

Max-Planck-Institut für demografische Forschung Max Planck Institute for Demographic Research Doberaner Strasse 114 · D-18057 Rostock · GERMANY Tel +49 (0) 3 81 20 81 - 0; Fax +49 (0) 3 81 20 81 - 202; http://www.demogr.mpg.de

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# Leaving Home Ain't Easy A comparative longitudinal analysis of ECHP data

Arnstein Aassve (aassve@demogr.mpg.de) Francesco C. Billari (billari@demogr.mpg.de) Stefano Mazzuco (mazzuco@stat.unipd.it) Fausta Ongaro (ongaro@stat.unipd.it)

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### Leaving Home Ain't Easy A comparative longitudinal analysis of ECHP data

Arnstein Aassve\*, Francesco C. Billari\*, Stefano Mazzuco\*\* and Fausta Ongaro\*\*

\*Research Group on the Demography of Early Adulthood Max Planck Institute for Demographic Research Doberaner Strasse 114 D-18057 Rostock, Germany E-mail: <u>aassve@demogr.mpg.de</u>, <u>billari@demogr.mpg.de</u>

> \*\*Department of Statistical Sciences University of Padova Via Cesare Battisti 241-243 I-35121 Padova, Italy
>  E-mail: mazzuco@stat.unipd.it, ongaro@stat.unipd.it

#### Abstract

We use three waves of the European Community Household Panel (ECHP) to analyse the impact of employment, earnings, household income, and welfare on young adults' decision to leave the parental home. In particular we investigate the importance of these income sources in different welfare settings. We use a simultaneous equation approach to control for unobserved heterogeneity. This is important given that the ECHP does not include retrospective information on demographic events. We find employment and income to be very important factors in the decisions of young adults in the Southern European Welfare State to leave home. For the Continental European Welfare state the results are more mixed. Employment and income are still important factors, but the effects are less clear and there are significant variations. In the Scandinavian Social Democratic Welfare State, the effect of employment and income appears negligible. The effect is also modest in the UK (the Liberal Market State), a finding we attribute to the educational system.

**Keywords**: leaving home, transition to adulthood, ECHP, welfare regimes, living arrangements of young adults.

#### 1. Introduction

The age at which young adults leave home in order to establish an independent household, alone or with a partner, is highly variable among European countries (Billari et al., 2001; Corijn and Klijzing, 2001). The reasons young adults leave home and the living arrangements they move into are also very different in different countries: Some leave home to move in with a partner, some leave to pursue higher education, some move for their jobs, and some simply desire independence. And some live alone, whereas others move in with a roommate. As Fernandez Cordón (1997) has argued, in a time of overall social and economic convergence in European countries, it is hard to find social indicators with such striking differences among EU countries as those related to leaving home. For instance, in the early 1990s, 32 percent of young men in Italy and 25 percent of young men in Spain had not left home by the age of 30. In Sweden the figure drops to 2 percent; in the Netherlands, it is 5 percent, and in France the rate is 9 percent. Significant differences also exist for women (Table 1).

The differences among countries are rather complex, reflecting on the one hand longstanding path-dependent and self-reinforcing factors, and on the other hand institutional, economic and conjunctural factors. First, the presence of long-term cultural continuities, with emphasis on the strength of inter-generational ties between societies, is evident especially when looking at differences between northwestern and southwestern Europe (Reher, 1998; Dalla Zuanna, 2001). Such cultural continuities, together with historical contingencies having long-term consequences, have contributed to shape institutional frameworks at the societal level, with advantages and disadvantages for various living arrangements (Holdsworth, 2000). This institutional framework has determined young Europeans' living arrangements. Second, macro social changes and economic dynamics have constrained the choices of young adults, and have constrained policy makers in their willingness to help young adults choose their own living arrangements.

Given this complex relationship and the existing institutional framework, the *welfare regimes* (Esping-Andersen, 1999) of western European countries cannot be taken as purely exogenous, since they have been partially shaped by cultural factors and path-dependencies (Mayer, 2001). For instance, whether a society encourages young adults to attend higher education at universities with on-campus accommodation, or whether a society favours local universities where young adults and their parents have the possibility to co-reside for a longer period, depends on the prevailing views of intergenerational relationships—as well as financial constraints. Although we have in mind also cultural factors and the interplay between such factors and institutional settings, this paper puts focus on the medium-term perspective, and we take institutional arrangements as exogenous. The aim is to compare the impact of the economic and labour market situation of young adults on the propensity to leave home in different welfare regimes. As a guideline for interpretation, we use the well-known classification of welfare regimes outlined by Esping-Andersen in his four-type specification, which gives more weight to familialism and thus distinguishes Southern Europe within

conservative types of welfare states<sup>1</sup>. The four-types specification is also in accordance for instance with Ferrera (1996), who speaks of a Southern European welfare-state model, with Trifiletti (1999), and with the classification of welfare regimes by Mayer (2001). The four-type classification groups countries into four categories according to their welfare regime: 1) Liberal Market, 2) Social-Democratic (Scandinavian), 3) Conservative Continental European and 4) Southern European. By using this specification, we aim to shed light on how institutional configurations shape the choice of living arrangements of young adults according to their economic status. We use longitudinal data from three waves of the European Community Household Panel (ECHP) (European Commission, 1999).

The paper is structured as follows: In Section 2 we review some results concerning the impact of income and occupational status on the age of young adults when they leave home. In Section 3, we outline our hypotheses concerning the differences between welfare regimes. In Section 4, we present an in-depth description of the data and the statistical methods we use for modelling this process. Our findings are presented in Section 5. Section 6 includes some discussions and prospects for future research.

#### 2. Findings in the literature: income, employment status and leaving home

The fact that leaving home is closely associated with union formation often complicates the analysis of income and occupational effects, since finding a partner becomes a key factor in the decision-making process (Mulder and Hooimeijer, 1999). In addition, this association varies according to the society. For cohorts born around 1960, 72 percent of Swedish young men (and 60 percent of Finnish men) left home before starting a coresidential partnership. Among the Flemish-speaking young Belgians, the percentage was 20 percent; among the Spanish, it was 25 percent (Billari et al., 2001). Partnership formation is frequently analysed in terms of search and matching behaviour, which is similar to the approach taken in job search models. In the latter framework, the individual's income tends to have ambiguous effects on the likelihood of marriage and thus of independent living (Aassve et al., 2001a; 2001b). On the one hand, a high level of personal income reduces the importance of parental support (in terms of living in the parental home). This can be thought of as a *self-reliance effect*<sup>2</sup>, which says that young adults become more likely to leave the parental home as their personal income increases.4 This will also have an effect on partnership formation. For instance, a woman with a high income is less dependent on a husband as an income source and might choose to delay marriage. However, high-income individuals are likely to receive more marriage offers, and this might accelerate the partnership formation process. This can be thought of as a *good-catch* effect, which will have a positive effect on the rates of marriage. However, individuals realising that they are a good catch might raise their reservation threshold in response to the high level of marriage offers. The insight from

<sup>&</sup>lt;sup>1</sup> Esping-Andersen (1999, p. 94) leaves doors open for both a three- and a four-type categorization, as he states: "a simple 'three worlds' typology may suffice for most of the purposes that this book pursues. The final judgment is not yet in, and we shall in fact see that the distinctiveness of the Southern European countries does make its mark on issues such as post-industrial employment adaptation."

<sup>&</sup>lt;sup>2</sup> This is equivalent to an "independence effect," which often reported in this literature.

this theoretical perspective is that one's own income has an ambiguous effect on leaving home, and any empirical analysis is unlikely to uncover anything other than the net effects.

The empirical literature on the impact of income and occupational status on young adults' household formation in a European setting is relatively scarce. The main reason is the lack of comparative data-sets which include reliable measures of income. In this section we review the main papers of the existing literature concerning specific countries.

### 2.1 Liberal Market regimes

The literature on the process of leaving home comes mainly from the United States. Consequently, it is no surprise that most of the studies in the literature reflect the situation of Liberal Welfare regimes. Here we provide a review of the most influential studies:

Whittington and Peters (1996) examine the impact of economic variables of children and parents on the probability of making a transition to independent living in the U.S. They find that a young person's predicted wage level increases the probability of independent living, whereas the parents' income level is negatively associated with the probability of leaving the parental home. They also find a negative association between the probability of leaving home and the level of welfare payments. Avery, Goldscheider, and Speare (1992) find that parental income is negatively associated with transitions to marriage, whereas they find no strong effect on the transition to independent living. They find that a high level of personal income is positively associated with leaving the parental home. Haurin, Henderschott, and Kim (1991) find a relatively strong positive correlation between the individual's earning potential and the propensity to leave the parental home. Mulder and Clark (2000) find that although parental housing has an impact on leaving home, this is far less important than the young adult's own income.

Examining the British case, Ermisch (1999) finds evidence that housing market conditions, evaluated mainly by regional relative housing prices, affect the decision of young adults to leave the parental home. He finds that tight housing markets tend to delay moving from the parental home, as well as making returns to the parental home more likely. Young people with high income levels are more likely to leave home and less likely to return.

Buck and Scott (1993) use the Panel Study of Income Dynamics to analyse the patterns of young people leaving the parental home. They relate event histories that describe the transitions in and out of the parental home. Young adults leave home for two alternative reasons: to live independently or to get married. The authors show that over time young adults have become more likely to leave home to live independently and less likely to leave to get married. They find that coming from a one-parent family tends to accelerate the transition to independent living and delay the transition to marriage. Also, for women, family size is negatively associated with marriage. An advanced educational level has a negative effect on the offspring's transition to marriage, but a positive effect on the transition to independent living. Young people's own income is found to have a relatively small effect on the transition to independent living and is only significant for the marriage transition. In contrast, full-time employment has a strong positive impact on leaving home.

## 2.2 Social-Democratic welfare regimes

Relatively little attention has been given to leaving home in Nordic countries, and only a couple of studies have systematically investigated the process of leaving home. Nilsson and Strandh (1999) use register-based income data on parents to investigate the role of income on leaving home. They find a statistically significant association between the propensity of leaving home and the parental income level. The impact of parental income is not statistically significant for women, which is in contrast to the findings of Whittington and Peters for the U.S. However, they find the social class of parents to be important. In addition, employment increases the probability of independent living; continuously employed young adults have the highest propensity to leave home. But the authors are unable to conduct a separate analysis of the impact of young adults' income because of the low variability of incomes within occupational states. Nilsson and Strandh also analyse the inclination of young adults to return home, and they find that experiencing difficulties in the labour market increases the probability of returning home.

