

Gendered barriers at exits of unemployment The gender gap in unemployment duration in Spain

Abstract

The growing research on unemployment as a stratification mechanism has examined the gender gaps in unemployment rates, duration and their impact on other labor market outcomes, such as wages. Spain has one of the OECD's largest gross gender gaps in unemployment rates and duration (Azmat et al, 2007) and constitutes an interesting case for this research. Using data from the Spanish sample of the European Community Household Panel I analyze gender differences in duration and patterns of exiting unemployment using event history analysis techniques. The analyses confirm that there is a remarkable gender gap in unemployment duration after controlling for several individual and macroeconomic variables. Women are 20% less likely than men to find a new job and twice as much likely to drop out of the labor force. This evidence challenges optimistic opinions about the increasing integration of women in the Spanish labor market.

Introduction

Unemployment is a relevant indicator of individual's status in the labor market. In societies like advanced industrial countries, individuals' socioeconomic wellbeing highly depends on their relation towards the labor market. As a consequence, unemployment spells represent a downside at both individual and society levels. Unemployment is by definition exclusion from the formal labor market. At the individual level, unemployment experience impacts negatively on individuals' prospects of improving or maintaining their socioeconomic conditions. Unemployment damages individuals' acquisition of skills, their labor experience and their earnings. Moreover, unemployment spells should not be considered as static positions, since they often involve a process of cumulative disadvantage. Gallie and Paugam (2000) consider unemployment spells as processes of 'social disqualification' and DiPrete and McManus (2000) refer to them as 'trigger events'. Moreover, unemployment experience not only has negative consequences in terms individuals' labor market attachment, but it can also have major repercussions on their feeling of isolation and their social integration (Paugam and Russell 2000)¹. Countries' high unemployment rate is an indicator of the degree to which the labor market is able to integrate the active population. Several processes affect the level of unemployment at the national level. Some scholars have emphasized the current incidence of structural changes on unemployment rates, such as technological change, deindustrialization and the rise of the services sector (Esping-Andersen 1999).

¹ The movie "Los lunes al sol" ("Mondays under the sun") directed by Fernando León Aranoa illustrates the consequences of unemployment on family disorganization and social isolation for a group of men in Spain.

The goal of this paper is to examine the gender gap in unemployment duration in Spain. I use data from the Spanish sample of the European Community Household Panel (ECHP) from 1994 to 2001. Using event history analysis' techniques, I study the determinants of the gender gaps in unemployment duration in two sets of analysis: a logistic regression on the likelihood of exiting unemployment by finding a new job, and a competing risk multinomial logistic regression analysis on the likelihood of exiting unemployment by either finding a new job or dropping out of the labor force. This paper is divided in five sections. First, I contextualize the situation of women in the Spanish labor market. Second, I review the literature on gender gaps in labor market outcomes, focusing on the implications of that research for the gender gaps in unemployment duration. Third, I describe the data I use and the methodological approach. In this section I also display some descriptive analysis. Fourth, I present and discuss the results from the preliminary analysis. Finally, I summarize the major findings and assess their implications for future research.

Women and the Spanish Labor Market

Spain is often recognized as a member of the so-called Southern European States, which include Italy, Greece, Spain and Portugal. Those countries share several historical similarities referring to forms of political domination, economic development pace and class structures and relations (Giner 1985; Sapelli 1995). Additional research has also pointed out their similitude in terms of labor market dynamics and welfare regimes. Esping-Andersen's (1990) influential work situated the Southern European countries within the Conservative-Corporatist Welfare Regime, typified by Germany. This classification was extended by Liebfried, who introduced a new category grouping separately the Southern European states, to emphasize the 'rudimentary' stage of their welfare regime development as compared to the northern European countries (Liebfried 1992). Other scholars followed and improved Liebfried's description of the Mediterranean welfare regime (Guillén and Matsaganis 2000; Rhodes 1997). Three main characteristics stand out when describing the Southern European welfare regime: the role of the traditional family, the low level of family related resources provided by the State (such as childrearing and retirement benefits), and the relevance of the Church.

In fact, Spain exhibits characteristics that indicate the strong and continuing role of the traditional family. Jurado and Naldini (1996) use a diverse arrange of measures regarding women's participation in the labor market, gender divergence in education, and the influence of the catholic church. They conclude that Spain is an example of a country where the presumed 'deinstitutionalization of families' did not take place at the same pace it did in other European countries. The divorce rate is low compared to other countries and also the number of births out of marriage. The emancipation age is very high as well as the number of adults living with their parents (Cousins 2005; Delgado and Castro 1998; González-López 2001). This persistent traditional role of families accompanied by the increasing female participation in the labor market provoked the emergence of a new phenomenon: women's 'double working load'. Data from the Women Institute in Spain shows that women spent over four daily hours on housework while men spend only one (Durán 1997).

