# Women's Employment after Childbirth \*

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#### Abstract

This paper explores the dynamics of female employment decisions around childbearing using longitudinal data from the 2002-2006 Chilean Social Protection Survey (Encuesta de Protección Social, EPS). The study evaluates how the birth of a child can affect the woman's decision to work. The results indicate that the hazard of leaving employment is high for women during the first year of their newborn child. The mother of a newborn child could be 3 times more likely to leave employment. Even after exhausting maternity leave (12 weeks), women still face a high risk of leaving employment. When the child is three month old women still face a 40-50% higher risk of leaving employment, but the risk tends to disappear after the child is more than one year old. These results could be interpreted as maternal leave laws are delaying the decision of some women of quitting their employment after giving birth. Moreover, these effects get magnified for women who are entitled to maternity benefits. For women without maternity benefits the risk of leaving employment is high right after the birth, but this effects disappears quickly. For women with maternity benefits we find de opposite. The risk of leaving employment remains pretty high (70-80%) during the first and second year of the child. The introduction of individual effects and employment history variables reveal the persistence of two contrasting labor force patterns among women. As the actual labor experience increases, the probability of entering an inactivity period decreases. Additionally, the greater the number of years a woman remained inactive in the past, the greater the probability of re-entering an inactivity period. In the voluntary transitions model, past inactivity periods have a smaller effect on the probability of leaving employment. We interpret this results as a possible indication of an important penalization by the labor market, in terms of employment opportunities after prolonged periods of inactivity.

**Keywords:** Fertility; Childcare; Motherhood; Mothers; Participation; Women. **Jel-codes:** J13, J62, J63

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# 1. Introduction

The relationship between female labor market participation and fertility has received massive attention in the economic literature. Most of fertility research focused on the study of differences on labor market participation of women with and without children or with total number of children. Some recent developments use instrumental variables for total number of children to identify the causal effect of family size on women labor market participation. Instead, in this paper we study the dynamic effect of a birth event on female labor market employment.

Using a monthly longitudinal dataset of more than 5,000 women we study the labor market participation of women before and after the birth of a child. The primary objective is to evaluate how the birth of a child can affect the woman's decision to work, controlling for women attachment to the labor market. To capture the effects of individual preferences playing a role on the woman's attachment to the labor market and the effect of other non-varying omitted variables, the model developed includes a time-invariant individual effect. Furthermore, pre-labor experience variables control for the effect of the individual's intrinsic (time varying) attachment to the labor market and ensure the consistent estimation of the effect of the family structure variables on the current employment status. We observe women that have been in the labor market for one month up to 26 years. In addition, we compare the dynamic effect of fertility on employment dynamics comparing women that are entitled to receive maternal benefits with those that are not entitled.

Chile exhibits a participation rate significantly lower than the regional average. Countries such as Argentina, Colombia, Uruguay and Bolivia have achieved a greater insertion of women in the labor market. Despite this fact, during the period of 1990–2006, the female labor force participation increased in Chile from 34.8% to 46.3%<sup>1</sup>. In particular, the labor force participation rate has gown from 23% to 37.4% among women with small children (less than one year-old, and 43.8% to 61.8% among women without children. These changes, however, have not been strong enough for the country's participation rate to be at par with those of the developed economies, and inclusively with those of many Latin American countries.

Individual preferences can certainly play a fundamental role when explaining the scarce labor force attachment of the woman in Chile. Contreras and Plaza (2004) find that *male chauvinistic behavior* has a negative and significant effect on the decision of participating in the labor market. Even more, the negative effect of such variables more than double the positive effect of the human capital variables. The empirical evidence, found in this paper, is consistent with the theoretical papers of Vendrik (2003) and Neubourg and Vendrik (1994) and with the empirical results found by Fernández et al. (2004), Antecol (2003), Antecol and Bedard (2002) and Chuang and Lee (2003). The cultural perception of the woman's role in the family is clearly related to her fertility rate, which in turn affects her decision to participate in the labor market. Additionally, the labor supply of low-income females might be particularly affected by maternity benefits and the limited supply of (formal) childcare along with an excessive compression in the wage structure.

<sup>&</sup>lt;sup>1</sup> National Employment Survey, INE.

For example, some papers find a positive relationship between labor force participation and maternity leave duration (M. Baker y K. Milligan, 2005, S. Burgess *et al.*, 2008, C. R. Winegarden y P. M. Bracy, 1995). Baker and Millingan (2005) exploiting an the expansion of job-protected maternity leave in Canada, find that maternity leave reduces the proportion of women quitting their jobs and increase the probability of returning to their pre-births employers. Burgess et al. (2008) using UK data find that women who are entitle to maternity rights are more likely to return to their pre-birth job before seven months. Low skill workers tend to exhaust their paid maternity leave, while managerial and professional women tend extend their leave until the expiration of their unpaid leave. Abe et. al (1998) and Ronsen and Sundstrom (1996) find qualitatively similar results for United States, Japan and UK.

In Chile, various studies find that there is a decreasing relationship between labor force participation and the number of children in the family, both the total number of children as well as those under the age of 5 years (D. Contreras *et al.*, 1999, A. Mizala *et al.*, 1999)<sup>2</sup>. However, the results found do not necessarily indicate that the number of children negatively affects the female labor supply in Chile. The number of children in the family can also be associated with the family model adopted. Additionally, the models may contain omitted variables, which affect the decisions of fertility, as well as those of labor supply. Due to the correlation between the family structure variables and the error term in the participation equation, not only are the estimated coefficients of these variables biased, but also the estimates of the labor supply parameters. By studying the same women before and after the birth we can face the problems in the ongoing literature.

The following section presents the empirical model to be estimated. Section 3 describes the data and examines the mobility patterns between the different employment statuses for both men and women. In particular, the labor force participation and the employment patterns for women are compared using data from the 2006 EPS and the 2006 CASEN Survey. Section 4 analyzes the main results of the estimation and finally section 5 concludes.

#### 2. Data and models to be estimated

The purpose of this paper is to examine the determinants of the woman's decision to enter an inactivity period. In particular, we study the determinant of the transition from employment to out of the employment, from employment to inactivity and from employment to voluntary inactivity. The woman's decision to quit working is modeled as a function of human capital variables (schooling), employment history variables, such as actual labor experience, years of employment at job, and history of unemployment and inactivity periods, and family structure variables, such as the number and age of the children and marital status.

To undertake the analysis, we use the 2002-2006 Social Protection Survey. This survey contains information on complete and incomplete periods of employment, inactivity and unemployment for each individual interviewed. In 2002, individuals were questioned on all periods of unemployment, inactivity and employment held from 1980 onwards. In 2004, individuals were questioned on all periods of unemployment, inactivity and employment, inactivity and employment held from 2002 to 2004 and the survey included new individuals who were asked their

 $<sup>^{2}</sup>$  According to the data from the 2006 CASEN Survey the labor participation rate of a woman, with no children is 61.8%, while that of a woman, with a child younger than 12 months, is 37.4%.

individual labor market history from 1980 onwards. In 2006, all individuals were asked about their labor market history from 2004 to 2006. Since we do not observe labor history of women before 1980 we restrict our sample to women who were under 50 years old in 2006 who were aged over 24 in 1980. The final sample contains information on 22,256 employment events for 5,513 women.

