

# Mobility Into and Out of Poverty in Europe in the 1990s and the Pre-Crisis Period: The Role of Income, Demographic and Labour Market Events

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Mobility into and out of poverty in Europe in the 1990s and the pre-crisis period: the role of income, demographic and labour market events

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#### **Abstract**

In this paper, we analyze poverty dynamics in Europe for the period 1994-2001 using the European Community Household Panel (ECHP) and for the period 2005-2008 using the European Union Statistics on Income and Living Conditions (EU-SILC). The study first focuses on poverty profiles which depict the poverty duration, recurrence and persistence and then on the trigger events (income, demographic, labour market) associated with movements into and out of poverty, using a modified version of the Bane and Ellwood (1986) framework of event analysis. Multivariate logit analysis is employed at a second step in order to identify the socioeconomic factors that affect the transitions into and out of poverty. Cross-country differences, as well as differences in poverty dynamic trends between the two periods, are examined. Poverty profiles show a consistency with the welfare regime typology during the period 1994-2001, but the results are not entirely clear in the pre-crisis period. Moreover, the results show that new Member-States cannot be clustered into one group. The results differ significantly across countries when the events associated with poverty exits and entries are examined in detail with the event and multivariate logit analysis, reflecting the different importance of the various household income components, as well as the different effect that the demographic changes have to transitions into and out of poverty in each country. The general patterns that can be observed are five: a) In both periods, income events and especially changes in head's labor earnings seem to be highly associated with poverty transitions in all countries, but more so in the Mediterranean countries, while demographic events seem to be relatively more important in Northern countries; b) Employment events are more important for ending a poverty spell than unemployment events for starting a poverty spell; c) The importance of second income earners (finding a job or increasing earnings) for bringing the household out of poverty was established in both periods; d) The demographic events have a stronger effect in the EU-SILC than the ECHP for poverty entries and weaker for poverty exits; e) The socioeconomic characteristics of the household and the household head present a rather similar patterns across countries in both periods examined.

**Keywords:** Poverty, EU, ECHP, EU-SILC, event analysis

**JEL code:** 132, 131, J64

#### 1. Introduction

In the late 2000s Europe plunged into a crisis that, in most member-states, was the deepest since the end of World War II. Along with drops in GDP and increases in unemployment, poverty measured with the poverty line anchored in time in real terms increased, in some countries sharply, while relative poverty rose in most countries. The aim of the present paper is to investigate one particular aspect of poverty, namely entries to and exits from poverty, in the EU in the period just before the onset of the crisis, using the information of the European Union Survey of Income and Living Conditions (EU-SILC) for the period 2005-2008. Furthermore, these results will be compared with similar results for the period 1994-2001 obtained using the European Community Household Panel (ECHP).

Three types of analysis are performed aiming to identify similarities and differences across European countries as well as time periods. The first is an analysis of poverty profiles in a window of time that enables us to identify the extent that the poverty in the countries under examination is persistent, intermittent or transient. The second analysis is a modified version of the "standard" Bane and Ellwood (1986) framework of event analysis. More specifically, we try to identify whether particular transitions into or out of poverty can be associated with specific demographic or employment events or they should be classified as "pure" income events. In this framework, a detailed analysis is carried out to identify the specific demographic, employment or income event that is associated with the transition under examination. The third analysis is a multivariate probability analysis of transitions into or out of poverty, where we examine simultaneously the impact of several state and event explanatory variables. The state variables are characteristics of the household or the household head, while the event variables include a number of demographic and employment changes. Finally, an attempt is made to associate these results with particular welfare state regimes encountered in Europe.

The structure of the paper is the following. The second section reports the main findings of the relevant empirical literature. In the third section, we present the two main types of methodology applied (event analysis and multivariate logit analysis), as well as the datasets used. The fourth section contains the empirical resultys; we first present the results of the examination of poverty profiles in the two periods, then the results of the event analysis and, finally, the results of the multivariate logit analysis. In section 5 we conclude. A technical annex provides details on how we handled the income, education, marital status and household headship variables in both datasets, which is a key issue for our analysis.

#### 1.1 Survey of literature

The pioneering work of Bane and Ellwood (1986) was the first to focus on the events associated with movements into and out of poverty. The idea behind the use of event analysis for explaining poverty dynamics is that an income or demographic event, happening at the household level, might affect the beginning or ending of the poverty spell. Contrary to the belief that, family changes are not important for poverty dynamics because they do not happen often or to a large proportion of the population or mainly are voluntary life-cycle changes (Gottschalk 1982), Bane and Ellwood notice that family events do happen close to poverty transitions and, thus, are important for the sub-group of the population that moves over and under the poverty line. They find that only 38% of all spell beginnings can be associated with a decline in head's labour earnings and, thus, they conclude that models focusing only on the earnings of household head cover a relatively small number of poverty transitions. In total, in their analysis, income events account for approximately 60% of all

poverty beginnings, while demographic events for 40%. When they examine spell endings, they find that income events are much more important than demographic events and particularly the rise of head's earnings accounts for more than 50% of all spell endings.

Duncan *et al.* (1993) add employment events to the Bane and Ellwood framework and find that in the US, Canada and six European countries¹ employment events are by far the most frequent causes of both poverty exits and entries. Oxley *et al.* (2000) also examine six OECD countries² with respect to the importance of changes in family structure and in the labour market which are associated with poverty transitions. One of their most interesting findings is that events related to family status are relatively more important for entries than for exits. McKernan and Ratcliffe (2002) focus only on the US, using two longitudinal data sets: the Panel Study of Income Dynamics (PSID) and the Survey of Income and Program Participation (SIPP). In line with previous research, they notice that changes in household structure are relatively rare events in the population, but individuals who experience these events are the most likely to experience transition into or out of poverty. On the contrary, individuals who experience employment shifts are less likely to experience a poverty transition. Yet, as shifts in employment are more common events in the population at large, they are associated with a larger share of transitions into and out of poverty.

Jenkins (2000) applies the event methodology of Bane and Ellwood to the BHPS data and identifies another important factor for poverty entries and exits. Compared to Bane and Ellwood (1986), Jenkins' (2000b) findings give more importance to "secondary earners" (other than the household head) both for poverty entries and exits than to demographic effects. Jenkins *et al.* (2001a; 2001b) also introduce the analysis of non-mutually exclusive events using four relevant statistics<sup>3</sup>. In a subsequent study focusing on child poverty transitions, Jenkins and Schluter (2003) examine the chances of making a transition in Britain compared to Germany conditional on experiencing a trigger event rather than just examining differences in the prevalence of trigger event per se. At the same time, they examine certain joint events (e.g. chances in labour market attachment combined with household formation or dissolution). They find that Anglo-German differences in child poverty occur from differences in the financial consequences associated with events rather than differences in the event prevalence. They attribute the differences in the financial consequences associated with events to the nature of the two welfare states<sup>4</sup>.

Following Jenkins and Schluter (2003), Canto (2003) also controls for the fact that the prevalence of events may differ between the poor and the non-poor and she examines non-mutually exclusive events, using the Spanish Household Expenditure Survey. Her main finding is that only around 7% of all movements out of poverty are due to demographic events in Spain. She underlines that Spain is a particular case, compared to the other European Countries, given the outstandingly low occurrence of important demographic events like childbirth, divorce, departure of children from parental home etc. in the population in general. Focusing also on Spain, but with the ECHP data, Barcena-Martin *et al.* (2006) study the trigger

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<sup>&</sup>lt;sup>1</sup> France (province of Lorraine), Germany, The Netherlands, Luxembourg, Ireland and Sweden.

<sup>&</sup>lt;sup>2</sup> Canada, Germany, the Netherlands, Sweden, the United Kingdom and the United States.

<sup>&</sup>lt;sup>3</sup> The prevalence of each trigger event, the prevalence of each trigger event among the poor, the probability of a poverty transition associated with having experience the event and the share of all poverty transitions accounted for each event (see Jenkins et al. 2001a, p. 109; Jenkins et al. 2001b, p. 27).

<sup>&</sup>lt;sup>4</sup> For instance, they refer that the German tax and benefit system provides better protection to children's income against adverse events than the British system, as well as reinforces the effect of positive events (e.g. benefits from taxation for married couples) (Jenkins and Schluter 2003).

events that may be related to poverty exits by household type. Their main finding is that different types of households have different routes for escaping poverty e.g. while for young households the increase in labour income is the main route to exit poverty for older families social benefits play this role. Therefore, they suggest differentiation of antipoverty policies depending on the type of household. This is in accordance with the results that Jenkins *et al.* (2001a) find using the BHPS. The importance of non-labour income is obvious for pensioner household and demographic events for lone parent households, suggesting that when applying the Bane and Ellwood analysis, the division of the sample according to household type makes sense.

Using the first three waves of the ECHP, Bourreau-Dubois *et al.* (2003) examine the trigger events for poverty entries and exits, separately for men and women. They find that women are more vulnerable both to market and demographic events (especially to spouse death and union dissolution), while men's poverty entries are mainly linked to labour market events. The main route out of poverty is access to employment and then union, whereas for men is first separation and then access to employment. The results reveal a dependence of women to their male partners concerning poverty entries and exits. Layte and Whelan (2003) is the only work that applies event analysis to 10 EU Member-States using the first five waves of the ECHP. Contrary to the research supporting that poverty transitions have become increasingly "biographised" based on life cycle changes, Layte and Whelan (2003) also verify that transitions into poverty tend to be associated with decreases in income rather than changes in the demographic make up of households.

Vandecasteele (2010) focuses on two of the life events (partnership dissolution and leaving the parental home), studying the main poverty trajectories after experiencing these events. She identifies four broad latent classes: persistent non-poor, people with a transient or transient-recurrent / poverty risk, people with a longer-term poverty risk and late poverty entrants. According to the results, the transient poverty risk is less structured by gender, educational and social class inequality than the longer-term poverty risk.

Polin and Raitano (2014) analyze the demographic and economic events associated with households falling into or exiting poverty through both descriptive analyses and logit regressions using the EU-SILC up to 2006, and this is the first poverty event analysis that includes the "new" EU Member-States. Their results show that most poverty transitions are associated with economic events, but the entry rates after the occurrence of demographic events are also crucial. Poverty entry patents seem to be consistent with their welfare regime typologies, but a less clear ranking among them emerges when considering poverty exit rates. Moreover, an interesting finding is that when they use regression analysis controlling for household and household head characteristics, the economic events do not have stronger effect on poverty mobility in less generous welfare regimes, as shown by the descriptive analysis, and no differences related to welfare regimes typologies emerge with respect to the conditional transition rates associated with demographic events.

The Bane and Ellwood analysis of events associates a specific pre-determined event that happens within a one year period with a transition into or out of poverty occurring at the same period of time (e.g. in the same year). Nevertheless, several events (triggers) may occur in the same period. In order to allow events to happen simultaneously and also examine other socioeconomic determinants of poverty entries and exits, one may wish to estimate a probability model in which trigger events as well as particular household characteristics are used as regressors.

Multivariate logit analysis has been used extensively in many studies in order to test the validity of event analysis' results, as well as to disentangle the effect of events from other factors affecting transitions into and out of poverty. Many researchers find that event variables in logit regressions are significant even when controlling for the corresponding state variables. For example, two important OECD studies on poverty dynamics, Antolin *et al.* (1999) and Oxley *et al.* (2000) find that both employment status and employment change variables affect transitions into and out of poverty. When examining the effect of event variables to poverty transitions, Muffels (2000) and Muffels *et al.* (2000) find that all variables related to changes in employment status of household members are significant indicators of transitions into and out of poverty.

Finnie and Sweetman (2003) report that, in Canada, family status and family changes are strong determinants of poverty entries and exits. Having a first child more than doubles the probability of entering poverty for couples, while moving back to the parental home is associated with large declines in the probability of entering low income for single and lone parents. Van Leeuwen and Pannekoek (2002) use a binary dynamic logistic model with event variables in order to examine the effect of finding work by one of the household members on the probability of ending a poverty spell in the Netherlands. They report that although finding a job by the household head increases by 22% the probability of escaping poverty, it does not guarantee the end of the poverty spell. Dewilde (2004) highlights that the impact of both demographic and labour market events for poverty entries is stronger in Britain than in Belgium, possibly because in Belgium both the family and the welfare state assume a greater responsibility for negative life course events (e.g. young adults stay longer in their parental household, the unemployment benefits are more generous, etc.).

Canto *et al.* (2006) use both descriptive and multivariate analysis, in order to analyse the impact of demographic, labour market and welfare state transfers events in promoting exits from deprivation for childbearing households in Spain. They show that the impact of labour market events is lower for childbearing households despite the fact that their prevalence is particularly high.

Callens and Croux (2009) use a multilevel recurrent discrete-time hazard analysis to simultaneously model the impact of life cycle events and structural processes on poverty entry and exit across European Regions. They identify a gender differentiation with respect to the effect of marriage and divorce. Thus, while marriage and divorce have a strong, but opposite impact on poverty dynamics for women, these events are of little or no importance for men to whom the effect of employment or unemployment is far more important. Welfare regimes have an impact on poverty entry, but this was not detected for poverty exit.

Discrete time hazard analysis has been used extensively for identifying poverty entry and exits determinants in combination with duration dependence. Many papers have focused on the issue of whether duration into/out of poverty affects the probability of exiting/re-entering poverty (see for example Betti et al. 2000; Makovec 2006; Fertig and Tamm 2007; Ayllón 2008; Andriopoulou and Tsakloglou 2011a). Complementary to this question related to the state of poverty rather than transitions is the question on whether current poverty status is related to past poverty experiences and this is the issue of state-dependence, which in the recent literature is examined with controls for unobserved heterogeneity and initial conditions (Cappellari and Jenkins 2004; Ayllón 2009; Biewen 2009; Andriopoulou and Tsakloglou 2011b).

### 2. Methodology & data

#### 2.1 The hierarchical classification system of income and demographic events

The analysis of Bane and Ellwood (1986) distinguishes two mutually exclusive categories of events, which may affect the beginning/ending of poverty spells: income and demographic events. Income events happen when certain income components of the household income increase or decline. Demographic events are practically changes in the household size. As Oxley *et al.* (2000) underline, changes in the household size such as the arrival of a child affect individual equivalent incomes because total household income is spread among more household members. Alternatively, in the case of separations or divorce, economies of scale are lost as two new households are set up.

The starting point for the classification of events into income and demographic events is the definition of the equivalised household income or needs-adjusted household income (Jenkins 2000):

$$EHI = \frac{\sum_{i=1}^{n} \sum_{j=1}^{m} x_{ijt}}{es(n,a)},$$

where i is the number of individuals in the household, j the various household income components, x the income of the individual household members from the various income components for period t and es the equivalence scale depending on the number n and the age  $\alpha$  of the household members.

When a poverty spell begins for an individual, this is usually due to a decline in his equivalised household income. If the equivalised household income has remained stable or has increased and nevertheless the individual enters poverty, then the beginning of the poverty spell is attributed to the increase of the poverty line (poverty line effect). The same applies with the poverty exits which are not due to an increase in the needs-adjusted income. In order to minimize "the poverty line effect", we divide the household income (the numerator of the equivalised household income formula) by the mean household income of the specific country for the specific wave<sup>5</sup>. In this way, a purely relativistic analysis is performed, which limits the

relative difference of household income was: 
$$\frac{105-100}{100} = 0.05$$
 for period 1, now it is  $\frac{105}{220} - \frac{100}{160} = \frac{0.48-0.63}{0.63} = -0.24$ 

This last figure is then compared to the relative difference of the equivalence scale (denominator), in order to conclude whether the main event associated with the beginning of the poverty spells is an income or demographic event. Thus, the second consequence of this method is that it redefines the balance between the income and demographic events. For instance, lets assume that the result of the first method was also a small decrease of individuals income by 0.05 and that there is an increase in equivalence scale of the household from 2.1 to 2.3 because of "rise in needs" (relative difference  $\frac{2.3-2.1}{2.1} = 0.1$ ). According to the first method, the effect of the

<sup>&</sup>lt;sup>5</sup> The results of making all household incomes relative to the national mean for the specific period can be better illustrated by an example. Let's assume that in country A in period 1, an individual has a total household income of 100 euros, while the poverty line is 90 euros and the mean income 160 euros. In period 2 the poverty line increases quicker than his income to 120 euros, while his income only increase to 105. The mean national is now 220 euros. If we do not express incomes in relative terms, the beginning of the poverty spell for this individual is due to the poverty line effect, since he entered poverty while his nominal income increased; consequently, no further event analysis is performed on this case. What we want to achieve is to reduce the growth effect and also the poverty line effect, by making all household incomes relative to the national mean for the specific period. In this way, while the

transitions that are due to the poverty line effect. In the following tables, the results using a purely relativistic approach are presented.

Hence, as shown in the algorithm figure, if a decline in the equivalised household income causes the poverty entry, then five alternatives may have happened: first, the household income (numerator) might have decreased; second, the household equivalence scale (denominator) might have increased; third, the household income might have decreased and at the same time the equivalence scale might have increased; fourth, both the income and the equivalence scale is greater than that of income and fifth, both the income and the equivalence scale might have decreased, but the income effect is greater.

The micro-level events that may lie behind the decrease of the household income (numerator) or the increase of the equivalence scale (denominator) are exactly what the Bane and Ellwood methodology is trying to identify. The events that may be associated with the decrease of the household income are called "income events", since essentially they are declines in one or more income components of one or more household members. Using the individual and household income components available, we have formulated eight types of income events defined by changes in: household head's labour earnings, spouse's labour earnings, children's (offspring's) labour earnings, other household members' labour earnings, non-work private income, non-pension social benefits, pensions and any other income component. The events, which cause changes in equivalence scale are called "demographic events" and are closely related to household formation or dissolution. In the case of poverty entries, the events which make the equivalence scale rise may be: union, a new household "member moving in" the family, the birth of a baby, a child reaching the age of 14 and, thus, becoming adult according to the equivalence scale used ("rise in needs") or any other demographic event (residual category). In the same way, the income events associated with a poverty exit, are increases in the above income components, while the demographic events associated with a decline in equivalence scale are: divorce, death, a household "member moving out" and the residual category of other demographic events.

The first question that arises is "what happens if at the same time both the household income (nominator) and the equivalence scale (denominator) change?" In this case, we examine which change is proportionally greater. For instance, if  $es_1$ ,  $es_2$ ,  $hi_1$  and  $hi_2$  are the values for equivalence scale and household income in periods 1 and 2, the demographic effect is greater than the income effect if

$$\frac{es_2 - es_1}{es_1} \ge \frac{hi_2 - hi_1}{hi_1} .$$

Yet, even if we identify whether the stronger effect on the needs-adjusted income originates from the nominator or the denominator, the second question that occurs is "how can we identify which specific income or demographic event is associated with this change, since more than one income components might have changed and more than one demographic events might have taken place?" The ordering of the income events is much easier than the demographic events, since the magnitude of change of the income component can be taken into account. Thus, for example, we identify the decrease in social benefits to be the main

demographic event is stronger (0.05 is smaller than 0.1), while according to the second method, the income effect prevails (0.24 greater than 0.1).

event associated with the beginning of a poverty spell, if the absolute decrease in the social benefits' income components from period 1 to period 2 is the largest among all the other income declines observed.

With regard to the demographic events, the hierarchical system is based on the importance of the event. For all the individuals that entered poverty while being in a household with the same household head as last year, the demographic events associated with the beginning of the poverty spell are ordered as follows: union (concerning the head couple), "member moving in", birth, "rise in needs", and "other demographic event". The union is considered more important than all the other demographic events because it concerns the household head. The "rise in needs" is the least important because it provokes the smallest increase in the equivalence scale (only 0.2 units in the case of the modified OECD scale used in our analysis). Finally, the birth increases the modified OECD scale by 0.3 units, while it is more probable that a new household member joining the household would be an adult and, thus, would increase the household needs by 0.5 units. The demographic events for poverty exits are ordered as follows: divorce, death, a household member moving out and then the residual category of "other demographic events". Divorce<sup>6</sup> is more important since it concerns the household head couple. Death is arbitrarily defined as more important than the departure of a household member from the household. Yet, the households in which the two demographic events happen simultaneously are few.

The third question that needs to be addressed is "what happens if the individual enters or escapes poverty in a different household than last wave?" In this case, neither the household members nor the income composition are the same as last year and the comparison makes no sense. Here, our analysis differs from previous studies and we group these individuals in a separate category. We then check whether the household under examination is a new panel household or an old panel household (for example young individuals returning to their parental household after their studies). In the case of the new household, we assume that the main event associated with the beginning or ending of the poverty spell is the demographic event that caused the creation of the new household: union, divorce, a child leaving the parental home (but not for union), and any other demographic event. These demographic events are mutually exclusive and, thus, we do not have to set a hierarchical order for them.

In line with previous studies, we consider the change of the household head to be a major demographic event associated with spell beginnings and endings. Thus, when a change in household head occurs, while the household enters or escapes poverty, we consider this event as the main event associated with the spell beginning or ending and we examine what is the particular event behind the head change: divorce, death or other demographic event. These events are also mutually exclusive, the household head can either divorce or die or leave the household for other reasons.

In Figure 1, we summarize in a flow diagram all the steps described above. The first step is to check whether the poverty entry (exit) is due to a decrease (increase) in the equivalised household income or due to the poverty line effect<sup>7</sup>. We then examine if the individual enters

<sup>&</sup>lt;sup>6</sup> For the purposes of the analysis, we have merged the separation and the divorce cases into one category that we call "divorce".

<sup>&</sup>lt;sup>7</sup> For the cases that the beginning or ending of the poverty spell is caused by the general income growth effect no further analysis is done, because what we want to examine is the "micro" and not the "macro" events that may cause the beginning of the poverty spell.

(exits) poverty in a different household compared to last wave. If this is the case, in a third step, we check whether he/she returns to an old panel household or to a new panel household. For the individuals that escape (enter) poverty by returning to an old household, we assume that this is the main demographic event associated with the beginning or ending of the poverty spell. For the individuals that enter (escape) poverty by moving into a new household, we attribute the poverty entry (exit) to the reason for the household creation: union, divorce, child leaving parental household (not for union) and any other demographic event. Going back to the second step, if the individual who begins (ends) the poverty spell lives in the same household as in the previous wave, we move to step three and check whether a change in household head has taken place. If the household head has changed, we consider this demographic event to be the main event associated with the transition into (out) of poverty and we then investigate the reasons for this head change: divorce, death or other event. If the household head remains the same, we move on to the "traditional" Bane and Ellwood analysis of events and we examine whether the relative change in the equivalence scale is greater than the income change. If the income event is stronger, we move to the fifth step and we examine which income component has the greatest decrease (increase) and we finally consider the decline (rise) of this income component to be the main income event associated with the beginning (ending) of the poverty spell. If the demographic event is greater, we check through the hierarchical system described above which of the following events has taken place: union (concerning the couple head), "member moving in", birth, "rise in needs", other demographic event for poverty entries; or divorce, death, "member moving out", other demographic event for poverty exits.

