

Residential Mobility and Labor Market Transitions: Relative Effects of Housing Tenure, Satisfaction and Other Variables

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Abstract

This paper undertakes an investigation of the relationship between housing tenure, residential mobility and job mobility. The analysis is done for Spain, France and Denmark, using data from the *European Community Household Panel (ECHP, 1995-2001)*. The econometric technique consists of a bivariate probit model that allows us to account for the simultaneity of behaviors in housing and labor markets. Our results confirm the Oswald hypothesis only in the case of Denmark, where homeowners are found to be less mobile on the labor market. In contrast, the effect of homeownership on job mobility is small in France and no effect is shown in Spain. Finally, our results reveal that, in all countries, mobility is satisfaction driven: Those less satisfied in their job (housing) are more likely to change job (house), and lower satisfaction in commuting time increases job mobility but not residential mobility.

Resumen

Investigamos la relación entre la tenencia de viviendas y la movilidad tanto residencial como laboral. Utilizamos datos para España, Francia y Dinamarca proveniente de Panel de Hogares de Europea (1995-2001). El método econométrico empleado el modelo de Probit Bivariante que nos permite considerar la simultaneidad de las decisiones de viviendas y en el mercado de trabajo. Los resultados obtenidos confirman la hipótesis de Oswald solo para el caso de Dinamarca, donde los propietarios son menos móviles en el mercado de trabajo. En contraste, el efecto de la tenencia de viviendas en la movilidad laboral es pequeño en Francia y no existente en España. Finalmente, los resultados revelan que, en los tres países analizados, la movilidad es motivado por satisfacción: Los que están menos satisfechos con su trabajo (vivienda) tienen mayores probabilidades de cambiar del trabajo (vivienda), y menos satisfacción con el tiempo de desplazamiento al trabajo aumenta la movilidad laboral pero no la movilidad residencial.

JEL Classification:

Key words: Residential mobility, job mobility, satisfaction, bivariate probit

1. Introduction

During the last decade, many studies have argued that the effect of homeownership on residential mobility is clearly negative. However, empirical results concerning the effect of homeownership on labor market mobility are less clear. As pointed out by some works in the literature (Blanchard and Katz, 1992), the lack of labor mobility is probably one of the main reasons for Europe's long-term unemployment and persistent differences of unemployment figures between different regions. Oswald (1999) suggested that homeownership lies at the heart of this lack of mobility, and that differential homeownership rate across countries is one of the main reasons for the differentials in unemployment rates. The effect of homeownership on unemployment arises due to its negative effect on residential mobility owing to the transaction costs of selling and buying houses which affect homeowners but not renters. Given the high moving costs faced by homeowners, they are more reluctant to move even when labor market opportunities elsewhere are more attractive. Oswald showed some evidence to support his hypothesis using the cross-country and sometimes within-country cross-regional comparisons. However, the results of many recent studies (Brunet, 2004; Coulson and Fischer, 2002; Green and Henderschott, 2001; Munch et al., 2003; van Leuvensteijn and Koning, 2004; van Vuuren, 2005) suggest that empirical evidence is mixed and at best weak to support Oswald hypothesis.

Most of these studies have focused on the relationship between the rates of homeownership and the unemployment rates either at a macro level or from a micro perspective. However, few studies have been intended to analyze the impact of homeownership on individual job-to-job mobility. The housing market is likely to have an influence on the degree of labor mobility. By making it expensive to change location, high levels of homeownership are expected to reduce the degree of residential mobility and the job mobility rates. Homeowners are presumably less likely to change job than renters because a homeowner is tied to his/her location and would incur substantial exit costs if a change of residence were to be accomplished.