The information on complete and incomplete periods of labor activity and on the type of labor market transition experienced by the individual allow us to study the entry to inactivity periods in a continuous event-history framework. The hazard function  $h_i(t; Z_i(t))$  for worker *i* at time *t* will be assumed to take the proportional hazard form:

(1) 
$$h_i(t;Z_i(t)) = \alpha_i \lambda_0(t) \exp(Z_i(t)\beta)$$

where  $h_i$  takes the value 1 if the individual stops working and enters an inactivity period, and assumes the value 0 if the individual continues employed,  $\lambda_0(t)$  is the baseline hazard function,  $Z_i(t)$  is a vector of variables that can or cannot vary in time for worker *i* at time *t*, and  $\beta$  is a vector of parameters to be estimated. Additionally, we consider a second model in which  $h_i$  takes the value 1 if she enters voluntarily an inactivity period, 0 if she continues employed. In the latter model, the decision of leaving the job is not influenced by a layoff or by reasons unknown to the worker. Antel (1986, 1988), Moore et al. (1998) and McLaughlin (1990, 1991), among others, find that it pays off to distinguish between voluntary and involuntary labor market movements, even when this information is self-reported. The model assumes that the probability of entering an inactivity period is a function of the continuous employment time t (that measures the attachment to the labor market and/or the acquisition of current labor experience), but it is also a function of the individual's characteristics, and the employment and family histories included in Z.

The likelihood function to be maximized depends on the assumptions made on the baseline function  $\lambda_0(t)$ . The baseline function can be assigned a parametric form or it can be left unspecified (non-parametric estimation). In our case we choose to model the baseline function following a Weibull distribution,

(2) 
$$\lambda_0(t) = pt^{p-1}$$

If the parameter p is less than one, the hazard of entering an inactivity period is decreasing in the continuous employment time; while if it is greater than one, the hazard of entering an inactivity period is increasing in employment time.

When individuals have more than one event, the likelihood function of the complete employment history would consist of the sum of the likelihood functions of each event. Additionally, the model assumes an individual effect  $\alpha_i$ , which captures the particular tastes of an individual with respect to employment. An individual, with less attachment to the labor market than the average worker, would have  $\alpha_i$  greater than one, while an individual, with greater attachment to the labor market, would have  $\alpha_i$  less than one. In order to check for robustness, this random effect is parameterized as both following a Gamma and an inverse Gaussian distribution.

The variables of interest in this model are those related to family structure. The set of family structure variables essentially consists of the history of childbirths. We also include monthly dummies to highlight the characteristics of maternal benefits in Chile. Maternal benefits in Chile entitled paid leave for 18 weeks (6 weeks before birth and 12 weeks after it) and paid leave if the child is sick until he is one year old. Additionally, women have the right to two half-hours a day for breastfeeding. Companies with 19 or more female workers have to provide free daycare to women until their child turns two years old. In particular, we are interested in analyzing whether these maternity benefits might **delay** women's exit of employment.

For this reason, we construct the following dummy variables. The variable "month of births" equals one for the month a women experience a birth, zero otherwise. The variable "month 2-3" equals one while the child is two to three months old (until the worker exhaust his maternity leave), zero otherwise. We also have dummy variables for months 4-12 (paid leave for a sick child) and for months 13 to 24 (some women are entitled to free day care). Finally we add a continuous variable that counts months after maternity benefits are exhausted. We interact these variables with a dummy variable that equals to one whenever a women is entitled to receive maternity benefits<sup>3</sup>.

<sup>&</sup>lt;sup>3</sup> In Chile women are entitled to maternity benefits if: (a) they are salaried workers and they have been affiliated to the pension system for at least six months; (b) they are independent workers and they have been affiliated to the pension system for 12 months. The company provided free-day care is only for women working in firms with more than 19 female workers. We do no have controls for this eligibility.

Other control variables to be included in the model are: years of schooling, age and employment history variables, such as years of actual pre-labor experience, years of inactivity and of unemployment since 1980, dummies for the presence of other small children in the household and dummies for different economic sectors.

Two conditions adopted in the model will adequately identify the childbirth effect. One is the inclusion of a individual effect, which potentially captures the effects of the cultural factors playing a role on the woman's attachment to the labor market and the effect of other non-varying omitted variables. The other is the inclusion of employment history variables (pre-labor experience). As reported by Duleep and Sanders (1994), Dex et al. (1998) and Nakamura and Nakamura (1996, 1994), the use of pre-labor experience variables makes it possible to control for the individual's intrinsic (time varying) attachment to the labor market and to consistently estimate the effect of the family structure variables on the current employment status. Furthermore, it is not necessary to have a long employment history. Having information on relatively recent labor experience is sufficient to consistently estimate the parameters of the dynamic labor supply model (Nakamura, 1994; 1996).

The employment history of the individual is reflected in the model by means of the time variable in equation (1), as well as through the variables that record the individual's employment history prior to the beginning of each employment period. The employment history is characterized by years of experience and years of inactivity. All models are estimated with and without year effects, in order to control for labor market conditions.

One drawback of this dataset is that variables related to the spouses' presence are not well defined in this dataset. In the first two waves of EPS individuals were asked to report information on the year of marriage (or the year the couple began living together) and whether the individual ended the relationship (EPS 2002) or became widowed or divorced (EPS 2004), but these surveys didn't include information about the date of separation or the date of death of the partner. It wasn't until EPS 2006 when they began asking in which year the relationship ended. Therefore we only will observe complete marital histories for three specific groups: (i) women who have been continuously single; (ii) women who only have had one couple and they are still together in 2006; (iii) more recent couples, whose information is reported in 2006.

In order to deal with this problem, we could explore different options. We could estimate the model with an *imputed* marital status variable, assuming that a relationship does not end until the next relationship starts or until the individual reports its end. In this base model (Model I) we include a *fuzzy* dummy variable that flags the existence of a partner or and spouse present. In Model II, we only include women with complete marital status histories, that is, women identified in the different groups specified in the previous paragraph.

Self-reported employment histories go back only to the beginning of 1980. For this reason, all the estimates are presented for men and women who were under 50 in 2006. This decision is justified by the consideration that respondents over 50 (in 2006) were aged over 24 in 1980, the assumption accordingly being that their work histories are underreported.