In order to analyze income events further, in a variation of the above algorithm, when the programme runs step 4a, a further step is added that concerns only the income events. The income declines are divided to those that are caused by an unemployment event and to "pure" income decreases. The unemployment event is defined as a move from full-time or part-time employment to unemployment<sup>8</sup> or inactivity or as a move from full-time employment to part-time employment<sup>9</sup>. Thus, before we classify the main event associated with the beginning of the poverty spell to be an income event, we check whether an unemployment event has happened for one of the household members (head, spouse, children, other); if not we then move on to examine which income component had the largest absolute decrease. Essentially, what we want to test is the effect of unemployment as opposed to pure income decreases with regard to transitions into poverty.

#### 2.2 Multivariate logit analysis of poverty transition determinants

Complementary to the event analysis is the multivariate logit analysis, which controls at the same time both for events that happen to household members and for other socioeconomic determinants for the household and household head and thus aims to establish causality between poverty determinants and transitions into or out of poverty. In the analysis that follows, we do not control for state or duration dependence, but we only focus on the determinants of transition into and out of poverty, focusing on employment, income and demographic events. Thus, the model used is a simple binary multivariate logistic model:

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<sup>&</sup>lt;sup>8</sup> For the ECHP data we have merged the unemployed with the "discouraged workers" as they are defined by ILO. Yet only 0.53% of observations belong to the latter category.

<sup>&</sup>lt;sup>9</sup> The transitions from full employment to part-time employment are very few in both samples, therefore we have merged the categories despite the fact that a transition from full time to part time employment is different from a transition from employment to unemployment.

$$\Pr(y_{it}=1) = F(\beta x_i + \gamma e_i) = p_{it}$$
 and 
$$\Pr(y_{it}=0) = 1 - F(\beta x_i + \gamma e_i) = 1 - p_{it}$$

where  $y_{it}$  is the dependent variable capturing the transition in question (transition into or out of poverty).  $y_{it} = 1$  when the individual has a transition (enters or exits poverty) and  $y_{it} = 0$  when the individual is in the same status as in the previous year. F is the logistic distribution  $\exp(z)$ 

 $F(z) = \frac{\exp(z)}{1 + \exp(z)} = \Lambda(z)$ , x and  $\beta$ , the vector of explanatory variables and the

corresponding coefficients, while e and  $\gamma$  are the vectors for the explanatory event variables and their coefficients.

When we control for unobserved heterogeneity or frailty, an individual-specific unobserved characteristic u is added. u follows a given parametric distribution<sup>10</sup> (gamma or normal).

$$Pr(y_{it} = 1) = F(\beta x_i + \gamma e_i + u) = p_{it}$$

We have estimated u using random effect techniques. When using random effect techniques all different specifications of the model converge and this is expected since the random-effects approach leads to more efficient estimators if the distributional assumptions are satisfied.

In the analysis that follows using the ECHP and EU-SILC, we use all transitions into and out of poverty observed in the waves under examination. Since, the aim of this paper is to study transition events irrespectively of the length of spell, and thus we do not focus on spell duration or state dependence, there is no particular reason to exclude left-censored spells or control for initial conditions.

Finally, given that the data include repeated observations from the same individual and from the same family, following most researchers in the field, we use the robust or sandwich estimator of variance in place of the traditional calculation, which allows observations to be dependent within cluster, although they must be independent between clusters ( Huber 1967; White 1980).

#### 2.3 ECHP and EU-SILC

The data we use for the analysis come from the European Community Household Panel (ECHP) for the period 1994-2001 and from the EU-Statistics on Income and Living Conditions (EU-SILC) for the pre-crisis period (2005-2008).

Both surveys can be defined as a harmonized cross-national longitudinal surveys, which focus on income and living conditions of households and individuals in the European Union. Due to their multidimensional nature, they provide information at micro-level across countries and across time on: income, employment, health, education, housing, migration, social transfers and social participation, as well as demographics with main aim to offer appropriate data for the analysis of income and social dynamics in the European Union. The main difference between the two panels is that the ECHP has a full panel structure meaning that the same individuals are followed every year, while the EU-SILC is a rotational panel with one fourth of

<sup>&</sup>lt;sup>10</sup> The specification for unobserved heterogeneity can also be fully non-parametric by using one or multiple mass points, following Heckman and Singer (1984).

the sample being replaced every year. The country participation in the ECHP is presented in Table 11 and for EU-SILC in Table 12, along with the availability of different income components across countries and waves. The ECHP covers 14 EU Member-States of the EU, while the EU-SILC the EU-28 plus Norway and Switzerland.

Another difference between the two panels is that the ECHP is based on input, while EU-SILC on output harmonization<sup>11.</sup> This means that the sample design, the mode of survey implementation and the questionnaire were harmonized ex-ante for all the EU Member States in the ECHP, while in the EU-SILC the main aim is to deliver a harmonized list of target variables, but there is flexibility in the data collection methodology that can be followed.

With regards to the particular analysis undertaken in this paper, the difference between the tracing rules of the two panels creates some discrepancies. In the ECHP all sample individuals over 16 were followed throughout the survey. In the EU-SILC among households experiencing a split, large percentages of those remaining in the original sample household are followed, however few of those moving to a split-off household are followed. According to Iacovou and Lynn (2013), this indicates that the EU-SILC may not be suitable for longitudinal analysis of specific groups such as individuals leaving the family home following divorce or separation or young home-leavers. This has important implications for the event analysis for individuals that change household, and thus the relevant results should be interpreted with caution.

As far as specific variables are concerned, we have imputed missing values in marital status and educational variables following certain algorithms that we have developed and are presented in the Technical Annex. In the ECHP, due to the large number of household head changes without a particular reason (death, household head moving out, divorce etc.) we have also developed an algorithm for redefining this variable, this was not necessary in the EU-SILC.

Finally, the most important difference with regards to the income variables used, in the ECHP we have reconstructed the household income, by moving one year back all the individual income components and attributed them to the household composition in the previous year. In this way the time lag between the income variables and the other socioeconomic variables of the individual and the household is being eliminated. We attempted also to reconstruct the income in the EU-SILC for the countries that had the individual net income components available. Yet, the reconstruction has not yield the expected results with regards to certain controls that we ran in comparing the new with the previous income distribution, mainly due the rotational structure of the panel which by definition results in losing one quarter of the observations when income components are lagged one wave back. Therefore, for the analysis with the EU-SILC, we use the household income as it has been calculated from Eurostat. The two methodologies for the reconstruction of household income in both the ECHP and the EU-SILC are presented in the Technical Annex.

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<sup>&</sup>lt;sup>11</sup> Input harmonization is always ex-ante, while output harmonization may be both ex-post and ex-ante, depending on whether the survey design has taken into account the conversion of data to be carried out later (Ehling and Rendtel 2003). However, there were certain departures from harmonization. First of all, not all the EU Member States started participating from the first wave and in some countries cloned national sources were used to fill in the ECHP data instead of conducting an original ECHP survey. In particular, Germany, the UK and Luxembourg switched from input harmonization to output harmonization, after 1996 (EPUNet 2004).

#### 3. Results

#### 3.1 Poverty profiles

We start by developing a modification of the poverty profiles typology of Muffels *et al.* (1999). In Table 1, we combine in four poverty profiles the three notions of poverty prevalence, duration and recurrence, using the ECHP. The basis for the construction of these profiles are the spells that each individual experiences and not the poverty rates. As Mendola *et al.* (2009) define it, when examining young adults persistent poverty, spell analysis takes into account explicitly the temporal sequencing of the episodes of poverty. In our definition, the first profile "transient poor", includes all those experiencing poverty only once and for only one year. The second profile "mid-term poor" includes the individuals that experience poverty only once but for a period of two years. The "recurrent poor" are defined as those who have been poor more than once but never longer than two consecutive years and finally the "long-term poor" are those who are continuously poor for a period of at least three years.

In most countries, the proportion of the transient poor is greater than the other categories, with the exception of Portugal and Greece, where the long-term (or persistent) poor are the majority (39.35 and 35.02 respectively), and in Italy, where the difference is very small (35.68% transient poverty and 34.77% permanent poverty). The highest proportion of transient poor is found in countries with low poverty rates: Denmark, Finland and the Netherlands. From all countries which have an average headcount ratio for this period over 18%, Greece and Portugal have the lowest proportion of transient poor to the poor population. Thus, 65% of the poor in these countries experience poverty for more than one year. Finland has the highest percentage of two-year poverty, but it has the lowest percentage of recurrent and permanent poor. Also, it should be underlined that for Finland only five waves of the ECHP are available and this may bias the results for recurrent and permanent poverty. The same holds for Luxembourg and Austria, that have very low rates of recurrent and permanent poverty. The problem of multiple spells (recurrent poverty) seems to be more important in Spain, Greece and Italy. Particularly, in Spain the percentage is 3% more than the other two countries; thus, while Spain has a low mid-term and a relatively low percentage of persistent poverty, the proportion of individuals "ever poor" who return to poverty, after being non-poor for one or more years, is high.

Almost 29% (28.83) of the poor in the EU, experience a poverty spell lasting more than 2 years (long-term poor). This corresponds to 10% (9.94%) of the total population. Apart from Portugal, Greece, Italy, Ireland and the UK which have high proportions of persistent poverty, but also have high poverty rates, Luxembourg and France also "suffer" from high figures of permanent poverty nearly 30%, which corresponds to almost 7% of the total population in Luxembourg and 9.51% in France<sup>12</sup>. Results actually reveal that the EU-14 countries differ widely in the extent of poverty persistence with the Southern European countries, Ireland and the UK showing high rates, particularly when compared to countries such as Denmark, Finland and the Netherlands. Similar results are found by Layte and Whelan (2003), when analysing poverty persistence using the first five waves of the ECHP.

If we take into account the welfare regime typology of Esping-Andersen (1990), expanded also to include the Southern welfare regime type (Ferrera 1996), the results for all the seven waves of the ECHP (excluding Austria, Finland and Luxembourg) show that the Member-States

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<sup>&</sup>lt;sup>12</sup> Own calculations from the ECHP.

belonging to the social democratic regime (Denmark and the Netherlands) have higher proportion of their population not experiencing poverty than the countries of the corporatist regime (Belgium, Germany, France) and at the same time lower poverty rates, followed by the liberal regime (Ireland and the UK), while the Southern countries (Greece, Italy, Spain and Portugal) come last. Regarding the distribution of the poor among the four poverty types, in social democratic regimes, the proportion of the transient poor in the countries associated with the social-democratic regime is larger than in the corporatist countries and in corporatist countries larger than in the two remaining regimes. Concerning the mid-term poverty, the corporatist countries have higher rates, while the liberal and Southern regimes "suffer" more from recurrent and persistent poverty than the social democratic and the corporatist regimes. Social democratic and corporatist regimes are expected to have lower permanent and recurrent poverty rates than the other two regimes due to the more effective antipoverty and active labour market policies and due to the more organised and "generous" social security systems. The only exception to this is Spain, that has a relatively low percentage of permanent poverty compared to the other Mediterranean countries. Yet, Spain has the highest percentage of recurrent poverty in Europe. Particularly, Greece and Portugal are the only countries, where the percentage of permanent poverty is greater than that of transient poverty.

For the pre-crisis period 2005-2008 (Table 2), as expected the percentage of individuals experiencing poverty in any of these four years is lower than in the ECHP period which is twice as long (8 years) with the exception of Luxembourg. Across all countries, the "transient poor" is the category with by far the largest percentages. Yet, this might also be due to the rotational structure of the panel which offers a small observation period, and thus many left or right censored spells. The lowest proportion of transient poor to poor in total are observed in Lithuania, Cyprus and Poland, indicating that almost have of individuals experiencing poverty in that period, stay in poverty for at least two years. Relatively high percentages are also observed with regards to the long-term (persistent) poverty in Cyprus (22.85), Luxembourg (20.86), Lithuania (19.31), Poland (18.02), Italy (17.90) and Greece  $(17.64)^{13}$ . The observation about Luxembourg is also consistent with the ECHP findings indicating that while poverty rates are very low, those in poverty remain poor for long time. In Ireland (16.27), Denmark (15.43), Sweden (14.82) and Cyprus (14.74) the recurrent poverty is also more than 14% within the poor, indicating that a substantial number of individuals that escape poverty is prone to reenter poverty within the next coming years. Given that the observation period is very short, this figure could be even larger if we could observe individuals within a larger timeframe. In Norway (18.46), France (18.19), Lithuania (17.92), Poland (16.61) and Ireland (16.22) the midterm poverty (2 years) is relatively high compared to the recurrent and long-term poverty.

No clear pattern emerges with regards to the welfare regimes. Thus, while some general remarks remain the same as in the previous period (like the fact that the percentage of individuals that do not experience poverty at all in all the waves is higher in Northern that in Southern Countries), there are many differences especially when analysing the profiles. For instance Portugal has a very large percentage of transient poverty and very low percentage of long-term poverty, which is exactly the opposite than in the previous period. The liberal regimes of Ireland and the UK seem to perform better than Luxembourg and France in terms

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<sup>&</sup>lt;sup>13</sup> Results on long-term persistent poverty are slightly different for some countries than those presented in Jenkins and Van Kerm (2012) due to a different definition, as they measure the persistent poverty rate in a specific year t to be the faction of individuals who are poor in t and poor in at least two of the three preceding years.

of the proportion of the poor not experiencing poverty, and do not cluster together in terms of the picture of transient poverty compared to the other three categories.

Another finding is that the new Member-States cannot be grouped together. In Estonia, Latvia and Poland, we observe a similar poverty profiles pattern where transient poverty is relatively high. Yet, Cyprus and Lithuania have relatively high rates of long-term poverty, while Slovenia, Slovakia, and Bulgaria could probably form another group with high rates of transient poverty and relative low rates of persistent poverty. Hungary and Malta perform better than all new Member-States presenting similar patterns with the social-democratic regimes.

It should be highlighted that figures cannot be directly compared with Table 1 due to the difference in the period of time which is embedded in the definition of the different poverty profiles. Moreover country participation is not the same in all waves both in the ECHP and EU-SILC and this should also been taken into account when interpreting the results further.

#### 3.2 Event analysis for poverty spell beginnings

#### 3.2.1 Results using the ECHP (1994-2001)

Table 3 presents all the events that can be associated with poverty spell beginnings and their relative frequency within each country using the ECHP. The sample includes all spell beginnings that are observed in the period 1994-2001 and the cases have been weighted using the cross-sectional weights. The last row of the table shows the sample size (number of spell beginnings) for each country.

What immediately draws the attention is that pure income events are more often associated with a poverty entry in all European countries under examination than unemployment or demographic events. The percentages range from 67.23% in Finland to 84.51% in Belgium.

When the particular income events entries are analysed, in all countries with the exception of Denmark, Ireland and the UK<sup>14</sup>, the decline of head's labour earnings is the leading factor. There are two exceptions to this rule. In Denmark, the decrease in pensions is the most important factor and in Ireland the decrease in social benefits. The effect of social benefits to poverty spell beginnings is by far the lowest in Greece<sup>15</sup>, where declines in social benefits account only for 5.44% of all poverty entries. This is expected, since in Greece, the social-benefits (excluding pensions) account on average for only 6.53% of the total household income, while in Ireland the respective figure was more than 23% in this period<sup>16</sup>.

In Greece, almost 44.77% of all poverty entries are due to a decrease in head's labour earnings. Declines in spouse's labour earnings are more important for transitions into poverty in Austria (15.88%). Yet, it should be underlined that in Austria the household headship is almost equally divided among the two genders, meaning that 50% of all households declare that the household head is a female, while for instance in Greece the figure is less than 25%. The case of Portugal is interesting because it deviates from the other "old poor" EU countries,

<sup>&</sup>lt;sup>14</sup> The high number of imputed income values in the UK has resulted in a high proportion of the household income (7%) to originate from unknown sources in this country. Therefore, when interpreting the results for the UK, this drawback should be taken into account.

 $<sup>^{15}</sup>$  The second lowest is found in Italy (10.25), which is almost double.

The distribution of income to different income components for all countries is available from the authors on request.

where the decrease in spouse's labour earnings is not an important factor for poverty entries compared to the head's labour earnings. Thus, the figure is very low for Ireland (3.39%), Greece (3.69%), Spain (4.59%) and Italy (4.71%), while for Portugal it is 6.40%. Note though, that the proportion of spouse's labour earnings to the total household income is twice as high in Portugal than in the other "old poor" EU countries<sup>17</sup> in the period 1994-2001.

Offspring's labour earnings affect poverty entries more in Luxembourg, Portugal and Ireland and especially in the case of Ireland and Luxembourg, they are more important than the spouse's labour earnings. In Denmark, the Netherlands, Finland and Belgium, declines in offspring's labour earning do not matter significantly for poverty entries. This also reflects the fact that in these countries few economically independent children stay with their parents in the same household (Parissi 2008). The last category of labour earnings (that of other household members) does not seem to be important in any country. Finally, declines in non-work private income, bring relatively more individuals into poverty in Belgium, France and Greece.

The importance of employment events ranges from 8.84% in Belgium to 24.48% in Spain. In Spain, Ireland, Portugal, Germany and Greece, the total unemployment effect accounts for more than 19% of poverty entries. The unemployment events of the household head are more important for poverty entries than the unemployment events that occur to other household members in all EU countries with the exception of Luxembourg, where spouse unemployment events are more important. If we add the unemployment events with income events, we get the total number of transitions into poverty due to the decrease in the nominator (disposable household income) of the equivalised household income. The results in this table show that a large proportion of income events in many European countries is due to the transitions from employment to unemployment rather than a "pure" decline in earnings.

With respect to the demographic events, for the individuals that experience a poverty entry, while being in the same household as in the previous wave, when they were non-poor, the change of the household head seems to be an important factor for poverty entries in Finland and, to a lesser extent, in Luxembourg and the UK. For the majority of individuals that enter poverty without a household or a household head change, the "standard" Bane and Ellwood analysis for the importance of income versus the demographic effects is performed.

In all countries, income events are much more important than demographic events for poverty spell beginnings. Yet, in Luxembourg, Ireland, the UK and the Netherlands, the demographic events account for more poverty entries than in the remaining EU countries. What is interesting is that in Finland and Denmark, where the demographic effect of household change is very strong, for the individuals that remain in the same household, the demographic effects are of very low importance. When analysing further the demographic events, no common patterns can be identified with respect to their importance, since most of the figures are below 1%. Only the birth of a baby in Ireland is associated with 2.42% of all poverty entries in this country, while 2.46% of poverty spell beginnings in Luxembourg happen when a new household member moves into the household.

<sup>&</sup>lt;sup>17</sup> It could also be possible that the high proportion of spouse's labor earnings to the household income in Portugal is due a higher number of female household heads compared to the other EU countries. Yet, the proportion of female-headed households does not differ in Portugal from the EU average, although it is higher than in the other Southern European countries.

In Greece, Spain, Portugal, Ireland, Italy and Belgium the household change does not seem to be related with poverty entries. Yet, in Denmark and Finland more than 10% of spell beginnings occur when the individual changes household. This proportion is also relatively high in the UK (6.73%), Germany (5.87%) and France (5.77%). This result could reflect differences in household structure and mobility among the EU countries. For instance, the general population in Denmark and Finland might change households more often than in the other EU countries. Tabulations on the frequency of household changes show that in these countries the household changes are more often observed to poor than non-poor individuals. For, instance in Denmark, only 2.25% of the non-poor population changes households in the period of survey; the figure is twice as high for the poor (5.64%)<sup>18</sup>. The same holds for Finland and to a lesser extent for the UK, Germany and France. Thus, although in these countries the mobility of non-poor individuals into different households is higher than the EU mean, the mobility of poor individuals is much higher, reflecting a possible association between household changes and transitions into poverty.

The movement into a new rather than an old household seems to be important for the beginning of the poverty spells and when the reasons for the creation of the new household are examined further, it is clear that most spell beginnings due to a household change start for young individuals who leave the parental household. The effect is stronger in Denmark, where almost 7.5% of all poverty entries concern young individuals who leave the parental home, but not through union. On the contrary, in the four Mediterranean countries, this effect accounts less than 0 .5% of poverty entriesand for Ireland it is less than 1%. This is expected since in these countries, it is common for young individuals to live in their parental household until they get married (Aassve et al. 2006; Parissi 2008). Canto *et al.* (2006) highlight that, in Spain, in 1995, more than 50% of individuals aged less than 30 lived in their parental household.

When all the demographic effects are added together (categories 1.1.3, 1.2 and 2 of Table 3), the highest proportion of transitions into poverty associated with demographic events is found in Finland (17.88%), followed by Denmark (13.81%), the UK (13.44%) and Luxembourg (11.25%), while the income effect is stronger in Greece (96.48%) and Spain (96.38%) followed by Italy (95.76%), and Portugal (95.06%). In total, the effect of income events as opposed to the demographic events prevails in all Member-States.

#### 3.2.2 Results using the EU-SILC (2005-2008)

When we examine the pre-crisis period 2005-2008, in Tables 5A and 5B, the general pattern for income events dominating over unemployment and demographic events remains the same. The association of income events with transitions into poverty ranges from 68.91% in Iceland to 82.42% in Estonia. In almost half of the countries examined, decrease in head's labour earnings accounts for more than 30% of total poverty entries and this is just pure income events (decrease in income) without taking account the effect of unemployment. The highest figure appears in Norway (48.33%) and the lowest in Ireland (19.32%). The role of spouse's labour earning is particularly high in Poland (16.15%), Portugal (14.46%), Lithuania (13.31%), Slovenia (13.06%) and Austria (12.58%) and has low importance in the Czech Republic (4.68%), Belgium (5.38%) and Norway (5.29%). Slovakia is the only country where the decrease in offspring's labour earnings is more important (11.26%) than the decrease in spouse's labour earnings (9.52%). The pattern of very low percentages for offspring and other

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 $<sup>^{\</sup>rm 18}$  The results for all countries are available from the authors on request.

household members for the socio-democratic states observed in the ECHP remains also in the EU-SILC results. Declines in non-work private income are relative highly associated with poverty entries in the Netherlands (12.47%), Belgium (11.94%) and Denmark (11.89%). The importance of non-work private income for poverty entries in the previous period (1994-2001) was apparent only in Belgium. The decrease in social benefits is important for poverty entries in France (21.29%), Luxembourg (16.51%), the UK (15.48%) and Hungary (15.21%). In general though, decreases in social benefits and pensions in the pre-crisis period are much less related to poverty entries than during the period 1994-2001. Only in the UK the effect has remained at the same level (around 12%); in all other countries the effect declined dramatically, probably signalling that there are not many pensions decreases (vis-a-vis the mean national income) in the pre-crisis era.

