165.014	104.174	200.000	550.000
	November		128.241	141.642	138.071	352.352	191.292		334.550
	December	105.618	117.541	126.456	149.102	138.104	215.368	298.267	216.253
2004	January		126.735	122.394	170.461	171.068	468.125	188.820	
	February		130.363	167.265	170.827	159.903	220.000	232.885	120.000
	March	90.000	113.868	151.153	153.648	125.406	146.306	130.000	
	April	100.000	122.848	115.570	130.557	137.353	363.893		130.000
	May		113.089	125.217	137.372	180.763	215.517	508.000	900.000
	June		111.708	91.845	230.111	159.893	123.351		300.000
	July		161.939	160.976	193.344	142.665	163.490	501.587	200.000
	August	127.426	119.014	140.963	119.795	151.610	72.926	121.020	1.000.000
	September	120.000	125.692	55.883	137.200	122.316	382.404	330.784	355.000
	October	45.000	142.988	133.610	149.735	188.930	200.234		190.303
	November		126.779	145.953	165.726	126.424	187.161	650.000	425.841
	December								

Table E13
Average salary of those moving from employment to unemployment
by reason for leaving job

Year	Month	Involuntary Dismissal	Caused by worker
2002	January	221.288	83.543
	February	258.680	104.839
	March	178.986	175.581
	April	158.256	159.446
	May	248.474	
	June	179.190	12.000
	July	273.114	
	August	283.106	140.000
	September	230.647	
	October	244.680	270.000
	November	251.118	236.177
	December	145.602	54.270
2003	January	199.061	150.000
	February	185.458	126.503
	March	161.006	122.000
	April	358.583	600.000
	May	152.629	151.158
	June	438.067	159.803
	July	141.964	146.711
	August	213.560	120.000
	September	266.441	120.000
	October	182.734	56.468
	November	333.369	209.260
	December	183.306	96.965
2004	January	207.943	120.000
	February	204.756	183.408
	March	122.256	
	April	277.222	112.704
	May	359.109	250.000
	June	185.151	
	July	177.971	
	August	233.446	125.420
	September	151.553	140.586
	October	135.556	336.809
	November	271.935	70.000
	December		

Table E14
Average salary of those moving from employment to unemployment
by type of job

Year	Month	permanent	temporary	self-employed
2002	January	211.864	130.633	169.886
	February	328.419	127.792	169.554
	March	150.695	123.671	63.064
	April	151.282	127.594	64.497
	May	268.722	119.665	228.648
	June	190.434	113.424	98.390
	July	235.521	142.673	300.000
	August	264.957	131.954	140.373
	September	221.013	159.054	80.000
	October	190.774	141.917	90.000
	November	222.943	140.817	70.000
	December	137.426	146.869	137.854
2003	January	198.462	107.703	100.000
	February	144.725	119.793	350.000
	March	138.473	123.647	125.010
	April	255.195	111.034	76.648
	May	288.372	115.414	93.097
	June	250.769	151.897	150.000
	July	195.448	116.032	61.119
	August	206.576	141.654	63.443
	September	197.363	123.918	142.250
	October	170.689	98.583	70.000
	November	301.316	130.555	90.959
	December	172.734	132.018	102.959
2004	January	242.405	118.148	83.662
	February	203.312	139.363	225.216
	March	154.969	122.825	71.496
	April	243.267	129.510	132.268
	May	214.058	120.557	162.252
	June	142.481	147.924	
	July	170.558	168.267	250.000
	August	196.412	116.842	142.120
	September	186.250	104.510	
	October	162.977	125.899	
	November	216.469	120.248	92.900
	December			

Table E15
Duration of unemployment (months)
by gender

gender	p25	median	p75
Men	2	5	12
Women	3	7	14

Table E16
Duration of unemployment (months)
by educational level

type of education	p25	median	p75
None	2	7	16
PrimaryInc	3	7	13
PrimaryCom	3	6	12
SecondaryInc	2	5	12
SecondaryCom	3	5	12
TechnHigher	3	6	12
UnivInc	3	7	17
UnivCom	3	7	12

Table E17
Duration of unemployment (months)
by economic sector

Activity	p25	median	p75
Undefined sector	4	12	24
Agriculture	3	5	8
Mining	2	3	5
Industry	3	5	10
Electricity	3	3	13
Construction	2	4	7
Retail	2	5	11
Transport	2	6	12
Financial services	2	6	12
Trade services	2	5	12
Not well specified	3	4	6

Table E18
Duration of unemployment (months)
by age brackets

Age	p25	median	p75
16 to 21	2	4	9
22 to 31	3	5	12
32 to 41	3	5	12
42 to 51	3	6	13
52 to 64	3	7	17
over 56	6	12	21

Table E19
Duration of unemployment (months)
if last job was permanent

Permanent	p25	median	p75
No	3	6	13
Yes	2	5	12

Table E20
Duration of unemployment (months)
if last job had an employment contract

contract	p25	median	p75
No	3	8	16
Yes	2	5	9

Table E21
Duration of unemployment (months)
for those whose departure was caused by the worker

cause	p25	median	p75
No	3	6	12
Yes	3	7	14

Table E22
Duration of unemployment (months)
for those who had children in the 2002-2004 period

cause	p25	median	p75
No	3	6	12
Yes	4	11	21

Table E23
Salary versus Unemployment Insurance Amount

Brackets	Unemployment Insurance amount	Average salary	Substitution rate
less than or equal to \$100,000	35.142	70.000	50%
\$100,000 to \$150,000	40.787	120.000	30%
\$150,000 to \$350,000	57.628	200.000	30%
greater than or equal to \$350,000	56.855	600.000	9%