## 3. Data. Patterns of Female Labor Market Mobility

The 2006 Social Protection Survey reports information on about  $16_{a}000$  individuals, of which half of them are women. As we explained in the previous section, we only consider women under 50 in 2006, so we end up with a sample of  $5_{a}513$  individuals. Preliminary studies conducted by the Superintendencia de Administradoras de Fondos de Pensiones<sup>4</sup> reveal that the density of the contributions reported by the EPS are similar to those obtained from their administrative records<sup>5</sup>. Hence, this database seems to be reliable for studying continuous employment periods.

Table 1 reports basic descriptive statistics of the final sample used in this study.

# **INSERT TABLE 1**

Graph 1 shows the proportion of women that are inactive in year t, conditional that they were employed in year t-1, compared to men in the same condition.

#### **INSERT GRAPH 1**

Table 2 reports statistics on the duration of employment, unemployment and inactivity periods for both men and women considered in the sample. In general, it is observed that women have shorter median duration of employment periods (with the same employer) than men.

<sup>&</sup>lt;sup>4</sup> This agency regulates the Administrators of Pension Funds.

<sup>&</sup>lt;sup>5</sup> The SAPF has a data set with the provisional history of a sample of individuals affiliated to the system.

	U15		
	Male	Female	Total
Duration of Employment Periods			
Same Employer			
Percentile 25	11	6	8
Median	35	27	33
Percentile 75	113	89	104
Duration of Continuous Employment Periods			
Percentile 25	20	7	11
Median	140	46	79
Percentile 75	275 *	202	275
Duration of Inactivity Periods			
Percentile25	11	13	11
Median	35	47	38
Percentile 75	71	126	99
Duration of Unemployment Periods			
Percentile 25	2	3	2
Median	5	7	6
Percentile 75	12	21	14
	1	1	1

More importantly, it is noted that women also have shorter median duration of continuous employment periods. Women clearly hold shorter periods of continuous employment than their male counterparts. Further, it is seen that, for women, the continuous periods of inactivity and unemployment are substantially longer than for men. In fact, the statistics on the duration of inactivity periods reflected in this table are downward biased, since the sample does not contain continuously inactive individuals.

Table 3 presents basic mobility statistics between the employment statuses for men and women. The second column illustrates the proportion of continuous periods of employment, unemployment and inactivity, until the end of the sample period. The third to fifth columns show the proportion of continuous periods of employment, inactivity, and unemployment that terminate in periods of unemployment, employment, and inactivity, respectively. For

women, it is observed that 55% of the continuous employment events end in inactivity periods, while 92% of the inactivity periods end in employment periods. The table further indicates that women are more inclined to retire from the labor market than their male colleagues. There is a greater probability for the employment periods held by men to terminate in unemployment periods.

Persistence in the Employment Status by Sex												
Type of Event	% Events	% Events Terminate in Periods of										
	Continuing in 2006	Unemployment	Employment	Inactivity								
Men												
Unemployment	15.0		98.1	1.8								
Employment	53.6	77.6		22.4								
Inactivity	17.7	12.2	87.8									
Women												
Unemployment	18.9		96.1	3.8								
Employment	37.9	44.7		55.3								
Inactivity	27.1	7.3	92.7									
		1	1									

Table 3:Persistence in the Employment Status by Sex

Source: Prepared using the 2002-2006 EPS.

# 4. Results

Tables A-1 to A-6 present the estimation of the different models presented in section 2. As it was explained, we present models with and without random effects and different sets of dummy variables in order to control for births and other time variables related to maternal benefits. In all the models, the variables included are those of employment history, years of schooling, and family structure. In all the tables, a negative (positive) coefficient will indicate that this variable reduces (increases) the risk of leaving employment and falling into

inactivity. Positive coefficients lead to a hazard ratio greater than one, while negative coefficients lead to a hazard ratio less than one.

From these tables it can be seen that women who experience a birth have a high risk of leaving employment. This risk is very high during the first month of the child, and then decreases but remains positive until the child reaches 12 months. The results are qualitatively robust across different specifications, although the estimated effects are bigger in the model of voluntarily transitions.

Table 4 presents a summary of the hazard ratios of entering an inactivity period for the model that does not control for entitlement to maternity benefits. We only present them for for the random effect model with inverse gaussian frailty, but the results are very similar across the different model. In Graph 2 we only present the hazard rates for Model (d) to illustrate the gradient of the birth effect.

During the first year of the baby the risk of falling into inactivity remains high, but decreases as the baby ages. Women face a high risk of leaving employment after they exhaust their maternal leave, but the risk seems to disappear after the child is more than one year old.

Table 4: The Effect of the Birth of a Child on the Probability of Entering an Inactivity Period - All women - random effect inverse gaussian-

	Mo	odelo I	Modelo II					
	(a)	(b)	(c)	(d)				
		All transitions						
Pre-birth 3-month period	2.62 ***	2.63 ***	2.84 ***	2.83 ***				
Month Birth	3.19 ***	3.11 ***	2.78 ***	2.72 ***				
Month 2-3	1.14	1.13	1.01	1.01				
Month 4-12	1.45 ***	1.43 ***	1.33 **	1.33 **				
Month 13-24	1.12	1.11	1.02	1.01				
		Voluntary t	ransitions					
Pre-birth 3-month period	2.48 ***	2.49 ***	2.68 ***	2.68 ***				
Month Birth	3.60 ***	3.44 ***	3.68 ***	3.52 ***				
Month 2-3	1.52 *	1.50 *	1.32	1.31				
Month 4-12	1.87 ***	1.82 ***	1.86 ***	1.82 ***				
Month 13-24	1.17	1.13	1.12	1.10				

Notes: \* p<0.05; \*\* p<0.01;\*\*\* p<0.001.



Graph 2:

Source: Prepared using the 2002-2006 EPS.

These results could be consistent with maternal leave laws delaying the decision of some women of quitting their employment. However this evidence is weak than we expected, provided that the gradient tends to disappear before women exhaust their benefits. In this model, however we haven't controlled for the fact that some women might not quality to maternity benefits. Table 5 reports these same estimates in the model in which we control for maternity benefits eligibility, while Graph 3 presents only the results for Model (d). Once we account for the fact that some women might not qualify for maternity benefits, we still do find that the risk of leaving employment increases when the child is born or even in the previous months. But all the other effects disappear for the group of women that might not be entitled to maternity benefits. Women who are entitled to maternity benefits experience a higher risk of leaving employment (falling into inactivity) during the first year and second year of the child. All the hazard ratios in Table 5 are presented relative to the base category (women that do not experience a birth), but the differences between women with and without benefits are always statistically significant.

These results could be suggesting that maternity laws are *delaying the decision of some women of quitting their employment* after giving birth. But after women exhaust both their maternal paid leave and sick-child leave, the risk of leaving employment remains high, meaning that women will exit employment in any case.