In this paper, we examine Spanish, French and Danish data to explore the relationship between housing tenure, residential mobility and job mobility. In addition, we look for factors other than housing tenure which affect residential and labor market mobility of individuals and compare their relative importance. In particular, we examine the effect of the satisfaction levels with housing and different aspects of jobs on the residential and labor mobility of individuals. It is argued that most human behavior including residential and job mobility is satisfaction (or utility in economic terminology) driven. People change their

place of residence or their jobs to achieve higher levels of satisfaction. Those who are more satisfied with their current housing are less likely to move. Those who are more satisfied with their jobs are less likely to look for other jobs. Overall job satisfaction, in turn, is likely to be affected by wages, job security and commuting time along with other job characteristics. It would be expected that satisfaction levels with commuting time at the current job affect both residential and job mobility. Those who suffer longer commuting times might be more likely to look for either a house closer to their workplace or another job closer to their residence location.

Our results reveal some interesting cross-country differences. Among the main findings, we can highlight that renters are substantially more mobile in residence than owner-occupiers in all countries, but the effect on job mobility is important only in Denmark, while its effect is small in France and no effect is shown in Spain. Housing satisfaction affects strongly on residential mobility, and job satisfaction on job mobility in all countries confirming that mobility is satisfaction driven. Commuting time satisfaction has small but significant effects on job mobility, but not on residence mobility, in all countries suggesting that people, when they suffer from long commuting, change jobs more frequently than residence. Among other variables, changes in marital status stands out as a dominant factor in residential move, while temporal contract and part-time work show up as important determinants of job mobility.

The rest of the paper is organized as follows. The next section deals with an overview of the related literature. Section 3 presents an exposition of the data set. Section 4 offers a detailed analysis on the relationship between residential and job mobility, and Section 5 concludes.

2. Related literature

The idea that homeownership should lead to inferior labor market outcomes arises from the fact that homeowners are less able to change residence, and this reduced residential mobility hampers the efficiency of labor markets. This idea was introduced by Oswald in a series of papers in the 1990s (Oswald, 1997, 1999). The argument stems from the fact that homeownership causes more inertia in spatial mobility than home rents due to the relatively higher transaction and moving costs. Consequently, homeowners tend to have more stable search behavior on the labor market than renters do, and they experience lower job-to-job transition rates.

Some other papers in the literature have supported this Oswald's hypothesis. Gardner et al. (2000) present evidence on labor mobility on the UK, showing that homeowners are less mobile than renters.

However, another branch in the literature points out that there is a positive link between opportunity and homeownership. These studies suggest that the stability of homeowners and their associated neighborhoods is perhaps a benefit rather than a detriment, and to the extent that neighborhoods matter in the creation of labor market opportunity, then homeownership can be viewed as a way of creating positive labor market outcomes. In this line, Dohmen (2005) used a theoretical framework with search and moving costs to show that high-skilled homeowners may be even more mobile than low-skilled renters. Recently, van Leuvensteijn and Koning (2004) and Munch et al. (2003) have analyzed the effect of homeownership on respectively job mobility and unemployment for respectively the Netherlands and Denmark, and they find no effects on job mobility. Van der Vlist (2001) studied the Dutch situation as well and concluded that homeownership has a small positive effect on job-to-job transitions.

Regarding the individual relation between residential and job mobility, several modeling frameworks exist, mostly in the context of job search theory (see van den Berg, 1997). Predictions of these models suggest that if workers face substantial costs in moving residence, job mobility may be severely hampered.

These intriguing and contrary results on the effects of homeownership on job mobility call for further analysis on the relationship between the housing and labor markets.

3. Data

Longitudinal data are essential to conduct a dynamic analysis on residential and job mobility. In this paper we use data from the European Community Household Panel (ECHP). The ECHP forms the most closely coordinated component of the European system of social surveys. This survey gathers information of several socio-economic aspects in the European Union. It occupies a central position in the development of comparable social statistics across Member States on income including social transfers, labor, poverty and social exclusion, housing, health, as well as various other indicators related to the living conditions of private households and persons. It is, therefore, a harmonized longitudinal survey that makes it possible to study individual and

family behaviors such as job and residence moves over several consecutive years.

The present analysis is based on the 1995-2001 waves of the ECHP for Spain, France and Denmark.¹ To examine residential move and labor market transitions, we look at the changes between any two consecutive years. Therefore, for an individual we will have at maximum 6 observations (1995-1996, ..., 2000-2001) of potential transitions. We select those in ages between 25 and 54 to avoid potential confounding effects of schooling and early retirement decisions. And we focus our analysis in estimating the main determinants of residential and job mobility.