As far as the unemployment events are concerned, in total they account for 7.13% of total poverty entries in Czech Republic to 23.52% in Latvia suggesting that there are huge country differences, probably related to the unemployment rate in each country. In the majority of countries, it is the head's unemployment that matters most with the exceptions of Finland and Norway where the presence of other unemployment household members matters more, as well as Denmark and Austria where the effect of head's and spouse's unemployment is exactly the same.

The demographic events are again more important in Northern and Central European countries than in Mediterranean countries, as was also observed in the previous period, with the exception of Cyprus where 11.20% of poverty entries are associated with demographic events. In particular, the effect of the demographic events (with the same head) ranges from 3.17% in Bulgaria and 3.32% in Greece to 10.99% and 11.74% in the Netherlands and Luxembourg respectively. The strongest demographic event for entering into poverty, while living into the same household with the same household head as in the previous period, seems to be the birth of a baby or a new household "member moving in" the household. Changes in household head seem to be an important factor for entering poverty in Denmark and Iceland. Yet, the association with a particular event (as main event), death or divorce, was not possible in most of the cases, since the residual category is predominant in most of the countries, suggesting possible data discrepancies in measuring these events. At any arte, the picture was not that different in the ECHP<sup>19</sup>.

Unfortunately, the low percentages associated with changes in household composition, do not allow us to analyze further with the EU-SILC these results suggesting that there is low tracking of the split households. In general, this might bias the comparisons across the two periods to the direction that there might be an underestimation of the effect of the demographic events. This actually is a very interesting finding, because without taking into account this underestimation, demographic events seem to have a larger effect to poverty entries in the pre-crisis period than in the period 1994-2001.

<sup>&</sup>lt;sup>19</sup> At this point it should be noted that both in the ECHP and EU-SILC, the household head variable has not been simply defined as the reference person in each wave, but in amore complex way presented in the Annex that ensures that there are no unnecessary changes of the household head. In otherwords, the household head as defined in the first wave, does not change if he/she is present in the household.

#### 3.3 Event analysis for poverty spell endings

#### 3.3.1 Results using ECHP (1994-2001)

Table 4 presents the results for poverty spell endings. In line with event analysis for transitions into poverty, the sample for transitions out of poverty includes all spell endings that are observed in the period 1994-2001.

For the individuals that escape poverty while being in the same household with the same household head, the income effect is again much larger than the employment and the demographic effect. Yet, in all countries the demographic effect is stronger compared to poverty entries. The highest proportion is found in Luxembourg (9.92%), Finland (9.00%), and France (8.07%) and the lowest in Spain<sup>20</sup> (2.09%) and Greece (1.72%). The income events have again the highest effect in Greece, Italy and Spain. Indeed, increases in head's labour earnings are related with more than 30% of the total number of poverty spell endings in these countries. To be more specific, in almost all EU countries the increase in head's labour earnings is the main event associated with poverty exits. Only in Luxembourg and the UK<sup>21</sup> the increase in social benefits is more important than the increase in head's labour earnings. In line with Luxembourg and the UK, the effect of social benefits in bringing individuals out of poverty is also very high in all the corporatist states (Germany, France and Belgium) and the Netherlands. In Denmark the social benefits have almost the same effect as pensions. Pensions are also an important income component associated with poverty exits in Germany, Italy, and Belgium followed by Greece and France. Spouse's labour earnings range from 5.20% in Spain to 13.76% in Luxembourg. Thus, while spouse's labour earnings in Luxembourg account only for 6.53% of poverty spell beginning, they have almost twice as high an effect for poverty spell endings. In general, the effect of changes in spouse's earnings in bringing the household out of poverty is much stronger than for dragging it into poverty. The same holds in most countries for offsprings' labour earnings. Finally, in line with poverty entries, the effect of non-work private income is relatively strong in Belgium, as well as Denmark and Greece.

The employment events that we add into analysis are defined as transitions from unemployment or inactivity to full-time or part-time employment and from part-time to full-

When comparing demographic to income events, Barcena-Martin *et al.* (2006) find that 15.65% of all poverty exits in Spain are due to changes in family structure, while 84.36% is due to increases in a certain income component. In our analysis, the prevalence of demographic events in Spain is much lower 6.24% in total, while

income events account for more than 93% of poverty exits. This difference may be due to two reasons. First, the definition of household head differs in the two papers. Barcena-Martin *et al.* (2006) use the original reference person as household head, while we define the household head a different way (see annex part C.2). In the original definition of household head in the ECHP as the reference person, the reference person changes without obvious reason (e.g. death of household head or divorce) and this fact creates "fake" changes of household head and, thus, increases the importance of demographic events. Second, we use the unbalanced panel, while Barcena-Martin *et al.* (2006) use the balanced panel. As they, also, underline in their paper, the longer a household is observed the higher the chances of experiencing a demographic event. Consequently, the use of the balanced panel increases the prevalence of the demographic events versus the income events, since it excludes the households that were observed only for few waves.

observed only for few waves.

21 The results for the UK should be interpreted with care due to the large number of imputed values classified as "unknown" income components. Jenkins *et al.* (2001a) using the BHPS find that 33% of all spell endings can be associated with a rise in head's labour earnings, while another 29% due to increases in spouse's or other individual's labour earnings. In total, they find that 81% of poverty exits are due to income events and 19% due to demographic effects which is almost the same result shown in Table 3. Consequently, it can be claimed that a large number of the "unknown" income components belong to the head 's labour earnings.

time employment<sup>22</sup>. In all countries, apart from Germany and Luxembourg the employment effect is stronger in bringing individuals out of poverty than the unemployment effect for poverty entries. The proportion of individuals that escape poverty because a household member finds a job is exceptionally high in Ireland (39.17%), Spain (31.63%) and Portugal (28.22%). Especially in Ireland, the employment effect for poverty exits is twice as high as the unemployment effect for poverty entries. This is expected since the period 2001 was a period of rapid growth for Ireland and when growth is high unemployment usually declines. Yet, the difference between the effect of employment events to transitions into and out of poverty may be attributed to the fact that when an unemployment event occurs there is usually an unemployment benefit that decreases gradually, thus, the poverty entry does not take place in the year of the unemployment event, but later depending on the type of social safety net or it can be due to the effect of smoothing annual earnings. Since our analysis associates unemployment events with beginnings of poverty spells that happen almost at the same time, we may lose some of the effects of unemployment that appear later on. On the contrary, the effectiveness of employment on spell endings is direct and immediate and this may be why the effect appears to be so stronger for poverty exits.

When the employment events are studied further with regard to the particular household member to whom they happen, the interest shifts from household head to offspring in many EU countries. Thus, in the Southern EU countries (Spain, Greece, Italy and Portugal), it is the employment of offsprings that is more important for bringing the household out of poverty than the employment of household head. The same is observed in Luxembourg. The income effect as compared to Table 3 weakens significantly for Spain (from 93.51% it falls to 61.88%) that had the highest income effect with two types of events in the analysis. However, it still remains strong for Italy (72.89%) and Greece (74.00%), but not stronger than for Belgium (74.85%).

To sum up, regarding the impact of the different types of demographic effects, in all countries the demographic effect for poverty exits is stronger than for poverty entries. In Finland, almost 25% of all poverty exits are associated with demographic rather than income events, while for the other EU Member-States the figure varies from 18.38% in Luxembourg to around 6% in Greece, Spain and Italy. Income events are again the most important category and are highly associated with poverty exits in Greece, Italy and Spain.

Regarding the demographic effects, household change seems to be associated with poverty exits in Finland (7.70%), Denmark (6.82%) and the UK (6.04%). The percentage of individuals that escape poverty because they return to an "old" household is now quite large in many countries, indicating that the return e.g. of a student to the parental household may be associated with the ending of the poverty spell. The percentage is relatively high in the UK (4.28%) and Denmark (3.14%). The change in household head seems to be a much more important factor for poverty exits than entries for the individuals that remain in the same household as in the previous wave. The effect of the new household head for poverty exits ranges from 2.32% in Italy to 7.88% in Finland, while for poverty entries it ranges from 0.14% in Ireland to 5.47% in Finland.

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<sup>&</sup>lt;sup>22</sup> When an individual undertakes a second job, while being in full-time employment, his/her employment status does not change according to the ILO classification. Thus, the second job results in a pure income increase and is not registered as an employment event.

Finally, the poverty line effect is almost zero for poverty exits. This is expected since it is very rare that there are cases of individuals escaping poverty because of a decrease in poverty line in a period of growth.

#### 3.3.2 Results using the EU-SILC (2005-2008)

In Tables 6A and 6B, the results of the event analysis for poverty spell endings are presented. What first draws the attention is a result also observed in the ECHP data: the effect of the employment events for poverty exits is much stronger than the effect of unemployment for poverty entries, meaning also that there are fewer transitions now associated with pure income events. In more detail, the effect of the employment events ranges from 14.70% in France to 49.05% in Bulgaria, where almost half of poverty exits are associated with finding a job by a household member. In 10 out of 26 countries analyzed, the effect of offspring's employment event is more important than that of the household head, and in another four countries the effect is almost the same. With regards to the spouse moving from unemployment or inactivity to employment, in 10 out of 26 countries the effect is greater than for the household head. In this way, the role of the second income earners in bringing the household out of poverty is verified, in line with the ECHP results.

Income events account for 65% to 75% in most countries with the exception of Belgium, France and Ireland where the effect of pure income increases rises to more than 79% and Bulgaria, Finland, Norway and Sweden, where the effect drops to less than 55%. In the majority of countries the increase in head's labour earnings is the main income event associated with the ending of a poverty spell. Yet, in many countries the effect of other income components is also quite important: a) second income earners are important in Denmark, Finland, Lithuania, Latvia, Luxembourg, Poland, Portugal, Sweden, Slovenia and Slovakia, b) non-work private income in Denmark, Iceland and the Netherlands, c) social benefits are very important in Ireland (21.83%), followed by the Luxembourg (16.93%) and Hungary (16.45%), the UK (15.86%), Belgium (14.56%) and Czech Republic (14.28%), d) pensions in Ireland (29.03%) followed by the UK (18.55%) and Portugal (17.64%), Austria (15.49%), Lithuania (15.10%) and France (14.98%). When comparing with poverty entries there is more diversity in the main income event associated with the ending of the poverty spell than with the beginning, where decreases in head's labour earnings dominate.

The effect of demographic events both with the same or different household head is lower than in poverty entries, with the exception of Finland, Norway, Sweden and the UK. A "member moving out" of the household seems to be the main demographic event associated with the decrease in the equivalence scale that brings the household out of poverty. The effect is particularly strong in Sweden, Finland, Norway, the UK and Ireland.

#### 3.4. Logit analysis for poverty entries in the EU

In the following paragraphs, we first identify the main determinants of poverty entries in 14 EU Member-States for the period 1994-2001 and then for the period 2005-2008 using the multivariate logit model presented in 3.2. Four model specifications have been tested, but here we present only the results of the final specification. The event variables which are included in all specifications are divided into three groups. The first group consists of variables that are related to changes in the employment status of household members and, more specifically, transitions from employment to unemployment or inactivity. The second group

consists of variables indiocating that individuals have changed household from one wave to the other. More specifically, these variables describe the events that may have occurred and led the individual to change household (divorce, union or child leaving parental household). This division is only tested with the ECHP, since in the EU-SILC very few households from split-households were followed. The third group of event variables includes all demographic events that take place, while the individual remains in the same household as in the previous wave (death of the household head, divorce of the household head, union of the household head, "member moving in/out", death of a household member, birth of a baby, a child reaching the age of 14).

It should be underlined that not all types of events presented in the Bane and Ellwood analysis are captured with corresponding dummies in logit analysis in order to avoid endogeneity problems. Specifically, income events (decrease in household members labour earnings, nonwork private income, social benefits, pensions and other income components) cannot be added in the regression, because they are included in the calculation of the equivalised household income which is used in order to define the dependent variable of the model (the change in poverty status of individuals from one wave to the next).

The state variables included in the analysis are divided into two groups. The first group concerns characteristics of the household head (gender, age, educational level, employment status, citizenship) and the second group includes variables that describe the household in total (household type, presence of unemployed members, or disabled individuals in the household, as well as home ownership). In the final specification presented, we have removed the variables that may cause possible multicollinearity problems: the unemployment status of the household head, the dummy indicating the presence of other unemployed household members in the household, which partly measure what the employment event variables also capture; as well as the household type dummies that may be correlated with the demographic event variables in the sense that certain demographic events happen to specific household types. From the specifications that have been tested, it turned out that, among all the household types<sup>23</sup>, young or elderly singe adults and households with dependent children were the most vulnerable categories to poverty entries, therefore, in the final specification we include age dummies for household head as well as a variable capturing the presence of dependent children in the household.

#### 3.4.1 Results using the ECHP (1994-2001)

Table 7 presents the results of the final model specification examining transitions into poverty using ECHP. The baseline probability shows that the probability for entering poverty for the baseline group is 1% or 2% in all countries. The small differences have a positive impact to the analysis, meaning that the selection of the baseline group is appropriate for facilitating comparisons.

The age dummies are significantly higher than one in all Member-States, meaning that the risk of entering poverty increases for these households in comparison to the baseline group. Living in a female-headed household increases significantly the risk of having a transition into

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<sup>&</sup>lt;sup>23</sup> With regard to the household type, nine dummies describing nine different household types were used: singe adult aged less than 30 years old, single adult aged from 30 to 64 years old, single adult older than 64, couple with at least one adult older than 64, couple with 1 or 2 dependent children, couple with 3 or more dependent children, lone parent household and other household types with and without dependent children.

poverty in many European countries. On the contrary, in Greece and Portugal, the risk decreases. The effect of education of the household head on the risk of poverty entry is very strong and negative for higher education and positive for primary education in all countries with the exception of the Netherlands, where a household head having completed only primary education decreases the chances of the household to entry poverty vis-à-vis the reference group (secondary education). On the contrary, in Portugal, Greece, Italy and Spain, the odds ratios for primary education are particularly high as compared to the Northern European Member-States. Having another citizenship in many countries increases the risk of entering poverty and particularly for the non-EU citizens with the highest effect being observed for the non-EU citizen in Luxembourg. In Austria and Germany living in a household with a household head that has another EU-citizenship decreases the risk to enter poverty at 0.05 level of significance.

The variable capturing the presence of dependent children in the household is also greater than 1 in all countries with the exception of Denmark (0.72) where the risk is lower for these families compared to those with no dependent children. Finally, as it is expected, having a disabled household member in the family increases the risk of having a transition into poverty in all European countries that present a statistically significant result.

With regards to the event variables, the transition from employment to unemployment of the household head is one of the most important determinants of entering poverty and even more important in Italy (6.83), Luxembourg (6.14) and Ireland (5.46). In terms of probabilities<sup>24</sup>, the highest risk appears in Ireland (9,8%), while in Italy and Luxembourg the probabilities are 6.3% and 5.7% respectively, while Belgium and France have 8.3% and 6,8% which is higher in terms of probability while lower in terms of odds of coefficients, because they have twice the risk of the baseline group.

In general, transitions from employment to unemployment or inactivity increase the odds ratios for transitions into poverty in all countries and in most cases the effect is significant at the 0.1% level (p<0.001). The transitions from employment to unemployment or inactivity that concern the household head seem to be more important than transitions from employment to unemployment of the other household members with the exception of Austria, where the most important factor is the transition from employment to unemployment of the spouse. Nevertheless, it should be underlined that Austria is the only country where household headship is divided equally between men and women<sup>25</sup>, consequently the group of what we call "head spouse" in Austria is not female dominated as in most other European countries. Transitions from employment to unemployment or inactivity for other household members (usually children or upward relatives) are as important as the relevant events of spouse or even more in some cases (Spain, Greece, Finland, Italy and the Netherlands).

In Table 7, what draws the attention in relation to demographic events are the particularly high odds ratios in most EU Member-States related to the demographic variable that describes household change due to leaving parental household. In particular, in the Netherlands (19.45), the UK (15.66) and Denmark (14.97), the odds are significantly higher vis-à-vis the baseline group. Yet, in terms of probabilities also France and Finland present high risk for this group of

Probability=odds\_constant\*odds\_coefficient/(1+odds\_constant\*odds\_coefficient)

<sup>&</sup>lt;sup>24</sup> The formula for calculating odds to probabilities is:

In Austria almost 50% of the households answer, in the household questionnaire, that the head of the household is female (own calculations from the ECHP data).

young people living their parental homes. On the contrary, in Spain, Greece, Italy and Portugal the corresponding odds ratios are relatively low or insignificant. This can be attributed to the fact that children in Mediterranean families do not easily move out of the parental household, actually, they might live in the parental household until they get married (Iacovou and Davia 2006; Parissi 2008), and when they move out, it is when they can economically support themselves quite well<sup>26</sup>. On the contrary, in Northern Europe, a considerable proportion of offsprings leave their parental household during their late teens or early twenties (Aassve et al. 2006; Iacovou and Davia 2006; Parissi 2008). Actually, Aassve et al. (2006) also use data from the European Community Household Panel and by applying propensity score estimation techniques, they find that the event of leaving home does have a particularly strong effect in entering poverty in Scandinavian countries, but rather weak effect among Mediterranean countries. This finding is in accordance with the results of the Bane and Ellwood analysis of events presented in Tables 3 and 4.

In general, all demographic events increase the risk of entering poverty in all Member-States whenever the effect is significant. There are three exceptions to this pattern. First, in Spain and Ireland, the death of the household head decreases significantly and strongly the chances of entering poverty. This may mean that the decrease of the equivalence scale (due to the death of a household member) has a greater impact than the decline in household income. The effect is insignificant in the remaining European countries. This is also verified from the low number of poverty entries associated with the relevant event that are presented in the Bane and Ellwood analysis (Table 1). Second, Denmark is the only country where the birth of a baby is related to lower hazard of transition into poverty. The corresponding odds ratio is 0.69. Given that the household equivalence scale increases with the birth of a baby, the fact that the risk decreases means that the birth of a baby is related to income increase probably due to social transfers. Indeed, the distribution of household income components in the ECHP shows that the share of social benefits in the household income of families with children in Denmark is higher than in all other Member-States<sup>27</sup>. Third, in Portugal the death of a household member (apart from household head) decreases the risk of poverty entry, while in most of the Member-States, the effect is not significant.

Regarding the event of divorce at household entries, there are two different effects that need to be examined. The first concerns the individuals that change household when a divorce takes place and the second the individuals that remain to the same household (usually the spouse that is responsible for the custody of children). In Belgium, Germany, France, Luxembourg, the Netherlands and Portugal, the individuals that change household after the divorce are in greater risk of entering poverty than the individuals that stay in the same household, the opposite is observed in Denmark, Spain, Finland, Ireland and the UK. Particularly, for the UK, the corresponding odds ratio is the highest across all countries, 5.07. In terms of probabilities, it means that, in the UK, 9,2% of the individuals that experience a divorce and remain in the same household (usually wives with children) are in danger of entering poverty.

The event of union is also captured with two variables. The first refers to the individuals that get married and change household and these are normally adult children that leave their

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<sup>&</sup>lt;sup>26</sup> Nevertheless, it should also be noted that Iacovou and Davia (2006) report that in several countries, a substantial percentage of young people are supporting their parents economically. In particular, in the Southern European countries, a sizeable minority live in poor households due to their continuing co-residence with their parents, but would most likely had escaped poverty if they moved out of the parental home.

<sup>&</sup>lt;sup>27</sup> Results are available from the authors on request.

parental household and the second to individuals that do not change household, but a new household member (spouse) moves into the household and in that case the household equivalence scale increases. Nevertheless, the union is expected also to have a positive effect on the equivalised household income, because the new household member may have an income and the resources are pooled. Yet, the event of union, in both cases increases the risk of moving into poverty, whenever the effect is significant. The mobility of household members, irrespective of whether members move in or out of the household, increases the risk of entering poverty in all countries when the result is significant. As expected the risk of moving into poverty increases when a household-member reaches the age of 14, because of the increase in the equivalence scale and, thus, the decrease of the equivalised household income per capita, given that the household income does not change.

Finally, the likelihood-ratio test for rho shows that unobserved heterogeneity is important in all countries. As measured by sigma\_u, the magnitude of unobserved heterogeneity ranges from 0.77 in Finland and 1.43 in Italy (see bottom of Table 7).

#### 3.4.2 Results using the EU-SILC (2005-2008)

The results of the logit analysis for poverty entries are presented in Tables 9A and 9B. The results are in line with most of the findings of the ECHP for the previous period examined. With regards to the socioeconomic characteristics of the household head, living with a household head aged less than 30 or more than 64 increases the risk of entering poverty in all 26 countries with the exception Hungary, Luxembourg and Poland for the households headed by elderly, where the effect goes to the opposite direction. The effect is very strong for youngheaded households in Denmark, Norway and Iceland and this finding is in accordance with the results of the descriptive event analysis presented in previous sections. Only in Norway, the female headship does not increase the risk of entering poverty across countries with a significant odds-ratio for this variable. Primary education increases the risk, while higher education decreases the risk of experiencing a poverty spell in all countries with the exception of primary education in Norway. The protective effect of higher education (for the household head) is very strong in Portugal, Cyprus and Hungary where the odds-ratio is less than 0.30. The risk of entering poverty rises for households with dependent children with the exception of Finland and Norway, while the presence of disabled individuals, increases the risk of entering poverty in ten countries, and decreases the risk of entering poverty in Denmark, Hungary, Italy, Lithuania and Poland.

The effect of moving from employment to unemployment increases the risk of entering poverty in all countries where the effect is significant. The effect is particularly strong for the transition from employment to unemployment for the household head in the UK (36.5), Belgium (8.24) and Ireland (6.23). In Iceland, the UK, Czech Republic and Bulgaria the effect of the spouse moving into unemployment is stronger. The effect of other household members, mainly offspring's, entering into unemployment for poverty entries is significant only in ten out of 26 countries and only in Belgium and France the odds-ratio is quite large. The results for moving from employment to inactivity are more mixed. For household head, in nine countries the effect is positive, while in three countries (Estonia, Finland and the Netherlands) the effect is negative. For the spouse, the effect is weaker in terms of statistical significance, positive only in eight countries and negative in two (France and Iceland). Also, in eight countries the effect of having a transition from employment to inactivity for other household members (usually

grand-parents) is positive on the probability of entering poverty, while it is negative in the case of Estonia, Lithuania, Poland and Slovakia.

Demographic events are stronger in terms of level of odds-ratio and significant than income events in most of the countries examined. The events of death (head or other members), divorce, "member moving in", birth always increase the risk of entering poverty when the variable has a significant coefficient. The effect of the death of the household head presents very high odds-ratios in the majority of countries. The effect of the union and "member moving in" the household is more mixed and in most of the cases goes to the direction of decreasing the risk of entering into poverty. Finally, the unobserved heterogeneity is significant in most of the countries.