Table 5:
The Effect of the Birth of a Child on the Probability of Entering an Inactivity Period
- Women with and without benefits – random effect inverse gaussian-

	Mo	delo I	Mod	elo II
	(a)	(b)	(c)	(d)
		All tran	sitions	
Pre-birth 3-month period	2.41 ***	2.45 ***	2.79 ***	2.81 ***
Pre-birth 3-month period for women with MB	2.76	2.74	2.84	2.81
Month Birth	2.45 ***	2.45 ***	2.06 **	2.05 **
Month birth for women with MB	3.92	3.76	3.57	3.45
Month 2-3	0.69	0.70	0.59 **	0.60 *
Month 2-3 for women with MB	1.54 ***	1.51 **	1.43 ***	1.41 **
Month 4-12	1.08	1.09	0.96	0.97
Month 4-12 for women with MB	1.86 ***	1.81 ***	1.79 ***	1.76 ***
Month 13-24	0.81	0.81 *	0.75 *	0.75 *
Month 13-24 for women with MB	1.47 ***	1.44 ***	1.33 ***	1.31 ***
		Voluntary t	ransitions	
Pre-birth 3-month period	2.35 **	2.38 **	2.81 ***	2.84 ***
Pre-birth 3-month period for women with MB	2.55	2.55	2.58	2.57
Month Birth	2.33 *	2.29 *	2.34 *	2.28 *
Month birth for women with MB	4.56	4.31	4.78	4.53
Month 2-3	0.83	0.83	0.69	0.70
Month 2-3 for women with MB	2.08 *	2.02 *	1.90 *	1.86 *
Month 4-12	1.16	1.15	1.10	1.09
Month 4-12 for women with MB	2.52 ***	2.42 ***	2.60 ***	2.54 **
Month 13-24	0.84	0.82	0.79	0.78
Month 13-24 for women with MB	1.48 **	1.42 *	1.46 *	1.41 *

Source: Prepared using the 2002-2006 EPS. MB: Maternity benefits.

Notes: \* p<0.05; \*\* p<0.01;\*\*\* p<0.001.

Graph 3: Relative Hazard after childbirth for women with and without maternal benefits





# **B-** Voluntary transitions



Source: Prepared using the 2002-2006 EPS.

The inclusion of the individual effect and the employment history variables in the model show the persistence of the contrasting patterns of female labor force participation. The greater the number of years the woman has remained inactive in the past, the greater the probability is of re-entering an inactivity period (Graph 4). A woman who initiates employment after being inactive for 5 years, has a hazard of becoming inactive twice as much as that of a woman who has been continuously employed.

The relative hazards predicted by each model differs, but qualitatively the effect is similar. In the particular case of the effect of years of past inactivity, the voluntary transitions model predicts a substantially bigger effect than the model that includes all transitions..





Source: Prepared using the 2002-2006 EPS.

There are two other variables that influence the probability of entering an inactivity period, even after controlling for having children and employment history. Both age and level of education, significantly influence the probability of retiring from the labor market<sup>6</sup>. The base category is defined as the 15-year old individuals. There are no fertile cycle effects, since there are controls for the presence of children in the household and for employment history variables. The hazard of entering an inactivity period decreases monotonically with age.





Source: Prepared using the 2002-2006 EPS.

<sup>&</sup>lt;sup>6</sup> At some point we included quadratic terms for preexperience and education. The results were robust to these changes. We only left the quadratic term for age.

The human capital variables also reveal a strong trend to remain in the labor market, as is predicted by the dynamic theories of labor supply. A woman holding a university education will enter an inactivity period with a substantially lower probability than a woman holding an incomplete primary education (Figure 4).

# Figure 4:



**Relative Hazard by Years of Schooling** 

Source: Prepared using the 2002 EPS.

# 5. Conclusions

There are studies that estimate the effect of the family structure on the female labor supply in Chile. The estimation of standard labor supply models utilizing cross-sectional databases have suggested that the presence of children in the household has negative effects on female labor force participation, while it only marginally affects male labor force participation. In particular, these studies report that greater effects are produced at the level of participation rather than at.... A crucial problem encountered when evaluating these results is that family structure variables depend on the family model adopted or individual preferences, which in turn also conditions female labor force participation. Considering these issues, the family structure variables are potentially endogenous.

This paper explores the dynamics of female labor force participation in Chile using longitudinal data to evaluate how the birth of a child can affect the woman's decision to work. It is expected that an individual effect, which does not vary in time, will capture the effects of individual preferences on the woman's attachment to the labor market and the effect of other non-varying omitted variables. Furthermore, pre-labor experience variables control for the effect of the individual's intrinsic (time varying) attachment to the labor market and ensure the consistent estimation of the effect of the family structure variables on the current employment status.

We find that women face a high risk of leaving employment during the first month following the birth of their child. For all women we notice that women face a high risk of leaving employment after they exhaust their maternal leave (12 weeks), but the risk seems to disappear after the child is more than one year old. *These results could be seen as maternal leave laws delaying the decision of some women of quitting their employment*. Moreover, when we make an effort to identify eligibility for maternal women, we find that these effects only matter for women that are entitled to maternal benefits. For women without maternity benefits the risk of leaving employment is high right after the birth, but this effects disappears quickly. For women with maternity benefits we find de opposite. The risk of leaving employment remains high (70-80%) during the first and second year of the child.

The persistence of the contrasting labor force patterns among women are confirmed when the individual effect and the employment history variables are considered in the model. As the actual labor experience increases, the probability of entering an inactivity period decreases. Additionally, the greater the number of years a woman remained inactive in the past, the greater the probability is of re-entering an inactivity period. In the voluntary transitions model, the presence of inactivity periods in the past is less frequent than in the model that includes all transitions. This can be seen as a possible indication of an important penalization by the labor market, in terms of employment opportunities.

# References

Abe, M., et al. "Maternity Leave Policies and Womens Employment after Childbirth: Evidence from the United States, Britain and Japan." *Centre for Analysis of Social Exclusion, LSE, CASE Papers*, 1998.

**Antecol, H.** "Why is there Cross-Country Variation in Female Labor Force Participation Rates?. The Role of Male Attitudes Toward Family and Sex Roles," Claremont Colleges Working Papers, 2003.

Antecol, H. y Bedard, K. "The Decision to Work by Married Immigrant Women: The Role of Extended Family Households," Claremont College, Working Papers, 2002.

Antel, J. J. "Human Capital Investment Specialization and the Wage Effects of Voluntary Labor Mobility." *Review of Economics and Statistics*, 1986, 68(3), pp. 477-83.

\_\_\_\_\_. "Interrelated Quits: An Empirical Analysis of the Utility Maximizing Mobility Hypothesis." *Review of Economics and Statistics*, 1988, 70(1), pp. 17-22.

**Baker, M. y Milligan, K.** "How does job-protected maternity leave affect mother's employment and infant health?," Cambridge: National Bureau of Economic Research Working Paper, 2005, 59.

Burgess, S., et al. "Maternity Rights and Mothers' Return to Work." Labour Economics, 2008, 15(2), pp. 168-201.