Considering that decisions of residential moves and job changes are usually taken simultaneously in the individual and family optimization process, we adopt an econometric approach that account of the simultaneity of behaviors in housing and labor markets.

As for the type of information we will need in the analysis, the ECHP provides information on the date when starting with the current employer and changes in residential location. We define as *movers* those individuals who changed the address of residence between year t and year t+1. It includes both intra- and inter-provincial address changes. In addition, *job movers* are defined as those who change from job to job between two consecutive years.

Furthermore, the data set provides information on different individual, household and job characteristics, that will be included as explanatory factors to analyze residential and job mobility: housing tenure, satisfaction, household size, financial situation of the household, total net household income, gender, changes in marital status, children in the household, education, health, age, working hours, sector, educational mismatch, and type of contract.²

Housing tenure is distinguished in four categories, outright owner, owner with mortgage, renter and others, where others are usually free renters. For the purpose of this paper, we allow housing tenure to affect both residential and job mobility.

Satisfaction is examined in four domains: job or main activity, income, housing, and commuting time. In the analysis of residential mobility housing and commuting time satisfaction variables are included, while in the analysis of job changes satisfaction levels in job or main activity, income, and commuting

¹ We focus the analysis on the seven latest waves of the survey since the type of contract (included as an explanatory factor for job mobility) is not observed in the 1994 survey.

² We also control for yearly, regional and occupational dummies.

time are included. Satisfaction levels are reported in a scale of 1 (very dissatisfied) to 6 (fully satisfied), which are treated as continuous variables in our study.

Changes in marital status are considered to affect residential mobility but not job mobility. We consider four types of changes in marital status. The reference category, "married-married" includes those who remain married between t and t+1. The rest of categories are: "single-single" (single in t and t+1), "div-div" (divorced or separated in t and t+1) and "changed" (different marital status between t and t+1). Gender, education, health status, age, household size and financial situation of the household are supposed to affect both residential and job mobility.

We assume the presence of children under 15 years in the household affects residential mobility but not job mobility. In contrast the child birth is considered as an explanatory factor of both residence move and job changes. Furthermore, an interaction variable between gender and child birth is included as an explanatory in the job mobility equation.

Finally, several job characteristics are assumed to influence job mobility, mainly the number of working hours, the sector, the type of contract, and the presence of an educational mismatch between the worker and job.

4. Residential Mobility and Job Change

In this section, we first provide some descriptive evidence on the relationship between mobility and some of the main explanatory variables, such as housing tenure and satisfaction. Then, we look at the satisfaction changes over two consecutive years by mobility status in order to analyze whether mobility is satisfaction driven. Finally, we proceed to a multivariate analysis where we adopt a simultaneous decision-making framework with correlated error terms between the residential mobility and job mobility.

4.1 Descriptive analysis

Table 1 provides descriptive results on the bivariate relationship between residential mobility, job mobility and our main explanatory variables. It is worth noting that there are some differences in mobility rates between the three countries analyzed. Denmark shows the highest mobility rate in both. Comparing Spain and France we find that, while residence mobility is higher in

France than in Spain, the opposite is true regarding job mobility. These cross-country differences in mobility rates make the comparisons interesting.

According to the housing tenure, clear differences become apparent regarding the probability of residence move: in all countries changing residence is significantly more likely among renters than homeowners, confirming the results of the existing literature. The same pattern is observed in the probability of job change although the difference by housing tenure is smaller.