Since 1978, Spain provides a legal framework of equality between men and women in different dimensions of the public sphere. Since then, a number of Equality of Opportunity Plans have been developed and implemented in order to improve women's situation in the labor market. Moreover, some recent legal initiatives have been taken place to promote women's conciliation of family and labor life². Despite of those efforts, Spain stands out, jointly with other Southern European countries, in various indicators of gender inequality compared to other EU countries: female labor participation, unemployment rates, precarious employment or part-time jobs (García-Serrano et al. 1999; Navarro-Gómez and Rueda-Narváez 2008; Torns 1999). Gardín, Río and Cantón (2006) analyzed the wage gap in several EU countries and concluded that Spain has one of the largest gender wage gap.

Using data from the quarterly Labor Force Survey in Spain (EPA), I constructed Table 1 that summarizes the evolution of employment, unemployment and participation in the labor market rates for men and women from 1993 to 2000. The unemployment rate is significantly higher for women compared to men. The highest difference between men and women can be found in 1995, when women face an unemployment rate that is 12 points higher than men's rate. The smallest difference, on the other hand, is in 1993. I calculated the ratio over that period and it shows a slightly positive trend (see Appendix 1). This means that the proportion of women unemployed relative to men is increasing over time. The employment rate for women has been progressively increasing through this period. However, we can observe that the difference between men and women's employment rate is substantially high. At any point in time the difference is always above 20 points. Labor participation's rate is also significantly higher for men as compared to women. Like in the previous case, the difference between men and women is at any point in time is around 20 points. For these last two indicators, the calculated ratios also show an increasing trend in the proportion of employed and labor active women relative to men; this trend is stronger than the one observed for unemployment (see Appendix 1).

Table 1. Employment, unemployment and labor participation rates in Spain. 1993-2000

Source: EPA

	Unemployment rate			Employment rate			Labor participation rate		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
1993		18,7		39,3					
1994	22,64	4	29,41	2	53,99	25,49	50,82	66,44	36,12
1995		19,6		38,6					
1996	24,12	2	31,62	8	52,83	25,36	50,98	65,73	37,09
1997		18,0		39,2					
1998	22,90	5	30,79	9	53,33	26,07	50,96	65,07	37,66
1999	22,08	17,4	29,56	39,9	53,78	26,91	51,27	65,12	38,20

² Equality of Opportunity Plans, 1988-1990, 1993-1995, 1997-2000. Law 39/99 on the conciliation of family and labor life for workers.

6		3		5					
199		15,8		40,9					
7	20,61	3	28,16	6	54,76	27,93	51,59	65,06	38,87
199		13,5		42,3					
8	18,61	7	26,53	0	56,57	28,81	51,96	65,45	39,22
199		10,9		44,2					
9	15,64	4	22,94	6	58,51	30,80	52,46	65,69	39,97
200				46,1					
0	13,87	9,56	20,43	6	60,14	32,93	53,59	66,49	41,38

Table 2 illustrates the trends in temporal and part-time employment for men and women in Spain. At a first sight, it is obvious that the difference between men and women holding either of these two types of employment contracts is remarkably high. In 1993, 37% of employed women held a temporary contract, and that percentage increases significantly over time. The percentage for men at the beginning of this period was 30%, and this percentage also quickly increases all the way through the year 2000. In 1993 the difference between men and women was 7 points, and in 2000 this difference is reduced to 3 points. Likewise, 14% of employed women held a part-time contract in 1993, while only 2% of men did so. The percentage of women holding a part-time contract also increases over time, for men, on the other hand, the percentage remains stable. This remarkable increase in those two types of employment is related to the general flexibilization of the Spanish labor market, by which women have been more significantly affected (González-López 2001).

Table 2. Men and Women Temporal and Part-time employment in Spain. 1993-2000

Source: EPA

	Temporal employment		Part-time employment	
	Men	Women	Men	Women
1993	29,73	37,25	2,24	14,22
1994	31,72	37,56	2,46	14,73
1995	33,15	37,95	2,75	16,14
1996	34,34	38,76	2,95	16,49
1997	35,39	38,71	3,01	17,02
1998	35,48	38,12	2,91	16,82
1999	36,16	39,72	2,89	17,07
2000	37,11	40,65	2,77	16,81

At a very basic level, these descriptive statistics give us an idea of the remarkable differences among men and women's incorporation in the Spanish labor market. Overall, women are less employed and have lower rates of participation in the labor market than men. At the same time, they face higher rates of unemployment, and higher percentage of non-standard employment contracts. Therefore, it seems accurate to deduce that despite of the increase of female employment in Spain, there is still a clear gender inequality that

drives women disproportionately to less advantageous labor market positions, such as unemployment and non-standard employment contracts.