## 2.3 Conservative Continental European Welfare Regimes

De Jong et al. (1991), using Dutch panel data, show that a high level of transferable material resources, defined mainly as income, property, and the father's job status, in the parental household translates into an earlier rate of leaving home. In contrast, non-transferable material resources, defined as space in the parental household, the preparation of meals and housework, etc., have the opposite effect--as long as leaving home is not due to continuing education. Non-material resources are also shown to have an impact on the decision of young adults to leave the parental home. , Wagner and Huinink (1991) use data from various sources (including the German Socio-Economic Panel) to argue that in West Germany, across birth cohorts, the impact of occupational status -- and in particular of labour force experience -- has played an increasing important role in the propensity to leave the parental home.

### 2.4 Conservative Southern European Welfare Regimes

In their analysis of the Italian case, using two waves of the national sample of the ECHP, Aassve et al. (2001a) find that economic circumstances are important in young adults' decisions to leave home. In particular, they find personal income resources and parental income levels to be crucial factors in the decision to leave home. The results suggest that stable employment is an important prerequisite for men to start their own household. But for women, finding a partner seems to be the most important factor in becoming independent of their parents.

In a comparative study involving Italy and Spain, using retrospective data from the Fertility and Family surveys, Billari et al. (forthcoming) confirm that being employed is an important factor in household formation, especially with union formation in the countries included. The results differ for men and women, suggesting that the traditional gender division of labour still influences the dynamics of family formation. For men, holding a job significantly increases their chances of getting married. For women, however, the observed association is negative -- although having had a job in the past increases their probability of getting married, in particular if their labour force experience was a lengthy one. In addition, current employment decreases the chances of residential autonomy, for both men and women.

### 3. Hypotheses on differences between welfare regimes

As illustrated by Esping-Andersen (1999), the very nature of the "welfare state crisis" lies in the problematic interaction between the components of welfare regimes: labour markets, the family and the state. In particular, a key disjunction is that labour market and welfare regulations have originated in a society that no longer exists. Emerging risks in contemporary, post-industrial welfare-based societies arise primarily from huge changes in the labour market and in households. Focusing on household formation allows us to throw additional light on one of the fundamental issues of post-industrial social dynamics. Specifically, we expect the impact of income (both of the individual and of the parental household) and labour market position on the propensity to leave home to vary across different welfare regimes.

Before casting our hypotheses, let us briefly review the results of two papers that constitute important precedents for our analysis. The only preceding multinational comparative study on the issue is based on cross-sectional data from the Luxembourg Income Study (Short and Garner, 1990). Short and Garner examine the determinants of living alone among young adults aged 15-24 in the U.S., Canada, Germany, the U.K. and Australia. They distinguish incomes from 1) wages, salaries and self-employment; 2) means-tested transfers, social security transfers and private transfers; 3) cash, pensions and other cash income. The analysis by Short and Garner concludes that different types of income affects the propensity to live alone differently, and in turn the effects vary by country. The cross-sectional nature of the study, however, allows them to conclude that: "Although the empirical evidence described here is preliminary, we interpret it as suggestive that incomes do affect living arrangements and that incomes from differently up to the study of the study. Now the study is preliminary to the study of the study of

Holdsworth (2000) compares two countries with different welfare regimes: Britain and Spain. She does not find important differences in the impact of transferable material parental resources (using the fathers' occupation as a proxy) between the two countries. In both cases, such resources have only a limited impact on the transition out of the parental home, with the exception of Spanish young adults who are children of agricultural workers. On the contrary, there are important effects of parental cultural capital and of non-transferable resources. Important differences are found on the impact of unemployment: while being unemployed is not an obstacle to leaving home in Britain (although the impact varies depending on the reasons), it delays household formation in

Spain. Holdsworth concludes that "the opportunity structure is but one factor influencing delayed leaving home in Spain." Furthermore, she states that "the expectation that young people in Spain will not leave home until they are 'ready' to establish a family household is incorporated into the wider institutional framework, - particularly the educational system in each country which has very different expectations of young people's living arrangements and dependency on parents."

The next section elaborates our hypotheses concerning how welfare regimes are linked with the explanatory variables. We also discuss our hypotheses in terms of gender differences when relevant.

## 3.1 Employment status

We expect being employed to have, in general, an important impact in speeding up the transition out of the parental home. However, we foresee an exception for the Social-Democratic welfare regimes, where the welfare state provides an important safety net that allows young adults to leave the parental home independently of their labour market position, in particular to pursue higher education. The institutional arrangements concerning higher education also play a crucial role in individual choices in other kinds of welfare regimes. An additional exception is related to leaving home due to labour migration. Leaving home for job-related reasons is likely to happen more frequently where 1) there is higher labour market mobility (e.g. in Liberal Welfare states), and 2) where job-related emigration has long been a response to poor employment opportunities. The latter was particularly relevant in Southern Europe during the 1990s, especially in Greece and Portugal. In these countries we might actually find that unemployment is positively associated with leaving home. We also expect significant gender differences in Southern Europe, where the traditional male breadwinner model is still shaping the way households are formed for many young individuals. In these cases male employment status matters considerably more than female employment status.

### 3.2 Job instability

Let us first clarify that we are referring to individual-level job instability. We measure this (not necessarily in a foolproof way) by whether individuals experienced periods of unemployment in the past. We expect this measure to somehow mirror those more prone to unemployment. Having experienced job instability should have the most important influence in Southern European and in Liberal Welfare regimes, and in general we expect it to have a postponing effect on leaving home. In particular, in Southern Europe, where the familialization of the welfare of young adults is more pronounced, young adults who experienced labour market problems are expected to continue residing in the safety "ne(s)t" of their parents until they have attained a stable job position. Nevertheless, moving to a better labour market might also be a reason for leaving the parental home, which will shift the impact of job instability in the opposite direction (with a higher propensity to leave home for those who have experienced problems in the labor market). State-provided safety nets make individual experiences of job instability less of a problem in Continental European and Social-Democratic welfare states.

### 3.3 Income from labour

Among employed young adults, we expect that the level of income from labour will influence the opportunities to form a new household. We hypothesise that the impact of labour income differences is more important where the general relative costs of establishing a new household are higher. Here the housing market plays a key role. Income differences are thus expected to have the highest impact in Southern Europe, where housing markets are particularly "inhospitable" to new entrants given low credit accessibility and low provision of public housing (see also the hypothesis on parental household's income below). Again, given that a male breadwinner model still survives in Southern Europe, income differences should count more for young men than for young women. We also expect an important impact of income differences in Liberal Welfare regimes, where individuals are expected to rely on their own income when establishing a new household. The deregulation of housing may, however, influence in the opposite direction (with the possibility, however, of being caught in bad housing or mortgage traps). In general, we expect a lower importance of income in Social-Democratic and Continental-European welfare regimes.

### 3.4 Non-labour income

We focus here on public allowances of various kinds. In general, we hypothesise that receiving income from other sources raises the propensity to leave the parental home. We expect the highest impact in the case of Social-Democratic welfare regimes, where such allowances are specifically targeted to allow a choice of one's own living arrangement. Other sources of income may nevertheless show their importance even in contexts where their relative frequency is lower.

### 3.5 Parental household's income

Parents hold an important position in terms of their offspring's decision to leave home. They are sometimes, for instance, in a position to subsidise their offspring's education and human capital accumulation. Furthermore, parents are likely to provide financial support to their children when they are setting up their own household (this is frequently referred to as the familialization of household formation). These factors explain why the parental household's income may influence the timing of young adults' leaving home. With this in mind, we expect the more familialistic welfare regimes, those of Southern Europe, to be characterised by a higher impact of parental income, followed by Continental European welfare regimes. We expect only modest effects in the Liberal and Social-Democratic welfare regimes. Nevertheless, cultural factors may also contribute to pushing household income in the opposite direction, especially in Southern Europe. For instance, if parents are willing to let their children stay with them longer (as seems generally to be the case), then the higher the parental income, the lower the incentive for their children to move to a new household that's likely to be less comfortable.

#### 4. Data, preliminary descriptions, and statistical implementation.

This section gives an outline of the ECHP data (section 4.1) together with a descriptive analysis (sections 4.2 and 4.3). In section 4.4 we present a statistical model of the leaving home process.

### 4.1. Data and selection of the samples

The data are drawn from the European Community Household Panel (ECHP). This is a longitudinal survey on households that has been carried out annually since 1994 in Belgium, Denmark, France, Germany, the United Kingdom, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, and Spain. Austria and Finland joined the project in 1995 and 1996 respectively (Eurostat, 1996). The panel is planned for six waves in all, but only the first three waves were available at the time of this analysis. The ECHP contains nationally representative samples of households. It collects a wide range of data for each household member aged 16 and over. It focuses on individual and household incomes, but also on other social and demographic household and individual characteristics (such as education and vocational training, employment and unemployment, household structure, housing and dwelling, health, social relations, individual satisfaction and dissatisfaction). An important feature of the survey is its longitudinal dimension. This allows us to analyse the changes in the individual's living arrangement status across the waves and connect them to other social and/or income variables<sup>3</sup>.

In analysing the impact of economic and occupational status on leaving home for the different welfare regimes, we selected 10 countries. Denmark (DEN) is taken to represent the Social Democratic welfare state<sup>4</sup>, France (FRA), Germany (GER), and the Netherlands (NET)<sup>5</sup> represent the Conservative Continental welfare system, the United Kingdom (UK) and Ireland (IRE) represent the Liberal Market state system, and Italy (ITA), Spain (SPA), Portugal (POR) and Greece (GRE) are taken to represent the Southern European welfare model. The sample sizes vary considerably among the countries. Table 2 shows that Italy and Spain have the most samples (6-7,000 households corresponding to 15-17,000 individuals in each wave). In contrast, Denmark has the smallest sample (3,000 households, 5-6,000 individuals). This will affect the sizes of the sub-populations considered in this study.

From the first wave (1994) of each country we selected a sub-sample of individuals aged 18-34 who still live in the parental home. The lower bounds represent the age at which the phenomenon of leaving home begins to acquire social importance. The relatively high upper age boundary reflects the fact that in some countries a large proportion of

<sup>&</sup>lt;sup>3</sup> Using the same data, for instance, Whelan et al. (2001) analyse the persistence of income poverty.

<sup>&</sup>lt;sup>4</sup> Finland and Austria entered the survey at a later stage and are consequently not included in our study here.