Table 1: Proportion of movers by some characteristics										
		SPAIN			FRANCE		D	ENMARK		
	Resid.	Job	N/	Resid.	Job	M	Resid.	Job	M	
	mobility	mobility	N	mobility	mobility	N	mobility	mobility	N	
All	5,78	9,86	19911	8,86	3,88	23018	11,65	11,84	10904	
Housing tenure										
Outright owner	4,89	9,75	10355	5,28	2,41	3690	7,83	9,79	562	
Owner mortgage	2,94	8,39	6294	3,26	3,22	10637	7,79	10,07	8122	
Renter	16,99	13,26	2036	17,66	5,41	7646	26,65	18,76	2191	
Free renter	7,99	12,64	1226	14,19	4,60	1043	34,48	27,59	29	
Gender										
Men	5,52	10,41	13433	9,08	4,42	13155	12,07	12,45	5831	
Women	6,08	8,72	6478	8,57	3,16	9863	11,18	11,16	5073	
Age										
25-29	11,01	18,24	3541	21,14	8,68	3273	25,28	21,67	1357	
30-39	6,69	10,88	7491	10,88	4,63	7843	13,22	14,69	4010	
40-49	3,08	6,15	6597	4,44	2,36	8647	7,80	8,40	3857	
50-54	1,84	4,21	2282	3,41	1,32	3255	5,77	5,06	1680	
Education										
Low	4,52	11,96	9456	6,60	4,08	8292	10,92	11,77	1529	
Middle	6,03	9,19	4115	8,54	3,23	7954	11,47	12,11	5072	
High	7,27	7,16	6340	12,02	4,42	6772	12,13	11,57	4303	
Marital Status										
Married	4,01	8,18	14329	6,65	3,22	15135	7,74	9,83	6809	
Single	6,01	14,54	4278	14,09	6,04	5097	17,41	16,41	2499	
Sep/Divorced	5,96	12,29	822	8,55	2,66	2070	14,53	12,64	1005	
Any change	54,51	13,95	466	21,18	6,05	595	30,20	15,20	500	
Health Status	ĺ	·		Í	,		·	,		
Very bad	0	3,03	33	7,55	4,91	265	7,14	14,29	14	
Bad	4,99	12,90	341	9,95	4,84	372	11,61	16,96	112	
Fair	4,12	10,50	2742	7,64	3,19	6141	9,21	10,26	1053	
Good	5,93	9,46	12444	9,06	3,85	12850	11,28	11,37	3660	
Very good	6,16	10,41	4350	10,33	5,05	3387	12,30	12,32	6064	
Job Satisfaction										
Low	6,22	18,15	1736	9,23	10,10	1040	16,16	34,50	229	
Medium	5,73	11,41	7745	8,76	4,34	9097	12,71	15,51	2501	
High	5,60	7,33	10430	8,90	3,06	12881	11,21	10,09	8174	
Income										
Satisfaction										
Low	5,76	14,72	4458	8,75	5,39	3098	15,78	18,72	545	
Medium	5,75	9,52	10583	8,75	3,67	13800	12,24	13,71	3880	
High	5,54	6,14	4870	9,17	3,59	6120	10,96	10,16	6479	
Housing										
Satisfaction										
Low	9,71	14,37	1308	30,94	6,16	795	34,48	18,30	377	
Medium	7,12	11,01	6900	14,22	4,26	6412	20,44	14,76	2202	
High	4,43	8,67	11703	5,58	3,62	15811	8,30	10,79	8325	
Satisfaction with										
commuting time										
Low	5,43	13,91	2746	10,29	7,04	1662	14,75	19,30	834	
Medium	5,90	11,52	6747	9,25	3,98	6283	11,34	14,27	2390	
High	5,65	7,72	10418	8,55	3,50	15073	11,42	10,29	7680	

Small gender differences in both residence and job mobility can be appreciated in the three countries. However, age seems to be an important factor in explaining both types of mobility. In particular, our results reveal that younger persons have a significantly higher probability of both residence and job mobility than older ones. For example, those aged 25-29 have about 4 or 5 times higher residence and job mobility than those aged 50-54.

Education is positively related to residential mobility in Spain and France. However, while in Spain lower educational levels are significantly related with higher rates of job mobility, no significant differences in terms of education are observed in France or Denmark. Changes in marital status are strongly related with residence change in all countries, while being married is negatively related with both residence and job mobility. Health status seems not to be related with either mobility in the three countries.