When comparing with the ECHP, there are three conclusion to be drawn: a) The socioeconomic variables of the household head and the household have very similar effects on transition into poverty in both periods, b) the effect of unemployment events is also significant, but the effect of inactivity is more mixed going in many cases to the opposite direction and this was not observed in the ECHP, c) the effect of demographic events is stronger in EU-SILC results than the ECHP and the events of union and "member moving in" seem to decrease the chances of entering poverty in most countries, while in the ECHP the pattern observed is that all demographic events increase the poverty risk.

#### 3.5 Logit analysis for poverty exits in the EU

In the following paragraphs, the determinants of transitions out of poverty are examined for the same periods as for transitions into poverty (1994-2001 & 2005-2008). The variables are divided in the same categories as in the analysis of poverty entries with the difference that the employment event variables concern transitions from unemployment or inactivity to employment. Also, in line with the Bane and Ellwood analysis, the events "birth of a child" and "rise in needs" are not included in the regressions, because they are only related to poverty entries and not exits.

#### 3.5.1 Results using the ECHP (1994-2001)

In Table 8, the results of the final specification are presented; This specification includes only state variables that do not capture similar effects with event variables. Contrary to the results for poverty entries, the baseline probability across countries differs a lot. The probability of exiting poverty from one wave to the other for the baseline group ranges from 0.20 in Finland to 0.41 in Spain. This is expected, since now the population in question is a sub-sample of the total population (those already in poverty) and the poverty exit rates differ significantly across countries.

Regarding the socioeconomic characteristics of the household head, the odds ratios for the age dummies are significantly lower than one in most of the countries, meaning that households headed by young or elderly individuals escape poverty with more difficulty than the households with middle aged household heads. Living in a female-headed poor household decreases significantly the chances of exiting poverty in all countries that the effect is significant. With respect to the educational level of the household head, it is interesting to note that while, in all Member-States, the chances of entering poverty decline strongly for individuals that live in a household with a household head that has completed higher education, this does not hold for poverty exits. Specifically, only in eight (Finland, Belgium,

Italy, Germany, Greece, France Austria and Denmark) out of 14 countries, the relevant effect is significant, meaning that while higher education may protect individuals from entering poverty, it does not always help them to exit poverty if they are already poor.

The effect of household head citizenship on transitions out of poverty is mixed. Specifically, the effect is significant for "other EU citizenship" only in Spain (0.25) and Belgium (0.61), where the effect is negative; and in Austria (3.34) and France (2.00), where the effect on the probability of exit is positive. Individuals living in households with a non-EU household head have lower exit probabilities in almost all Member-States, where the relevant odds ratios are significant, with the exception of Italy, where the effect is positive (3.42).

The existence of dependent children in the household decreases the chances of exiting poverty in eight out of 14 Member-States vis-à-vis the reference group. In Denmark, Ireland, Austria and Finland, the result goes to the opposite direction and the presence of dependent children in the household seems to increase the chances of exiting poverty. The effect of disability on the chances to exit poverty is negative when the effect is significant (Portugal, Italy, the UK, France, Greece, Ireland.

As Table 8 demonstrates, the effect of "employment" events of the household head for poverty exits is not the most important factor that helps households to escape poverty. In most countries, it is the transition of the secondary income earners (spouse or other household member) from unemployment to employment that has stronger effects for bringing the household out of poverty and this confirms the results of the Bane and Ellwood analysis presented in the previous section. In Luxembourg, Denmark the Netherlands and Belgium, the transition from unemployment to employment of the spouse is one of the most important factors for bringing the household out of poverty.

The effect of demographic events on poverty exits is mixed and the results for certain events go to the opposite direction than anticipated. For instance, divorce increases the chances of exiting poverty in France, Finland and Austria (only for individuals that do not change household after the divorce). This positive effect is much stronger for individuals that change household, (usually the husband<sup>28</sup>), than for the individuals that do not change household after the divorce, (usually the wife with children<sup>29</sup>). The odds ratios are 7.21 for the former category in Finland and 4.78 in France, while for the latter category 2.20 in Finland, 3.04 in France and 2.16 in Austria. Only, in Germany and Spain the divorce has a negative impact on poverty exit for individuals that change household for Germany and for individuals that stay in the same household for France.

On the contrary, in Greece, union is the most important factor that brings individuals out of poverty (6.19). For individuals that change household when they get married, the event of union<sup>30</sup> is also important in Denmark (7.78), Italy (3.40) and Portugal (2.86), but insignificant in other Member-States. On the contrary, for most Member-States and especially for Austria, Luxembourg and Germany, the event of union has a strong effect on transition out of poverty

<sup>&</sup>lt;sup>28</sup> Calculation from the relation file in the ECHP data.

 $<sup>^{\</sup>rm 29}$  Calculation from the relation file in the ECHP data.

<sup>&</sup>lt;sup>30</sup> The event of union includes also the cohabitation cases.

for unions that happen in the same household<sup>31</sup>. In general, it can be concluded that the event of union is more important for poverty exits than for poverty entries in all Member-States.

A paradox that appears is that in the same way as for poverty entries, the mobility of individuals both into and out of the household has a positive effect on poverty exit. This may be attributed to the double effect that mobility of individuals has on household income. For instance, if an individual leaves the household, the equivalence scale of the household declines and this has a positive effect on the equivalised household income, but at the same time the household income and, thus, the equivalised household income may decrease if the individual who moved out of the household was an income earner. When an individual changes household because he leaves parental household, the effect on poverty exits is not significant. On the contrary, as presented above, this event is very significant for poverty entries. This means that when young individuals leave their parental household for other reasons than getting married, their risk for entering poverty increases. Yet, when they already live in a poor household, changing household does not help them exit poverty.

Moreover, the death of the household head increases the chances of exiting poverty, when the effect is significant and at first sight this is another paradox. Practically, this means that the effect of the decrease on the equivalence scale due to the death of the household head is greater than the decrease in the household income. In total, the finding of the Bane and Ellwood analysis that demographic events are more important for poverty exits than for poverty entries is verified strongly through the logit analysis for individuals that experience a demographic event and stay in the same household as in the previous year.

Finally, the likelihood-ratio test for rho shows that unobserved heterogeneity is important in all countries also for poverty entries. As measured by sigma\_u, the magnitude of unobserved heterogeneity ranges from 0.72 in the Netherlands and 1.28 in Belgium (see bottom of Table 8).

## 3.5.2 Results using the EU-SILC (2005-2008)

Contrary to poverty entries and in line with the ECHP results for poverty exits, the baseline probabilities in Tables 10A and 10B are high, because they concern a baseline group that was poor in the previous period and exits poverty in the current period. Thus, a much smaller group that that of poverty entries, where all the observations in the sample apart from those already in poverty are possible "candidates".

With regards to the age of the household head, while an elderly household head clearly decreases the chances of exiting poverty, the pattern of young household heads is mixed. In Austria, Finland, Hungary, Netherlands, Norway, Slovakia and the UK the chances of exiting decrease, while in Estonia, Lithuania, Latvia and Poland the chances increase. Female headship clearly decreases the chances of exiting poverty whenever the effect is significant. A clear pattern is also depicted for the level of education of the household head with primary education increasing the risk of remaining into poverty, while higher education decreasing it. Having dependent children or disabled individuals in the household decreases the chances of exiting poverty in most countries with the exception of Denmark for both regressors, Cyprus,

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<sup>&</sup>lt;sup>31</sup> Meaning that the household is the same as in the previous wave and a new household member (spouse to household head) moves into the household. The union may have the form of marriage or cohabitation.

and Latvia for dependent children, as well as Hungary and Lithuania for disabled individuals, where the effect goes towards increasing the chances of exiting poverty.

Only in Sweden and the UK the effect of having a transition from unemployment to employment for the household head has a large and significant coefficient. In most countries the transition from inactivity to employment of the household head is more important for bringing the household out of poverty. Moving from unemployment or inactivity to employment for second income earners increases the chances of exiting poverty in most countries and for some countries the effect is particularly high. For example: a) the transition from unemployment to employment for other household members in the UK (18.48) and Czech Republic (16.20), b) the role of spouse's transition from inactivity to employment in Latvia (11.53) and Denmark (10.48), c) the transition from inactivity to employment for other household members in Cyprus (8.11).

Demographic events present a mixed pattern with the events of union and "member moving in" exercising a positive effect on spell endings, while death, divorce and "member moving out" have a negative effect, although in many countries the corresponding coefficients are not significant.

When comparing with the ECHP, we observe that: a) Young headship increases the chance of exiting poverty in many countries; this effect was observed with the ECHP data only in Luxembourg, b) Most of the other socioeconomic variables present a similar pattern across the two periods, c) The effect of moving from inactivity to employment is much stronger than the effect of moving from unemployment to employment for the household. This was not observed in the ECHP, d) The important role of second income earners when finding a job for bringing the household out of poverty was verified in both periods, e) Demographic events are not so strongly significant as in the ECHP and in many cases, they present a mixed pattern. Thus, while in the ECHP most demographic events increased the chances of exiting poverty, in the EU-SILC, some events (death, divorce and "member moving out") decrease the chances of exiting poverty in specific countries.

#### 4. Conclusions

This paper studied the different profiles of poverty (transient, mid-term, recurrent and long-term poverty) in European countries using spell analysis and identified the main determinants of poverty transitions with particular emphasis on labour market, income and demographic events using event analysis, as well as multivariate logit analysis. The analysis was split in two periods, the first covering the years 1994-2001 using ECHP, and the second covering the precrisis period 2005-2008 using EU-SILC.

As far as poverty profiles are concerned, for the period 1994-2001, we observe a consistency with the welfare regime typology as developed by Esping-Andersen (1990), expanded also to include the Southern welfare regime type (Ferrera 1996), in the sense that the Member-States belonging to the social democratic have higher proportion of their population not experiencing poverty than the countries of the corporatist regime and at the same time lower poverty rates, followed by the liberal regime, and then the Southern countries. At the same time, in social democratic regimes, the proportion of the transient poor is larger than in the corporatist countries and in corporatist countries, in turn, larger than in the other two regimes. The corporatist countries have higher rates of mid-term poverty compared to the

other regimes, while the liberal and Southern regimes "suffer" more from recurrent and persistent poverty than the social democratic and the corporatist regimes.

The above patterns are not as clear in the period 2005-2008, and there are many diversions from what one would expect according to the welfare regime typology. Moreover, the new Member-States cannot be clustered together as we observe large differences across them. From the Eastern countries, Estonia, Latvia and Poland have similarities in terms of the poverty profile patterns observed, while Lithuania seems to suffer more from long-term poverty, as well as Cyprus. Slovenia, Slovakia, and Bulgaria could probably form another group with high rates of transient poverty and relatively low rates of persistent poverty, while Hungary and Malta perform better than all new Member-States presenting similar patterns with the social-democratic regimes.

Then, a modified version of theBane and Ellwood methodology was used as a first step in order to identify income, labour market or demographic events that might have been associated poverty entries and exits.

For the period 1994-2001, both poverty entries and exits were found to be associated more closely with income rather than demographic events in all EU countries. However, income events and especially changes in head's labor earnings seem to be more closely associated with poverty transitions in Mediterranean countries, while demographic events seem to be relatively more important in Finland, Denmark, the UK and Luxembourg. Employment/unemployment events account in many cases for more than 20% of transitions into/out of poverty. Yet, employment events seem to be more closely related with poverty exits than unemployment events with poverty entries.

Event analysis for the period 2005-2008 reveals that the general pattern for income events dominating over (un)/employment and demographic events remains the same. The result that employment events for poverty exits are more important than unemployment events for poverty entries is also confirmed, as well as the role of second income earners in getting the household out of poverty. For poverty entries, in almost half of the countries examined, decrease in head's labour earnings accounts for more than 30% of total poverty entries. For poverty exits, there is more diversity in the main income event associated with the ending of the poverty spell. Changes in spouse's and offspring's labour earnings play important role in many countries, while changes in social benefits are very important in Ireland, Luxembourg, Hungary and the UK, as well as changes in pensions in Ireland, the UK and Portugal for getting the household out of poverty.

The effect of demographic events in EU-SILC is much stronger that in the ECHP both for poverty entries and exits. The demographic events are again more important in the Northern and Central European countries than in Mediterranean countries. Moreover, in the EU-SILC, the demographic events are more closely linked with poverty entries than exits, while this was not clearly observed in the ECHP. The strongest demographic event for entering into poverty, while living in the same household with the same household head seems to be the birth of a baby or a new household "member moving in" the household, while for exiting poverty the event of a new "member moving in" the household.

In contrast to the event analysis that simply associates events with the beginning or ending of a poverty spell that happens at the same time period, The logit analysis that was employed in the next stage, offers a more comprehensive examination of poverty determinants and their significance. In parallel with identifying the main "static" determinants of poverty entries and

exits, event variables were also included in the analysis. Even when both state and change (event) variables are included in the model specification, event variables remain strongly significant, signaling that the inclusion of event variables in the model is desirable.

For the period 1994-2001, when comparing the results of state variables across countries both for poverty entries and exits five points need to be underlined. First, there is no common pattern across Member-States for the results concerning female headship and citizenship of the household head. Second, the effect of the education of the household head on the risk of poverty entry is negative for higher education and positive for primary education with very few exceptions, where a primary educated household head also decreases the chances of the household members to enter poverty. Yet, this does not hold in all countries for poverty exits, meaning that while higher education may protect individuals from entering poverty, it does not always help them to exit poverty if they are already poor. Third, unemployment or inactivity of the household head significantly increases the chances of entering poverty and decreases the chances of exiting poverty in all Member-States, as expected. Fourth, families headed by young adults and families with children seem to have a higher hazard to enter poverty and lower probability to exit poverty than the baseline group in almost all Member-States.

As far as specific poverty transition determinants are concerned, for the period 1994-2001, "leaving the parental household" is the most important event related to poverty entries in "Northern" European countries. On the contrary, in the Mediterranean Countries, the corresponding odds ratios are very low or insignificant. In Italy, Spain, Greece, as well as in Luxembourg, Ireland and Belgium, the most important event for entering poverty is the transition from employment to unemployment of the household head. The transitions from employment to unemployment or inactivity that concern the household head seem to be more important than the transitions from employment to unemployment of the other household members with the exception of Austria. Yet, this is not verified for poverty exits, where the transition of the secondary income earners (spouse or other household member) from unemployment to employment has stronger effects for bringing the household out of poverty than the relevant transitions of the household head. In general, all demographic events examined tend to increase the risk of entering/exiting poverty in all Member-States whenever the effect is significant.

For the period 2005-2008, the logit analysis confirms most of the findings of the previous period for the socioeconomic variables of the household head and the household with very few exceptions (e.g. young heads increase the chance of exiting poverty in many countries, while in the ECHP this was observed only in Luxembourg). The effect of unemployment events is also significant, but the effect of inactivity for poverty entries is mixed going in many cases to the opposite direction than expected; something that was not observed in the ECHP. Moreover, for poverty exits, the effect of moving from inactivity to employment is much stronger than the effect of moving from unemployment to employment for the household head. The important role of second income earners when finding a job for bringing the household out of poverty was confirmed in both periods.

With regards to the demographic events, their effect is stronger in the EU-SILC than in the ECHP for poverty entries and weaker for poverty exits. For poverty entries, the events of union and "member moving in" seem to decrease the chances of entering poverty in most countries, while in the ECHP all demographic events increase the risk of poverty. For poverty exits, the results present a mixed pattern. Thus, while in the ECHP most demographic events increased

the chances of exiting poverty, in the EU-SILC, some events (death, divorce and "member moving out") decrease the chances of exiting poverty in specific countries.

Finally, noclear pattern can be identified across welfare regimes, while the new Member-States present very diverse results and, certainly, cannot be grouped all together.

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# **Annex 1 - Figures & Tables**

Figure 1: Event analysis of poverty spell beginnings and endings

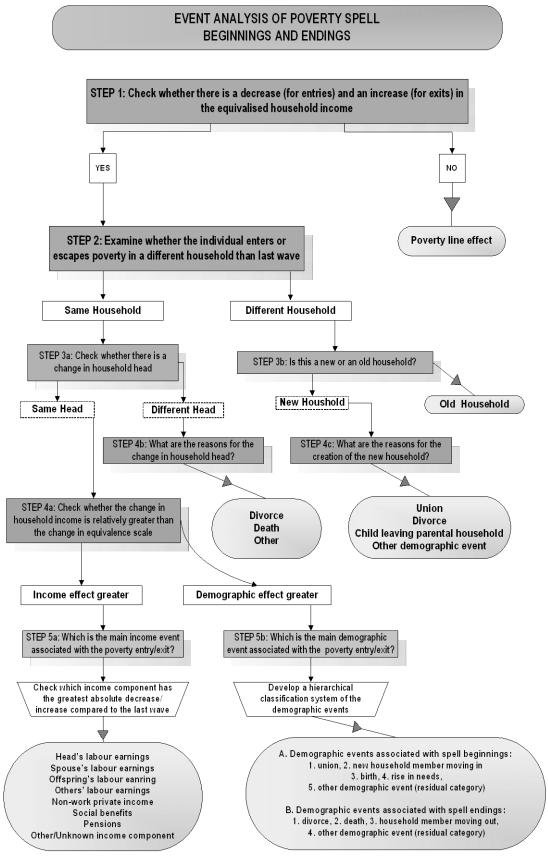


Table 1: Poverty occurrence and persistence (as a percentage to the poor population) – ECHP (1994-2001)

	ziri overty occ		persistence (a	0		,	- ,	
				Transient	Mid-term	Recurrent	Long-term (persistent)	
Ctry	Non-poor	Poor	Total	poor	poor	poor	poor	Total
AT	72.38	27.62	100.00	51.30	12.56	12.56	23.57	100.00
BE	67.89	32.11	100.00	45.94	11.96	15.04	27.06	100.00
DE	70.69	29.31	100.00	48.24	14.47	13.48	23.81	100.00
DK	72.59	27.41	100.00	56.51	12.84	13.75	16.89	100.00
EL	57.74	42.26	100.00	34.50	12.57	17.91	35.02	100.00
ES	61.38	38.62	100.00	40.76	11.68	20.97	26.59	100.00
FI	79.20	20.80	100.00	53.65	16.97	8.89	20.48	100.00
FR	67.60	32.40	100.00	41.54	14.38	14.72	29.35	100.00
IE	63.41	36.59	100.00	40.75	11.45	14.29	33.51	100.00
IT	61.86	38.14	100.00	35.68	11.88	17.67	34.77	100.00
LU	77.40	22.60	100.00	43.54	15.00	10.66	30.80	100.00
NL	76.21	23.79	100.00	51.74	11.69	15.59	20.98	100.00
PT	59.97	40.03	100.00	35.20	11.34	14.11	39.35	100.00
UK	57.88	42.12	100.00	41.81	12.84	15.05	30.29	100.00

Source: ECHP UDB (Dec 2003 - 2nd issue)

Table 2 : Poverty occurrence and persistence (as a percentage to the poor population) – EU-SILC (2005-2008)

			(	us a percenta	, , , , , , , , , ,	1 - 1 - 1 - 7		
				T	Battal Assessed		Long-term	
Church	Non moon	Door	Total	Transient	Mid-term	Recurrent	(persistent)	Total
Ctry	Non-poor	Poor		poor	poor	poor	poor	
AT	81.92	18.08	100.00	70.51	11.24	9.56	8.69	100.00
BE	78.57	21.43	100.00	66.90	9.81	13.72	9.57	100.00
BG	72.37	27.63	100.00	62.43	14.41	13.30	9.85	100.00
CY	77.13	22.87	100.00	52.17	10.23	14.74	22.85	100.00
CZ	86.71	13.29	100.00	61.18	13.08	12.64	13.10	100.00
DK	85.97	14.03	100.00	61.92	10.11	15.43	12.54	100.00
EE	73.85	26.15	100.00	56.35	14.81	12.90	15.94	100.00
EL	73.58	26.42	100.00	56.14	12.23	13.99	17.64	100.00
ES	72.13	27.87	100.00	63.38	13.80	10.71	12.11	100.00
FI	81.22	18.78	100.00	59.22	11.36	14.50	14.91	100.00
FR	78.46	21.54	100.00	59.45	18.19	8.85	13.51	100.00
HU	80.78	19.22	100.00	68.59	11.43	11.48	8.50	100.00
IE	77.95	22.05	100.00	55.69	16.22	16.27	11.82	100.00
IS	85.42	14.58	100.00	68.59	11.43	11.48	8.50	100.00
IT	75.12	24.88	100.00	54.19	14.12	13.79	17.90	100.00
LT	71.55	28.45	100.00	51.27	17.92	11.51	19.31	100.00
LU	68.90	31.10	100.00	58.08	11.04	10.02	20.86	100.00
LV	68.64	31.36	100.00	58.04	13.52	11.97	16.47	100.00
MT	80.04	19.96	100.00	72.98	6.97	13.54	6.51	100.00
NL	87.94	12.06	100.00	67.88	9.73	12.03	10.35	100.00
NO	76.48	23.52	100.00	71.07	18.46	4.03	6.44	100.00
PL	74.57	25.43	100.00	54.41	16.61	10.96	18.02	100.00
PT	84.06	15.94	100.00	80.23	8.19	8.90	2.68	100.00
SE	83.83	16.17	100.00	65.42	10.85	14.82	8.91	100.00
SI	86.65	13.35	100.00	60.37	12.07	13.33	14.23	100.00
SK	81.52	18.48	100.00	60.86	15.52	10.73	12.88	100.00
UK	73.53	26.47	100.00	71.57	10.23	9.33	8.88	100.00

Table 3: Events Associated with Poverty Entries (3 types of events) – ECHP (1994-2001)