Literature review

Classic social stratification focused on men's labor market outcomes. The increasing women's participation in the labor force raised voices claiming for a more direct study of gender dynamics in labor market processes (Beller 2009; Blossfeld and Drobnic 2001; Sorensen and McLanahan 1987). I locate this paper into this body of literature. In particular, this paper builds on literature that examines the existence and determinants of gender gaps in labor market outcomes. Blossfeld and Drobnic (2001) mention several recent developments according to which we should expect a closing gender gap in labor market outcomes: educational expansion, rising both women and married women labor force participation, penalization of employer's discriminatory practices, and decreasing number of children per women. Despite of these factors, gender gaps are still persistent in different domains of the labor market.

This area of literature is large and it looks at gender inequality in wages, occupational attainment and other labor market processes. Overall, there are two major theoretical approaches that take different stands in explaining the causes of gender inequality: the 'supply-side' approach, and the 'demand-side' approach. The main 'supply-side' theory is the human capital theory. The central argument is that gender gaps in labor market outcomes can be explained by differentials in terms of educational level, skills, or other job-specific human capital (Polachek 1981, 2004; Tam 1997).

In the 'demand-side' approach there are several theories. First, macro-structural perspectives, such as the dual labor markets and occupational segregation, argue that men and women face different opportunities and conditions in the labor market due to structural divisions (Bielby 1991; England 1992; Sorensen and Kalleberg 1981). Second, research on discriminatory attitudes and practices can be divided into two main approaches. On the one hand, there is literature that follows the human capital approach and proposed the concept of 'statistical discrimination'. This perspective states that discriminatory practices are simply due to different expectations about men and women's engagement in the workplace (Pelphs 1972). On the other hand, there is research that focuses on employers' discriminatory practices based on taste. This approach can be said to criticize the previous perspective for their lack of convincing evidence and for justifying employers' practices. Their main argument is that biased gender beliefs lead employers to directly, either consciously or unconsciously, discriminate against women (Correll et al. 2007; Petersen and Saporta 2004; Reskin and McBrier 2000).

Research on gender gap and unemployment is not as developed and extensive as it is on the gender gap in wages or occupational attainment. Nevertheless, the previously mentioned theoretical approaches provide a solid ground to investigate the implications of human capital, macro-structural contexts and discriminatory attitudes hypotheses in explaining the gender gap in unemployment experience. Like wages or occupational

attainment, unemployment is an important labor market outcome that differently affects distinct groups of population. A higher unemployment rate for women than for men can be a sign of multiple underlying processes. On the one hand, it could be an indicator that women have fewer skills than men and, as a consequence, they have a harder time in finding a job (Azmat et al. 2006; Baffoe-Bonnie and Ezeala-Harrison 2005). On the other hand, it could also be an indicator of structural or direct attitudinal discrimination against women (Algan and Cahuc 2004; Bertola et al. 2007). Women may have more difficulties to find a job than men because their employment possibilities are restricted to some specific economic sector, such as services. Likewise, women trying to find a job may face more obstacles than men due to gender-essentialist beliefs that lead to discriminatory attitudes and practices that marginalize women. A final option that has not been discussed in the previous literature review concerns the reservation wage. The higher unemployment rate for women could also reflect women's higher reservation wages. This type of dynamic has been found in studies of married or cohabiting couples (Blosseld and Drobnic 2001). All these scenarios are not only possible, but they may act simultaneously.

Research Plan

The aim of my project is to assess the accuracy of these different types of explanations of the gender gap in unemployment duration. I include two main groups of variables that can be seen as measures that relate to two different theoretical approaches. First, I include two sets of human capital variables: educational level and individual labor force experience and characteristics. These variables aim to examine to what extent the human capital approach is accurate when arguing that different levels of human capital can explain differences between men and women's unemployment duration. Second, I include macro-economic indicators, such as unemployment rate or women's labor force participation rate. These measures can address the potential existence of macro-level processes explaining the gender gap in unemployment duration, such as the existence of segmented labor markets or occupational segregation. However, those two groups of variables are only limited and cannot be considered to exhaust the possibilities to test these two theoretical approaches.

Methodology

For the purposes of this paper I use employment history data from the Spanish sample of the European Household Panel Study (EHP). The goal of this study is to produce comparative and harmonized data for the EU countries on life conditions and social cohesion. The Spanish sample consists of eight yearly surveys undertaken from 1994 to 2001, providing an eight-year observation window for which I have monthly data on unemployment spells (a total of 96 time observations).

The Spanish sample was drawn over the whole Spanish territory excluding Ceuta and Melilla. The sample is based on household units, from which they choose the people they interview. The interviewee profile is an individual aged 16 or older. They designed a representative probabilistic sample of private households. The household sample

encompasses 8,000 units from which 17,893 people was interviewed in the first wave. However, due to panel attrition, only 9,736 individuals were fully interviewed in all the eight cycles. The panel attrition rate between the first and the third wave in Spain was 0.185, almost half of the highest attrition rate in the ECHP identified in UK (Peracchi 2002). Gallo et al. (2004) performed an analysis for the probability of being attritor in the ECHP for each country. The results show some significant effects of certain variables in the Spanish sample. For the purposes of this paper I assume that panel attrition does not selectively biases the estimates.