Finally, satisfaction appears to be significantly related with mobility. Those with lower levels of satisfaction in their current job are more likely to change jobs. A similar pattern, although with smaller effects, is observed between the satisfaction level with financial situation and job mobility. Furthermore, those with lower satisfaction with current housing are much more likely to change their place of residence, and to change jobs. Finally, satisfaction with commuting time especially affects job mobility. In this respect, we find that in the three countries the percentage of job movers is clearly higher among those individuals who were not satisfied at the previous period. For the case of Denmark, it seems that satisfaction with commuting also affects residential mobility.

Obviously, many of these relations are due to confounding effects of other correlated variables. Thus, an econometric approach is necessary to carry out a more-in-depth analysis on the main determinants of residence and job mobility.

4.2 Mobility and Changes in Satisfaction

In this section we examine the changes in satisfaction level according to residential and job mobility. The descriptive analysis in Table 1 showed that those who are less satisfied with their current housing (job) are more likely to change housing (job). The main purpose of this section is to assure that mobility is satisfaction motivated. In particular, we would try to address the question whether those who change residence (job) improve on their satisfaction levels with housing (job).

As can be observed in the last column of Table 2, between any two consecutive years 85.29% of workers in Spain stayed in the same residence and

the same job, 9% changed jobs but stayed in the same residence, 4.85% changed residence but stayed in the same job, and only 0.85% of workers changed both job and residence. In France, the corresponding percentages are, 88.08%, 3.05%, 8.03% and 0.83%, while in Denmark, the corresponding figures are 79%, 9%, 9% and 2.5%. The fact that the proportion of workers who changed both job and residence is small compared to those who changed only residence or job suggests that the majority of changes in job and residence are within local areas.

Satisfaction changes according to mobility status, presented in Table 2, seem to be reasonable and can be summarized as follows. First, those who change residence gain a substantial increase in housing satisfaction compared to those who do not change residence. Second, those who change jobs experience substantial gains in the satisfaction with main activity and income. Third, those who change both experience substantial gains in satisfaction in almost all domains, although some country differences can be appreciated. In Spain people changing job and residence at the same time experience a significantly higher increase in satisfaction with income compared to France or Denmark. In France, however, those who change both improve on job satisfaction substantially more than in the two other countries. In Denmark and France, changing both residence and job improves significantly the satisfaction level with commuting time, while the effect is absent in Spain. Summarizing, the results confirm that mobility (with respect to either housing or job) is satisfaction driven.

Table 2 : Satisfaction change by Mobility									
SPAIN	Changes in satisfaction with respect to								
Residential mobility	Job mobility	Main activity	Income	Housing	Commuting	N			
No mover	No mover	-0,055	0,015	-0,031	-0,034	16813			
No mover	Mover	0,146	0,167	0,004	0,028	1758			
Mover	No mover	0,020	0,133	0,739	-0,105	952			
Mover	Mover	0,320	0,509	0,491	0,024	169			
FRANCE		Chang	ges in satisfaction w	vith respect to					
Residential mobility	Job mobility	Main activity	Income	Housing	Commuting	N			
No mover	No mover	-0,048	0,009	-0,065	-0,013	20146			
	Mover	0,382	0,263	-0,179	0,051	697			
Mover	No mover	-0,045	0,040	0,850	0,051	1842			
	Mover	0,707	0,183	0,712	0,175	191			
DENMARK		Chang	ges in satisfaction w	vith respect to					
Residential mobility	Job mobility	Main activity	Income	Housing	Commuting	N			
No mover	No mover	-0,082	-0,028	-0,068	-0,017	8499			
	Mover	0,326	0,146	-0,103	-0,051	1014			
Mover	No mover	-0,032	0,024	0,654	-0,118	996			
	Mover	0,271	-0,019	0,406	0,213	266			

4.3 Multivariate analysis

Given that many variables in our descriptive analysis are correlated, we cannot draw any causal interpretation from the bivariate correlation. In this section, we run bivariate probit models where residential moves and job changes are estimated simultaneously to allow for a possible correlation in residuals in the two equations. In practice, in order to help identification we exclude some variables in one of the two equations, which are based on the conceptual model and the results of simple probit model. In specific, we exclude main activity satisfaction, income satisfaction and job characteristics from residential motility equation, while we exclude housing satisfaction, household income and marital status changes from job mobility equation. The results are shown in Table 3.