<sup>&</sup>lt;sup>5</sup> Belgium was not analysed because income data in the ECHP three-wave release were provisional.

young people still live in the parental home well into their thirties. Those individuals who lived with at least one parent in 1994 represent our primary sample and are followed through consecutive waves (1995 and 1996). Of interest here is whether they live inside or outside of the parental home. There are no new entries of individuals living with at least one parent in the consequent waves. Young adults who were living outside of the parental home in 1994 are sorted into another sub-sample with the purpose of controlling for self-selection effects (see section 4.4).

Table 3 shows how the sizes of the primary sub-sample (i.e. the sample of individuals not having left the parental home in 1994) changes for each country through the three waves. As already indicated from the total samples, important differences exist among countries in the primary samples. Italy has the largest sample size (3,802 individuals) - Denmark the smallest (279). The small sample size for Denmark may affect the robustness of the estimates, but since this is the only country representative of the Social Democratic welfare states we decided to keep it among the countries to be analysed. Over the three-year period, the primary sub-samples decreases as individuals leave the parental home. However, the primary samples are also reduced through attrition. For most countries, the percentage of drop-outs does not exceed 5 percent of the individuals recorded as living in the parental home in the previous year. Some countries have relatively high attrition rates (ranging from 10 to 16 percent). Unfortunately they are the ones with the smallest samples (Denmark and the Netherlands). This will have to be taken into consideration in the final interpretation of the datasince this may affect our estimates.

### 4.2. Description of differences between countries

Table 4 shows the percentages of young people living in the parental home in 1994 (the first wave) for each of the ten countries. The figures suggest considerable differences in leaving home behaviour among young Europeans. We find the lowest percentages in Denmark and the UK (around 20 percent) and the highest levels in Italy (over 50 percent overall and almost 70 percent for men . From the distribution of these proportions one is able to identify at least three groups: 1) countries where residential autonomy takes place at an early age (UK, DEN), 2) countries in which residential autonomy takes place at a very late age (ITA, SPA, POR), and 3) countries where residential autonomy takes place at an intermediate age (FRA, NET, GER). Ireland and Greece are the exceptions. For both countries the levels are closer to those of Continental Europe than to the UK and the Southern European levels, respectively.

Another important difference between countries concerns the family status of the young individuals who still live in the family of origin (Table 5). The majority of them are single and childless. In some countries, however, it is not uncommon for young adults to live with their partners and children at their parents' home. This is particularly the case for women<sup>6</sup>. In the UK, Ireland, Portugal, Spain, and Greece, more than 5 percent of young women with their own families still live with their parents. In Portugal the

<sup>&</sup>lt;sup>6</sup> This can in fact only mean that among men there is an underestimate of these cases due to the fact that in the case of dissolution of a couple, the children generally stay with the mother.

percentage is as high as 13 percent. The composition of this group of young adults is not homogenous across countries. In Greece the group is mainly composed of married women and probably reflects a traditional family model, whereas in Spain and Portugal a significant proportion is single or divorced mothers, and in Ireland, this group consists almost exclusively of single mothers. In the UK, the group is fairly heterogeneous.

## 4.3. The economic situation of young adults living with or without parents

Here we present a descriptive analysis of individual and household resources in their relation to young people's living arrangements. We selected four countries representative of the four classes of the welfare states<sup>7</sup>. These statistics are presented in Tables 6a and 6b. The data indicates that these variables are important, although the effects are not always the same.

Economic factors influence the behaviour of young men (Table 6a). In Spain work seems important in achieving independence; the unemployed and students are considerably more likely to live with their parents. But employment does not seem to accelerate men's departure from the family of origin in all countries. Moreover, being unemployed does not necessarily delay residential autonomy everywhere. In Denmark employment has very little impact on the decision to leave the parental home. In fact, the young adults who are most likely to leave home are those recorded as unemployed or students. Here we also see that previous periods of unemployment tend to accelerate the departure from the parental home, possibly due to the job market search. Continental Europe and the UK show intermediate modes of behaviour. In both cases being employed seems to have relatively little effect in terms of achieving residential autonomy. However, Germany and the UK show different patterns for young adults who are not employed. Unemployed men in Continental Europe appear to accelerate housing independence (as in Denmark) whereas in the UK they tend to stay at home longer. Moreover, students in the UK leave the family of origin at a younger age whereas in Germany they remain at home considerably longer.

There are additional differences in terms of individual labour *income*. Both in Germany and Spain we find income to be positively associated with residential autonomy, although the effect is considerably stronger for the latter. In the UK and in Denmark, labour income seems to be less important in males leaving home. No strong effect of income is especially evident in Denmark. This is not unexpected given that state allowances to young adults are relatively generous in Denmark. In fact, as can be seen from Table 5a, the majority of those receiving state allowances live outside the parental home. This is in contrast to Spain and Germany, where state allowances seem less likely to help young adults in leaving home. In Spain fairly strict eligibility rules prevent young individuals from receiving assistance, whereas in Germany this might be due to lower support levels (compared to Denmark). In both cases, the level of state allowances are too insignificant to affect individuals' behaviour in terms of leaving home. In the

<sup>&</sup>lt;sup>7</sup> In the case of several countries belonging to the same welfare regime we chose the one with the largest sample size at the first wave (see Table 2). The only exception refers to the Continental countries, where Germany was preferred to France because the former country presented less missing cases in the variable measuring spells of unemployment in the past five years .

UK, state allowances are provided for individuals with very low income, which is consistent with the fact that those who receive state support mainly live at home with their parents. Other forms of economic support (i.e. "additional private income") seem to favour exit from the parental home, although the effect does not appear to be strong.

There are also differences in terms of the income in the household of origin. In Spain there is a negative association, suggesting that high-income families tend to encourage children to stay at home. At the other end of the spectrum we find the UK, in which parental income does not seem to have much influence on leaving home. Also, it is difficult to derive any strong predictions of household income for Denmark. In Germany there seems to be some effect, although it is not as strong as in Spain.

Among women, (Table 6b) both the individual and household resources seem to be less important compared to men. Moreover, the effect of these variables is less differentiated from one country to another. Overall, the data suggest that being a student generally lengthens the time women spend living in the parental home. All other activity seems to facilitate residential autonomy. Furthermore, being unemployed or being a housewife is generally associated with a higher departure rate from the parental home, relative to being a student. Having experienced unemployment in the last five years also pushes women to leave the family of origin (for job migration or for marriage/cohabitation). The UK seems to have slightly different patterns in that current employment as well as previous periods of unemployment seem to have no impact on the living arrangement of women<sup>8</sup>. In general, economic independence, measured by labour income, promotes women's leaving home. Spain is the country where the (positive) association between income and housing independence is stronger. As for men, the availability of allowances does not produce the same effect in all countries. In Germany such allowances have no effect on the behaviour of women. In the UK those who receive such benefits seem to remain in the parental home longer. In Spain and in the Netherlands being the beneficiary of unemployment benefits or other housing/education allowances promotes the exit from the family of origin.

Although this analysis is still rather crude, it highlights some elements that are consistent with the hypothesis set out in section 3. In particular, the data suggest that the way the educational system is organised, as well as the characteristics of the labour market and the welfare regime, may be important in determining the living arrangement of young people, especially of males.

### 4.4 The statistical model

Although descriptive statistics are very useful in identifying patterns among countries, using only description we are unable to provide solid statistical evidence for the possible impact of the variables of interest. Consequently we propose a modelling approach to the process of leaving home. We use a generalisation of the probit selection model developed by van der Ven and van Praag (1981) in order to account for any possible bias that might arise because the ECHP does not include retrospective histories on

<sup>&</sup>lt;sup>8</sup> This result should, however, be considered carefully given the low number of women who left in the period between the first and second waves.

leaving home (see below). The model consists of two equations: a selection equation, and the outcome of interest<sup>9</sup> equation. Here the outcome equation measures the event of leaving the parental home during the three waves we observe the respondents. The selection equation measures whether the individual had left the parental home prior to the first wave. This approach is previously applied by Aassve et al. (2001a) to the process of leaving home. Here the model is generalised in the sense that the outcome equation is a discrete-time hazard model of leaving home, rather than just a simple probit specification.

The motivation for adopting this model is straightforward. Our primary aim is to analyse the impact of economic variables on leaving the parental home. However, there is no retrospective information about the individuals who left the parental home prior to the first wave. Consequently we do not know at what time they left, so we cannot associate time variables to these individuals. The difficulty here is that those who are recorded to have left prior to the survey might have done so in a non-random fashion. Due to unobserved characteristics or differences in preferences, they might have had a higher probability of leaving. Thus, excluding this sample has the potential of producing biased estimates and consequently under-estimating the probability of leaving home. As a result we should observe a negative correlation between the selection and the outcome equations.

However, there is an important factor that complicates matters further. This is caused by the fact that a large proportion of the individuals in the primary sample is left-censored. This phenomenon is best explained in terms of hazard regression models. Assume for the moment that we have retrospective information on all individuals in terms of the date when they left the parental home. In such a case one can estimate a duration model using the date of leaving home as the event of interest. In most cases, we would expect the hazard rate to increase, at least until a certain age. In other words, the probability of leaving home, conditional on not having done so at time t, increases with age. The implication here is that the predicted probability of leaving home will be higher than the probability of leaving home for the whole sample. As a result we expect a simple probit model to over-predict the probability of leaving home.