The event of interest for this paper is the likelihood of exiting unemployment. I present one set of preliminary analyses: a competing risks model that includes two possible destinations for exiting unemployment: either finding a new job or dropping out of the labor force. The entry time begins with the first month that a person is observed to be unemployed, while the end time is defined as the last month of unemployment before the person is again employed, or drops out of the labor force. The sample comprises 8,692 unemployment spells for a total of 4,080 individuals. The total number of events for the whole sample is 7,233. The total time at risk is 73,443. Those spells ending with finding a new job sum 6,129, while those spells ending through dropping out of the labor force sum 1,114.

The dependent variable for my analysis is the rate at which individuals exit unemployment. As far as covariates are concerned, I use both time-constant and time-dependent covariates. Table 3 presents the mean values for the dependent variable and a selected list of covariates for the sample that exits unemployment by finding a new job and the sample that exits unemployment by dropping out of the labor force. These straightforward statistics already exhibit some noticeable gender differences. Women tend to be younger than men on average in both samples. Men seem to experience on average higher number of unemployment spells in the previous five years to the interview than women. The educational level covariate shows that women are, on average, advantaged over men. The dummy variable for having been employed in the services sector before the unemployment spell is considerably higher for women as compared to men. Finally, in receiving unemployment benefits men seem to exhibit advantage over women.

Table 3. Descriptive Statistics. Mean for selected variables.

	Destination 1 Finding a job		Destination 2 Dropping out	
	Men	Women	Men	Women
Mean of the survival time	10.66	12.30	65.08	38.42
Age	36.69	34.29	36.15	33.94
Cohabitation	0.57	0.55	0.53	0.54
Children	0.76	0.76	0.76	0.77
Number of times an individual experienced unemployment in the past 5 years.	2.94	2.46	2.72	2.01

Education level, based on a scale of 8 categories)	3.02	3.82	3.17	3.92
Dummy for services sector	0.08	0.14	0.08	0.14
Receiving unemployment benefits ³	0.17	0.14	0.15	0.10

Regression Analyses

There are different ways to model event history data and perform regression analysis. In this case, I choose to use a discrete-time model to estimate logistic regressions. I picked this option in order to be able to directly model duration dependence. I divide the first set of preliminary analyses into five models. The first model only includes the dummy variable for females as well as a quantitative variable that counts the number of months spent in unemployment (t), and that same variable squared (t^2). The second model incorporates demographic variables: a time-varying covariate for age, a dummy variable for the presence of young children (under the age of 14) and an interaction term of this variable with female, a dummy variable for being married, and another dummy variable for young individuals who are under the age of 30. The third model introduces the same two educational covariates used in the previous analysis, secondary education and university degree. Model 4 incorporates variables related to labor market experience: a dummy variable for being a first-time jobseeker, a quantitative variable for the number of times an individual has experienced unemployment spells during the last five years, a dummy variable for being previously employed in the services sector, a dummy variable for quitting the previous job due to family responsibilities, a quantitative variable for the occupational level held in the previous job measured with ISCO88-2 digits, and a dummy variable for having held a part-time employment before being unemployed.

Table 4 presents the multinomial logistic regression's results for the first destination, and table 5 displays the results for the second destination. Duration dependence indicates exact opposite trends for finding a new job and dropping out of the labor force. In the first case, duration dependence is negative, indicating that the longer a person stays in unemployment, the lower the chances of finding a new job. On the other hand, duration dependence is positive for dropping out of the labor force. This means that the longer a person stays unemployed, the higher the chances to drop out of the labor force. In both cases, duration dependence get weaker over time, as indicated by the t^2 coefficient. Those two coefficients point to a curvilinear shape of the duration dependence. The coefficient for female is strong in for both destinations, negative in the first case, and

³ In Spain, the requirements for receiving unemployment benefits depend on individuals' labor force attachment. A minimum of one year of work is required to start receiving the unemployment benefits. This requirement was previously half years instead of one year, and some scholars argue that change had a disproportionate negative impact on women's chances to access unemployment benefits (Laparra & Aguilar, 1997; Cousins, 2005) The duration of those unemployment benefits also depend on the amount of time spent working with a formal contract in the labor force. Those minim requirements are calculated over the previous six years to the demand of unemployment benefits. It is remarkable to note that a day of part-time employment counts as a full-time employment.

positive in the second case. Being a woman lowers the log odds of finding a new job, while it increases them for dropping out of the labor force. This result is consistent with the theoretical approaches that emphasize gender inequality in the labor force. It is also consistent with previous research showing the persistence of traditional family structure and women's roles in Spain.