Housing tenure and mobility: Housing tenure affects substantially residential mobility in all countries. Renters are more likely to change residence than homeowners. This result is due to the fact that, because of the high degree of fixed costs involved in the acquisition of property, homeowners are tied to their location to a greater extent than are renters. The effect is largest in Denmark and Spain and smallest in France. Among the owners, having mortgage seems to reduce residential mobility in Spain and France but not in Denmark. On the other hand, housing tenure has no effects on job mobility in Spain while it has significant effects in Denmark and France. This result is in line with Gardner et al.(2000) who present evidence on labor mobility on the UK and show that homeowners are less mobile than renters.

Satisfaction and mobility: As expected, higher housing satisfaction reduces residential mobility and higher job satisfaction discourages job mobility. On the one hand, higher satisfaction in financial situation discourages job mobility in Spain while it has no effects in France or Denmark. On the other hand, the satisfaction level with commuting time has negative effects on job mobility in all countries but no effect on residential mobility. This might suggest that those who suffer from higher commuting times are more likely to move their jobs than their residence. But it might also be due to the fact that there are other household members who do not work in the same area making residence move more complicated.

Demographic characteristics and mobility: Males are significantly more likely to change jobs than their female counterparts in Spain and France, but no gender differences are observed in Denmark. This is consistent with other indices of gender equality in the labor market suggesting that Denmark has the least and Spain the largest gender inequality. Age is found to significantly affect

³ Sample characteristics are presented in Appendix.

residential but not job mobility in France and Denmark. Household size has in general no effect on either mobility, while economic difficulty to make ends meet has a positive effect on job mobility in Spain and Denmark. Furthermore, total household income seems to increase residential mobility. Residence mobility appears to be positively affected by the birth of children in France and Denmark, while the presence of children under 15 in the household is found to significantly reduce residence move only in Denmark. However, these two factors do not exert any influence on job mobility decisions in these countries. In contrast, the birth of children reduces job-to-job transitions amongst Spanish females. Changes in marital status increase enormously the probability of residential change, and the effect is largest in Spain. Divorced are found to be more likely to change residence than their married counterparts. Single persons are less likely to move residence compared to married only in Spain. This Spanish peculiarity seems to be consistent with the fact that in Spain the age of emancipation is relatively higher than in other European countries. Education seems to be positively related with residential mobility in Spain and France while it is negatively related with job mobility only in Spain. Finally, health status does not exert any significant effect in either mobility in any country.

Job characteristics and mobility: Most job characteristics significantly affect job mobility. First, those employed under temporary contract are much more likely to change jobs in the three countries. Second, part-time jobs seem to increase job mobility in France and Spain while no significant effect is observed in Demark. Third, being employed in the public-sector seems to discourage job mobility in all countries, with the strongest effect found in France and the smallest effect in Denmark. Finally, over-education exerts a positive and significant effect on job mobility, with the strongest effect found in Denmark.

The estimated correlation coefficient between the two mobility equations is positive and significant in the three countries. This result suggests the existence of unobserved, but relevant, factors (for instance individual preferences regarding mobility) that affect residence and job mobility in the same direction.