**Chuang, H. L. y Lee, H. y.** "The Return on Women's Human Capital and the Role of Male Attitudes toward Working Wives: Gender Roles, Work Interruption, and Women's Earnings in Taiwan." *American Journal of Economics and Sociology*, 2003, *62*(2), pp. 435-59.

**Contreras, D., et al.** "Tasa de Participación Femenina: 1957-1997. Un Análisis de Cohortes Sintéticos," Universidad de Chile, Working Papers, 1999.

**Contreras, D. y Plaza, G.** "Participación Femenina en el Mercado Laboral Chileno. ¿Cuánto importan los Factores Culturales?," *Encuentro 2004 de la Sociedad de Economía de Chile.* Villa Alemana, Chile, 2004.

**de Neubourg, C. y Vendrik, M.** "An Extended Rationality Model of Social Norms in Labour Supply." *Journal of Economic Psychology*, 1994, *15*(1), pp. 93-126.

**Dex, S. y et al.** "Women's Employment Transitions around Child Bearing." *Oxford Bulletin of Economics and Statistics*, 1998, 60(1), pp. 79-98.

**Duleep, H. O. y Sanders, S.** "Empirical Regularities across Cultures: The Effect of Children on Woman's Work." *Journal of Human Resources*, 1994, *29*(2), pp. 328-47.

**Fernandez, R.,** *et al.* "Preference Formation and the Rise of Women's Labor Force Participation: Evidence from WWII," National Bureau of Economic Research Working Papers, 2004.

McLaughlin, K. J. "General Productivity Growth in a Theory of Quits and Layoffs." *Journal of Labor Economics*, 1990, 8(1), pp. 75-98.

\_\_\_\_\_. "A Theory of Quits and Layoffs with Efficient Turnover." *Journal of Political Economy*, 1991, *99*(1), pp. 1-29.

Mizala, A., et al. "Female Labor Supply in Chile," Documentos de trabajo CEA, 1999.

Moore, M. J., et al. "The Anatomy of Jumps and Falls in Wages," S. W. Polachek, *Research in Labor Economics*. London: JAI Press Inc., 1998, 201-32.

Nakamura, A. y Nakamura, M. "An Event Analysis of Female Labor Supply," S. W. Polachek, *Research in Labor Economics*. Binghamton: Elsevier, 1996, 353-78.

\_\_\_\_\_. "Predicting Female Labor Supply: Effects of Children and Recent Work Experience." *Journal of Human Resources*, 1994, *29*(2), pp. 302-27.

Vendrik, M. C. M. "Dynamics of a Household Norm in Female Labour Supply." *Journal of Economic Dynamics and Control*, 2003, 27(5), pp. 823-41.

Winegarden, C. R. y Bracy, P. M. "Demographic Consequences of Maternal-Leave Programs in Industrial Countries: Evidence from Fixed-Effects Models." *Southern Economic Journal*, 1995, *61*(4), pp. 1020-35.

			All transitions into inactivity						Only voluntary transitions into inactivity							
	Mode	Model I I		1 I	Model	Π	Model	Π	Model	Ι	Model	Ι	Model	Π	Model	II
No Pre-experience	-0.7034	***	-0.6255	***	-0.7411	***	-0.6728	***	-0.3432	***	-0.2421	***	-0.4053	***	-0.3115	***
Years of pre-experience	-0.0014		-0.0043		-0.0065		-0.0079		0.0046		0.0006		-0.0019		-0.0037	
Schooling	-0.0647	***	-0.0691	***	-0.0630	***	-0.0673	***	-0.0103		-0.0149	*	-0.0107		-0.0159	
Pre-birth 3-month period	0.9623	***	0.9595	***	1.0512	***	1.0438	***	0.9225	***	0.9190	***	1.0092	***	1.0025	***
Month Birth	0.9874	***	0.9815	***	0.8881	***	0.8797	***	1.0905	***	1.0659	***	1.1432	***	1.1172	***
Month 2-3	-0.0376		-0.0331		-0.1488		-0.1426		0.2350		0.2302		0.1013		0.1017	
Month 4-12	0.1859	**	0.1843	**	0.1486		0.1503		0.3747	***	0.3609	***	0.3919	***	0.3873	***
Month 13-24	0.0052		-0.0068		-0.0614		-0.0708		0.0022		-0.0256		-0.0278		-0.0533	
Total months since birth	-0.0017	***	-0.0018	***	-0.0023	***	-0.0023	***	-0.0024	**	-0.0026	***	-0.0026	**	-0.0027	**
Has partner	0.5358	***	0.5207	***	0.6157	***	0.6065	***	0.6569	***	0.6502	***	0.7315	***	0.7145	***
Age	-0.2526	***	-0.2849	***	-0.2551	***	-0.2899	***	-0.2888	***	-0.3241	***	-0.2913	***	-0.3303	***
Age sq.	0.0030	***	0.0035	***	0.0030	***	0.0036	***	0.0036	***	0.0041	***	0.0036	***	0.0042	***
Years of inactivity	0.0741	***	0.0648	***	0.0698	***	0.0619	***	0.0712	***	0.0575	***	0.0680	***	0.0557	***
Entitled to maternity leave $= 1$	-0.3410	***	-0.3265	***	-0.3631	***	-0.3487	***	-0.5040	***	-0.4799	***	-0.5531	***	-0.5320	***
Total kids	-0.0230		-0.0084		0.0192		0.0297		-0.0653	**	-0.0366		-0.0442		-0.0173	
Year effects			Yes				Yes				Yes				Yes	
Constant	3.2267	***	2.6980	***	3.3099	***	2.9416	***	1.8382	***	1.4437	***	1.9816	***	1.7756	***
ln p	-0.2017	***	-0.2164	***	-0.2075	***	-0.2180	***	-0.0214		-0.0388		-0.0238		-0.0349	
Р	0.8173		0.8054		0.8126		0.8042		0.9788		0.9619		0.9765		0.9657	

 Table A-1

 Estimated Results. Model without random effect and without entitlement to maternity leave variable

Notes: \* p<0.05; \*\* p<0.01; \*\*\* p<0.001; Model I, with fuzzy control for presence of partner; Model II, only women with known marital history. Other controls introduced in some of the models but not reported here: year effects; economic sector dummies (agricultural, industrial, etc.); presence of other small children, by age.