Model 2 includes demographic variables. Age has a negative effect on finding a new job while a positive but statistically insignificant effect on dropping out of the labor force. Young individuals that are unemployed have lower chances of exiting unemployment than adults. This effect is related to the high unemployment rate experienced by youngsters in many countries, especially in Southern European countries (Russell and O'Connell 2001). The presence of young children increases the chances of finding a new job, while it decreases the chances of dropping out of the labor force. However, the interaction term between female and young children exerts stronger and opposite effects on both destinations. Being a woman and having young children decreases the log odds of finding a new job, while it increases them for dropping out of the labor force. It is interesting to note that the coefficient for young children and the interaction term turn insignificant in the last model for the first destination, finding a new job. However, this pattern does not hold in for the analysis of dropping out of the labor force. These results indicate that the effects of young children on finding a new job are explained by the inclusion of covariates that control for labor force experience.

Model 3 includes two variables for educational level. Having attained secondary education depresses the chances of exiting unemployment by finding a new job, while holding a university degree increases them. Quite surprisingly, those effects are the same for the second destination, dropping out of the labor force. The odds of dropping out of the labor force are 25% higher for those holding a university degree compared to those that do not. This finding could indicate the presence of an 'opting-out' trend as represented by Belkin (2003). In order to rule out that possibility, I performed another analysis (not shown here) including an interaction term between female and university degree. The resulting coefficient is strong and negative for destination two, challenging the existence of an 'opting-out' trend. The alternative explanation of this positive effect is that individuals holding a university degree may be more likely to drop out of the labor market after a period of unemployment and go back to school.

Model 4 introduces covariates indicating different dimensions of individuals' labor market experience. The coefficient for first-time jobseeker is strong and negative for finding a new job, while it is strong and positive for dropping out of the labor force. This suggests that individuals looking for their first job face disadvantageous conditions that reduce their chances of getting a job, increasing their chances for dropping out of the labor force. The coefficient for previous unemployment indicates that for each additional time a person experienced unemployment the chances of finding a new job increase, and the chances of dropping out of the labor force decrease. The number of times an individual experienced unemployment seems to pick up the effect of labor force attachment, strengthening the skills for finding a new job. The coefficients for being previously employed in the services sector and quitting the previous job due to family

responsibilities have a negative impact on finding a new job, but a positive impact on dropping out of the labor force, although in the later case the coefficient is statistically not significant. The opposite is true for the last two variables, previous occupational level and previous part-time jobs increase the chances of dropping out of the labor force but depress the chances of finding a new job, although in this case again the latter coefficient is statistically not significant.

As far as the gender gap is concerned, the analysis shows how the differences between men and women, for both destinations, are progressively reduced by the inclusion of covariates. For finding a new job, the initial female coefficient indicated that women's odds of exiting unemployment through this path were 30% lower as compared to men (odds ratio= 0.70). In model 4, the coefficient shows that being a woman lowers the odds of finding a new job by 20% (odds ratio=0.78). This suggests that 10% of the difference in the odds of finding a new job between men and women is explained by the introduction of labor market experience indicators, such being a first-time jobseeker or having previously quit the job due to family responsibilities. For the case of dropping out of the labor force, the evolution is similar. Initially, women are much more likely to take this path of exiting unemployment (odds ratio= 3.2). After the inclusion of all the covariates, women are two and a half times more likely than men to take this destination (odds ratio=2.5). Overall, these findings are somewhat consistent with the human capital approach, although there is a large remaining gender gap residual that is left unexplained by each of the performed analyses.

Table 5. Multinomial logistic regression results (I)

VARIABLES	Destination 1: finding a new job			
	Model 1	Model 2	Model 3	Model 4
t	-0.0493*** (0.00339)	-0.0479*** (0.00340)	-0.0473*** (0.00341)	-0.0309*** (0.00351)
t^2	0.000453*** (7.43e-05)	0.000461*** (7.48e-05)	0.000456*** (7.49e-05)	0.000320*** (7.86e-05)
Female	-0.359*** (0.0271)	-0.327*** (0.0307)	-0.336*** (0.0309)	-0.240*** (0.0315)
Age		-0.0147*** (0.00202)	-0.0164*** (0.00213)	-0.0187*** (0.00218)
Young children		0.178*** (0.0500)	0.184*** (0.0500)	0.0559 (0.0504)
Female*Young children		-0.335*** (0.0678)	-0.326*** (0.0678)	-0.101 (0.0692)
Married		0.151*** (0.0369)	0.156*** (0.0373)	0.0963*** (0.0373)
Young		-0.160*** (0.0456)	-0.160*** (0.0457)	-0.0746 (0.0457)

Secondary Education			-0.0976*** (0.0332)	-0.101*** (0.0335)
University degree			0.173*** (0.0448)	0.251*** (0.0456)
First job				-0.983*** (0.0529)
Past unemployment				0.0741*** (0.00383)
Services sector				-0.482*** (0.0559)
Quitting previous job for family resp				-0.594*** (0.135)
Previous job occupational level				-0.0682*** (0.00577)
Part-time previous job				-0.153 (0.106)
Constant	-1.871*** (0.0250)	-1.389*** (0.0885)	-1.293*** (0.0990)	-1.254*** (0.102)
Observations	73443	73443	73443	73443