							Coun	itry						
Associated Event	AT	BE	DE	DK	ES	EL	FR	FI	IT	IE	LU	NL	PT	UK
1. Same household	96.76	97.15	94.13	89.43	98.58	99.02	94.01	88.43	98.24	96.66	97.42	95.66	97.59	93.05
1.1 Same head	95.46	96.50	93.24	88.28	97.80	98.19	92.57	82.96	97.65	96.52	94.48	95.26	96.96	90.66
1.1.1 Unemployment events	13.30	8.84	22.05	15.44	24.48	19.80	14.20	14.89	15.51	21.45	11.78	14.90	21.01	14.18
Head	7.55	5.54	13.78	7.86	11.25	8.56	8.54	10.97	7.55	10.44	3.49	6.75	9.18	7.89
Spouse	4.47	1.89	5.39	5.85	5.40	5.53	3.72	2.53	3.48	4.96	4.67	5.48	7.62	4.25
Offspring	1.16	1.41	2.80	1.63	7.39	5.27	1.81	1.33	3.91	5.74	2.52	2.56	3.94	1.87
Others	0.12	0.00	0.08	0.10	0.44	0.44	0.13	0.06	0.57	0.31	1.10	0.11	0.27	0.17
1.1.2 Income events (decrease in:)	80.21	84.51	69.25	70.75	71.90	76.68	75.66	67.23	80.25	70.54	76.82	77.11	74.05	72.15
Head's labour earnings	24.71	25.19	17.05	15.87	33.35	44.77	23.20	24.05	37.62	19.85	23.02	28.51	30.69	11.14
Spouse's labour earnings	15.88	4.12	6.31	7.98	4.59	3.69	6.52	8.60	4.71	3.39	6.53	7.34	6.40	7.10
Offspring's labour earnings	4.90	2.40	5.28	1.28	4.18	5.24	2.62	1.61	3.46	6.30	12.69	0.41	7.78	3.03
Others' labour earnings	1.74	1.17	0.15	1.28	1.03	0.74	0.11	0.51	1.21	0.36	0.96	0.19	1.36	0.48
Non-work private income	2.99	7.05	4.78	4.51	4.67	5.48	6.38	2.85	4.32	2.75	4.97	2.72	5.07	3.86
Social benefits	14.59	14.42	12.22	13.51	12.13	5.44	18.81	13.15	10.25	20.63	19.50	16.21	12.86	16.57
Pensions	12.95	16.79	13.15	20.49	7.47	10.33	15.64	12.73	15.65	11.34	7.23	10.94	7.24	8.48
Other income component	2.45	13.37	10.31	5.83	4.48	0.99	2.38	3.73	3.03	5.92	1.92	10.79	2.65	21.49
1.1.3 Demographic events	1.95	3.15	1.94	2.09	1.42	1.71	2.71	0.84	1.89	4.53	5.88	3.25	1.90	4.33
Union	0.10	0.26	0.59	0.41	0.08	0.10	0.19	0.28	0.05	0.01	0.21	0.92	0.01	0.45
Member moving in	0.39	1.46	0.21	1.62	0.53	0.99	1.06	0.21	0.33	1.05	2.46	0.76	0.54	1.90
Birth	0.70	1.08	0.80	0.00	0.41	0.32	1.05	0.23	0.75	2.42	1.62	0.22	0.66	1.46
Rise in needs	0.76	0.35	0.33	0.00	0.35	0.14	0.41	0.12	0.76	1.05	0.81	1.20	0.57	0.52
Other demographic event	0.00	0.00	0.01	0.06	0.05	0.16	0.00	0.00	0.00	0.00	0.78	0.15	0.12	0.00
1.2 Different head	1.30	0.65	0.89	1.15	0.78	0.83	1.44	5.47	0.59	0.14	2.94	0.40	0.63	2.39
Divorce	0.10	0.51	0.71	0.14	0.29	0.15	0.42	0.90	0.27	0.00	1.08	0.19	0.03	1.02
Death	0.09	0.00	0.00	0.00	0.06	0.17	0.00	0.12	0.22	0.06	0.27	0.00	0.14	0.13
Other	1.11	0.14	0.18	1.01	0.43	0.51	1.02	4.45	0.10	0.08	1.59	0.21	0.46	1.24
2. Different household	3.24	2.56	5.87	10.57	1.26	0.96	5.77	11.57	1.52	2.20	2.43	4.10	2.41	6.73
2.1 Old household	0.02	0.18	0.07	0.31	0.05	0.03	0.16	0.96	0.00	0.20	0.00	0.38	0.04	0.91
2.2 New household	3.22	2.38	5.80	10.26	1.21	0.93	5.61	10.61	1.52	2.00	2.43	3.72	2.37	5.82
Union	0.13	0.18	1.03	0.34	0.27	0.20	0.27	0.30	0.37	0.09	0.10	0.18	0.52	0.15
Divorce	0.00	0.90	0.63	0.90	0.01	0.02	0.40	0.24	0.18	0.04	1.03	0.35	0.52	0.14
Child leaving parental hh	2.37	0.75	3.02	7.49	0.27	0.48	3.64	6.51	0.47	0.95	0.72	2.56	0.00	4.42
Other demographic event	0.72	0.55	1.12	1.53	0.66	0.23	1.30	3.56	0.50	0.92	0.58	0.63	1.33	1.11
3.Poverty line effect	0.00	0.29	0.00	0.00	0.16	0.02	0.22	0.00	0.24	1.14	0.15	0.24	0.00	0.22
														ļ
Number of spells	1,352	1,464	2,717	1,196	5,315	4,162	3,149	1,181	5,015	2,359	687	1,907	3,380	3,090

Source: ECHP UDB (Dec 2003 - 2nd issue)

Table 4: Events Associated with Poverty Exits (3 types of events) – ECHP (1994-2001)

Table in Events rissociated within every	Country													
Associated Event	AT	BE	DE	DK	ES	EL	FR	FI	IT	ΙE	LU	NL	PT	UK
1. Same household	97.22	97.34	97.46	92.47	98.30	98.87	96.95	91.92	98.43	98.61	99.04	98.91	98.48	93.96
1.1 Same head	93.69	93.96	92.15	88.54	95.60	95.63	91.19	84.04	96.11	95.84	91.20	94.84	94.98	87.48
1.1.1 Employment events	24.12	13.89	19.24	19.39	31.63	19.90	20.27	21.46	20.81	39.17	10.94	26.17	28.22	17.51
Head	9.21	4.92	10.69	9.01	8.66	5.12	7.07	14.64	4.67	18.08	3.87	12.74	7.95	8.73
Spouse	7.13	4.69	4.36	3.73	5.95	6.60	6.36	4.03	3.64	8.58	3.07	6.56	9.20	4.26
Offspring	5.01	4.28	4.18	6.65	15.93	8.03	6.84	2.79	11.85	12.43	4.00	6.67	10.26	4.41
Others	2.77	0.00	0.01	0.00	1.09	0.15	0.00	0.00	0.65	0.08	0.00	0.20	0.81	0.11
1.1.2 Income events (increase in:)	64.43	74.85	68.85	62.61	61.88	74.00	62.86	53.57	72.89	51.13	70.34	64.54	60.44	65.15
Head's labour earnings	22.04	23.04	15.72	14.88	30.02	38.81	20.56	24.12	31.65	22.91	17.05	25.27	20.63	9.67
Spouse's labour earnings	11.83	5.84	7.58	7.77	5.20	5.03	6.30	10.00	5.37	3.17	13.76	5.06	10.11	6.07
Offspring's labour earnings	4.71	2.46	2.61	2.01	5.54	5.43	3.69	1.59	5.39	5.68	8.61	1.20	6.87	1.93
Others' labour earnings	0.71	0.21	0.29	0.28	1.11	0.34	0.65	0.08	0.63	0.02	1.57	0.43	1.98	0.77
Non-work private income	3.96	8.46	4.50	8.40	4.14	6.34	4.13	5.05	4.27	1.46	4.44	1.95	3.34	2.99
Social benefits	9.91	13.93	17.45	11.26	8.82	6.31	14.77	9.20	10.62	8.17	22.47	12.17	7.96	16.42
Pensions	9.86	12.36	13.86	14.43	4.27	10.68	10.84	2.24	12.78	3.98	1.97	10.10	5.77	7.59
Other income component	1.41	8.55	6.84	3.58	2.78	1.06	1.92	1.29	2.18	5.74	0.47	8.36	3.78	19.71
1.1.3 Demographic events	5.14	5.22	4.06	6.54	2.09	1.73	8.06	9.01	2.41	5.54	9.92	4.13	6.32	4.82
Divorce	0.36	0.11	0.40	0.49	0.07	0.02	0.55	1.61	0.04	0.00	0.71	0.15	0.00	0.27
Death	0.86	0.74	0.60	1.41	0.60	0.47	0.61	2.15	0.30	0.68	0.92	0.00	3.31	0.64
Member moving out	3.92	4.37	3.06	4.64	1.42	1.24	6.90	5.25	2.05	4.86	8.29	3.98	2.85	3.91
Other demographic event	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.16	0.00
1.2 Different head	3.53	3.38	5.31	3.93	2.70	3.24	5.76	7.88	2.32	2.77	7.84	4.07	3.50	6.48
Divorce	0.82	1.14	0.64	0.40	0.10	0.24	0.88	0.84	0.10	0.60	1.67	0.52	0.65	1.00
Death	2.40	1.90	4.14	2.37	2.07	1.97	3.18	3.80	2.08	1.78	3.48	0.00	2.24	2.55
Other	0.31	0.34	0.53	1.16	0.53	1.03	1.70	3.24	0.14	0.39	2.69	3.55	0.61	2.93
2. Different household	2.52	2.39	2.39	6.82	1.45	1.10	2.98	7.70	1.57	1.39	0.62	1.09	1.23	6.04
2.1 Old household	0.67	0.34	1.40	3.14	0.30	0.17	1.31	1.69	0.05	0.58	0.25	0.63	0.52	4.28
2.2 New household	1.85	2.05	0.99	3.68	1.15	0.93	1.67	6.01	1.52	0.81	0.37	0.46	0.71	1.76
Union	0.05	0.17	0.06	0.15	0.12	0.22	0.15	0.26	0.30	0.16	0.00	0.07	0.31	0.03
Divorce	0.20	0.37	0.22	0.80	0.02	0.05	0.59	2.15	0.04	0.00	0.00	0.00	0.06	0.23
Child leaving parental hh	0.25	0.43	0.20	0.38	0.09	0.31	0.34	0.43	0.09	0.07	0.11	0.02	0.00	0.50
Other demographic event	1.35	1.08	0.51	2.35	0.92	0.35	0.59	3.17	1.09	0.58	0.26	0.37	0.34	1.00
3 .Poverty line effect	0.26	0.27	0.15	0.71	0.25	0.03	0.07	0.38	0.00	0.00	0.34	0.00	0.29	0.00
Number of spells	1,411	1,485	2,996	1,033	5,560	4,118	3,019	814	5,599	2,036	734	2,033	4,023	3,204
Number of spens	1,411	1,400	2,330	1,055	5,500	4,110	3,019	014	2,229	2,030	/34	2,033	4,023	3,204

Source: ECHP UDB (Dec 2003 - 2nd issue)

Table 5A: Events Associated with Poverty Entries (3 types of events) – EU-SILC (2005-2008)

	Jercy Eller		or evenies,				Country						
Associated Event	AT	BE	BG	СҮ	CZ	DK	EE	EL	ES	FI	FR	HU	IE
1. Same household	99.79	99.61	100.00	100.00	99.81	100.00	99.75	100.00	99.92	100.00	99.67	99.58	100.00
1.1 Same head	98.19	98.24	99.15	99.59	98.19	93.02	99.49	99.51	99.09	98.96	97.22	98.44	99.73
1.1.1 Unemployment events	11.94	10.37	23.15	7.13	12.32	7.75	11.21	14.99	16.94	18.20	10.50	19.16	20.54
Head	5.86	5.97	9.83	3.05	5.83	3.88	5.10	6.00	8.03	4.65	5.52	10.36	10.61
Spouse	5.86	2.84	7.40	1.83	4.30	3.88	3.44	4.78	4.74	5.05	2.71	4.07	6.67
Offspring	0.00	1.57	4.12	1.83	1.81	0.00	2.17	2.59	3.18	2.17	1.46	3.35	2.31
Others	0.21	0.00	1.80	0.41	0.38	0.00	0.51	1.62	0.99	6.34	0.80	1.38	0.95
1.1.2. Income events	81.13	81.70	72.83	81.26	80.04	75.45	82.42	81.20	77.43	74.18	80.07	71.92	71.97
Head's labour earning	29.10	28.38	23.47	29.74	35.63	33.33	32.36	35.25	31.59	41.62	27.87	22.93	19.32
Spouse's labour earning	12.58	5.38	9.51	7.13	4.68	14.99	10.32	9.72	11.36	8.98	10.86	8.32	6.12
Offspring's labour earning	3.30	1.17	7.82	5.09	2.10	0.00	6.11	7.37	6.44	1.92	1.68	2.99	1.50
Others' labour earnings	0.32	0.20	1.37	2.24	0.00	0.00	2.68	0.97	2.29	1.68	0.51	0.42	0.27
Nonwork private income	6.18	11.94	4.23	9.78	4.78	11.89	4.46	4.70	5.97	7.62	6.36	0.78	9.25
Social benefits	12.47	9.59	11.84	8.55	12.03	5.43	9.17	6.56	2.06	6.74	21.29	15.21	11.97
Pensions	9.70	2.74	2.33	2.44	1.91	1.03	3.44	0.73	3.75	0.08	2.78	5.51	5.85
Other income component	7.46	22.31	12.26	16.29	18.91	8.79	13.89	15.88	13.97	5.53	8.71	15.75	17.69
1.1.3. Demographic events	5.12	6.16	3.17	11.20	5.83	9.82	5.86	3.32	4.69	6.58	6.66	7.37	7.21
Union	0.53	0.49	0.00	0.00	0.10	0.26	0.00	0.24	0.10	0.00	0.04	0.12	0.68
Member moving in	1.39	2.05	0.85	1.63	0.96	1.03	0.38	1.46	1.85	0.48	1.98	1.80	1.36
Birth	1.39	0.78	0.32	1.02	2.01	4.13	1.02	1.30	1.22	3.21	1.35	2.16	1.63
Rise in needs	0.00	0.00	0.00	0.00	0.57	0.00	0.76	0.00	0.00	0.40	0.00	0.00	1.36
Other demographic event	1.81	2.84	2.01	8.55	2.20	4.39	3.69	0.32	1.51	2.49	3.29	3.29	2.18
1.2 Different head	1.60	1.37	0.85	0.41	1.62	6.98	0.25	0.49	0.83	1.04	2.45	1.14	0.27
Divorce	0.43	0.00	0.00	0.41	0.29	0.00	0.13	0.00	0.21	0.00	0.15	0.48	0.00
Death	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	1.17	1.37	0.85	0.00	1.34	6.98	0.13	0.49	0.63	1.04	2.30	0.66	0.27
2. Different household	0.21	0.39	0.00	0.00	0.19	0.00	0.25	0.00	0.08	0.00	0.33	0.42	0.00
Number of entries	938	1,022	946	491	1,047	387	785	1,234	3,837	1,247	2,734	1,670	735

Table 5B: Events Associated with Poverty Entries (3 types of events) – EU-SILC (2005-2008)

Table 3B. Events Associated with		· /1	,	,	<u> </u>		Country						
Associated Event	IS	IT	LT	LU	LV	NL	NO	PL	PT	SE	SI	SK	UK
1. Same household	100.00	99.92	99.76	99.92	100.00	100.00	100.00	99.97	98.80	100.00	100.00	100.00	99.81
1.1 Same head	95.34	98.35	97.76	98.74	99.60	99.01	96.27	99.29	98.19	98.33	98.80	99.42	98.96
1.1.1. Unemployment events	14.77	15.75	15.31	13.50	23.52	6.30	15.69	11.34	14.86	12.71	15.06	18.04	18.56
Head	7.77	8.45	6.60	6.71	10.13	1.48	3.73	5.01	6.83	7.80	6.89	8.08	12.36
Spouse	4.40	3.54	2.83	4.95	5.58	1.98	1.86	4.06	3.51	4.12	3.04	6.49	4.21
Offspring	0.00	3.33	4.48	1.34	5.82	2.22	0.88	1.76	3.51	0.78	2.64	2.31	1.28
Others	2.59	0.43	1.41	0.50	1.99	0.62	9.22	0.51	1.00	0.00	2.48	1.15	0.71
1.1.2. Income events	68.91	77.59	77.86	73.51	72.73	81.73	74.31	81.28	81.43	77.48	77.16	76.62	76.99
Head's labour earning	36.79	30.46	29.45	20.70	25.28	30.49	48.33	31.65	26.61	34.34	29.01	32.90	23.82
Spouse's labour earning	10.62	8.64	13.31	12.32	9.49	12.84	5.29	16.15	14.46	7.36	13.06	9.52	8.05
Offspring's labour earning	1.81	5.68	1.77	2.10	5.98	1.60	0.29	6.53	5.22	1.56	8.49	11.26	2.70
Others' labour earnings	0.00	1.33	1.53	1.51	1.44	0.37	2.16	1.52	2.81	6.24	4.81	0.00	0.76
Nonwork private income	2.85	8.80	2.24	6.29	0.88	12.47	6.47	0.41	2.91	8.47	2.24	0.43	8.48
Social benefits	6.48	9.46	8.72	16.51	8.05	8.64	7.16	7.96	10.14	9.81	10.74	9.81	15.48
Pensions	1.81	1.28	3.77	1.01	3.27	1.23	0.39	1.15	3.11	1.56	0.40	2.16	12.59
Other income component	8.55	11.94	17.08	13.08	18.34	14.07	4.22	15.91	16.16	8.14	8.41	10.53	5.11
1.1.3. Demographic events	11.66	4.98	4.59	11.74	3.35	10.99	6.27	6.67	1.91	8.14	6.57	4.76	3.41
Union	0.00	0.24	0.47	0.84	0.32	0.00	0.10	1.18	0.50	0.78	0.64	0.00	0.24
Member moving in	3.11	1.57	0.35	2.35	1.36	1.73	4.71	1.08	0.50	0.56	1.92	0.00	1.52
Birth	4.66	1.23	1.65	6.62	0.64	2.47	1.18	1.35	0.30	1.11	0.40	0.87	0.85
Rise in needs	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.58	0.00	0.67	0.64	0.00	0.80
Other demographic event	3.89	1.79	2.12	1.93	1.04	6.79	0.29	2.47	0.60	5.02	2.96	3.90	0.00
1.2 Different head	4.66	1.57	2.00	1.17	0.40	0.99	3.73	0.68	0.60	1.67	1.20	0.58	0.85
Divorce	0.52	0.19	0.12	0.50	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00
Death	0.00	0.08	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	4.15	1.31	1.88	0.50	0.40	0.99	3.73	0.61	0.60	1.67	1.20	0.58	0.85
2. Different household	0.00	0.08	0.24	0.08	0.00	0.00	0.00	0.03	1.20	0.00	0.00	0.00	0.19
Number of entries	386	3,752	849	1,193	1,254	810	1,020	2,954	996	897	1,248	693	2,112

Table 6A: Events Associated with Poverty Exits (3 types of events) – EU-SILC (2005-2008)

	•	урссо			·		Country						
Associated Event	AT	BE	BG	СҮ	CZ	DK	EE	EL	ES	FI	FR	HU	IE
1. Same household	100.00	99.63	100.00	99.83	99.23	100.00	100.00	100.00	99.76	100.00	99.59	99.77	100.00
1.1 Same head	98.51	98.61	98.57	97.40	96.99	98.91	98.99	102.33	98.03	95.84	96.90	97.34	98.29
1.1.1 Employment events	21.67	15.03	49.05	18.92	27.40	17.76	32.80	20.16	25.58	35.33	14.70	30.70	15.54
Head	8.06	5.84	17.68	4.34	11.91	8.74	6.86	5.60	6.97	18.27	4.62	10.97	7.31
Spouse	6.89	3.43	10.46	7.29	8.90	5.74	7.77	5.53	8.38	8.22	5.64	9.72	2.86
Offspring	5.09	5.47	17.11	6.77	6.21	3.28	14.03	8.15	9.39	8.32	3.83	8.65	5.37
Others	1.64	0.28	3.80	0.52	0.38	0.00	4.14	0.87	0.85	0.51	0.60	1.36	0.00
1.1.2. Income events	76.45	81.26	48.95	74.65	67.35	78.69	65.19	76.78	69.85	53.20	79.16	64.84	79.31
Head's labour earning	24.49	27.55	11.50	23.96	27.08	18.85	22.30	28.82	22.15	16.55	22.46	16.17	6.06
Spouse's labour earning	7.59	5.75	7.79	7.64	6.85	13.39	9.28	8.15	9.04	10.15	7.29	6.27	4.00
Offspring's labour earning	5.79	4.36	6.27	5.38	3.78	5.46	7.97	9.17	7.68	2.94	4.91	5.43	4.23
Others' labour earnings	0.00	0.46	1.24	0.00	0.13	0.55	3.13	0.22	0.98	0.00	0.51	0.40	0.00
Nonwork private income	1.25	5.75	0.48	3.65	0.70	8.47	0.40	2.91	2.84	4.16	6.11	0.17	4.34
Social benefits	10.80	14.56	4.75	11.46	14.28	12.30	5.85	5.82	5.98	7.01	13.53	16.45	21.83
Pensions	15.49	12.62	6.65	13.37	5.57	9.84	5.65	6.91	11.46	3.35	14.98	11.31	29.03
Other income component	11.03	10.20	10.27	9.20	8.96	9.84	10.60	14.77	9.70	9.04	9.38	8.65	9.83
1.1.3. Demographic events	0.39	2.32	0.57	3.82	2.24	2.46	1.01	1.97	2.61	7.31	3.04	1.81	3.43
Divorce	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.07	0.05	0.00	0.06	0.40	0.00
Death	0.00	0.19	0.00	0.35	0.26	0.00	0.30	0.29	0.45	0.30	0.13	0.34	0.00
Member moving out	0.16	1.39	0.57	1.56	1.66	0.00	0.40	0.22	1.44	6.50	1.84	0.96	3.43
Other demographic event	0.23	0.74	0.00	1.91	0.26	2.46	0.30	1.38	0.66	0.51	1.01	0.11	0.00
1.2 Different head	1.49	1.02	1.43	2.43	2.24	1.09	1.01	1.09	1.73	4.16	2.69	2.43	1.71
Divorce	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00
Death	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00
Other	1.49	1.02	1.43	2.43	2.24	1.09	1.01	1.09	1.65	4.16	2.69	2.43	1.71
2. Different household	0.00	0.37	0.00	0.17	0.77	0.00	0.00	0.00	0.24	0.00	0.41	0.23	0.00
Number of exits	1,278	1,078	1,052	576	1,562	366	991	1,374	3,761	985	3,157	1,769	875

Table 6B: Events Associated with Poverty Exits (3 types of events) – EU-SILC (2005-2008)