Table 3: Biva	ariate P	robit Es	stimation	Resul	ts of Resid	ential	Mobili	ty and	Job Mo	bility			
	SPAIN					FRAN				DENM	IARK		
						Resid. Mobility .						Job Mobility	
	Coef	t	Coef	t	Coef	t	Coef	t	Coef	t	Coef	t	
Housing tenure													
Owner without mortgage	_	_	_	_	_	_	_	_	_	_	_	_	
Owner with mortgage	-0,276	-6,14	-0,094	-2.84	-0,274	-5,95	0,038	0,68	0,071	0.84	0,024	0,30	
Renter	0,652	14,46	0,020	0,44	0,362	8,21	0,117	1,98	0,621		0,264	3,14	
Free renter	0,247	3,99	0,016	0,29	0,298	4,68		1,93	0,815		0,558	2,04	
		- ,	- , -	-, -	.,	,	,	,		-,	-,	,-	
Satisfaction with													
Work or main activity			-0,066	-5,23			-0,140	-8,57			-0,164	-9,46	
Financial situation			-0,036	-2,66			-0,003	-0,14			0,002	0,08	
Housing situation	-0,100	-7,18	0,005		-0,250	-19,88	0,019		-0,177	-11,40		2,40	
Commuting	0,021	1,85	-0,026				-0,048		0,012		-0,061		
		,	- , -	,	.,.	, -	-,-	- /-		- ,-	-,	- , -	
Household size	0,050	0,98	-0,000	-0,00	-0,071	-1,65	0,019	0,50	0,019	0,31	-0,002	-0,07	
Difficulty to make ends meet	-0,009	-0,53	0,046		-0,024		-0,001		-0,005		0,050		
Female	-0,069	-1,95	-0,128		-0,021		-0,153		-0,028		-0,013		
Children<15	-0,016	-0,36	,	,	-0,003	-0,08	·	ŕ	-0,115	-2,12	·		
Chile birth	0,028	0,30	0,093	1,04	0,260		0,068	0.65	0,221		-0,090	-0.78	
Female * Child birth		- ,	-0,610	,	.,	- ,	-0,048		,	,-	-0,235		
Total net household income	0,141	3,56	-,	_,~.	0,220	6,21	-,	-,	0,212	3,89	-,	-,	
1 3 444 11 5 11 5 11 5 11 5 11 5 11 5 11	0,1.1	2,20			0,220	0,21			0,212	0,0)			
Marital status													
Married-Married	_	_			_	_			_	_			
Single-Single	-0,140	-2,83			0,013	0,38			0,065	1,29			
Div-Div	0,197	2,47			0,152	3,06			0,296	4,71			
Changed	,	25,24			0,344	5,35			0,664	9,98			
Changes	1,072				0,5	0,00			0,00.	,,,,			
Education													
Low	_	_	_	_	_	-	_	_	_	_	_	-	
Middle	0,043	0,96	-0,097	-2,49	0,076	2,32	-0,084	-1,87	0,017	0,33	0,031	0,58	
High	0,166	3,92	-0,132		0,164		0,027		0,066		0,069	1,14	
8		- ,-	-, -	,	, ,	,-	-,-	- 7-		,	-,	,	
Health													
Very good	-0,166	-1,30	-0,109	-1,10	0,022	0,25	-0,013	-0,12	-0,017	-0,11	-0,059	-0,41	
Good	-0,111	-0,90	-0,161	-1,67	0,019	0,24	-0,144	-1,49	-0,059	-0,38	-0,099	-0,68	
Fair	-0,207	-1,59	-0,035		-0,068				-0,127		-0,146		
Bad or very bad	_	_	_	-	_	-	_	-	_	_	_	_	
Age	-0,019	-0,84	-0,018	-1,04	-0,063	-3,56	-0,036	-1,61	-0,092	-4,00	-0,045	-2,00	
Agesq	0,000	-0,59	0,000	-0,44	0,000	1,62	0,000	0,36	0,001	2,95	0,000	0,74	
Part-time			0,165	2,75			0,281	4,26			0,090	1,33	
Public sector			-0,277	-6,46			-0,485	-10,55			-0,124	-3,20	
Over-educated			0,061	2,10			0,060	1,76			0,097	2,79	
Type of contract													
Permanent			-	-			-	-			-	-	
Fixed-term			0,929				0,826	16,29			0,776	11,57	
Casual work			0,818	9,16									
Other			0,852	10,01									
Constant	-2,309	-3,49	-0,625	-1,74	-0,628	-1,29	0,119	0,27	-0,564	-0,80	0,584	1,23	
rho	0,070	2,48	0,070	2 48	0,213	7 01	0,213	7 01	0,151	5 72	0,151	5,73	
N	0,070		911	2,40	0,213	2301		1,91	0,131	109		5,13	
Log likelihood			740			-897				-70			
Regional dummies included in bo	<u> </u>				<u> </u>	-071	U		<u> </u>	-70	1/		

Regional dummies included in both equations for Spain and France. Yearly and occupational dummies included in the job mobility equation for the three countries

5. Concluding Remarks

In this paper we examined how residential and job mobility are affected by housing tenure, satisfaction and other individual, family and job characteristics. In order to allow for the simultaneous nature of the both mobility decisions, we use an econometric approach based on bivariate probit models.