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 6. Multinomial logistic regression results (II)

VARIABLES	Destination 2: dropping out of the labor market			
	Model 1	Model 3	Model 4	Model 5
t	0.0930*** (0.00908)	0.0939*** (0.00908)	0.0962*** (0.00910)	0.0882*** (0.00913)
t ²	-0.00195*** (0.000241)	-0.00194*** (0.000241)	-0.00196*** (0.000241)	-0.00186*** (0.000238)
Female	1.186*** (0.0721)	0.997*** (0.0779)	0.999*** (0.0782)	0.953*** (0.0790)
Age		6.06e-05 (0.00465)	-0.00599 (0.00494)	-0.00354 (0.00500)
Young children		-1.315*** (0.280)	-1.308*** (0.280)	-1.229*** (0.281)

Female*Young children	1.544*** (0.287)	1.579*** (0.287)	1.471*** (0.288)
Married	0.242*** (0.0801)	0.232*** (0.0811)	0.249*** (0.0824)
Young	0.0114 (0.105)	0.00525 (0.105)	-0.0331 (0.107)
Secondary Education		-0.311*** (0.0774)	-0.288*** (0.0791)
University degree		0.216** (0.0958)	0.189* (0.0974)
First job			0.334*** (0.0882)
Past unemployment			-0.0571*** (0.0173)
Services sector			0.174* (0.0950)
Quitting previous job for family resp.			0.177 (0.157)
Previous job occupational level			0.0231* (0.0124)
Part-time previous job			0.248* (0.139)
Constant	-5.436*** (0.0859)	-5.445*** (0.221)	-5.081*** (0.243)
Observations	73443	73443	73443

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Discussion and conclusion

The analyses performed in this paper represent a modest attempt to explain the gender gap in unemployment duration in Spain. First, I reviewed the relevance of this phenomenon in Spain, and the results consistently showed that the gender gap is present and remarkable. Then, I discussed the theoretical approaches that have been developed to explain the existence of gender gaps in different dimensions of the labor market. I summarized the main approaches into two groups, the demand side and the supply side approaches. Due to the limited data and measures concerning certain phenomena, such as labor force experience, discrimination and other macro-level indicators, these analysis should be considered only as a limited endeavor to test the main arguments derived from the human capital approach, the dual labor markets and the occupational segregation

hypotheses. In this final section I would like to recapitulate the main findings and their implications for future research.

First, the analyses performed in this paper convincingly confirmed that there is a remarkable gender gap in unemployment duration, which indicates a quite dramatic disadvantage for women. The first analysis shows that unemployed women are 20% less likely to find a new job than men and more than twice as much likely than men to drop out of the labor force, after all demographic, educational, labor experience indicators and macro-economic covariates are controlled for. This evidence is rather impressive and challenges those optimistic opinions about the increasing women's integration in the Spanish labor market. From these analyses it is obvious that regardless of women's increasing participation rate in the labor market, unemployed women face a much disadvantageous context than men.

The remaining question is: what can then explain the persistent gender gap in the likelihood of exit unemployment? I consider two possibilities. First, the failure to account for the gender gap may be due to the modeling approach I took for this modest analytical attempt. As I mentioned before, duration dependence is directly modeled when using logistic regression models. As a consequence, imperfections in modeling time dependence can result into misleading outcomes. In this sense, it may be the case that the real pattern of duration dependence is more complex and it is not appropriately captured by the two covariates I include in the analyses (t and t^2). I tried several other options, such as t^3 , and I also examined interaction terms between time and variables such as female or age. Neither of those inspections yielded fundamentally different results. Moreover, the results from the analyses I performed using Cox regression (see in the appendix 5) did not generate very different results either. The resulting hazard ratio for the final model was 0.85, indicating that being a woman reduces the hazard rate, that is the conditional probability of exiting unemployment, by 15%. This gives me confidence that the employed modeling approach for time dependence is not totally deceptive.

Having ruled out this first possibility, the remaining alternative is the existence of some unobserved variables that would explain the gender gap and turn insignificant the coefficient for female. I consider three types of relevant measures that could significantly improve the analysis performed here. First, better indicators about labor force experience and performance would be convenient. For example, an accurate measure about the years a person spent in the labor force and/or employed, or concerning specific training and skills, as well as measures about within or across firms' mobility could better control for gender differences in labor market characteristics. Second, indicators concerning the macro-level conditions could also significantly improve the estimates. I think it would be relevant to include variables concerning the expansion and contraction of the services sector, where women are mostly employed, as well as some measures about occupational segregation and its implications for unemployment dynamics. Finally, measures about attitudes and opinions concerning the incorporation of women in the labor market could be relevant. These sorts of indicators would be especially important to be measured for employers. As cited research suggests, patriarchy and the traditional role of family

are quite persistent in Spain. Consequently, discriminatory attitudes may be as well persistent.