	Country													
Associated Event	IS	IT	LT	LU	LV	NL	NO	PL	PT	SE	SI	SK	UK	
1. Same household	100.00	99.95	100.00	100.00	100.00	100.00	100.00	99.93	99.08	100.00	100.00	100.00	100.00	
1.1 Same head	91.54	98.47	98.97	98.10	96.76	98.29	91.10	98.48	97.37	96.53	98.28	98.00	98.96	
1.1.1. Employment events	22.64	22.08	29.18	17.96	27.52	21.73	28.52	27.65	19.01	27.92	27.12	32.53	22.61	
Head	6.72	7.82	9.15	4.67	7.46	9.15	12.65	7.75	2.75	19.44	6.24	6.49	10.48	
Spouse	12.44	4.69	7.78	8.54	8.81	8.85	9.03	6.49	6.99	4.86	6.15	6.79	7.60	
Offspring	3.48	8.35	11.44	4.11	7.19	3.72	5.55	11.73	8.82	3.61	11.93	17.17	3.82	
Others	0.00	1.23	0.80	0.63	4.05	0.00	1.29	1.68	0.46	0.00	2.80	2.10	0.71	
1.1.2. Income events	67.16	73.93	67.73	76.03	68.26	75.45	54.32	67.82	76.86	56.11	67.27	64.77	71.31	
Head's labour earning	29.60	23.08	19.91	16.77	26.53	26.96	14.32	24.94	19.24	11.25	19.80	26.45	14.91	
Spouse's labour earning	8.21	7.87	10.87	15.59	10.70	7.55	8.39	10.03	7.45	9.58	9.40	11.38	6.89	
Offspring's labour earning	4.23	8.67	4.23	5.14	10.61	3.92	3.10	10.34	10.54	4.17	10.40	12.77	2.27	
Others' labour earnings	0.00	0.60	0.00	0.55	1.44	0.40	1.16	1.75	1.60	0.56	1.81	0.80	0.85	
Nonwork private income	6.22	5.04	0.92	3.09	0.18	6.24	2.19	0.29	4.12	1.94	0.90	0.00	3.16	
Social benefits	2.99	11.73	6.06	16.93	3.06	12.37	7.10	4.41	9.28	3.47	7.50	6.29	15.86	
Pensions	5.97	9.32	15.10	4.43	2.52	8.75	3.48	4.14	17.64	2.36	3.44	3.39	18.55	
Other income component	9.95	7.62	10.64	13.53	13.22	9.26	14.58	11.91	6.99	22.78	14.01	3.69	8.82	
1.1.3. Demographic events	1.74	2.46	2.06	4.11	0.99	1.11	8.26	3.00	1.49	12.50	3.89	0.70	5.05	
Divorce	0.00	0.13	0.00	0.63	0.00	0.00	0.00	0.18	0.00	0.97	0.36	0.00	0.57	
Death	0.00	0.20	0.80	0.24	0.45	0.00	0.26	0.27	0.00	0.00	0.45	0.00	0.33	
Member moving out	1.49	1.58	0.00	2.53	0.54	1.11	4.00	2.17	0.00	11.53	2.98	0.50	3.11	
Other demographic event	0.25	0.55	1.26	0.71	0.00	0.00	4.00	0.38	1.49	0.00	0.09	0.20	1.04	
1.2 Different head	8.46	1.48	1.03	1.90	3.24	1.71	8.90	1.46	1.72	3.47	1.72	2.00	1.04	
Divorce	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.54	0.00	0.00	
Death	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Other	8.46	1.48	1.03	1.90	3.24	1.71	8.90	1.37	1.72	3.47	1.18	2.00	1.04	
2. Different household	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.07	0.92	0.00	0.00	0.00	0.00	
			<b>A</b> -		4.455	20.5			455			1.05-		
Number of exits	402	3,990	874	1,264	1,112	994	775	4,466	873	720	1,106	1,002	2,119	

Table 7: Logit analysis for poverty entries (final specification) – ECHP (1994-2001)

Depvar=poverty entry							Сог	ıntry						
	AT	BE	DE	DK	ES	EL	FR	FI	IT	IE	LU	NL	PT	UK
Baseline probability	0.02	0.02	0.01	0.02	0.01	0.02	0.02	0.02	0.01	0.02	0.01	0.01	0.01	0.02
Household head														
Aged <30	1.80***	1.51***	1.84***	2.35***	1.54***	1.85***	2.00***	3.04***	1.32**	1.25	1.52***	2.43***	1.39***	2.08***
Aged >64	1.60***	1.73***	1.33***	4.23***	1.14**	1.53***	1.01	1.53***	1.31***	2.02***	1.34*	1.87***	2.23***	2.34***
Female	1.04	1.70***	1.39***	1.31***	1.22***	0.77***	1.68***	1.68***	0.95	1.58***	1.1	1.76***	0.90*	1.34***
Higher education	0.55***	0.36***	0.45***	0.54***	0.41***	0.38***	0.42***	0.45***	0.51***	0.23***	0.16***	0.24***	0.19***	0.44***
Primary education	2.16***	2.14***	2.04***	1.50***	2.99***	3.85***	2.16***	1.71***	3.49***	2.12***	2.72***	0.59***	4.28***	1.11*
Other EU citizenship	0.24*	1.63***	0.82*	2	1.66	s.n.o.	2.24***	3.40***	0.49	2.91***	2.18***	s.n.o.	3.99*	0.76
Non-EU citizenship	2.14***	2.37***	1.43***	2.44**	1.22	0.47	3.76***	3.29*	2.46*	2.08	5.73***	1.67	3.30*	2.39**
Household														
At least one dep child	1.51***	1.42***	1.33***	0.72***	2.08***	1.53***	1.44***	1.14	2.10***	1.54***	2.49***	2.12***	1.43***	1.88***
Severe disability or chronic disease	1.96***	1.15	1.62***	1.58***	1.36***	1.52***	1.43***	1.41***	1.31***	2.42***	d.c.	1.92***	1.26***	1.49***
Events														
Employment (transition)														
Employment to unemp. (head)	1.78**	4.51***	4.08***	1.66**	3.12***	3.11***	3.67***	2.65***	6.83***	5.46***	6.14***	3.42***	2.63***	1.98***
Employment to inactivity (head)	1.61***	2.90***	2.14***	2.82***	1.10	1.52***	2.22***	1.30	1.55***	1.32*	2.62***	1.78***	1.21	1.70***
Employment to unemp. (spouse)	2.10***	0.64	2.73***	1.28	0.78	2.03***	0.95	0.94	1.31	2.03**	2.91**	1.25	1.39*	1.60*
Employment to inactivity (spouse)	1.34*	0.69	1.48***	1.07	0.91	1.48***	1.75***	0.72	1.37***	1.22	1.17	1.35*	2.29***	0.94
Employment to unemp. (other)	0.68	0.84	1.35*	s.n.o.	1.29***	1.68***	1.27	0.72	2.31***	1.54***	2.66***	2.97**	1.75***	1.52*
Employment to inactivity (other)	0.61*	1.63	1.58**	1.45	1.10	1.76***	1.13	2.10***	1.12	1.43**	1.08	2.84***	0.91	0.90
Demographics (change hh)														
Change hh due to divorce	1.88	3.24*	5.19***	2.53	0.93	1.63	4.02**	1.87	1.64	2.6	5.99*	3.61*	4.97**	2.19
Change hh due to union	0.54	0.84	2.52***	2.22*	1.84**	1.56	2.40**	2.84**	2.29***	0.80	1.80	0.62	1.34	0.79
Child leaving parental hh	5.13***	3.79***	8.36***	14.97***	1.69	4.22***	11.72***	11.37***	3.51***	4.83***	3.87*	19.45***	0.46	15.66**
Demographics (same hh)														
Death of hh head	0.31	0.44	0.33	s.n.o.	0.12***	0.82	0.72	2.95	1.41	0.15**	1.78	d.c.	0.67	1.66
Divorce of hh head	1.65	1.38	4.48***	2.82**	2.22**	1.10	1.70*	3.80***	1.89*	3.00**	3.41**	2.36**	1.03	5.07***
Union of hh head	1.25	0.67	1.15	0.94	1.44	1.93	1.20	0.94	0.86	1.07	1.72	1.74**	2.82***	1.25
Member moving in	1.05	2.27***	2.65***	3.89***	1.13	1.55***	2.43***	3.13***	1.68***	0.89	2.50***	4.02***	1.04	2.27***
Member moving out	1.73***	1.39**	1.52***	0.98	1.37***	1.16	1.33***	1.84***	1.52***	0.93	1.57***	0.90	1.85***	1.21*
Death	0.76	0.58	1.06	s.n.o.	1.02	0.97	0.39	0.76	0.72	0.50*	1.28	d.c.	0.40***	0.77
Birth	1.16**	1.55***	1.53***	0.69*	1.66***	1.48***	1.27**	1.34*	1.69***	1.35**	1.78***	1.2	1.36***	1.70***
Rise in needs	1.33	1.33**	2.07***	2.38***	1.54***	1.44***	1.76***	2.90***	1.64***	1.35***	1.16	2.02***	2.02***	1.38***
_constant	0.02***	0.02***	0.01***	0.02***	0.01***	0.02***	0.02***	0.02***	0.01***	0.02***	0.01***	0.01***	0.01***	0.02***
Number of obs	39,024	43,033	90,095	34,336	91,599	66,105	84,362	38,764	102,197	50,375	32,577	71,944	67,659	66,198
Wald chi2	551***	935***	2,063***	1,295***	1,982***	1.824***	2,084***	1,279***	1,969***	1,307***	942***	1,193***	1,115***	1,732**
		555	_,000	_,	-,	-, '	-,,	-,	-,	-11,419	J	-,	-,	-,

sigma_u	1.24***	1.23***	1.26***	0.97***	1.31***	1.26***	1.28***	0.77***	1.43***	1.20***	1.03***	1.26***	1.35***	1.15***
rho	0.32***	0.32***	0.32***	0.22***	0.34***	0.33***	0.33***	0.15***	0.38***	0.30***	0.24***	0.32***	0.36***	0.29***

- 1. Source: ECHP UDB 1994-2000 (Dec 2003 2nd issue)
- 2. Odds ratios are reported
- 3. \*p<0.05, \*\*<0.01, \*\*\*p<0.001
- 4. d.c. variable dropped due to collinearity
- 5. s.n.o variable dropped due to small number of observations, variable predicts failure or non-failure perfectly
- 6. Baseline probability:

hh head: male, aged [30,64], having completed secondary education and being a citizen of the country under examination;

hh: without dependent children, none of the household members has severe disability or chronic disease; none of the events has taken place

Table 8: Logit analysis for poverty exits (final specification) – ECHP (1994-2001)

UK 0.40
0.40
0.61***
*** 0.59***
** 0.87**
1.08
*** 0.75***
0.95
1.14
*** 0.73***
** 0.82***
*** 1.16
1.17
*** 1.55*
*** 1.48**
*** 1.44
*** 2.90***
1.64
*** 3.79
1.24
*** 3.50***
8 0 4* 0* 5 0* 7 7 7 3*

Divorce of hh head Union of hh head Member moving in Member moving out Death _constant	2.16* 5.57*** 2.86*** 2.40*** 1.18 0.30***	0.95 0.61 1.91* 0.95 2.94** 0.60***	1.38 4.19*** 1.64** 1.19 3.15*** 0.62***	0.90 3.62*** 1.76** 1.72*** 1.73 0.60***	0.54* 3.16*** 1.00 1.56*** 1.34* 0.70***	0.99 1.42 3.23*** 1.52*** 1.84*** 0.67***	3.04*** 2.66*** 1.44** 1.66*** 4.01*** 0.62***	2.90** 3.48*** 1.46 1.90*** 4.24*** 0.25***	0.49 2.12* 1.27 1.52*** 1.74** 0.65***	0.68 1.54 2.43*** 2.49*** 3.18*** 0.32***	1.22 4.91*** 2.05** 2.70*** 32.73*** 0.41***	1.29 0.96 2.01*** 1.55*** d.c. 0.66***	1.60 2.90*** 2.12*** 1.56*** 2.18*** 0.50***	1.31 2.71*** 1.34*** 1.29*** 1.68* 0.67***
Number of obs Wald chi2 Log likelihood sigma_u	6,409 297*** -3,506 1.23***	6,547 222*** -3,712 1.28***	11,883 397*** -7,019 1.20***	3,852 254*** -2,227 1.03***	22,173 564*** -12,962 1.03***	19,563 533*** -10,562 1.05***	15,967 701*** -8,421 1.09***	3,736 201*** -2,046 1.16***	25,652 520*** -14,308 1.02***	9,588 537*** -5,147 1.00***	4,029 223*** -2,068 1.09***	7,264 185*** -4,596 0.72***	25,495 836*** -11,948 1.18***	14,507 408*** -8,299 0.96***
rho	0.32***	0.33***	0.31***	0.24***	0.24***	0.25***	0.27***	0.29***	0.24***	0.23***	0.26***	0.14***	0.30***	0.22***

Notes: see Table 7

Table 9A: Logit analysis for poverty entries – EU-SILC (2005-2008)

Depvar=poverty entry							Country						
	AT	BE	BG	CY	CZ	DK	EE	EL	ES	FI	FR	HU	IE
Baseline probability	0.01	0.01	0.02	0.01	0.01	0.01	0.05	0.04	0.02	0.01	0.01	0.01	0.02
Household head													
Aged <30	1.48	2.69***	3.17***	1.62	1.35	7.34***	0.79	1.76**	0.96	2.29***	2.17***	2.18***	2.87***
Aged >64	1.84***	1.85**	3.59***	2.66***	0.88	3.42***	2.16***	0.90	1.70***	1.32	0.84	0.52***	2.66***
Female	1.04	3.37***	1.01	2.20***	5.48***	1.11	1.16*	1.49***	1.09	0.88	1.41***	1.55***	1.28**
Higher education	0.77	0.35***	0.41***	0.24***	0.36***	0.75	0.59***	0.40***	0.39***	0.25***	0.35***	0.25***	0.54**
Primary education	3.16***	1.78***	2.79***	2.62***	2.40***	1.67**	1.66***	1.59***	1.91***	1.61***	2.48***	3.40***	2.63***
Household													
At least one dep child	1.74***	1.43**	1.53***	1.23	2.87***	1.44*	1.19*	1.55***	1.95***	0.81*	2.10***	2.66***	1.59***
Severe disability or chronic disease	0.91	2.21***	1.34***	1.58***	1.39***	0.58**	1.24**	1.08	1.12*	1.31**	0.99	0.85*	1.12
Events													
Employment (transition)													
Employment to unemp. (head)	2.66***	8.24***	3.89***	0.00	3.50***	2.71*	3.48***	4.06***	1.80***	0.86	3.73***	4.90***	6.23***
Employ. to inactivity (head)	1.27	0.31*	0.57	0.87	1.57*	1.28	0.50**	1.18	1.79***	0.52**	1.20	1.33	4.11***
Employ. to unemp. (spouse)	2.99***	0.13*	5.80***	0.00	6.91***	0.00	1.57	0.92	0.78	2.00*	0.91	2.84***	3.23**
Employ. to inactivity (spouse)	1.03	1.83	0.58	1.35	0.75	0.75	1.03	1.52*	1.17	1.26	0.42***	0.66	2.03**
Employment to unemp. (other)	0.00	0.44	1.42	0.79	4.69***	0.00	2.00**	1.19	1.16	1.38	1.84**	1.46	1.19
Employ. to inactivity (other)	0.54	8.43***	1.05	0.23	0.90	0.00	0.39**	1.26	1.82***	3.77***	4.28***	0.94	2.31***
Demographics (change hh)	10.20*	2.87	0.00	0.00	0.48	d.c.	3.79	d.c.	1.38	d.c.	1.25	1.43	d.c.
Demographics (same hh)													
Death of hh head	24.5***	0.00	8.62***	32.7***	53.8***	d.c.	13.5***	15.7***	16.4***	0.66	66.3***	47.5***	36.5***
Divorce of hh head	5.34***	16.7***	0.49	4.14***	7.47***	2.69	1.72***	2.38**	3.14***	1.52	1.91*	4.42***	9.84***
Union of hh head	0.30**	1.75	0.73	0.20**	0.31*	0.61	0.49*	0.94	1.63**	0.39*	0.76	0.60*	0.50
Member moving in	1.17	1.26	0.60*	1.73*	1.29	2.83***	0.42**	1.12	1.2	1.78**	1.83***	1.02	0.44**
Member moving out	1.39	4.33***	4.10***	2.11**	2.92***	d.c.	1.94***	1.18	2.30***	9.55***	4.32***	3.20***	2.44***
Death	0.85	45.97**	2.13***	0.64	1.71	d.c.	8.63***	2.56***	2.07***	9.74***	2.71**	2.76***	4.47***
Birth	1.84**	0.63	0.83	1.26	1.49	1.48	1.08	1.60**	1.44**	3.27***	1.10	1.88**	1.61
Rise in needs	1.91***	0.94	0.95	0.78	1.47**	2.16***	1.77***	0.89	1.22	1.64***	0.72**	0.73*	1.49*
_constant	0.01***	0.00***	0.02***	0.01***	0.00***	0.00***	0.05***	0.04***	0.02***	0.01***	0.01***	0.01***	0.02***
Number of obs	18,318	18,271	9,893	12,708	43,430	15,731	12,772	16,759	37,708	22,551	45,920	26,138	10,298
Wald chi2	287***	98***	208***	168***	488***	94***	573***	275***	611***	563***	717***	406***	249***
Log likelihood	-3,504	-3,712	-3,242	-2,052	-5,354	-1,743	-3,375	-4,408	-12,217	-4,539	-10,233	-5,860	-2,609
sigma_u	1.29	2.66	1.37	1.11	2.00	1.84	0.03	0.72	1.60	1.93	1.75	2.10	0.89
rho	0.34***	0.68***	0.36***	0.27*	0.55***	0.51***	0.00	0.14	0.44	0.53***	0.48***	0.57***	0.19***

Notes: 2-5 see Table 7

<sup>1.</sup> Source: EU-SILC (2008 Longitudinal dataset, revision 3)

<sup>6.</sup> Baseline probability:

hh head: male, aged [30,64], having completed secondary education; hh: without dependent children, none of the household members has severe disability or chronic disease; none of the events has taken place

Table 9B: Logit analysis for poverty entries – EU-SILC (2005-2008)

Depvar=poverty entry							Country						
	IS	IT	LT	LU	LV	NL	NO	PL	PT	SE	SI	SK	UK
Baseline probability	0.01	0.01	0.03	0.01	0.07	0.01	0.02	0.02	0.03	0.01	0.01	0.01	0.02
Household head													
Aged <30	3.43***	2.75***	1.88**	1.47	0.60***	1.96**	4.07***	1.77***	2.74***	1.97***	1.77**	1.14	2.25***
Aged >64	1.91	0.92	2.76***	0.59*	3.51***	1.05	1.37	0.66***	1.58***	3.07***	1.26	1.52**	2.65***
Female	0.85	1.69***	1.58***	0.96	1.32***	1.28**	0.62***	1.24***	1.26*	0.90	1.17*	1.51***	1.38***
Higher education	0.62	0.45***	0.47***	0.73	0.55***	0.54***	0.42***	0.18***	0.09***	0.56***	0.20***	0.46***	0.49***
Primary education	1.32	2.32***	1.77***	4.84***	2.53***	2.26***	0.58***	1.90***	1.13	1.13	2.72***	2.11***	2.53***
Household													
Having at least one dep child	1.34	2.42***	1.47***	3.47***	1.04	1.24*	0.59***	2.39***	d.c.	1.02	1.25**	2.35***	1.56***
Severe disability or chronic disease	1.31	0.87*	0.78**	1.08	1.09	1.28**	1.27**	0.84***	1.05	1.09	1.28***	1.05	1.04
Events													
Employment (transition)													
Employment to unemp. (head)	0.00	11.4***	1.78*	3.90***	1.95***	0.83	0.94	3.85***	1.58	3.63***	2.81***	9.74***	36.5***
Employment to inactivity (head)	1.25	1.77***	1.38	1.56	2.02***	0.22*	2.43***	1.06	2.96***	1.87**	1.33	2.00**	4.29***
Employment to unemp. (spouse)	60.4***	2.61***	3.78***	0.46	1.73*	0.00	0.00	1.12	1.73	1.64	1.93**	6.60***	10.6***
Employment to inactivity (spouse)	0.12***	1.40*	0.66	2.52***	1.45*	0.98	0.59	1.51**	0.77	1.59*	0.94	0.83	1.42*
Employment to unemp. (other)	0.00	1.83**	1.92**	4.07***	2.17***	12.2***	2.19	1.10	2.13***	0.00	1.79***	1.42	1.51
Employment to inactivity (other)	0.55	1.57*	0.25**	0.28	1.10	1.19	3.15***	0.42***	1.57	0.70	2.09**	0.32*	1.60*
Demographics (change hh)	d.c.	0.61	16.11*	3.02	0.00	d.c.	d.c.	2.87	3.19*	d.c.	d.c.	0.00	5.07
Demographics (same hh)													
Death of hh head	d.c.	s.n.o.	11.9***	60.1***	8.58***	s.n.o.	4.10**	10.8***	30.9***	0.00	10.9***	11.7***	5.58***
Divorce of hh head	2.88	36.9***	1.68	20.4***	2.24***	s.n.o	2.39	3.17***	2.38	14.8***	1.95*	1.64	3.99***
Union of hh head	0.24*	1.51	0.28*	2.60**	1.52*	0.00	0.62	1.11	0.29**	0.39***	1.21	0.54	1.12
Member moving in	1.02	2.58***	0.52	1.52	1.05	2.45***	6.26***	1.48*	0.66	0.63	0.54**	0.80	0.63**
Member moving out	4.87***	3.94***	1.42	2.95***	2.13***	8.62***	12.4***	1.74***	13.6***	7.14***	3.22***	1.70*	2.10***
Death	0.00	8.14***	2.42***	11.4***	1.57*	8.33**	3.91*	3.19***	4.27***	1.68	2.99***	3.67***	2.45
Birth	3.59***	1.49*	0.74	2.58***	1.20	1.24	2.46***	1.03	1.20	1.99***	1.49*	3.30**	1.55**
Rise in needs	0.37**	0.98	0.38***	1.36	0.92	0.89	1.09	0.91	1.24	1.52**	1.68***	1.40*	1.51***
_constant	0.00***	0.01***	0.03***	0.00***	0.07***	0.00***	0.02***	0.02***	0.03***	0.01***	0.01***	0.01***	0.02***
Number of obs	8,977	60,586	14,552	20,550	12,317	34,913	22,654	49,004	12,964	20,313	34,478	19,203	24,333
Wald chi2	70***	1012***	270***	389***	427***	358***	758***	776***	260***	341***	262***	305***	543***
Log likelihood	-1,572	-13,224	-3,927	-4,085	-4,863	-3,739	-3,115	-12,298	-3,279	-3,613	-5,406	-3,593	-6,719
sigma_u	2.59	2.20	1.31	2.21	0.87	1.76	0.42	1.79	1.16	1.38	1.19	1.17	1.57
rho	0.67***	0.60***	0.34***	0.60***	0.19	0.49***	0.05	0.49	0.29**	0.37***	0.30***	0.29***	0.43***

Notes: see Table 9A

Table 10A: Logit analysis for poverty exits – EU-SILC (2005-2008)