Let us clarify the statistical model applied to this specific problem. In general a probit model assumes a latent relationship between an "index" measuring the phenomenon of interest and a vector of explanatory variables. This can be expressed in the following form:

$$y^* = x\gamma + u$$
 where  $u \sim N(0,1)$  (1)

The fact that equation (1) expresses a latent relationship implies that we do not observe the actual values of  $y^*$ . Instead we observe its sign, which determines the value of the observed binary variable  $y^s$ . In the standard probit model, therefore, we find the probability that  $y^s=1$  is given by:

<sup>&</sup>lt;sup>9</sup> This is an extension of the well-known Heckman selection model (Heckman 1979). In his original specification, the outcome equation is continuous.

$$\Pr(y^{S}=1) = \Pr(y^{*}>1) = \Phi(x\beta)$$
(2)

where  $\Phi$  denotes the normal distribution function. In our case equation (2) represents the selection equation, and it will take the value 1 if the respondent left the parental home prior to 1994; otherwise, it will take the value 0. In addition, we specify a second equation, which is a discrete time event history model with a probit specification, and which records respondents leaving the parental home during the two consequent waves. This can be expressed as:

$$\Phi^{-1}(h_t) = z_t \gamma + \varepsilon \quad t = 1,2 \quad \text{if } y^s > 0 \tag{3}$$

where t=1,2 refers to the second and third waves, respectively. Individuals are considered as right-censored if they are still at home by the third wave. Note that for the purpose of identification the set of co-variates z and  $x_t$  entering the equations must be different. The parameter vectors for the two equations are denoted by  $\beta$  and  $\gamma$ , respectively. Equations (2) and (3) are estimated simultaneously, so we can allow the equations' specific error terms to be correlated. In particular we specify the error structure to have joint normal distribution with correlation  $\rho$ .

$$\begin{pmatrix} u \\ \varepsilon \end{pmatrix} \sim N \left( (0), \begin{pmatrix} 1 & \rho_{u\varepsilon} \\ \rho_{\varepsilon u} & 1 \end{pmatrix} \right)$$
 (4)

It is clear that the effect of unobserved heterogeneity and left-hand censoring have opposing effects on the correlation between the selection and the outcome equation. Consequently the estimated correlation coefficient reflects the net effects caused by these factors. In general, we do not have strong prior expectations about its sign and the size. It is clear, however, that the effect of left-hand censoring is weakened if there is little variation in the timing of leaving home and if it happens at a very young age. An example of such a case is Denmark. From the results (discussed in section 5), we see that the correlation is strongly negative, which is consistent with the fact that in Denmark most people leave home at a very young age. In this case the effect of unobserved heterogeneity dominates, and the (net) correlation is consequently negative. For the remaining countries the effects are less clear-cut. However, in most cases the correlation is significant, which implies that if sample selection were not controlled, one would get biased parameter estimates.

### 5. Results and discussion

#### 5.1 Southern European

We consider the results for Italy and Spain first (Table 7c). The most striking feature here is the strong impact of employment and income. It is clear that both are crucial factors in determining when people leave home. This is in accordance with our initial

hypothesis. Thus, given the general weakness of the welfare state with low levels of state support for young adults, the effect of one's own performance in the labour market is more important. The employment/income coefficients are highly positive and significant, although the magnitude of the coefficients is greater for Spain. As one might expect the effect is stronger for men, suggesting that employment and income serves as the crucial trigger for being able to establish their own household. Furthermore, women who are out of the labour force have a much higher rate of leaving home than their male counterparts. Previous research using the ECHP (Aassve et al 2001) has shown that for Italian women, finding a partner is an important factor in leaving the parental home. Thus, Italian women are less reliant on work and their own income to become independent of their parents. The strong positive effect for those women not being in the labour force seems to support this finding. Perhaps a more unexpected result is that unemployed men in Spain tend to leave home quicker than the reference group. It is possible that they are, to a larger extent, forced to leave the parental home to find work.

The effects of the remaining variables of interest are considerably smaller, some of which are consistent with our hypothesis. For instance we find little effect of income support on the decision to leave home. The only exception concerns Spanish women, where the effect is positive and significant. Compared to Italy this is not surprising, given that welfare benefits are generally more generous in Spain. Nevertheless, the fact that it is significant for women and not for men is somewhat unexpected. Considering that there is a close relationship between leaving home and marriage formation, and that eligibility for unemployment benefits depends strictly on past periods of employment, it is possible that to some extent becoming unemployed is co-ordinated with forming an independent household with a partner. The generosity of non-labour income transfers, such as unemployment benefits, is generally less generous in Italy, and this is supported by our estimates. But overall, we conclude that the effects are weak, which can be attributed to the weakness of the welfare state, and this is consequently not surprising.

Looking at the coefficients of the household income levels, we see a general negative association. Thus, high parental income seems to delay the transition out of the parental home. However, there is a significant effect only for men whose parents' income are in the upper quartile of the distribution. In general, we would expect a stronger effect of household income in these countries. This is primarily based on the hypothesis that family relations and inter-generational support is more important and prevalent in Southern European countries. The fact that young adults cannot expect to receive much in terms of public support reinforces this argument. However, one should keep in mind that the effect of family income might be two-fold. On one hand, high family income implies that parents are in a better position to support their offspring in setting up their own household, thus generating a positive effect with regard to the level of household income. On the other hand, the income might be used as a means to keep the children in the parental home longer. That is, young adults might prefer to stay in the parental home if this is considered more comfortable than living on their own. It is clear that we will only capture the net effect, which might explain the lack of conclusive results on this variable. However, given that the coefficients tend to be negative suggest that the latter effect dominates.

The institutional setting for Portugal and Greece is somewhat different from that of Spain and Italy. For instance, social security for poor people is close to non-existent, whereas there is a small amount available in Italy and Spain. On the other hand, the employment rate has been generally higher in Portugal and Greece, especially during the period of the Panel, which might explain the fact that labour migration is more widespread in those countries. This might induce a higher rate of departure from the parental home. Finally, one should keep in mind that income levels are generally lower there, implying that there are more households with very low income. Nevertheless, the parameter estimates are fairly similar to Italy and Spain. Again, the employment and labour income seems very important, especially for Portugal. We also find the same gender pattern – employment and earnings are more important for men than for women. A significant difference is found for women who are out of the labour force. In contrast to their Spanish and Italian counterparts, they do not have a higher probability of leaving home. Furthermore, household income does not seem to play an important role in young people's decisions to leave home. Only Portuguese women whose parents belong to the upper quartile are significantly more likely to leave home. The impact of job insecurity, here measured by whether the individuals have experienced past unemployment, is surprisingly small. Again this might be the result of two opposing effects. On one hand, experiencing periods of unemployment makes one's economic situation more uncertain, making it more difficult to obtain the financial foundation needed to set up one's own household. On the other hand, fewer employment opportunities, and therefore a higher likelihood of experiencing periods of unemployment, might trigger labour migration, hence increasing the rate of leaving the parental home. Equally possible, however, is that this variable is simply not an adequate measure of job insecurity<sup>10</sup>.

#### 5.2 Conservative Continental European

In general we find more mixed and diverse patterns among the three countries in this group. Compared to the Southern European countries, we find a considerably smaller effect of employment status and income. This is particularly the case for men. In fact, the magnitude of the coefficients seems to suggest that employment and income is considerably more important for women. However, the results should be viewed in conjunction with the parameter estimates of the selection equation. From Table 2 we see that the number of individuals still living in the household at the time of interview is much smaller compared to the Southern European countries, which also has an important effect on the number of events actually taking place over the waves during which we observe them. For instance, comparing the Netherlands to Italy, we see the number of events in the two countries is 125 and 329, respectively. Furthermore, the respective numbers of individuals still living in the parental home at the time of interview are 350 and 3,235. Thus, for the Conservative European Welfare states, the majority of events take place before individuals are observed in the panel. As a result, it becomes important to consider the parameter estimates in the selection equation, which

<sup>&</sup>lt;sup>10</sup> Aassve et al. (2001a) used the regional unemployment rate as an alternative measure of job insecurity. This showed that individuals facing high unemployment were less likely to leave the parental home. However, the analysis was applied to Italy where there is generally a high variation in unemployment rates. It is not clear if this variable would provide a good measure of individual job insecurity in countries such as Denmark or the Netherlands.

is an estimate of the determinants of why people left the parental home prior to being observed in the sample. Consider, for instance, the impact of employment status and income level for men. Apart from France, we find no effect on leaving the parental home. But looking at the selection equation we find more of an impact. In general, employed men are significantly more likely to not be included in the selected sample. In other words, employed men are more likely to have left the parental home. For women, the picture is somewhat different. Employment and income level have relatively little impact on whether a woman is selected into the sample or not, but they have more impact on the transition being made over the observed waves. The Netherlands and France are in this respect quite different. In the Netherlands, we see little impact of employment and income on either being selected into the sample, nor in terms of the events taking place during the panel. In France employment and earnings are important both for the selection equation and the panel transitions.

Overall, it seems that employment is a less important factor in the European Welfare model. This is consistent with our initial hypothesis. However, it is difficult to make conclusive remarks in terms of income levels. In general, we would expect a stronger impact for the higher income quartiles. But the results often indicate a non-linear effect in which low income is equally important as high income, and where the middle quartiles show a lower impact. In other cases we observe that the middle quartiles are stronger than both the lower and the upper quartile. Furthermore, in many cases the coefficients for the different income quartiles are not statistically different from each other, possibly suggesting that in these countries employment is a more important determinant than the income level associated with it.

For the other parameters we find quite mixed results. For instance, we find that men and women in the Netherlands and men in Germany who come from families with high incomes are more likely to leave the parental home. For the other countries, there is no significant impact. If we consider the group as a whole, it is clear that the effect of household income on leaving home is inconclusive. Nevertheless, it is interesting that in the cases in which the coefficients are significant, the effect is positive. This suggests that the role of household income in these countries is different from that in Southern European countries. In Southern European countries a high household income generally prompts young adults to stay at home longer, whereas in Continental European countries it works as a catalyst to leave home, possibly through higher levels of financial transfers.

### 5.3 Liberal Market and Social Democratic

We consider the results for the UK and Ireland first. In terms of employment and income levels, we have hypothesised that this is particularly important since public transfers and benefits are generally low. However, for the UK we do not find a particularly strong association. Only for the highest earnings group do we find a relatively strong and significant effect. Still, this effect is not stronger than that found for many of the countries belonging to the Continental European welfare state. However, it should be pointed out here that the majority of the sample is recorded as having left the parental home before they are recorded in the panel, and only 138 individuals are recorded to have left home during the two waves. But even the

coefficients in the selection equation are weakly determined, suggesting that in terms of leaving home, employment and income are not crucial determinants. Here an important influence might work through the educational system. Young adults in Britain tend to complete their education at a younger age compared to many other European countries. Consequently, many leave the parental home even before they can possibly enter the sample. Also young adults attending university tend do so away from the residence of their parents<sup>11</sup>.

The effects of the income and employment parameters are considerably stronger in the Irish sample. Employment status is significant for both genders, and the earnings level is particularly important for women: Women who earn a high income leave home earlier than their male counterparts. There is also a strong impact of parental income for men. Interestingly, the effect is positive, which is in contrast to the Southern European countries. Furthermore, the impact is only significant and substantial for men.

Our only representative for the Social Democratic welfare model is Denmark. Here we expect little impact of employment and earnings, and modest impacts from parental income and periods of unemployment. Looking at the results in Table 6a, this certainly seems to be the case. However, we have a similar problem to that of the UK: Individuals leave the parental home at such an early age that only a very small number of events is actually recorded in the sample.