In conclusion, the gender gap in unemployment duration is a multidimensional process that involves not only labor market macro dynamics and individual-level traits, but also characteristics related to values, attitudes and family roles in the society. Future research should explore more in depth the inclusion of these types of variables and assess their relevance for explaining gender inequality in unemployment. That research could provide valuable information in order to promote women's equality of opportunity and conditions in the labor market.

References

- Algan, Yann, and Pierre Cahuc. 2004. "Job Protection: The Macho Hypothesis." in *IZA Discussion Paper No. 1192*. Institute for the Study of Labor.
- Azmat, Ghazala, Maia Güell, and Alan Manning. 2006. "Gender Gaps in Unemployment Rates in OECD Countries." *Journal of Labor Economics* 24(1):1-38.
- Baffoe-Bonnie, John, and Fidelis Ezeala-Harrison. 2005. "Incidence and Duration of Unemployment Spells: Implications for the Male-Female Wage Differentials." *The Quarterly Review of Economics and Finance* 45:824-847.
- Belkin, Lisa. 2003. "The Opt-Out Revolution." Pp. 735-738 in *Social Stratification. Class, Race, and Gender in Sociological Perspective*, edited by David B. Grusky. Westview Press.
- Beller, Emily. 2009. "Bringing Intergenerational Social Mobility Research into the Twenty-first Century: Why Mother's Matter in Mobility Research." *American Sociological Review* 74(4):507-528.
- Bertola, Giuseppe, Francine D. Blau, and Lawrence M. Kahn. 2007. "Labor Market Institutions and Demographic Employment Patterns." *Journal of Population Economics* 20(4):833-867.
- Bielby, William T. 1991. "The Structure and Process of Sex Stratification." Pp. 97-112 in *New Approaches to Economic and Social Analyses of Discrimination*, edited by Richard R. Cornwall, and Phanindra V. Wunnava. Praeger Publishers.
- Blossfeld, Hans-Peter, and Sonja Drobnic. 2001. "A Cross-National Comparative Approach to Couples' Careers." Pp. 1-15 in *Careers of Couples in Contemporary Societies: From Male Breadwinner to Dual Earner Families*, edited by Hans-Peter Blossfeld, and Sonja Drobnic. Oxford University Press.
- Blossfeld, Hans-Peter, and Sonja Drobnic. 2001. "A Cross National Comparative Approach to Couples' Careers." Pp. 3-15 in *Careers of Couples in Contemporary Societies: From Male Breadwinner to Dual-Earner Families*, edited by Hans-Peter Blossfeld, and Sonja Drobnic. Oxford University Press.
- Blossfeld, Hans-Peter, Katrin Golsch, and Götz Rohwer. 2007. *Event History Analysis with Stata*. Routledge.
- Box-Steffensmeier, Janet M, and Bradford S. Jones. 2004. *Event History Modeling. A Guide for Social Scientists*. Cambridge University Press.
- Correll, Shelley J., Stephen Bernard, and In Paik. 2007. "Getting a Job: Is There a Motherhood Penalty?" *American Journal of Sociology* 112(1297-1338).