Depvar=poverty exit							Country						
	AT	BE	BG	CY	CZ	DK	EE	EL	ES	FI	FR	HU	IE
Baseline probability	0.55	0.55	0.60	0.20	0.55	0.38	0.40	0.45	0.51	0.34	0.64	0.55	0.38
Household head													
Aged <30	0.64*	1.24	0.93	1.60	1.28	0.61	2.86***	1.18	1.20	0.61**	0.95	0.35***	0.93
Aged >64	0.45***	0.61**	0.46***	0.51***	0.58***	0.36***	0.41***	0.27***	0.47***	0.21***	0.64***	1.78**	0.95
Female	1.16	0.61***	0.71***	0.59***	0.66***	0.93	0.63***	1.14	0.89	0.98	0.70***	1.15	0.83
Higher education	1.66*	1.50	1.48	2.70*	1.07	2.25**	1.26	2.61*	2.54***	2.16**	1.61**	3.34**	1.16
Primary education	0.64***	0.63***	0.67***	0.89	0.42***	0.59*	0.64***	0.59***	0.84**	1.00	0.69***	0.34***	0.78
Household													
Having at least one dep child	1.10	0.53***	0.48***	2.91***	0.77**	1.57*	1.10	0.64***	0.53***	1.21	0.56***	0.60***	0.83
Severe disability or chronic disease	0.91	0.78*	0.76**	0.75*	0.83*	1.82**	0.70***	0.73**	0.69***	0.80	0.96	1.20*	1.45**
Events													
Unemployment (transition)													
Unemployment to employ.(head)	0.59	0.91	1.15	0.33*	1.10	1.88	0.68	0.61	0.78	1.37	0.71	1.16	1.91
Inactivity to employment (head)	1.67	0.67	5.83***	1.40	6.29***	0.43*	0.94	3.34*	2.38***	3.32***	0.32***	1.47	1.19
Unemployment to empl. (spouse)	1.03	0.34	1.67***	2.57	1.58*	s.n.o.	5.08***	1.09	2.33***	0.80	1.51	0.86	0.58
Inactivity to employment (spouse)	1.80*	1.00	0.81	0.74	1.46	10.48**	0.81	1.54	1.31	3.47***	0.79	3.52***	2.28
Unemployment to employ. (other)	0.87	4.56***	2.66***	16.2***	2.83***	d.c.	2.49***	1.24	1.43*	2.25	0.59*	2.85***	1.74
Inactivity to employment (other)	2.28***	0.39**	8.11***	2.11*	0.95	0.85	5.06***	2.29**	1.96***	2.69***	1.46*	3.01***	1.17
Demographics (change hh)	d.c.	0.89		d.c.	0.65	d.c.	d.c.	d.c.	s.n.o.	d.c.	1.94	1.74	d.c.
Demographics (same hh)			d.c.										
Death of hh head	0.00	0.75	0.10***	0.41	0.00	d.c.	0.00	0.39*	0.89	s.n.o.	0.17**	0.11***	0.00
Divorce of hh head	0.55	0.14**	0.52*	0.00	0.54	0.02**	1.15	0.84	0.94	1.82	1.16	0.43*	0.16*
Union of hh head	3.73***	0.92	0.28***	0.85	3.29***	0.48	1.62	0.12***	0.86	28.8***	1.23	1.02	6.04***
Member moving in	3.27***	2.16**	0.86	2.12*	3.82***	6.67***	17.0***	2.43**	2.34***	3.08***	1.15	0.93	3.64***
Member moving out	0.43**	0.28***	0.48***	0.75	1.14	d.c.	1.41	0.94	0.94	1.24	0.68**	1.93**	0.96
Death	0.00	1.36	0.18**	0.20	5.92*	d.c.	0.84	0.78	0.86	0.61	2.96	0.59	4.08
_constant	1.20	1.22	1.52***	0.25***	1.20	0.62*	0.66***	0.82	1.06	0.51***	1.76***	1.20	0.61**
Number of obs	2,647	3,100	2,813	2,551	3,849	1,038	3,007	4,514	10,610	2,684	7,400	4,340	2,387
Wald chi2	121***	85***	309***	129***	189***	61***	183***	117***	283***	147***	146***	244***	52***
Log likelihood	-1,735	-1,918	-1,669	-1,220	-2,453	-624	-1,713	-2,672	-6,696	-1,611	-4,878	-2,697	-1,522
sigma_u	0.95	1.84	0.01	1.05	0.90	1.07	0.87	1.89	1.44	1.14	1.49	1.20	1.23
rho	0.22***	0.51***	0.00	0.25**	0.20***	0.26	0.19	0.52***	0.39***	0.28	0.40***	0.30***	0.31***

Notes: see Table 9A

Table 10B: Logit analysis for poverty exits – EU-SILC (2005-2008)

Depvar=poverty exit							Country						
	IS	IT	LT	LU	LV	NL	NO	PL	PT	SE	SI	SK	UK
Baseline probability	0.69	0.38	0.28	0.32	0.31	0.67	0.63	0.43	0.26	0.37	0.33	0.37	0.59
Household head													
Aged <30	0.78	1.12	4.89***	0.88	3.35***	0.18***	0.45***	1.40**	0.50	1.23	0.87	0.23***	0.23***
Aged >64	0.35*	0.48***	0.70	2.67**	0.29***	0.67	0.24***	0.73*	0.86	0.32***	0.36***	1.06	0.79
Female	0.98	0.83**	0.56***	0.70**	1.10	0.93	1.15	1.01	0.93	0.92	0.82*	1.06	0.70**
Higher education	2.78*	1.77*	2.49*	1.57	1.97*	1.55	0.80	3.60***	7.60*	0.97	1.41	2.80*	1.55
Primary education	1.21	0.61***	0.42***	0.79	0.34***	0.78	0.71*	0.55***	1.03	1.04	0.67***	0.22***	0.44***
Household													
Having at least one dep child	0.41***	0.82**	1.03	0.64**	1.29*	0.45***	0.89	0.70***	d.c.	0.59***	1.07	0.87	0.67**
Severe disability or chronic disease	0.98	0.92	2.14***	1.09	0.77*	0.72*	0.90	0.91	0.76**	0.87	0.75**	0.71**	0.79*
Events													
Unemployment (transition)													
Unemployment to employ.(head)	0.20*	0.72	0.31***	0.24***	1.01	0.46	0.34**	0.86	0.12***	3.53***	0.84	0.99	5.54***
Inactivity to employment (head)	0.76	2.19***	0.67	0.38*	0.40**	0.65	0.67	1.09	0.77	2.83***	2.80*	0.35	2.20***
Unemployment to employ. (spouse)	0.66	0.56*	2.21	0.28***	1.98*	0.00	0.32	0.83	0.62	0.96	3.77***	0.68	3.07*
Inactivity to employment (spouse)	1.65	3.07***	4.18***	0.69	11.53***	3.42***	2.76**	1.44*	2.30**	0.99	1.50	0.64	8.85***
Unemployment to employ. (other)	0.00	3.68***	3.11***	1.05	0.77	d.c.	2.34	1.31**	4.30***	1.28	1.74**	5.29***	18.78***
Inactivity to employment (other)	2.50	1.84***	3.61***	1.88*	1.29	1.95*	1.03	1.49***	2.86***	6.58***	5.21***	3.59***	9.45***
Demographics (change hh)	d.c.	1.85	0.00	0.00	d.c.	d.c.	d.c	1.97	1.49	d.c.	d.c.	d.c	0.00
Demographics (same hh)													
Death of hh head	d.c.	0.44**	0.54	s.n.o.	0.15**	d.c.	0.00	0.54*	0.10**	s.n.o.	0.18	0.33	0.91
Divorce of hh head	0.21	2.61	1.11	0.83	1.02	s.n.o.	1.65	0.78	0.45	0.57	0.43	0.75	1.25
Union of hh head	0.83	2.60*	2.65	1.29	0.96	s.n.o.	2.42	2.08***	3.72**	2.92***	0.93	1.81	0.17**
Member moving in	1.55	1.23	1.70	1.95*	2.60***	11.54***	1.50	1.50*	3.65***	2.99**	7.65***	3.30	4.05***
Member moving out	1.12	1.27	2.10**	0.81	0.42**	1.06	0.73	1.18	0.09***	1.90***	2.66***	6.19***	1.90**
Death	d.c.	0.59	1.16	2.95	1.73	d.c.	s.n,o	0.60*	1.09	0.00	1.28	0.00	1.06
_constant	2.20**	0.60***	0.38***	0.47***	0.44***	2.05***	1.73**	0.76***	0.36***	0.58***	0.49***	1.11	1.45**
Number of obs	785	13,641	2,882	4,855	4,059	2,251	1,733	12,754	3,410	2,046	3,523	2,349	5,326
Wald chi2	24	362***	128***	83***	182***	85.94***	63.27***	235***	113***	115***	192***	122***	216***
Log likelihood	-518	-7,959	-1,640	-2,653	-2,174	-1,456	-1,130	-8,076	-1,844	-1,237	-1,989	-1,462	-3,317
sigma u	1.13	1.51	1.47	2.05	1.65	1.35	1.37	1.11	1.08	0.97	1.03	1.40	2.04
rho	0.28**	0.41***	0.40***	0.56***	0.45	0.36***	0.36***	0.27***	0.26***	0.22**	0.24***	0.37***	0.56

Notes: see Table 9A

#### **Annex 2: Technical annex**

### A2.1. Income measures and the reconstruction of household income in the ECHP

Most of the income components included in the ECHP UDB were collected at the individual level. This means that each household member aged more than 15 answered a detailed set of questions concerning his/her income sources. The total personal income was derived by adding the following income components: total income from work (wage and salary earnings, self employment income), non-work private income (capital income, assigned property rental income, private transfers received), social benefits (unemployment-related benefits, old-age/survivors' benefits, family-related allowances, sickness/invalidity benefits, education-related allowances, any other personal benefits, assigned social assistance, assigned housing allowance). The three income components that are characterised as "assigned" were collected at the household level<sup>32</sup> and then were divided equally among all adult household members<sup>33</sup> in the current wave (Eurostat 2003). The total household income was calculated by adding all the total personal incomes of all household members, plus an imputation component<sup>34</sup> that adjusts the household income for within household non-response.

Most of the income components were collected net of personal income taxes and social insurance contributions, apart from the income figures of France and Finland, which were collected in gross form. A net-to-gross factor for converting gross amounts to net and vice versa is available in the dataset. We used the net-to-gross factor so as to convert the income figures for France and Finland from gross to net, in order to have comparable national mean and median incomes, in all the EU Member-States. Yet, in certain parts of our analysis, we have tested for the validity of the net-to-gross factor by calculating e.g. certain poverty measures for France and Finland both from the gross and net incomes.

Most of the income components in the ECHP have an annual time frame of the calendar year preceding the interview. In all the ECHP countries, apart from the UK, the calendar year coincides with the tax year, which is the reference period for income components. Although, in this way income comparability is ensured, the other variables like the household composition variables, the economic activity status etc. refer to the time of interview and might not relate well to income measured over a period up to twelve months in the past (Eurostat 2001).

The above mismatch between the income variables and the remaining individual and household variables is particularly undesirable for the Bane and Ellwood analysis of events associated with the entries and exits from poverty. For example, if a divorce takes place in period t and is indeed associated with a drop in the household income, which results in bringing the household into poverty, the income decline appears in the data one wave later. Yet, this would not be a problem if the interviews took place at the beginning of the year and were referring to the year that has just ended. Yet, in the first quarter of the year, less than 14% of both household and personal interviews took place, while the bulk of interviews were being contacted during the last four months of the year<sup>35</sup>. Consequently the time-lag between the income variables and the remaining of the household and personal variables is even greater. Therefore, for the needs of the dynamic analysis that follows, we reconstruct the household income, transferring all the income components one year back.

<sup>&</sup>lt;sup>32</sup> The relevant questions are included in the household questionnaires and the information is provided by the respondent to the household questionnaire.

<sup>33</sup> In the ECHP all individuals aged 16+ are considered as adults.

<sup>&</sup>lt;sup>34</sup> During the first two waves an imputation factor was available for multiplication with the household income, in order to adjust for within household non-response.

<sup>&</sup>lt;sup>35</sup> A table of results, showing the distribution of interviews throughout the calendar year, is available from the authors on request.

On the other hand, we e do not simply lag one wave back the total net household income, as it has been constructed by Eurostat because of the dynamic nature of household, the composition of which changes over time. For instance, in period t, an individual may live alone in a household whereas in t-1 he might had been in another household e.g. with his parents. The income that he reports in period t is actually the income that he has earned and he has "pooled" with his parents (along with the parents' income) in t-1. By simply lagging his household income of wave t and assuming that this is his household income in t-1, the fact that his household composition might be different in the previous wave is completely ignored. Consequently, members of the same household have different household incomes and, thus, different equivalised household incomes in the same period. This violates the hypothesis, which we have already made, that household members completely share their income and, hence, have the same equivalised household income for the same period, and are commonly characterised as poor or non-poor. Another solution would be to use the current total monthly income (of the month preceding the interview), which is also available, in order to construct the annual income. Yet, monthly income is prone to underreporting. Therefore, we decided that the best solution would be to match the annual income variables with the remaining individual and household variables, so that they all refer to the same wave.

The methodology developed for the reconstruction of household income follows the logic of Eurostat's (2003) construction of household income variable and is similar to the one applied by Debels and Vandecasteele (2005; 2008). In order to offer an easy to read description of the reconstruction process, we do not use in the following paragraphs the original variable names.

The first step for the reconstruction of income is to transfer one wave back (lag) all the necessary income components: at the individual level, the total personal income, the assigned property rental income, the assigned social assistance and the assigned housing allowance; at the household level, the total property rental income, the total social assistance the total housing allowance, the imputed income (adjusting household income for within household non-response) and the net-to-gross factor.

The second step is to remove the assigned income components from the total personal income: the assigned property rental income, the assigned social assistance and the assigned housing allowance. The assigned income components are income sources that the household receives and are divided to all adult individuals in the current wave. Yet, the number of individuals may differ from the previous wave, so it is not correct to take into account these income components at the individual level, but it is better to use them at the household level (see steps 4 and 6).

The third step is to identify all the individuals that belong to the same household in t-1 and add all their total personal incomes, which we have lagged from t (after subtracting the assigned income components). From now on, we will call this sum "the reduced sum of total personal incomes of the household members". What we miss now are only the income components, which are collected/calculated at the household level: the total property rental income, the total social assistance the total housing allowance, and the imputed income.

The problem that arises in the fourth step is that the household members may be in different households in the next wave and, thus, have different figures for the above household-level variables. Hence, how am we going to select the individual from which we will collect the relevant values? For solving this problem, we have constructed an algorithm that copies first the value of the responder to the household interview and if this information is not available (either the value is missing or there is no indication of who is the household-interview responder) the value is copied from the reference person. If the information from the reference person is also missing, then the maximum value for the relevant income variable among the household members is chosen. In the same way, at a fifth step, we select the net-to-gross factor for the transformation of French and Finnish income components from gross to net.

At the sixth step, we construct the new total household income variable by adding the household level income components that we selected in step 4 to the reduced sum of the total personal incomes of the household members that we calculated in step 3. For France and Finland, in order to get the total net household income, we multiply all the income components (except for the imputation factor, which is already in net form) with the net-to-gross factor that we selected in step 5.

In this way, we manage to eliminate the time-lag between the reference period of the income variables and the reference period of the other household and individual variables. Yet, the use of the reconstructed income has an important disadvantage: the reduction of observations available for analysis. This happens because of two reasons. First, the last survey wave is lost, second if an individual abandons the survey in wave t, when lagging his income components one wave back, income "missings" also move one wave back, so attrition appears one wave earlier. Yet, if the individual's income was imputed in t, the imputed valued is transferred in t-1, and since we add to the household income the imputation factor (adjusting income for within household non-response) the value is included in the reconstructed household income. The loss of cases is near 18% for the unbalanced panel and 14% for the balanced panel, when comparing with the cases available for the original annual household income of Eurostat (referring to the previous calendar year). Nevertheless, for the needs of our analysis it seems better to loose this number of observations than having, for example, unemployed individuals with high annual earnings at the same period.

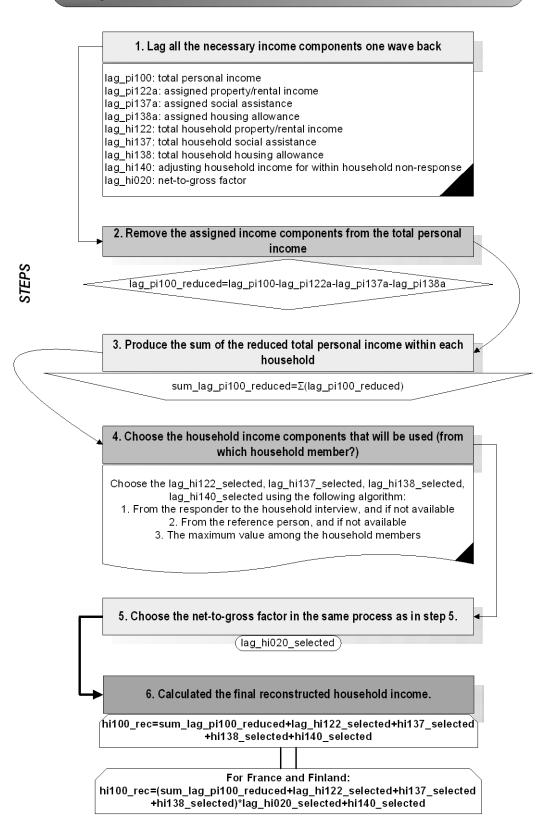
Table 11: Country Participation in the ECHP

rable 22. Country : articipation in the 2011	
COUNTRIES	FULL ECHP DATA FORMAT
Belgium, Denmark, France, Greece, Ireland, Italy, the Netherlands' Portugal, Spain	1994-2001
Austria	1995-2001
Finland	1996-2001
Germany	1994-1996
Luxembourg	1994-1996
United Kingdom	1994-1996

Source: ECHP UDB (Dec 2003 - 2nd issue)

Figure 2: Algorithm for the reconstruction of household income in the ECHP

# Algorithm for the reconstruction of household income



#### A2.2. Definition of the household head in ECHP

The definition of the household head is very important for dynamic poverty analysis, particularly for the event analysis, since a change in household head is considered a major demographic event that could be associated with transitions into and out of poverty. Therefore, the way that the household head is defined may affect the results. In the ECHP, the household head is captured by the "reference person" variable, which was used in the first wave for establishing the relationship of all the household members to this person. Moreover, the notion of the reference person was used for selecting the respondent to the household questionnaire and for attaching to them some socio-economic variables, concerning mainly the measurement of income, as well as for classification purposes (Eurostat 1994). Nevertheless, after the second wave, Eurostat dropped the concept of household head and started recording relationships using a matrix allowing the specification of mutual relationships between all the members of a household. For this reason or due to simple measurement error, the "reference person" variable presents some problems. First, dependent<sup>36</sup> children appear to be the head of the household, while their parents are present; second, in many cases the household head changes from one wave to another without an obvious reason while the previous household head is still present in the household. Both problems could distort our results, since "fake" household head changes could appear. In order, to correct for these two problems, we have decided to generate a new household head variable, which is based on the "reference persons" variable but controls for the above two problems. In the following paragraph, we describe the algorithm that we developed for the definition of household head.

First, we choose the household head in the first wave that the household appears giving priority to: 1) the reference person and if missing, 2) the reference person in the next wave and if missing, 3) the person responsible for the household accommodation and if missing, 4) the person responsible for the accommodation from the next wave and if missing, 5) the adult individual with the highest personal income and if missing, 6) the oldest individual. If a couple in the household exists, we require that one of the individuals in the couple must be the household head. If the household is a lone parent family, the lone parent must be the head. Then, we keep the household head stable throughout the waves, if the individual is still present in the household. If there is a split and the household head leaves the household or dies, we define the new household head with the same criteria and keep it stable until we have a second head change and so on. In the case that the household head defined in the first wave changes (e.g. because of separation) and then returns back, we consider him/her again to be the household head, in this way we also capture marital reunions.

#### A2.3. Corrections in the marital status and education variables in the ECHP

Another important variable, to which we have made some corrections, in order to improve the quality of our results, is the marital status variable, which "suffered" from serious item non-response. The algorithm we developed consists of five steps: First, we change the missing values in the marital status variable to "married" if the spouse of the individual, can be identified in the relation file, as being present in the household. In the ECHP, there is no distinction between marriage and cohabitation, so all couples identified in a household are classified in the same way. Second, we consider all the dependent children to be "never married" if the value for the marital status variable is missing. Third, if a missing value is surrounded by two valid but same values<sup>37</sup>, we replace the missing value by the valid one. Four, if one or a series of missing values is followed by two or more "never married" values<sup>38</sup>, then all the missings are

<sup>&</sup>lt;sup>36</sup> well define the dependent children based on the economic household typology of the ECHP. Therefore, the dependent child is: an individual aged less than 16 or an individual aged 16-24 that lives with his parents in the same household and he/she is economically inactive and not married.

<sup>&</sup>lt;sup>37</sup> For instance, if the missing pattern is 1 9 1 9 1 1, then the two missing values are changed to 1, if it is 1 1 9 3 3 3 or similar no change is done (1=married, 3=divorced, 9=missing).

<sup>&</sup>lt;sup>38</sup> Such a pattern is: 9 9 9 5 5 5 or 9 9 5 5 1. In this case all the missing could be safely change to "never married". Yet, if the missing pattern is like 9 9 5 1 1 1, it remains unchanged, since "the missing" is followed only by one "never married" value (1=married, 5=never married, 9=missing).

turned to "never married", since an individual that has never been married in t has also never been married in t-1, t-2 etc. Fifth, there are few measurement errors in the marital status variable e.g. an individual that appears to be divorced for a number of waves, might then appear to be "never married". In this case, we compute the frequency of the two values and we change them all to the value the frequency of which prevails<sup>39</sup>.

In case of missing values in the educational variable, we impute the relevant information from the previous or next year or the closest year with a valid value. In case of measurement error in the educational variable (e.g. an individual that appears to have completed higher education in the first three waves, he then appears to have completed primary education), we compute the frequency of the two values in all waves and we change them all to the value of which the frequency prevails. Yet, if more than two different values are involved, no change is made.

The application of the above procedure decreased significantly the number of missing values in both variables and since the process was performed in a "safe" way for not generating mistakes, we believe that the corrections improved the quality of the results. The algorithms for the correction of the "marital status" and the "educational variable", as well as for the reconstruction of household income and the definition of the household head were developed using the programming features of STATA software, and are available from the authors on request.

#### A2.4. Income measures and the reconstruction of household income in the EU-SILC

The main differences between ECHP and EU-SILC with regards to the income components for reconstruction of HH income, are:

In the EU-SILC data a total personal income is not available. Only the sub-components are available. Taxes on income and SSCs are calculated at household level along with tax adjustment. Thus, it is a mistake to use this aggregate variable and lag it one year back and attribute it to the household head, because it is a major variable and would concern another household composition.

The best proxy, in order to reconstruct the household income, in a way similar to the ECHP is to use all individual components net, move them one year back and then add the other variables at household level based on the reference person (household head). Thus, taxes on wealth and the tax adjustment will come from the reference person, but all other income components from the household members.

The tricky issue about the reconstruction is that there is no availability of all net personal income components in all countries. In Table 12, we present the main differences across the EU-SILC countries with regards to the collection of income components at personal and household level in gross and net form. In the countries were net individual income components are not available, the reconsruction of income is not possible.