For both the Liberal Market and the Social Democratic models, the results are indeed inconclusive. In the former model, mainly represented by the UK sample, we hypothesised that employment and earnings should be strong predictors for leaving home behaviour. But as we have seen, our results do not support this hypothesis. For the UK we believe the educational system might be an important factor explaining this phenomenon. The majority of young adults leave the parental home at a very young age. This implies that we will observe a relatively low variation in the income distribution among the home leavers. Also, young adults going to university tend to do so away from parents, and mainly live in college dormitories or shared accommodation. Thus, they leave home, but employment and income are not the triggering factors. For the Scandinavian model, we expected very little effect of employment and earnings due to the generous welfare state. As such our findings are in accordance with our hypothesis. But again we face a problem in that most people leave the parental home before they are even eligible to be included in the selected sample. Thus, the finding that employment and income are not important could also be explained by the fact that we have only a handful of observations at our disposal. In sum this implies that if one is interested in studying the process of leaving home in the Scandinavian countries and the UK, one might want to consider other data sources than the ECHP.

### 6. Concluding remarks

<sup>&</sup>lt;sup>11</sup> Another influential feature in the UK is known as the "gap" year, in which young adults take a year off, often working for charities, immediately after completing A-level exams. In our data, these individuals will be recorded as having left the parental home, and might contribute to the low number of cases living at home in the first wave.

The prime aim of this analysis is to shed light on the importance of the welfare state in young people's decisions to leave the parental home. Of particular interest is the importance of employment status and income in these various settings. Although the approach of analyzing family formation issues in the context of the welfare state is a common one, little has been done in making the link to the process of leaving the parental home. A crucial question is to what extent the concept of the welfare state can explain leaving home behaviour.

Our study shows that individuals' leaving home behaviour fits many of the predictions that can be derived from the framework of the welfare state in its four-type specification. In the Southern European model, employment and earnings are particularly important, a result which is consistent with the weakness of the welfare state. In Continental European countries, employment is important, whereas the level of earnings associated with it plays less of a role<sup>12</sup>. Family income levels are also important, although here the results are less conclusive. For the Social Democratic welfare state model, we find that one's own income and employment play an insignificant role, which certainly is consistent with the high welfare generosity present in these countries. In other respects, the concept of the welfare state seems less useful as a tool to study leaving home behaviour. This is particularly the case for the UK, where it seems that most young adults leave home independently of their current employment status and income level.

Some caveats of our analysis should be highlighted. The ECHP is rich in information on various income sources, and is therefore well suited to make comparative analysis of the importance of income in various dimensions of behaviour, including leaving home. However, the data does not provide much information on other potentially important determinants of leaving home. This includes information on value orientation, social capital and social networks, all of which are important when studying young individuals' behaviour. A further point regards the lack of retrospective information and parental information. Although we have attempted to take this into account in our modelling approach, it is clear that a substantial amount of information is lost. Parental characteristics are clearly important, and if included in the analysis, could impact some of the conclusions reached in this study. As such, richer data source available if one wants to analyse the impact of income and earnings. Consequently, we believe our study has provided some important insights into the study of leaving home behaviour.

<sup>&</sup>lt;sup>12</sup> We seem to find, again, a specificity of the Netherlands, which has been outlined also by Esping-Andersen (1999, p. 88): "the Netherlands remains a Janus-headed welfare regime, combining both social democratic and conservative attributes."

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#### References

- Aassve A., Billari F.C. and Ongaro F., (2001a), "The Impact of income and employment status on leaving home: Evidence from the Italian ECHP Sample", *Labour: Review* of Labour Economics and Industrial Relations, 15: 501-529.
- Aassve A., Burgess S., Chesher A. and Propper C., (2001b), "Transitions from home to marriage among young Americans", *Journal of Applied Econometrics* (forthcoming).
- Avery R., Goldscheider F.K. and Speare A., (1992), "Feathered nest/gilded cage: parental income and leaving home in the transition to adulthood", *Demography*, 29: 375-388.
- Billari F.C., Philipov D. and Baizán P., (2001), "Leaving home in Europe. The experience of cohorts born around 1960", *International Journal of Population Geography*, (forthcoming).
- Billari F.C., Castiglioni M., Castro Martín T., Michielin F. and Ongaro F., (forthcoming), "Household and union formation in a Mediterranean fashion: Italy and Spain." In Corijn M., Klijzing E. (Eds.), *Comparative research on fertility and the family in contemporary Europe: findings and lessons*. New York/Geneva: United Nations.
- Corijn M. and Klijzing E. (Eds.), (2001), *Transitions to adulthood in Europe*, Kluwer, Dordrecht.
- Dalla Zuanna G., (2001), "The banquet of Aeolus", *Demographic Research*, Vol 4-5. Available online at: http://www.demographic-research.org/.
- de Jong Gierveld J., Liefbroer A.C. and Beekink E., (1991), "The effect of parental resources on patterns of leaving home among young adults in the Netherlands", *European Sociological Review*, 7: 55-71.
- Ermisch J., (1999), "Prices, parents and young people's household formation", *Journal* of Urban Economics, 45: 47-71.
- Esping-Andersen G., (1999), *Social foundations of postindustrial economies*, Oxford University Press, Oxford.
- European Commission (EUROSTAT), (1999), European Community Household Panel. Longitudinal Users' Database. Waves 1, 2 and 3. Manual, EUROSTAT, Luxembourg.
- Fernandez Cordon J.A., (1997), "Youth residential independence and autonomy: A comparative study", *Journal of Family Issues*, 16: 567-607.
- Ferrera M., (1996), "Il modello Sud-Europeo di welfare state", *Rivista Italiana di Scienza Politica*, 1: 67-101.
- Haurin D. R., Henderschott P. H. and Kim D., (1993), "The impact of real rents and wages on household formation," *Review of Economics and Statistics*, 75: 284-293.
- Holdsworth C., (2000), "Leaving home in Britain and Spain", *European Sociological Review*, 16: 201-222.
- Mayer K.U., (2001), "The paradox of global social change and national path dependencies: life course patterns in advanced societies". In Woodward A.E. and Kohli M. (eds.) *Inclusions-Exclusions*, Routledge, London: 89-110.
- Mulder C. and Clark W.A.V., (2000), "Leaving home and leaving the state: evidence from the United States", *International Journal of Population Geography*, 6: 423-437.

- Mulder C. and Hoimeijer P., (1999), "Residential Relocations in the Life Course". In van Wissen L.J.G. and Dykstra P.A., *Population Issues. An Interdisciplinary Focus*, Kluwer Academic/Plenum Publishers, New York: 159-186.
- Murphy M. and Wang D., (1998), "Family and sociodemographic influences on patterns of leaving home in postwar Britain", *Demography*, 35: 293-305.
- Nilsson K. and Strandh M., (1999), "Nest leaving in Sweden: The importance of early educational and labor market careers", *Journal of Marriage and the Family*, 61: 1068-1079.
- Reher D.S., (1998), "Family ties in Western Europe: persistent contrasts", *Population* and *Development Review* 24: 203-234.
- Short K.S., Garner T.I., (1990), "Living arrangements of young adults living independently: Evidence from the Luxembourg income study". In: U.S. Bureau of Census, *Studies in household and family formation*, Current Population Reports, Series P-23, No. 169, U.S. Government Printing Office, Washington, DC.
- Trifiletti R., (1999), "Southern European Welfare Regimes and the Worsening Position of Women", *Journal of European Social Policy*, 9: 49-64.
- Van den Ven W. P. M. M. and Van den Praag, B. M. S., (1981), "The demand for deductibles in private health insurance: A probit model with sample selection", *Journal of Econometrics*, 17: 229-252.
- Wagner M. and Huinink J., (1991), "Neuere Trends beim Auszug aus dem Elternhaus". In Buttler G., Hoffman-Nowotny H.-J. and Schmitt-Rink G. (Eds.), Acta Demographica 1991, Physica-Verlag, Heidelberg: 39-62.
- Whelan C.T., Layte R., Maître B. and Nolan B., (2001), "Persistent Income Poverty and Deprivation in the European Union: An Analysis of the First Three Waves of the European Community Household Panel", European Panel Analysis Working Group, Working Paper 17, Institute for Social & Economic Research, University of Essex.
- Whittington L. A. and Peters H. E., (1996), "Economic incentives for financial and residential independence", *Demography*, 33:82-97.

## Tables

Table 1. Percentage of individuals having never left home at the age of 30 (S(30)) in the early nineties and the median age at leaving home (Me). Cohorts born around 1960, classification of countries according to Esping-Andersen (1999).

|                   | Me    | n    | Wome  | en   |
|-------------------|-------|------|-------|------|
|                   | S(30) | Me   | S(30) | Me   |
| Liberal regimes   |       |      |       |      |
| United Kingdom    | 11    | 22.4 | 5     | 20.3 |
| Social democratic |       |      |       |      |
| regimes           |       |      |       |      |
| Finland           | 12    | 21.7 | 2     | 19.8 |
| Sweden            | 2     | 20.2 | 1     | 18.6 |
| Continental       |       |      |       |      |
| Europe            |       |      |       |      |
| Austria           | 16    | 21.8 | 6     | 19.9 |
| Belgium           | 11    | 23.3 | 4     | 21.5 |
| (Flanders)        |       |      |       |      |
| France            | 9     | 21.5 | 5     | 19.8 |
| Netherlands       | 5     | 22.5 | 2     | 20.5 |
| West Germany      | 11    | 22.4 | 4     | 20.8 |
| Southern Europe   |       |      |       |      |
| Italy             | 32    | 26.7 | 20    | 23.6 |
| Portugal          | 26    | 24.3 | 19    | 21.8 |
| Spain             | 25    | 25.7 | 14    | 22.9 |
|                   |       |      |       |      |

Source: Billari et al. (2001), data from Fertility and Family Surveys.

| Waves  | Cases       | UK    | IR   | DEN  | NET  | FR    | GER  | IT    | SPA   | GRE   | POR   |
|--------|-------------|-------|------|------|------|-------|------|-------|-------|-------|-------|
| Wave 1 | Individuals | 10517 | 9904 | 5903 | 9407 | 14333 | 9490 | 17729 | 17893 | 12492 | 11621 |
|        | Households  | 5779  | 4048 | 3482 | 5187 | 7344  | 4968 | 7115  | 7206  | 5523  | 4881  |
| Wave 2 | Individuals | 8386  | 8531 | 5503 | 9151 | 13306 | 9002 | 17780 | 16263 | 12271 | 11858 |
|        | Households  | 4548  | 3584 | 3223 | 5110 | 6722  | 4688 | 7128  | 6522  | 5220  | 4916  |
| Wave 3 | Individuals | 6940  | 7487 | 4994 | 9277 | 13051 | 8746 | 17736 | 15643 | 11605 | 11706 |
|        | Households  | 3775  | 3173 | 2955 | 5179 | 6600  | 4593 | 7132  | 6268  | 4908  | 4850  |

Table 2. Individuals and households sampled with the ECHP panel: countries and waves.