- Cousins, Christine. 2005. "The Development of a Gendered Social Policy Regime." in 2005, edited by Mónica Threlfall, Christine Cousins, and Celia Valiente-Fernández. Routledge.
- Delgado, M, and T Castro. 1998. "Encuesta de Fecundidad y Familia 1995." *Opiniones y Actitudes* 20.
- DiPrete, Thomas A., and Patricia A. McManus. 2000. "Family Change, Employment Transitions, and the Welfare State: Household Income Dynamics in the United States and Germany." *American Sociological Review* 65(3):343-370.
- Durán, M. A. 1997. "El Papel de Mujeres y Hombres en la Economía Española." *Revista Información Comercial Española* 760:9-29.
- England, Paula. 1992. *Comparable Worth: Theories and Evidence*. Walter de Gruyter.
- Esping-Andersen, Gosta. 1990. *The Three Worlds of Welfare Capitalism*. Princeton University Press.
- Esping-Andersen, Gøsta. 1999. *Social foundations of postindustrial economies*. Oxford University Press.
- Gallie, Duncan, and Serge Paugam. 2000. "The Experience of Unemployment in Europe: The Debate." Pp. 1-24 in *Welfare Regimes and the Experience of Unemployment in Europe*, edited by Duncan Gallie, and Serge Paugam. Oxford University Press.
- Gallo, F, I Mastrovita, and I Siciliani. 2004. "The Nature of Sample Attrition in the ECHP." in *EPUNet Conference*, edited by EuroPanel Users Network.
- Gangl, Markus. 2004. "Welfare States and the Scar Effects of Unemployment: A Comparative Analysis of the United States and West Germany." *American Journal of Sociology* 109:1319-1364.
- García-Serrano, C, L Garrido, and L Tahoma. 1999. "Empleo y Paro en España: Algunas Cuestiones Candentes." in *Las Relaciones de Empleo en España*, edited by F Miguélez, C Prieto, and O Rebollo. Siglo XXI.
- Gardín, C, C Río, and O Cantó. 2006. "Poverty and Women's Labor Market Activity: the Role of Gender Wage Discrimination in the EU." in *Working Paper 2006-04*. ECINEQ.
- Giner, Salvador. 1985. "Political Economy, Legitimation and the State in Southern Europe." in *Uneven Development in Southern Europe: Studies of Accumulation, Class Migration and the State*, edited by R Hudson, and J Lewis. Methuen.
- González-López, María José. 2001. "Spouses' Employment Careers in Spain." Pp. 146-175 in *Careers of Couples in Contemporary Societies. From Male Bredwinner to Dual Earner Families*, edited by Hans-Peter Blossfeld, and Sonja Drobnic. Oxford University Press.
- Gonzalo, Maria Teresa, and Jan Saarela. 2000. "Gender Differences in Exit Rates fom Unemployment: Evidence from a Local Finnish Labor Market." *Finnish Economic Papers* 13(2):129-139.
- Guillén, A.M, and M Matsaganis. 2000. "Testint the 'Social Dumping' Hypothesis in Southern Europe: Welfare Policies in Greece and Spain during the last 20 years." *Journal of European Social Policy* 10(2):120-145.
- Jurado, T, and M Naldini. 1996. "Is the South so Different? Italian and Spanish Families in Comparative Perspective." *Southern European Society and Politics* 3(1):42-66.
- Leibfried, S. 1992. "Towards a European Welfare State." Pp. 245-279 in *Social Policy in a Changing Europe*, edited by Z. Ferge, and J. E. Kolberg. Westview Press.

- Navarro-Gómez, and Rueda-Narváez. 2008. "Discriminación y segregación de las Mujeres en el Mercado Laboral." in *Working Paper*. AEDE.
- Paugam, Serge, and Helen Russell. 2000. "The Effects of Employment Precarity and Unemployment on Social Isolation." Pp. 243-265 in *Welfare Regimes and the Experience of Unemployment in Europe*, edited by Duncan Gallie, and Serge Paugam. Oxford University Press.
- Pelphs, E. S. 1972. "The Statistical Theory of Racism and Sexism." *American Economic Review* 62(4):659-661.
- Peracchi, Franco. 2002. "The European Community Household Panel: A Review." *Empirical Economics* 27:63-90.
- Petersen, Trond, and Ishak Saporta. 2004. "The Opportunity Structure for Discrimination." *American Journal of Sociology* 109:852-901.
- Polachek, Solomon W. 1981. "Occupational Self-Selection: A Human Capital Approach to Sex Differences in Occupational Structure." *Review of Economics and Statistics* 58:60-69.
- . 2004. "How the Human Capital Model Explains Why the Gender Wage Gap Narrowed." in *IZA Discussion Paper No. 1102*. Institute for the Study of Labor.
- Reskin, Barbara F., and Debra Branch McBrier. 2000. "Why not Ascription? Organizations' Employment of Male and Female Managers." *American Sociological Review* 65(210-233).
- Rhodes, Martin. 1997. "Southern European Welfare States: Identity, Problems and Prospects for Reform." in *Southern European Welfare States: Between Crisis and Reform*, edited by Martin Rhodes. Frank Cass.
- Russell, H., and P. J. O'Connell. 2001. "Getting a Job in Europe: The Transition from Unemployment to Work among Young People in Nine European Countries." *Work, Employment and Society* 15:1-24.
- Sapelli, Giulio. 1995. *Southern Europe since 1945 : tradition and modernity in Portugal, Spain, Italy, Greece and Turkey*. Longman.
- Singer, Judith D., and John B. Willett. 2003. *Applied Longitudinal Data Analysis. Modeling Change and Event Occurrence*. Oxford University Press.
- Sorensen, A, and S McLanahan. 1987. "Married Women's Economic Dependency, 1940-1980." *American Journal of Sociology* 59(3):327-347.
- Sorensen, Aage B., and Arne L. Kalleberg. 1981. "An Outline Theory of a Theory of the Matching of Persons to Jobs." in *Sociological Perspectives on Labor Markets*, edited by Ivar Berg. Academic Press.
- Tam, Tony. 1997. "Sex Segregation and Occupational Gender Inequality in the United States: Devaluation or Specialized Training?" *American Journal of Sociology* 102:1652-1692.
- Torns, Teresa. 1999. "Las Asalariadas: Un Mercado con Género." Pp. 151-166 in *Las Relaciones de Empleo en España*, edited by F Miguélez, C Prieto, and O Rebollo. Siglo XXI.