Table A-2
Estimated Results. Model with random effect (gamma distribution) and without entitlement to maternity leave
variable

		All transitions	into inactivity	Only voluntary transitions into inactivity					
	Model I	Model I	Model II	Model II	Model I	Model I	Model II	Model II	
No Pre-experience	-1.1002 ***	-1.0231 ***	-1.1345 ***	-1.0850 ***	-0.4232 ***	-0.2900 ***	-0.4875 ***	-0.3824 ***	
Years of pre-experience	-0.0442 ***	-0.0529 ***	-0.0477 ***	-0.0546 ***	-0.0126	-0.0251	-0.0186	-0.0265	
Schooling	-0.0859 ***	-0.1012 ***	-0.0793 ***	-0.0923 ***	-0.0036	-0.0075	-0.0041	-0.0093	
Pre-birth 3-month period	0.9334 ***	0.9313 ***	1.0190 ***	1.0112 ***	0.9123 ***	0.9052 ***	0.9946 ***	0.9806 ***	
Month Birth	1.0668 ***	1.0600 ***	0.9462 ***	0.9325 ***	1.1262 ***	1.1136 ***	1.1608 ***	1.1394 ***	
Month 2-3	0.0760	0.0945	-0.0490	-0.0327	0.2823	0.3048	0.1389	0.1597	
Month 4-12	0.2915 ***	0.3063 ***	0.2166 *	0.2279 **	0.4367 ***	0.4576 ***	0.4377 ***	0.4530 ***	
Month 13-24	0.0761	0.0713	-0.0192	-0.0241	0.0451	0.0381	0.0042	-0.0040	
Total months since birth	-0.0022 ***	-0.0024 ***	-0.0028 ***	-0.0029 ***	-0.0027 **	-0.0031 ***	-0.0028 **	-0.0030 **	
Has partner	0.7344 ***	0.7471 ***	0.8203 ***	0.8367 ***	0.7724 ***	0.8215 ***	0.8507 ***	0.8755 ***	
Age	-0.3042 ***	-0.3777 ***	-0.3091 ***	-0.3784 ***	-0.3016 ***	-0.3570 ***	-0.3034 ***	-0.3562 ***	
Age sq.	0.0039 ***	0.0048 ***	0.0039 ***	0.0048 ***	0.0039 ***	0.0045 ***	0.0038 ***	0.0045 ***	
Years of inactivity	0.0737 ***	0.0624 ***	0.0722 ***	0.0630 ***	0.0649 ***	0.0454 ***	0.0635 ***	0.0483 ***	
Entitled to maternity leave $= 1$	-0.5575 ***	-0.5538 ***	-0.5527 ***	-0.5469 ***	-0.6583 ***	-0.6891 ***	-0.6930 ***	-0.7120 ***	
Total kids	-0.0034	0.0426	0.0477 *	0.0821 ***	-0.0524 *	0.0058	-0.0304	0.0157	
Year effects		Yes		Yes		Yes		Yes	
Constant	4.6727 ***	4.8998 ***	4.7264 ***	4.9831 ***	2.0834 ***	1.9660 ***	2.2214 ***	2.2266 ***	
ln p	0.0860 ***	0.1438 **	0.0571 *	0.1029 **	0.0893 **	0.1377 ***	0.0725 *	0.1073 **	
p	1.0898	1.1546	1.0588	1.1084	1.0935	1.14766	1.0752	1.11327	
Ln theta	0.4766 ***	0.7652 ***	0.3405 **	0.5823 ***	0.2992	0.8682 ***	0.1280	0.5960 *	

Notes: \* p<0.05; \*\* p<0.01; \*\*\* p<0.001; Model I, with fuzzy control for presence of partner; Model II, only women with known marital history. Other controls introduced in some of the models but not reported here: year effects; economic sector dummies (agricultural, industrial, etc.); presence of

Other controls introduced in some of the models but not reported here: year effects; economic sector dummies (agricultural, industrial, etc.); presence of other small children, by age.

Table A-3
Estimated Results. Model with random effect (inverse Gaussian distribution) and without entitlement to maternity
leave variable

		All transitions	into inactivity	Only voluntary transitions into inactivity					
	Model I	Model I	Model II	Model II	Model I	Model I	Model II	Model II	
No Pre-experience	-1.1501 ***	-1.0134 ***	-1.1995 ***	-1.0935 ***	-0.5835 ***	-0.3630 **	-0.6969 ***	-0.4988 ***	
Years of pre-experience	-0.0343 ***	-0.0297 **	-0.0407 ***	-0.0359 **	-0.0254	-0.0198	-0.0385	-0.0301	
Schooling	-0.1014 ***	-0.1122 ***	-0.0955 ***	-0.1070 ***	-0.0111	-0.0212	-0.0112	-0.0233	
Pre-birth 3-month period	0.9648 ***	0.9677 ***	1.0426 ***	1.0405 ***	0.9097 ***	0.9129 ***	0.9846 ***	0.9860 ***	
Month Birth	1.1604 ***	1.1357 ***	1.0242 ***	1.0002 ***	1.2796 ***	1.2353 ***	1.3021 ***	1.2595 ***	
Month 2-3	0.1303	0.1240	0.0061	0.0051	0.4208 *	0.4064 *	0.2772	0.2695	
Month 4-12	0.3692 ***	0.3570 ***	0.2860 **	0.2817 **	0.6270 ***	0.5962 ***	0.6222 ***	0.6007 ***	
Month 13-24	0.1165	0.0999	0.0180	0.0107	0.1549	0.1191	0.1173	0.0927	
Total months since birth	-0.0022 ***	-0.0024 ***	-0.0030 ***	-0.0030 ***	-0.0030 **	-0.0033 **	-0.0032 *	-0.0035 **	
Has partner	0.8312 ***	0.8051 ***	0.9297 ***	0.9163 ***	1.0660 ***	1.0362 ***	1.1829 ***	1.1369 ***	
Age	-0.3719 ***	-0.4434 ***	-0.3729 ***	-0.4455 ***	-0.4488 ***	-0.5144 ***	-0.4417 ***	-0.5139 ***	
Age sq.	0.0045 ***	0.0054 ***	0.0045 ***	0.0055 ***	0.0056 ***	0.0063 ***	0.0055 ***	0.0063 ***	
Years of inactivity	0.0938 ***	0.0857 ***	0.0885 ***	0.0823 ***	0.0956 ***	0.0787 ***	0.0903 ***	0.0767 ***	
Entitled to maternity leave $= 1$	-0.4873 ***	-0.4522 ***	-0.5062 ***	-0.4732 ***	-0.8243 ***	-0.7726 ***	-0.8836 ***	-0.8362 ***	
Total kids	-0.0125	0.0248	0.0458	0.0741 **	-0.0565	0.0064	-0.0328	0.0243	
Year effects		Yes		Yes		Yes		Yes	
Constant	4.6727 ***	4.8998 ***	4.7264 ***	4.9831 ***	2.0834 ***	1.9660 ***	2.2214 ***	2.2266 ***	
ln p	0.0860 ***	0.1438 **	0.0571 *	0.1029 **	0.0893 **	0.1377 ***	0.0725 *	0.1073 **	
р	1.0898	1.1546	1.0588	1.1084	1.0935	1.14766	1.0752	1.11327	
Ln theta	0.4766 ***	0.7652 ***	0.3405 **	0.5823 ***	0.2992	0.8682 ***	0.1280	0.5960 *	

Notes: \* p<0.05; \*\* p<0.01; \*\*\* p<0.001; Model I, with fuzzy control for presence of partner; Model II, only women with known marital history. Other controls introduced in some of the models but not reported here: year effects; economic sector dummies (agricultural, industrial, etc.); presence of

Other controls introduced in some of the models but not reported here: year effects; economic sector dummies (agricultural, industrial, etc.); presence of other small children, by age.