Source: own elaborations on European Community Household Panel.

| 1994  | 1995   | 1996     | UK   | IRE  | DEN  | NET  | FRA  | GER  | ITA  | SPA  | GRE  | POR  |
|-------|--------|----------|------|------|------|------|------|------|------|------|------|------|
| Total |        |          | 3077 | 3559 | 1804 | 2848 | 4565 | 2798 | 6035 | 5789 | 3579 | 3359 |
| OUT   |        |          | 2593 | 2104 | 1525 | 2257 | 3259 | 2019 | 2233 | 2729 | 2110 | 1456 |
| IN    | Total  |          | 484  | 1455 | 279  | 591  | 1306 | 779  | 3802 | 3060 | 1469 | 1903 |
|       | Drop-o | ut       | 0    | 65   | 42   | 60   | 23   | 18   | 129  | 126  | 16   | 33   |
|       | OUT    |          | 48   | 98   | 85   | 79   | 133  | 60   | 153  | 155  | 89   | 75   |
|       | IN     | Total    | 436  | 1292 | 152  | 452  | 1150 | 701  | 3520 | 2779 | 1364 | 1795 |
|       |        | Drop-out | 15   | 40   | 24   | 56   | 2    | 32   | 109  | 148  | 4    | 37   |
|       |        | OUT      | 90   | 103  | 21   | 46   | 130  | 67   | 176  | 179  | 79   | 148  |
|       |        | IN       | 331  | 1149 | 107  | 350  | 1018 | 602  | 3235 | 2452 | 1281 | 1610 |

Table 3. Individuals aged 18-34 in 1994 by living arrangement in 1994, 95 and 96 and by country.

Source: own elaborations on European Community Household Panel.

| Gender  | Age group | UK     | IR     | DEN    | NET    | FR     | GER    | IT     | SPA    | GRE    | POR    |
|---------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MALES   | 18-19     | 59.99  | 67.87  | 79.05  | 75.46  | 77.39  | 85.60  | 92.57  | 83.24  | 75.03  | 91.10  |
|         | 20-24     | 37.44  | 54.92  | 30.18  | 52.77  | 56.66  | 65.97  | 90.86  | 75.85  | 66.32  | 80.19  |
|         | 25-29     | 12.90  | 25.41  | 5.43   | 17.07  | 17.76  | 23.46  | 67.65  | 53.22  | 50.99  | 49.59  |
|         | 30-34     | 4.39   | 12.87  | 2.60   | 0.61   | 7.98   | 5.98   | 29.94  | 21.25  | 25.49  | 21.53  |
|         | 18-34     | 20.60  | 39.39  | 19.43  | 27.08  | 32.67  | 34.35  | 67.60  | 54.31  | 51.48  | 56.85  |
|         | Total     | 1683.1 | 1786.8 | 916.86 | 1570.6 | 2244.8 | 1445.6 | 2870.4 | 3125.1 | 1976.5 | 1978.5 |
| FEMALES | 18-19     | 54.26  | 63.10  | 67.17  | 73.65  | 70.46  | 82.49  | 96.39  | 82.40  | 68.97  | 87.27  |
|         | 20-24     | 18.36  | 39.61  | 17.80  | 20.38  | 40.53  | 36.43  | 83.52  | 71.49  | 44.05  | 75.50  |
|         | 25-29     | 6.00   | 18.48  | 2.84   | 3.02   | 8.46   | 9.58   | 45.92  | 36.88  | 18.29  | 31.86  |
|         | 30-34     | 2.25   | 5.21   | 0.87   | 0.88   | 2.74   | 1.79   | 19.25  | 16.43  | 8.75   | 16.23  |
|         | 18-34     | 12.60  | 28.69  | 12.45  | 15.90  | .22.37 | 20.39  | 55.25  | 46.19  | 29.54  | 47.13  |
|         | Total     | 1646.3 | 1778.7 | 877.65 | 1507.8 | 2230.5 | 1383   | 2814.4 | 3034.5 | 1972.0 | 1915.8 |

Table 4. Individuals aged 18-34 living in the parental home in 1994 by gender, age and country (%) (1).

Note: (1) The data is weighted. Source: own elaborations on European Community Household Panel.

|                                | ŪK     | IR     | DEN    | NET    | FR     | GER    | IT     | SPA    | GRE    | POR    |
|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MALES Never married            | 95.99  | 99.42  | 98.47  | 99.45  | 98.39  | 97.63  | 97.10  | 96.96  | 93.25  | 95.18  |
| Married (2)                    | 1.76   | 0.58   | 0.76   | 0.08   | 0.12   | 1.69   | 2.79   | 2.02   | 5.08   | 3.09   |
| Married in the past (2)        | 0.70   | 0.00   | 0.77   | 0.48   | 1.24   | 0.32   | 0.06   | 0.81   | 1.28   | 1.30   |
| Never married with partner (3) | 1.05   | 0.00   | 0.00   | 0.00   | 0.13   | 0.18   | 0.00   | 0.13   | 0.39   | 0.42   |
| Never married with children    | 0.49   | 0.00   | 0.00   | 0.00   | 0.13   | 0.18   | 0.06   | 0.08   | 0.00   | 0.02   |
| Total=100                      | 346.79 | 703.86 | 178.12 | 425.30 | 732.48 | 495.12 | 1940.3 | 1697.6 | 1017.5 | 1124.7 |
| FEMALES Never married          | 94.50  | 90.27  | 97.55  | 99.65  | 97.00  | 96.60  | 95.46  | 92.16  | 93.06  | 86.94  |
| Married (2)                    | 1.39   | 1.23   | 0.73   | 0.00   | 0.20   | 1.34   | 3.70   | 4.84   | 4.69   | 8.38   |
| Married in the past (2)        | 2.21   | 0.11   | 0.00   | 0.00   | 1.11   | 0.81   | 0.39   | 1.56   | 2.12   | 2.50   |
| Never married with partner (3) | 1.31   | 0.42   | 1.01   | 0.00   | 0.75   | 0.00   | 0.00   | 0.13   | 0.13   | 0.54   |
| Never married with children    | 0.59   | 7.98   | 0.70   | 0.36   | 0.94   | 1.25   | 0.44   | 1.31   | 0.00   | 1.65   |
| Total=100                      | 207.45 | 510.28 | 109.26 | 239.69 | 499.05 | 279.74 | 1555.1 | 1401.6 | 582.54 | 902.83 |

Table 5. Individuals aged 18-34 living in the parental home in 1994 by sex and marital status (%) (1).

Notes: (1) All data is weighted. (2) With or without children. (3) In consensual union, with or without children. Source: own elaborations on European Community Household Panel.

| Individual/household resources  | ι      | JK      | Den     | mark    | Gerr  | nany    | Sp      | ain     |
|---|--------|---------|---------|---------|-------|---------|---------|---------|
|   | IN     | OUT     | IN      | OUT     | IN    | OUT     | IN      | OUT     |
| Main activity status  |        |         |         |         |       |         |         |         |
| Employed  | 63.20  | 57.96   | 62.84   | 50.64   | 57.95 | 56.67   | 33.61   | 63.7    |
| Self-employed   | 5.35   | 12.24   | 1.98    | 2.26    | 1.15  | 0       | 5.66    | 13.6    |
| Unemployed  | 16.25  | 11.22   | 5.03    | 9.10    | 5.05  | 11.13   | 23.53   | 18.9    |
| Student   | 11.51  | 18.57   | 26.20   | 32.59   | 29.79 | 22.94   | 27.43   |         |
| Other inactive  | 3.70   | 0       | 3.94    | 5.41    | 5.51  | 9.26    | 9.73    | 3.7     |
| Spells of unemploment   |        |         |         |         |       |         |         |         |
| in the past 5 years   |        |         |         |         |       |         |         |         |
| No  | 59.79  | 69.87   | 71.22   | 64.24   | 80.44 | 74.08   | 48.01   | 38.4    |
| Yes   | 40.21  | 30.13   | 28.78   | 35.76   | 18.20 | 25.92   | 51.99   | 61.6    |
| Individual income (a)   |        |         |         |         |       |         |         |         |
| No income   | 22.02  | 34.73   | 15.25   | 18.51   | 30.76 | 15.46   | 51.08   | 19.8    |
| a. <q1 (b)<="" td=""><td>21.20</td><td>11.08</td><td>24.28</td><td>34.94</td><td>18.30</td><td>12.28</td><td>9.99</td><td>8.0</td></q1>   | 21.20  | 11.08   | 24.28   | 34.94   | 18.30 | 12.28   | 9.99    | 8.0     |
| b.Q1-Q2   | 18.81  | 4.92    | 21.83   | 9.37    | 15.45 | 29.49   | 16.36   | 13.5    |
| c.Q2-Q3   | 17.42  | 18.66   | 18.71   | 15.26   | 16.06 | 13.82   | 10.73   | 24.8    |
| d.>Q3   | 20.55  | 30.61   | 19.83   | 21.92   | 19.44 | 28.95   | 11.85   | 33.7    |
| Receving  |        |         |         |         |       |         |         |         |
| allowances (c)  | 30.76  | 18.55   | 26.67   | 60.40   | 13.75 | 12.99   | 0.48    | 3.5     |
| With additional private   |        |         |         |         |       |         |         |         |
| income  | 27.07  | 35.16   | 44.1    | 60.53   | 36.91 | 42.48   | 24.35   | 47.4    |
| Household income (d)  |        |         |         |         |       |         |         |         |
| a. <q1 (e)<="" td=""><td>30.91</td><td>34.06</td><td>28.64</td><td>27.11</td><td>27.49</td><td>20.33</td><td>27.49</td><td>35.2</td></q1> | 30.91  | 34.06   | 28.64   | 27.11   | 27.49 | 20.33   | 27.49   | 35.2    |
| b.Q1-Q2   | 25.19  | 20.37   | 31.63   | 14.59   | 25.12 | 34.14   | 25.88   | 28.0    |
| c.Q2-Q3   | 20.71  | 21.03   | 21.62   | 32.69   | 24.05 | 20.13   | 22.85   | 25.9    |
| d.>Q3   | 23.19  | 24.55   | 18.10   | 25.62   | 23.35 | 25.40   | 23.77   | 10.7    |
| Total=100   | 369.72 | 23.0495 | 127.713 | 31.9522 | 446   | 23.8492 | 1451.88 | 61.1529 |