Among the main findings we can highlight that housing tenure significantly affects (with some cross-country variation) residential mobility in all countries, while its effect on job mobility is strong in Denmark, marginal in France and non-existent in Spain. This result suggests the existence of cultural or institutional differences between the three countries in housing and labor markets. Furthermore, we find that mobility is strongly satisfaction driven; those who are less satisfied with housing (job) are more likely change house (job). Commuting satisfaction affects only job mobility suggesting that when faced with long commuting people are more prone to change jobs than residence.

Other findings worth mentioning are the following. First, gender differences in job mobility are strong in Spain while they are inexistent in Denmark, consistent with other gender inequality indices. Second, changes in marital status are an important factor in explaining residential mobility in Spain, which is consistent with the higher ages at emancipation in this country than in other European countries. Finally, holding permanent contracts, and being employed in the public-sector jobs discourage job mobility in all countries.

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Appendix

Table 1: Sample characteristics										
	Spain		F	rance	Denmark					
	Mean	Std.Dev	Mean	Std.Dev	Mean	Std.Dev				
Housing tenure										
Owner without mortgage	0,520	0,500	0,160	0,367	0,052	0,221				
Owner with mortgage	0,316	0,465	0,462	0,499	0,745	0,436				
Renter	0,102	0,303	0,332	0,471	0,201	0,401				
Free renter	0,062	0,240	0,045	0,208	0,003	0,052				
Satisfaction with										
Work or main activity	4,328	1,220	4,452	0,993	4,946	0,947				
Financial situation	3,512	1,281	3,707	1,142	4,561	1,088				
Housing situation	4,501	1,161	4,686	0,968	5,007	1,055				
Commuting	4,292	1,453	4,647	1,252	4,926	1,356				
Male	0,675	0,469	0,572	0,495	0,535	0,499				
Age	38,383	8,184	39,704	8,176	39,845	8,115				
Household size	1,227	0,413	1,087	0,462	1,011	0,488				
Difficulty to make end meet	3,667	1,147	3,360	0,956	2,902	1,131				
Total net household income	12,491	0,547	9,623	0,507	9,960	0,406				
Marital status										
Married-Married	0,720	0,449	0,658	0,474	0,624	0,484				
Single-Single	0,215	0,411	0,221	0,415	0,229	0,420				
Div-Div	0,041	0,199	0,090	0,286	0,092	0,289				
Changed	0,023	0,151	0,026	0,159	0,046	0,209				
Education										
Low	0,475	0,499	0,360	0,480	0,140	0,347				
Middle	0,207	0,405	0,346	0,476	0,465	0,499				
High	0,318	0,466	0,294	0,456	0,395	0,489				
Health										
Very good	0,218	0,413	0,147	0,354	0,556	0,497				
Good	0,625	0,413	0,558	0,497	0,336	0,477				
Fair	0,138	0,344	0,267	0,442	0,097	0,295				
Bad or very bad	0,019	0,136	0,028	0,164	0,012	0,107				
Part-time	0,043	0,202	0,061	0,239	0,069	0,254				
Public sector	0,043	0,202	0,323	0,237	0,402	0,234				
Over-educated	0,550	0,417	0,490	0,500	0,603	0,489				
Type of contract										
Permanent	0,578	0,494	0,845	0,362	0,843	0,364				
Fixed-term	0,378	0,385	0,052	0,302	0,040	0,304				
Casual work	0,013	0,383	0,032	0,223	0,040	0,190				
Other	0,013	0,113								