	All transitions into inactivity							Only voluntary transitions into inactivity								
	Mode	1 I	Model	l I	Model II Model I		II	Model I		Model I		Model	II	Model	II	
No Pre-experience	-0.7034	***	-0.6255	***	-0.7411	***	-0.6728	***	-0.3432	***	-0.2421	***	-0.4053	***	-0.3115	***
Years of pre-experience	-0.0014		-0.0043		-0.0065		-0.0079		0.0046		0.0006		-0.0019		-0.0037	
Schooling	-0.0647	***	-0.0691	***	-0.0630	***	-0.0673	***	-0.0103		-0.0149	*	-0.0107		-0.0159	
Pre-birth 3-month period	0.9623	***	0.9595	***	1.0512	***	1.0438	***	0.9225	***	0.9190	***	1.0092	***	1.0025	***
Pre-birth 3-month period * entitled to mat.ty																
leave																
Month Birth	0.9874	***	0.9815	***	0.8881	***	0.8797	***	1.0905	***	1.0659	***	1.1432	***	1.1172	***
Month birth * entitled to maternity leave																
Month 2-3	-0.0376		-0.0331		-0.1488		-0.1426		0.2350		0.2302		0.1013		0.1017	
Month 2-3 * entitled to maternity leave																
Month 4-12	0.1859	**	0.1843	**	0.1486		0.1503		0.3747	***	0.3609	***	0.3919	***	0.3873	***
Month 4-12 * entitled to maternity leave																
Month 13-24	0.0052		-0.0068		-0.0614		-0.0708		0.0022		-0.0256		-0.0278		-0.0533	
Month 13-24 * entitled to maternity leave																
Total months since birth	-0.0017	***	-0.0018	***	-0.0023	***	-0.0023	***	-0.0024	**	-0.0026	***	-0.0026	**	-0.0027	**
Total months since birth * Entitled																
Has partner	0.5358	***	0.5207	***	0.6157	***	0.6065	***	0.6569	***	0.6502	***	0.7315	***	0.7145	***
Age	-0.2526	***	-0.2849	***	-0.2551	***	-0.2899	***	-0.2888	***	-0.3241	***	-0.2913	***	-0.3303	***
Age sq.	0.0030	***	0.0035	***	0.0030	***	0.0036	***	0.0036	***	0.0041	***	0.0036	***	0.0042	***
Years of inactivity	0.0741	***	0.0648	***	0.0698	***	0.0619	***	0.0712	***	0.0575	***	0.0680	***	0.0557	***
Entitled to maternity leave $= 1$	-0.3410	***	-0.3265	***	-0.3631	***	-0.3487	***	-0.5040	***	-0.4799	***	-0.5531	***	-0.5320	***
Total kids	-0.0230		-0.0084		0.0192		0.0297		-0.0653	**	-0.0366		-0.0442		-0.0173	
Year effects			Yes				Yes				Yes				Yes	
Constant	3.2267	***	2.6980	***	3.3099	***	2.9416	***	1.8382	***	1.4437	***	1.9816	***	1.7756	***
ln p	-0.2017	***	-0.2164	***	-0.2075	***	-0.2180	***	-0.0214		-0.0388		-0.0238		-0.0349	
р	0.8173		0.8054		0.8126		0.8042		0.9788		0.9619		0.9765		0.9657	

### Table A-4: Estimated Results. Model without random effect and with entitlement to maternity leave variable

Source: Prepared using the 2002-2006 EPS.

Notes: \* p<0.05; \*\* p<0.01; \*\*\* p<0.001; Model I, with fuzzy control for presence of partner; Model II, only women with known marital history. Other controls introduced in some of the models but not reported here: year effects; economic sector dummies (agricultural, industrial, etc.); presence of other small children, by age.

		All transitions	into inactivity		Only voluntary transitions into inactivity					
	Model I	Model I	Model II	Model II	Model I	Model I	Model II	Model II		
No Pre-experience	-1.0929 ***	-1.0148 ***	-1.1388 ***	-1.0879 ***	-0.4133 ***	-0.2893 ***	-0.4806 ***	-0.3818 ***		
Years of pre-experience	-0.0427 ***	-0.0505 **	-0.0477 ***	-0.0538 ***	-0.0093	-0.0216	-0.0160	-0.0238		
Schooling	-0.0879 ***	-0.1031 ***	-0.0819 ***	-0.0951 ***	-0.0063	-0.0100	-0.0065	-0.0115		
Pre-birth 3-month period	0.8230 ***	0.8303 ***	0.9760 ***	0.9770 ***	0.8367 ***	0.8463 ***	1.0039 ***	1.0056 ***		
Pre-birth 3-month period * entitled to maternity										
leave	0.2008	0.1761	0.0751	0.0536	0.1429	0.1118	-0.0017	-0.0285		
Month Birth	0.7997 ***	0.8137 ***	0.6539 **	0.6489 **	0.6819 *	0.7017 *	0.6994	0.6960		
Month birth * entitled to maternity leave	0.5265 *	0.4851	0.5895	0.5714	0.7486	0.6891	0.7825	0.7460		
Month 2-3	-0.3862 *	-0.3556	-0.5446 **	-0.5218 **	-0.2894	-0.2489	-0.4487	-0.4177		
Month 2-3 * entitled to maternity leave	0.7789 ***	0.7513 **	0.8672 ***	0.8485 **	0.8948 **	0.8564 *	0.9583 *	0.9307 *		
Month 4-12	0.0281	0.0529	-0.0700	-0.0577	0.0401	0.0644	0.0144	0.0238		
Month 4-12 * entitled to maternity leave	0.5558 ***	0.5285 ***	0.6207 ***	0.6131 ***	0.7082 ***	0.6953 ***	0.7639 ***	0.7699 ***		
Month 13-24	-0.2040 *	-0.2211 *	-0.2778 *	-0.2972 **	-0.2053	-0.2259	-0.2570	-0.2770		
Month 13-24 * entitled to maternity leave	0.5710 ***	0.5917 ***	0.5437 ***	0.5710 ***	0.4642 *	0.4931 *	0.4965 *	0.5198 *		
Total months since birth	-0.0034 ***	-0.0037 ***	-0.0043 ***	-0.0045 ***	-0.0031 ***	-0.0034 ***	-0.0031 **	-0.0033 **		
Total months since birth * Entitled	0.0027 ***	0.0028 ***	0.0034 ***	0.0036 ***	0.0009	0.0008	0.0007	0.0007		
Has partner	0.7310 ***	0.7448 ***	0.8197 ***	0.8390 ***	0.7496 ***	0.8024 ***	0.8276 ***	0.8569 ***		
Age	-0.3025 ***	-0.3746 ***	-0.3075 ***	-0.3766 ***	-0.2983 ***	-0.3529 ***	-0.2984 ***	-0.3511 ***		
Age sq.	0.0038 ***	0.0047 ***	0.0038 ***	0.0048 ***	0.0038 ***	0.0045 ***	0.0037 ***	0.0044 ***		
Years of inactivity	0.0759 ***	0.0654 ***	0.0752 ***	0.0669 ***	0.0660 ***	0.0470 ***	0.0640 ***	0.0491 ***		
Entitled to maternity leave $= 1$	-0.7877 ***	-0.7807 ***	-0.7881 ***	-0.7849 ***	-0.8207 ***	-0.8413 ***	-0.8385 ***	-0.8509 ***		
Total kids	-0.0088	0.0345	0.0407	0.0727 **	-0.0539 *	-0.0003	-0.0316	0.0109		
Year effects		Yes		Yes		Yes		Yes		
Constant	4.7687 ***	4.9725 ***	4.8417 ***	5.0926 ***	2.1468 ***	2.0219 ***	2.2468 ***	2.2499 ***		
ln p	0.0871 ***	0.1430 **	0.0650 **	0.1104 ***	0.0739 *	0.1213 **	0.0602	0.0938 **		
p	1.091	1.1537	1.0672	1.1168	1.0767	1.12892	1.0621	1.09838		
Ln theta	0.4798 ***	0.7587 ***	0.3811 **	0.6134 ***	0.1205	0.7503 **	-0.0244	0.4873		