Table 6a. Men aged 18-34 living with at least one parent in 1994, by living arrangement in 1995 (IN and OUT) and personal/household resources: four selected countries, percentages.

| Individual/household<br>resources   | U       | K       | Der    | nmark   | Gerr    | nany    | Sp      | ain     |
|---|---------|---------|--------|---------|---------|---------|---------|---------|
|   | IN      | OUT     | IN     | OUT     | IN      | OUT     | IN      | OUT     |
| Main activity status  |         |         |        |         |         |         |         |         |
| Employed  | 62.11   | 58.66   | 37.38  | 54.08   | 57.19   | 74.94   | 24.26   | 38.3    |
| Self-employed   | 1.24    | 0       | 0      | 0       | 0       | 0       | 2.07    | 6.7     |
| Unemployed  | 5.95    | 13.53   | 5.99   | 10.40   | 6.13    | 10.90   | 21.66   | 28.1    |
| Student   | 23.12   | 7.91    | 56.63  | 33.49   | 35.81   | 14.78   | 41.13   | 12.5    |
| Other inactive  | 7.58    | 20.38   | 0      | 2.03    | 0.87    | 0       | 10.81   | 14.1    |
| Spells of unemploment in the past 5 years   |         |         |        |         |         |         |         |         |
| No  | 79.78   | 80.78   | 73.32  | 51.91   | 83.73   | 81.24   | 50.41   | 33.8    |
| Yes   | 20.22   | 19.22   | 26.68  | 48.09   | 14.27   | 18.76   | 49.59   | 66.1    |
| Individual income (a)   |         |         |        |         |         |         |         |         |
| No income   | 23.66   | 30.21   | 24.78  | 8.79    | 34.91   | 14.66   | 63.58   | 32.9    |
| a. <q1 (b)<="" td=""><td>28.79</td><td>7.90</td><td>29.22</td><td>31.81</td><td>17.54</td><td>24.40</td><td>10.79</td><td>13.3</td></q1>  | 28.79   | 7.90    | 29.22  | 31.81   | 17.54   | 24.40   | 10.79   | 13.3    |
| b.Q1-Q2   | 23.42   | 22.38   | 29.08  | 26.88   | 21.20   | 13.32   | 11.99   | 22.7    |
| c.Q2-Q3   | 13.88   | 9.00    | 11.47  | 17.34   | 16.43   | 33.33   | 7.02    | 13.6    |
| d.>Q3   | 10.25   | 30.52   | 5.45   | 15.18   | 9.93    | 14.29   | 6.61    | 17.3    |
| Receving  |         |         |        |         |         |         |         |         |
| allowances (c)  | 26.88   | 3.87    | 45.64  | 53.08   | 13.27   | 13.71   | 10.17   | 15.1    |
| With additional private   |         |         |        |         |         |         |         |         |
| income  | 22.04   | 22.62   | 29.97  | 44.15   | 32.25   | 41.98   | 19.10   | 33.4    |
| Household income (d)  |         |         |        |         |         |         |         |         |
| a. <q1 (e)<="" td=""><td>27.07</td><td>22.16</td><td>20.15</td><td>18.63</td><td>23.89</td><td>31.15</td><td>26.14</td><td>32.6</td></q1> | 27.07   | 22.16   | 20.15  | 18.63   | 23.89   | 31.15   | 26.14   | 32.6    |
| o.Q1-Q2   | 23.03   | 27.65   | 40.19  | 25.79   | 24.71   | 37.41   | 25.24   | 24.1    |
| c.Q2-Q3   | 27.11   | 25.55   | 21.10  | 42.63   | 28.18   | 22.36   | 23.19   | 19.2    |
| d.>Q3   | 22.79   | 24.64   | 18.56  | 12.96   | 23.22   | 9.07    | 25.42   | 24.0    |
| Total=100   | 226.236 | 16.1428 | 76.883 | 42.1917 | 262.071 | 31.7858 | 1309.43 | 65.1054 |

Table 6b: Women aged 18-34 living with at least one parent in 1994, by living arrangement in 1995 (IN and OUT) and personal/household resources: four selected countries, percentages.

Notes. (a) Yearly net income from work in 1994; (b) Quartiles are calculated by using income of individuals aged 18-34 and living with at least one parent in 1994; (c) The category includes allowances related to housing, education and unemployment; (d) The percentage of individuals with no household income is zero or insignificant; (e) Quartiles are calculated by using income of households, adjusted by equivalence scales, with at least a child aged 18-34 in 1994. Source: own elaborations on European Community Household Panel.

|   | UK     |         | IR     |         | DEN    |          |
|---|--------|---------|--------|---------|--------|----------|
|   | MALES  | FEMALES | MALES  | FEMALES | MALES  | FEMALES  |
| Selection equation  |        |         |        |         |        |          |
| Constant  | -0.161 | -0.201  | -0.687 | -0.493  | -0.327 | -0.483   |
| Low education   | 0.096  | 0.074   | -0.051 | -0.323  | -0.235 | 0.215    |
| Age 20-21   | 0.315  | 0.464   | 0.161  | 0.169   | 0.889  | 0.903    |
| Age 22-23   | 0.596  | 1.200   | 0.365  | 0.533   | 1.486  | 1.890    |
| Age 24-25   | 1.194  | 1.093   | 0.564  | 0.526   | 2.193  | 2.632    |
| Age 26-27   | 1.235  | 1.607   | 0.601  | 0.928   | 2.135  | 2.426    |
| Age 28-29   | 1.351  | 1.789   | 0.900  | 1.050   | 2.771  | 2.533    |
| Age 30-34   | 1.964  | 1.938   | 1.342  | 1.564   | 2.997  | 3.088    |
| Emp & Inc. <q1< td=""><td>-0.147</td><td>0.141</td><td>0.332</td><td>0.383</td><td>-0.234</td><td>0.042</td></q1<>            | -0.147 | 0.141   | 0.332  | 0.383   | -0.234 | 0.042    |
| Emp. & Q1 <inc.<q2< td=""><td>-0.045</td><td>0.029</td><td>0.125</td><td>0.171</td><td>-0.631</td><td>-0.154</td></inc.<q2<>  | -0.045 | 0.029   | 0.125  | 0.171   | -0.631 | -0.154   |
| Emp. & Q2 <inc.<q3< td=""><td>-0.479</td><td>-0.113</td><td>0.136</td><td>0.408</td><td>-0.352</td><td>-0.312</td></inc.<q3<> | -0.479 | -0.113  | 0.136  | 0.408   | -0.352 | -0.312   |
| Emp. & Inc>Q3   | 0.017  | 0.135   | 0.412  | 0.391   | -0.205 | -0.030   |
| Unemployed  | -0.026 | -0.021  | 0.407  | 0.233   | 0.279  | 0.192    |
| Self employed   | -0.106 | 0.728   | 0.305  | -0.055  | -0.894 | 0.391    |
| Out of labour force   | -0.019 | 0.703   | 0.108  | 0.799   | -0.249 | ******** |
| Leaving home  |        |         |        |         |        |          |
| equation  |        |         |        |         |        |          |
| Constant  | -1.247 | -0.773  | -2.637 | -1.773  | -1.730 | 3.435    |
| Emp & Inc. <q1< td=""><td>-0.096</td><td>-0.216</td><td>0.057</td><td>0.409</td><td>0.291</td><td>-0.145</td></q1<>           | -0.096 | -0.216  | 0.057  | 0.409   | 0.291  | -0.145   |
| Emp. & Q1 <inc.<q2< td=""><td>-0.022</td><td>0.259</td><td>0.020</td><td>0.684</td><td>0.261</td><td>0.565</td></inc.<q2<>    | -0.022 | 0.259   | 0.020  | 0.684   | 0.261  | 0.565    |
| Emp. & Q2 <inc.<q3< td=""><td>0.255</td><td>0.019</td><td>0.381</td><td>0.693</td><td>0.406</td><td>0.271</td></inc.<q3<>     | 0.255  | 0.019   | 0.381  | 0.693   | 0.406  | 0.271    |
| Emp. & Inc>Q3   | 0.628  | 0.568   | 0.523  | 1.085   | 0.311  | 0.982    |
| Unemployed  | 0.026  | 0.648   | 0.305  | 0.533   | 0.284  | 0.355    |
| Self employed   | 0.506  | 0.186   | 0.205  | 0.218   |        |          |
| Out of labour force   |        | 0.592   |        | 0.811   | 0.255  | 0.618    |
| Allowances  | 0.072  | -0.251  | -0.055 | 0.221   | 0.407  | 0.029    |
| Low education   | -0.076 | -0.155  | -0.064 | -0.072  | -0.357 | -0.268   |
| Age   | -0.002 | 0.002   | 0.023  | -0.008  | 0.010  | -0.201   |
| Unemployment spell  | 0.221  | -0.185  | 0.225  | 0.066   | -0.192 | 0.285    |
| Household inc. Q2   | -0.117 | -0.090  | 0.358  | -0.095  | -0.206 | -0.602   |
| Household inc. Q3   | 0.041  | -0.002  | 0.197  | 0.051   | 0.137  | 0.040    |
| Household inc. Q4   | 0.292  | 0.057   | 0.510  | 0.169   | 0.453  | -0.476   |
| Correlation (rho)   | 0.232  | 0.348   | -0.046 | 0.074   | -0.590 | -0.733   |