### Table A-5: Estimated Results. Model with random effect (gamma) and with entitlement to maternity leave variable

Source: Prepared using the 2002-2006 EPS.

Notes: \* p<0.05; \*\* p<0.01; \*\*\* p<0.001; Model I, with fuzzy control for presence of partner; Model II, only women with known marital history Other controls introduced in some of the models but not reported here: year effects; economic sector dummies (agricultural, industrial, etc.); presence of other small children, by age.

	All transitions into inactivity				Only voluntary transitions into inactivity			
	Model I	Model I	Model II	Model II	Model I	Model I	Model II	Model II
No Pre-experience	-1.1272 ***	-0.9988 ***	-1.1741 ***	-1.0772 ***	-0.5800 ***	-0.3623 **	-0.6894 ***	-0.4969 ***
Years of pre-experience	-0.0321 **	-0.0278 **	-0.0383 ***	-0.0337 **	-0.0260	-0.0203	-0.0391	-0.0304
Schooling	-0.1020 ***	-0.1127 ***	-0.0960 ***	-0.1074 ***	-0.0120	-0.0217	-0.0117	-0.0237
Pre-birth 3-month period	0.8781 ***	0.8942 ***	1.0245 ***	1.0332 ***	0.8561 **	0.8678 **	1.0320 ***	1.0446 ***
Pre-birth 3-month period * entitled to maternity								
leave	0.1381	0.1150	0.0189	-0.0011	0.0783	0.0677	-0.0851	-0.0997
Month Birth	0.8957 ***	0.8977 ***	0.7240 **	0.7163 **	0.8458 *	0.8270 *	0.8506 *	0.8229 *
Month birth * entitled to maternity leave	0.4692	0.4263	0.5489	0.5207	0.6720	0.6330	0.7132	0.6886
Month 2-3	-0.3641	-0.3543	-0.5262 **	-0.5142 *	-0.1914	-0.1807	-0.3643	-0.3522
Month 2-3 * entitled to maternity leave	0.7955 ***	0.7692 **	0.8835 ***	0.8607 **	0.9231 *	0.8841 *	1.0064 *	0.9733 *
Month 4-12	0.0766	0.0882	-0.0368	-0.0254	0.1465	0.1385	0.0998	0.0876
Month 4-12 * entitled to maternity leave	0.5457 ***	0.5034 ***	0.6193 ***	0.5890 ***	0.7775 ***	0.7452 ***	0.8567 ***	0.8449 **
Month 13-24	-0.2064	-0.2134 *	-0.2829 *	-0.2835 *	-0.1766	-0.2009	-0.2311	-0.2449
Month 13-24 * entitled to maternity leave	0.5935 ***	0.5776 ***	0.5688 ***	0.5552 ***	0.5675 **	0.5520 *	0.6079 *	0.5919 *
Total months since birth	-0.0034 ***	-0.0035 ***	-0.0045 ***	-0.0045 ***	-0.0031 *	-0.0035 **	-0.0034 *	-0.0037 **
Total months since birth * Entitled	0.0025 ***	0.0023 ***	0.0032 ***	0.0031 ***	0.0004	0.0003	0.0005	0.0004
Has partner	0.8164 ***	0.7935 ***	0.9104 ***	0.9025 ***	1.0585 ***	1.0282 ***	1.1732 ***	1.1289 ***
Age	-0.3644 ***	-0.4360 ***	-0.3625 ***	-0.4352 ***	-0.4421 ***	-0.5070 ***	-0.4314 ***	-0.5040 ***
Age sq.	0.0044 ***	0.0053 ***	0.0044 ***	0.0053 ***	0.0055 ***	0.0062 ***	0.0054 ***	0.0062 ***
Years of inactivity	0.0943 ***	0.0866 ***	0.0900 ***	0.0842 ***	0.0932 ***	0.0766 ***	0.0876 ***	0.0747 ***
Entitled to maternity leave $= 1$	-0.7257 ***	-0.6767 ***	-0.7476 ***	-0.7059 ***	-1.0040 ***	-0.9391 ***	-1.0538 ***	-0.9957 ***
Total kids	-0.0168	0.0190	0.0387	0.0653 **	-0.0556	0.0070	-0.0333	0.0231
Year effects		Yes		Yes		Yes		Yes
Constant	6.6038 ***	6.4040 ***	6.4984 ***	6.5416 ***	6.0393 ***	5.3315 ***	5.8930 ***	5.6033 ***
ln p	0.2888 ***	0.2734 ***	0.2476 ***	0.2467 ***	0.5619 ***	0.5036 ***	0.5300 ***	0.4869 ***
p	1.3348	1.3145	1.2809	1.2798	1.754	1.65463	1.6989	1.62724
Ln theta	2.5575 ***	2.5283 ***	2.2641 ***	2.3169 ***	4.5733 ***	4.1627 ***	4.2652 ***	3.9790 ***

### Table A-6: Estimated Results. Model with RE (inv. gaussian) and with entitlement to maternity leave variable

Source: Prepared using the 2002-2006 EPS.

Notes: \* p<0.05; \*\* p<0.01; \*\*\* p<0.001; Model I, with fuzzy control for presence of partner; Model II, only women with known marital history. Other controls introduced in some of the models but not reported here: year effects; economic sector dummies (agricultural, industrial, etc.); presence of other small children, by age.