## Table 7a: Parameter estimates for UK, Ireland, and Denmark.

| Table 70. Parameter   | NET      |          | FRA    |         | GER     |          |
|---|----------|----------|--------|---------|---------|----------|
|   | MALES    | FEMALES  | MALES  | FEMALES | MALES   | FEMALES  |
| Selection equation  |          |          |        |         |         |          |
| Constant  | -0.513   | -0.574   | -0.698 | -0.574  | -1.425  | -1.074   |
| Low education   | -0.278   | -0.088   | 0.171  | -0.009  | 0.016   | 0.119    |
| Age 20-21   | 0.072    | 0.565    | 0.381  | 0.354   | 0.440   | 0.809    |
| Age 22-23   | 0.562    | 1.214    | 0.713  | 0.638   | 0.662   | 1.653    |
| Age 24-25   | 0.864    | 2.244    | 0.990  | 0.987   | 1.201   | 1.848    |
| Age 26-27   | 1.332    | 2.367    | 1.549  | 1.523   | 1.779   | 2.221    |
| Age 28-29   | 1.615    | 2.391    | 1.639  | 1.786   | 2.310   | 2.547    |
| Age 30-34   | 2.701    | 2.885    | 1.972  | 1.979   | 2.632   | 3.052    |
| Emp & Inc. <q1< td=""><td>-0.009</td><td>0.174</td><td>-0.202</td><td>0.042</td><td>-0.030</td><td>0.262</td></q1<>         | -0.009   | 0.174    | -0.202 | 0.042   | -0.030  | 0.262    |
| Emp. & Q1 <inc.<q2< td=""><td>0.020</td><td>0.174</td><td>0.043</td><td>0.334</td><td>0.405</td><td>-0.121</td></inc.<q2<>  | 0.020    | 0.174    | 0.043  | 0.334   | 0.405   | -0.121   |
| Emp. & Q2 <inc.<q3< td=""><td>0.425</td><td>-0.252</td><td>0.036</td><td>0.569</td><td>0.193</td><td>0.004</td></inc.<q3<>  | 0.425    | -0.252   | 0.036  | 0.569   | 0.193   | 0.004    |
| Emp. & Inc>Q3   | 0.550    | 0.101    | 0.455  | 0.723   | 0.453   | -0.059   |
| Unemployed  | 0.437    | 0.465    | -0.374 | 0.187   | 0.399   | 0.247    |
| Self employed   | 0.375    | -0.110   | 0.076  | 0.876   | 0.575   | ******** |
| Out of labour force   | 0.285    | 0.330    | -0.609 | 0.980   | 0.031   | 1.184    |
| Leaving home equation   | n        |          |        |         |         |          |
| Constant  | -2.487   | -2.472   | -1.902 | -1.120  | -2.993  | -1.413   |
| Emp & Inc. <q1< td=""><td>-0.238</td><td>0.075</td><td>0.543</td><td>0.459</td><td>-0.138</td><td>0.906</td></q1<>          | -0.238   | 0.075    | 0.543  | 0.459   | -0.138  | 0.906    |
| Emp. & Q1 <inc.<q2< td=""><td>-0.131</td><td>0.032</td><td>0.503</td><td>0.720</td><td>-0.010</td><td>0.799</td></inc.<q2<> | -0.131   | 0.032    | 0.503  | 0.720   | -0.010  | 0.799    |
| Emp. & Q2 <inc.<q3< td=""><td>-0.080</td><td>0.312</td><td>0.493</td><td>0.327</td><td>0.067</td><td>1.229</td></inc.<q3<>  | -0.080   | 0.312    | 0.493  | 0.327   | 0.067   | 1.229    |
| Emp. & Inc>Q3   | 0.074    | -0.663   | 0.508  | 0.323   | -0.003  | 0.810    |
| Unemployed  | -0.396   | -0.162   | 0.371  | 0.416   | 0.034   | 0.619    |
| Self employed   | ******** | ******** | -0.242 | 1.012   | ******* | ******** |
| Out of labour force   | ******** | *******  | 0.465  | 0.328   | -0.105  | *******  |
| Allowances  | -0.012   | 0.251    | -0.210 | -0.014  | -0.262  | 0.068    |
| Low education   | 0.134    | 0.046    | -0.434 | -0.393  | -0.021  | -0.280   |
| Age   | 0.041    | 0.050    | 0.019  | -0.014  | 0.060   | -0.023   |
| Unemployment spell  | 0.349    | -0.131   |        |         | 0.486   | 0.035    |
| Household inc. Q2   | 0.258    | 0.040    | -0.163 | -0.048  | 0.255   | 0.025    |
| Household inc. Q3   | 0.403    | 0.174    | -0.192 | 0.118   | 0.085   | 0.002    |
| Household inc. Q4   | 0.597    | 0.557    | 0.093  | 0.169   | 0.393   | -0.165   |
| Correlation (rho)   | -0.097   | -0.263   | 0.043  | -0.093  | 0.234   | -0.175   |

Table 7b: Parameter estimates for Netherlands, France, and Germany.

|   | IT     |         | SPA    |         | GRE    |         | POR    |        |
|---|--------|---------|--------|---------|--------|---------|--------|--------|
|   | Males  | Females | Males  | Females | Males  | Females | Males  | Female |
| Selection equation  |        |         |        |         |        |         |        |        |
| Constant  | -1.715 | -2.067  | -1.032 | -1.134  | -0.375 | -0.451  | -1.434 | -1.582 |
| Low education   | 0.174  | 0.180   | 0.186  | 0.195   | -0.187 | 0.201   | -0.028 | 0.215  |
| Age 20-21   | 0.050  | 0.413   | 0.145  | 0.085   | 0.242  | 0.503   | 0.299  | 0.310  |
| Age 22-23   | 0.000  | 0.689   | 0.197  | 0.365   | 0.174  | 0.640   | 0.383  | 0.657  |
| Age 24-25   | 0.298  | 0.894   | 0.383  | 0.400   | 0.337  | 0.961   | 0.541  | 0.826  |
| Age 26-27   | 0.451  | 1.375   | 0.554  | 0.819   | 0.570  | 1.067   | 1.032  | 1.344  |
| Age 28-29   | 1.019  | 1.775   | 0.811  | 1.203   | 0.877  | 1.520   | 1.478  | 1.445  |
| Age 30-34   | 1.646  | 2.103   | 1.431  | 1.437   | 1.143  | 1.662   | 1.817  | 1.906  |
| Emp & Inc. <q1< td=""><td>0.391</td><td>0.500</td><td>0.126</td><td>0.152</td><td>-0.557</td><td>-0.635</td><td>0.120</td><td>0.046</td></q1<>          | 0.391  | 0.500   | 0.126  | 0.152   | -0.557 | -0.635  | 0.120  | 0.046  |
| Emp. & Q1 <inc.<q2< td=""><td>0.211</td><td>0.741</td><td>0.258</td><td>0.494</td><td>-0.265</td><td>-0.316</td><td>0.243</td><td>0.373</td></inc.<q2<> | 0.211  | 0.741   | 0.258  | 0.494   | -0.265 | -0.316  | 0.243  | 0.373  |
| Emp. & Q2 <inc.<q3< td=""><td>0.586</td><td>0.566</td><td>0.326</td><td>0.287</td><td>-0.522</td><td>-0.215</td><td>0.348</td><td>0.540</td></inc.<q3<> | 0.586  | 0.566   | 0.326  | 0.287   | -0.522 | -0.215  | 0.348  | 0.540  |
| Emp. & Inc>Q3   | 0.915  | 0.886   | 0.613  | 0.575   | 0.174  | 0.171   | 0.544  | 0.495  |
| Unemployed  | 0.031  | 0.166   | -0.057 | 0.297   | -0.820 | -0.394  | -0.314 | 0.232  |
| Self employed   | 0.619  | 0.727   | 0.365  | 0.560   | -0.146 | -0.111  | 0.266  | 0.618  |
| Out of labour force   | -0.220 | 1.461   | 0.003  | 0.861   | -0.364 | 0.564   | -0.107 | 0.654  |
| Leaving home equation   | n      |         |        |         |        |         |        |        |
| Constant  | -3.148 | -2.558  | -2.931 | -2.756  | -1.879 | -1.393  | -2.371 | -2.329 |
| Emp & Inc. <q1< td=""><td>0.261</td><td>0.375</td><td>0.699</td><td>0.562</td><td>0.686</td><td>0.020</td><td>0.630</td><td>0.440</td></q1<>            | 0.261  | 0.375   | 0.699  | 0.562   | 0.686  | 0.020   | 0.630  | 0.440  |
| Emp. & Q1 <inc.<q2< td=""><td>0.307</td><td>0.071</td><td>0.549</td><td>0.796</td><td>0.016</td><td>0.197</td><td>0.705</td><td>0.516</td></inc.<q2<>   | 0.307  | 0.071   | 0.549  | 0.796   | 0.016  | 0.197   | 0.705  | 0.516  |
| Emp. & Q2 <inc.<q3< td=""><td>0.633</td><td>0.454</td><td>0.918</td><td>0.726</td><td>0.786</td><td>0.312</td><td>0.840</td><td>0.877</td></inc.<q3<>   | 0.633  | 0.454   | 0.918  | 0.726   | 0.786  | 0.312   | 0.840  | 0.877  |
| Emp. & Inc>Q3   | 0.631  | 0.665   | 1.239  | 0.926   | 0.665  | 0.693   | 1.199  | 0.965  |
| Unemployed  | 0.164  | 0.434   | 0.587  | 0.533   | 0.218  | -0.098  | 0.608  | 0.604  |
| Self employed   | 0.422  | 0.566   | 0.968  | 0.897   | 0.794  | 0.347   | 0.900  | 0.892  |
| Out of labour force   | -0.259 | 0.619   | 0.114  | 0.654   | 0.148  | 0.082   | -0.058 | 0.444  |
| Allowances  | 0.035  | 0.266   | 0.193  | 0.265   | 0.297  | 0.151   | 0.246  | -0.021 |
| Low education   | -0.033 | -0.030  | -0.114 | -0.060  | -0.233 | 0.162   | -0.101 | 0.190  |
| Age   | 0.053  | 0.025   | 0.036  | 0.033   | -0.007 | -0.016  | 0.006  | 0.003  |
| Unemployment spell  | -0.189 | -0.116  | -0.007 | 0.118   | -0.079 | 0.217   | 0.116  | 0.306  |
| Household inc. Q2   | -0.092 | 0.021   | -0.112 | -0.220  | -0.028 | 0.204   | 0.214  | 0.080  |
| Household inc. Q3   | -0.067 | 0.138   | -0.084 | -0.145  | -0.027 | -0.103  | 0.184  | 0.077  |
| Household inc. Q4   | -0.338 | -0.088  | -0.286 | -0.055  | -0.030 | 0.080   | 0.094  | 0.452  |
| Correlation (rho)   | 0.106  | -0.151  | 0.123  | 0.070   | -0.068 | -0.155  | 0.466  | 0.257  |

Table 7c: Parameter estimates for Italy, Spain, Greece, and Portugal.

Source: own elaborations on European Community Household Panel. Coefficients with p-value<0.05 in bold, with p-value<0.1 in italics.