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<sup>&</sup>lt;sup>39</sup> For example, 3 3 3 5 5. In this case, the value that appears most times prevails and the two fives are changed to three. Yet, if more than two different values are involved e.g. 3 3 3 1 5, no change is made (3=divorced, 5=never married).

Table 12A: EU-SILC Country Participation & Income Components availability in countries AT-ES

VAR	DESCRIPTION	AT	BE	BG	CY	CZ	DK	EE	EL_GR	ES
PY010G	Employee cash or near cash income (gross)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 ok	2004-2011 ok	2004-2006 mis 2007-2011 ok	2004-2011 ok
PY010N	Employee cash or near cash income (net)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 mis	2005-2011 ok	2004-2011 mis	2004-2011 ok	2004-2011 ok	2004-2011 ok
PY021G	Company car (gross)	2004-2011 mis	2004-2011 ok	2006 missing 2007-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 ok	2004-2011 ok	2004 mis 2005-2011 ok	2004-2011 ok
PY021N	Company car (net)	2004-2011 mis	2004-2011 ok	2006 missing 2007-2011 ok	2005-2011 mis	2005-2011 mis	2004-2011 mis	2004-2011 ok	2004-2011 ok	2004-2011 ok
PY050G	Cash benefits or losses from self- employement (gross)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 ok	2004-2011 ok	2004-2006 mis 2007-2011 ok	2004-2011 ok
PY050N	Cash benefits or losses from self- employement (net)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 mis	2005-2011 mis	2004-2011 mis	2004-2011 ok	2004-2011 ok	2004-2011 ok
PY080G	Pensions received from individual private plans (gross)	2004-2011 ok	2004-2011 ok	2006-2007 mis 2008-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 mis	2004-2011 ok	2004-2006 mis 2007-2011 ok	2004-2011 ok
PY080N	Pensions received from individual private plans (net)	2004-2011 ok	2004-2011 ok	2006-2007 mis 2008-2009 ok 2010 missing 2011 ok	2005-2011 mis	2005-2011 ok	2004-2011 mis	2004-2011 ok	2004-2011 ok	2004-2011 ok
PY090G	Unemployment benefits (gross)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 Hils 2005-2011 ok	2005-2011 ok	2004-2011 mis 2004-2011 ok	2004-2011 ok	2004-2011 ok 2004-2006 mis 2007-2011 ok	2004-2011 ok
PY090N	Unemployment benefits (net)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 mis	2004-2011 ok	2004-2011 ok	2004-2011 ok
PY100G	Old-age benefits (gross)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 ok	2004-2011 ok	2004-2006 mis 2007-2011 ok	2004-2011 ok
PY100N	Old-age benefits (net)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 mis	2004-2011 ok	2004-2011 ok	2004-2011 ok
PY110G	Survivor benefits (gross)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 ok	2004-2011 ok	2004-2006 mis 2007-2011 ok	2004-2011 ok
PY110N	Survivor benefits (net)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 mis	2004-2011 ok	2004-2011 ok 2004-2006 mis	2004-2011 ok
PY120G	Sickness benefits (gross)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 ok	2004-2011 ok	2004-2006 mis 2007-2011 ok	2004-2011 ok
PY120N	Sickness benefits (net)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 mis	2004-2011 ok	2004-2011 ok	2004-2011 ok
PY130G	Disability benefits (gross)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 ok	2004-2011 ok	2004-2006 mis 2007-2011 ok	2004-2011 ok
PY130N	Disability benefits (net)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 mis	2004-2011 ok	2004-2011 ok	2004-2011 ok
PY140G	Education-related allowances (gross)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 ok	2004-2011 ok	2004-2006 mis 2007-2011 ok	2004-2011 ok
PY140N	Education-related allowances (net)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 mis	2004-2011 ok	2004-2011 ok	2004-2011 ok
HY040G	Income from rental of a property or land (gross)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 ok	2004-2011 ok	2004-2006 mis 2007-2011 ok	2004-2011 ok
HY040N	Income from rental of a property or land (net)	2004-2011 ok	2004-2011 mis	2006-2011 ok	2005-2011 mis	2005-2011 ok	2004-2011 mis	2004-2011 ok	2004-2011 ok	2004-2011 ok

VAR	DESCRIPTION	AT	BE	BG	CY	CZ	DK	EE	EL_GR	ES
	Family/children related allowances								2004-2006 mis	
HY050G	(gross)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 ok	2004-2011 ok	2007-2011 ok	2004-2011 ok
	Family/children related allowances									
HY050N	(net)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 mis	2004-2011 ok	2004-2011 ok	2004-2011 ok
	Social exclusion not elsewhere								2004-2006 mis	
HY060G	classified (gross)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 ok	2004-2011 ok	2007-2011 ok	2004-2011 ok
LIVOCONI	Social exclusion not elsewhere	2004 2044 1	2004 2044	2006 2044	2005 2044 1	2005 2011	2004 2044	2004 2044 1	2004 2044 1	2004 2044 1
HY060N	classified (net)	2004-2011 ok	2004-2011 mis	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 mis	2004-2011 ok	2004-2011 ok 2004-2006 mis	2004-2011 ok
HY070G	Housing allowances (gross)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 ok	2004-2011 ok	2004-2006 mis 2007-2011 ok	2004-2011 ok
HY070N	Housing allowances (gross)	2004-2011 ok	2004-2011 ok 2004-2011 mis	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 ok 2004-2011 mis	2004-2011 ok	2007-2011 ok	2004-2011 ok
11107011	Regular inter-household cash	2004-2011 OK	2004-2011 11115	2006-2011 OK	2005-2011 OK	2005-2011 OK	2004-2011 11115	2004-2011 OK	2004-2011 0k 2004-2006 mis	2004-2011 OK
HY080G	transfers received (gross)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 ok	2004-2011 ok	2004-2000 mis 2007-2011 ok	2004-2011 ok
	Regular inter-household cash	2001201108	2001 2011 OK	2000 2011 OK	2003 2011 OK	2003 2011 0K	200 1 2011 OK	2001 2011 0K	2007 2011 01	2001 2011 0K
HY080N	transfers received (net)	2004-2011 ok	2004-2011 mis	2006-2011 ok	2005-2011 mis	2005-2011 ok	2004-2011 mis	2004-2011 ok	2004-2011 ok	2004-2011 ok
	Interests, dividents, profits from									
	capital investment in								2004-2006 mis	
HY090G	unincorporated profits (gross)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 ok	2004-2011 ok	2007-2011 ok	2004-2011 ok
	Interests, dividents, profits from									
	capital investment in									
HY090N	unincorporated profits (net)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 mis	2005-2011 mis	2004-2011 mis	2004-2011 ok	2004-2011 ok	2004-2011 ok
HY110G	Income received by people aged	2004-2011 ok	2004 2011 als	2006-2011 ok	200F 2011 als		2004-2011 ok	2004 2011 ok	2004-2006 mis 2007-2011 ok	2004-2011 ok
1111100	under 16 (gross) Income received by people aged	2004-2011 OK	2004-2011 ok	2006-2011 OK	2005-2011 ok		2004-2011 OR	2004-2011 ok	2007-2011 OK	2004-2011 OK
HY110N	under 16 (net)	2004-2011 ok	2004-2011 mis	2006-2011 ok	2005-2011 mis	2005-2011 ok	2004-2011 mis	2004-2011 ok	2004-2011 ok	2004-2011 ok
	Regular taxes on wealth - Household	200 / 2011 011	2001202211110	2000 2011 011	2000 2011 11110	2000 2011 0K	200120111110	200 : 2011 0 K	2004-2006 mis	2004-2009 ok
HY120G	(gross)	2004-2011 mis	2004-2011 mis	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 ok	2004-2011 ok	2007-2011 ok	2010-2011 mis
	Regular taxes on wealth - Household									2004-2009 ok
HY120N	(net)	2004-2011 mis	2004-2011 mis	2006-2011 ok	2005-2011 mis	2005-2011 ok	2004-2011 mis	2004-2011 ok	2004-2011 ok	2010-2011 mis
	Regular inter-household cash								2004-2006 mis	
HY130G	transfer paid (gross)	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 ok	2004-2011 ok	2007-2011 ok	2004-2011 ok
10442001	Regular inter-household cash									
HY130N	transfer paid (net)	2004-2011 ok	2004-2011 mis	2006-2011 ok	2005-2011 mis	2005-2011 ok	2004-2011 mis	2004-2011 ok	2004-2011 ok	2004-2011 ok
HY140G	Tax on income and social insurance	2004 2011 4	2004 2011 4	2006 2011 4	2005 2011 4	2005 2011 6	2004 2014 4	2004 2014 6	2004-2006 mis	2004 2011 -
11140G	contributions (gross)  Tax on income and social insurance	2004-2011 ok	2004-2011 ok	2006-2011 ok	2005-2011 ok	2005-2011 ok	2004-2011 ok	2004-2011 ok	2007-2011 ok	2004-2011 ok 2004-2007 ok
HY140N	contributions (net)	2004-2011 mis	2004-2011 mis	2006-2011 ok	2005-2011 mis	2005-2011 ok	2004-2011 mis	2004-2011 mis	2004-2011 mis	2004-2007 ok 2008-2011 mis
11114014	Repayment/receipts for tax	2004 2011 11115	2004 2011 11115	2000-2011 UK	2003 2011 11115	2003-2011 OK	2004 2011 1115	2004 2011 11115	2004 2011 11115	2000-2011 11113
HY145N	adjustment (net)	2004-2011 ok	2004-2011 mis	2006-2011 mis	2005-2011 mis	2005-2011 mis	2004-2011 mis	2004-2011 ok	2004-2011 ok	2004-2011 ok
	aajasament (net)			2000 2011 11113	2000 2011 1113	2303 2011 AIII	2001 2011 11113	_501	_50 1 Z011 0K	

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Table 12B: EU-SILC Income Components availability in countries FI-LV

VAR	DESCRIPTION	FI	FR	HR	HU	IE	IS	IT	LT	LU	LV
	Employee cash or near		2004 mis					2004-2006 mis		2003 mis	2005-2006 mis
PY010G	cash income (gross)	2004-2011 ok	2005-2011 ok	2010-2011 ok	2005-2011 ok	2004-2009 ok	2004-2011 ok	2007-2011 ok	2005-2011 ok	2004-2011 ok	2007-2011 ok
	Employee cash or near									2003 mis	
PY010N	cash income (net)	2004-2011 mis	2004-2011 ok	2010-2011 ok	2005-2011 mis	2004-2009 ok	2004-2011 mis	2004-2011 ok	2005-2011 ok	2004-2011 ok	2005-2011 ok
						2004-2006 mis	2004-2006 mis	2004-2006 mis	2005-2006 mis		2005-2006 mis
PY021G	Company car (gross)	2004-2011 ok	2004-2011 mis	2010-2011 ok	2005-2011 ok	2007-2009 ok	2007-2011 ok	2007-2011 ok	2007-2011 ok	2003-2011 ok	2007-2011 ok
		2004-2006 mis						2004 mis			
PY021N	Company car (net)	2007-2011 ok	2004-2011 mis	2010-2011 ok	2005-2011 mis	2004-2009 mis	2004-2011 mis	2004-2011 ok	2005-2011 mis	2003-2011 mis	2005-2011 ok
	Cash benefits or losses										
	from self-employement		2004-2005 mis					2004-2006 mis		2003 mis	2005-2006 mis
PY050G	(gross)	2004-2011 ok	2006-2011 ok	2010-2011 ok	2005-2011 ok	2004-2009 ok	2004-2011 ok	2007-2011 ok	2005-2011 ok	2004-2011 ok	2007-2011 ok
	Cash benefits or losses										
	from self-employement									2003 mis	
PY050N	(net)	2004-2011 mis	2004-2011 ok	2010-2011 ok	2005-2011 mis	2004-2009 ok	2004-2011 mis	2004-2011 ok	2005-2011 ok	2004-2011 ok	2005-2011 ok
											2005-2006 mis
	Pensions received from		2004 2005		2005 2040 -1			2004 2006	2005 2006	2002 1-	2007 ok
DV000C	individual private plans	2004 2014 -1-	2004-2005 mis	2010 2011 -1-	2005-2010 ok	2004 2000 -1	2004 2011	2004-2006 mis	2005-2006 mis	2003 mis	2008-2009 mis
PY080G	(gross)	2004-2011 ok	2006-2011 ok	2010-2011 ok	2011 mis	2004-2009 ok	2004-2011 mis	2007-2011 ok	2007-2011 ok	2004-2011 ok	2010-2011 ok 2005-2006 mis
	Pensions received from										2005-2006 mis 2007 ok
	individual private plans	2004-2010 ok								2003 mis	2007 0k 2008-2009 mis
PY080N	(net)	2011 mis	2004-2011 ok	2010-2011 ok	2005-2011 mis	2004-2009 ok	2004-2011 mis	2004-2011 ok	2005-2011 mis	2003 ms 2004-2011 ok	2010-2011 ok
FTOODIN	Unemployment benefits	201111115	2004-2011 0K 2004 mis	2010-2011 UK	2005-2010 ok	2004-2009 UK	2004-2011 11113	2004-2011 0k 2004-2006 mis	2003-2011 11113	2004-2011 0k 2003 mis	2005-2011 0k
PY090G	(gross)	2004-2011 ok	2005-2011 ok	2010-2011 ok	2003-2010 0k 2011 mis	2004-2009 ok	2004-2011 ok	2004-2000 mis 2007-2011 ok	2005-2011 ok	2004-2011 ok	2007-2011 ok
110300	Unemployment benefits	2004 2011 OK	2003 2011 OK	2010 2011 OK	2011 11113	2004 2003 OK	2004 2011 OK	2007 2011 OK	2003 2011 OK	2003 mis	2007 2011 OK
PY090N	(net)	2004-2011 mis	2004-2011 ok	2010-2011 ok	2005-2011 mis	2004-2009 ok	2004-2011 mis	2004-2011 ok	2005-2011 ok	2004-2011 ok	2005-2011 ok
1 103014	(net)	2004 2011 11113	2004-2011 0K	2010 2011 OK	2005-2011 mis	2004 2003 OK	2004 2011 11113	2004-2011 ok 2004-2006 mis	2003 2011 OK	2003 mis	2005-2006 mis
PY100G	Old-age benefits (gross)	2004-2011 ok	2006-2011 ok	2010-2011 ok	2011 mis	2004-2009 ok	2004-2011 ok	2007-2011 ok	2005-2011 ok	2004-2011 ok	2007-2011 ok
	Grande Seriente (Bress)	200 / 2011 01	2000 2011 011	2010 2011 011	2011 11110	200 : 2005 01	200 : 2011 0::	2007 2011 011	2005 2011 011	2003 mis	2007 2011 011
PY100N	Old-age benefits (net)	2004-2011 mis	2004-2011 ok	2010-2011 ok	2005-2011 mis	2004-2009 ok	2004-2011 mis	2004-2011 ok	2005-2011 mis	2004-2011 ok	2005-2011 ok
			2004-2005 mis		2005-2010 ok			2004-2006 mis		2003 mis	2005-2006 mis
PY110G	Survivor benefits (gross)	2004-2011 ok	2006-2011 ok	2010-2011 ok	2011 mis	2004-2009 ok	2004-2011 ok	2007-2011 ok	2005-2011 ok	2004-2011 ok	2007-2011 ok
	(8 )									2003 mis	
PY110N	Survivor benefits (net)	2004-2011 mis	2004-2011 ok	2010-2011 ok	2005-2011 mis	2004-2009 ok	2004-2011 mis	2004-2011 ok	2005-2011 mis	2004-2011 ok	2005-2011 ok
	,,		2004-2006 mis		2005-2010 ok				2005-2006 mis	2003 mis	2005-2006 mis
PY120G	Sickness benefits (gross)	2004-2011 ok	2007-2011 ok	2010-2011 ok	2011 mis	2004-2009 ok	2004-2011 ok	2004-2011 mis	2007-2011 ok	2004-2011 ok	2007-2011 ok
	,			2010 mis					2005-2006 mis	2003 mis	
PY120N	Sickness benefits (net)	2004-2011 mis	2004-2011 ok	2011 ok	2005-2011 mis	2004-2009 ok	2004-2011 mis	2004-2011 mis	2007-2011 ok	2004-2011 ok	2005-2011 ok
	Disability benefits		2004-2005 mis		2005-2010 ok			2004-2006 mis		2003 mis	2005-2006 mis
PY130G	(gross)	2004-2011 ok	2006-2011 ok	2010-2011 ok	2011 mis	2004-2009 ok	2004-2011 ok	2007-2011 ok	2005-2011 ok	2004-2011 ok	2007-2011 ok
										2003 mis	
PY130N	Disability benefits (net)	2004-2011 mis	2004-2011 ok	2010-2011 ok	2005-2011 mis	2004-2009 ok	2004-2011 mis	2004-2011 ok	2005-2011 mis	2004-2011 ok	2005-2011 ok
PY140G	Education-related	2004-2011 ok	2004-2006 mis	2010-2011 ok	2005-2010 ok	2004-2009 ok	2004-2011 ok	2004-2006 mis	2005-2011 ok	2003 mis	2005-2006 mis

VAR	DESCRIPTION	FI	FR	HR	HU	IE	IS	IT	LT	LU	LV
	allowances (gross)		2007-2011 ok		2011 mis			2007-2011 ok		2004-2011 ok	2007-2011 ok
	Education-related			2010 mis						2003 mis	
PY140N	allowances (net)	2004-2011 mis	2004-2011 ok	2011 ok	2005-2011 mis	2004-2009 ok	2004-2011 mis	2004-2011 ok	2005-2011 mis	2004-2011 ok	2005-2011 ok
	Income from rental of a		2004-2006 mis		2005-2010 ok			2004-2006 mis		2003 mis	2005-2006 mis
HY040G	property or land (gross)	2004-2011 ok	2007-2011 ok	2010-2011 ok	2011 mis	2004-2009 ok	2004-2011 ok	2007-2011 ok	2005-2011 ok	2004-2011 ok	2007-2011 ok
										2003 mis	
	Income from rental of a									2004-2005 ok	
HY040N	property or land (net)	2004-2011 mis	2004-2011 ok	2010-2011 ok	2005-2011 mis	2004-2009 ok	2004-2011 mis	2004-2011 ok	2005-2011 ok	2006-2011 mis	2005-2011 ok
	Family/children related		2004 mis		2005-2010 ok			2004-2006 mis		2003 mis	2005-2006 mis
HY050G	allowances (gross)	2004-2011 ok	2005-2011 ok	2010-2011 ok	2011 mis	2004-2009 ok	2004-2011 ok	2007-2011 ok	2005-2011 ok	2004-2011 ok	2007-2011 ok
	Family/children related									2003 mis	
HY050N	allowances (net)	2004-2011 mis	2004-2011 ok	2010-2011 ok	2005-2011 mis	2004-2009 ok	2004-2011 mis	2004-2011 ok	2005-2011 ok	2004-2011 ok	2005-2011 ok
	Social exclusion not										
	elsewhere classified		2004-2006 mis		2005-2010 ok			2004-2006 mis		2003 mis	2005-2006 mis
HY060G	(gross)	2004-2011 ok	2007-2011 ok	2010-2011 ok	2011 mis	2004-2009 ok	2004-2011 ok	2007-2011 ok	2005-2011 ok	2004-2011 ok	2007-2011 ok
	Social exclusion not										
	elsewhere classified									2003 mis	
HY060N	(net)	2004-2011 mis	2004-2011 ok	2010-2011 ok	2005-2011 mis	2004-2009 ok	2004-2011 mis	2004-2011 ok	2005-2011 mis	2004-2011 ok	2005-2011 ok
	Housing allowances		2004-2005 mis		2005-2010 ok			2004-2006 mis		2003 mis	2005-2006 mis
HY070G	(gross)	2004-2011 ok	2006-2011 ok	2010-2011 ok	2011 mis	2004-2009 ok	2004-2011 ok	2007-2011 ok	2005-2011 ok	2004-2011 ok	2007-2011 ok
	Housing allowances									2003 mis	
HY070N	(net)	2004-2011 mis	2004-2011 ok	2010-2011 ok	2005-2011 mis	2004-2009 ok	2004-2011 mis	2004-2011 ok	2005-2011 mis	2004-2011 ok	2005-2011 ok
	Regular inter-household										
	cash transfers received		2004-2005 mis		2005-2010 ok			2004-2006 mis		2003 mis	2005-2006 mis
HY080G	(gross)	2004-2011 ok	2006-2011 ok	2010-2011 ok	2011 mis	2004-2009 ok	2004-2011 ok	2007-2011 ok	2005-2011 ok	2004-2011 ok	2007-2011 ok
	Regular inter-household										
	cash transfers received										
HY080N	(net)	2004-2011 mis	2004-2011 ok	2010-2011 ok	2005-2011 mis	2004-2009 ok	2004-2011 mis	2004-2011 ok	2005-2011 mis	2003-2011 mis	2005-2011 ok
	Interests, dividents,										
	profits from capital										
	investment in										
	unincorporated profits	2004 2044 1	2004-2006 mis	2040 2044 1	2005-2010 ok	2004 2000 1	2004 2044 1	2004-2006 mis	2005 2044	2003 mis	2005-2006 mis
HY090G	(gross)	2004-2011 ok	2007-2011 ok	2010-2011 ok	2011 mis	2004-2009 ok	2004-2011 ok	2007-2011 ok	2005-2011 ok	2004-2011 ok	2007-2011 ok
	Interests, dividents,										
	profits from capital investment in										
HY090N	unincorporated profits	2004 2011 mic	2004-2011 ok	2010-2011 ok	2005 2011 mis	2004-2009 ok	2004-2011 mis	2004-2011 ok	2005-2011 ok	2002 2011 mis	2005-2011 ok
H T U 9 U N	(net)	2004-2011 mis	2004-2011 UK	2010-2011 UK	2005-2011 mis	2004-2009 UK	2004-2011 11115	2004-2011 UK	2003-2011 UK	2003-2011 mis	2003-2011 UK
	Income received by										
	people aged under 16		2004-2006 mis		2005-2010 ok	2004 mis		2004-2006 mis		2003 mis	2005-2006 mis
HY110G	(gross)	2004-2011 ok	2007-2011 ok	2010-2011 ok	2011 mis	2005-2009 ok	2004-2011 ok	2007-2011 ok	2005-2011 ok	2004-2011 ok	2007-2011 ok
	Income received by	230 1 2011 3K	2007 2011 OK	2010 2011 0K	201111110	2003 2003 SK	2001 2011 OK	2007 2011 OK	2000 2011 0K	2001 2011 0K	2007 2011 01
	people aged under 16					2005 mis				2003 mis	
HY110N	(net)	2004-2011 mis	2004-2011 ok	2010-2011 ok	2005-2011 mis	2005-2009 ok	2004-2011 mis	2004-2011 ok	2005-2011 ok	2004-2011 ok	2005-2011 ok
11111014	(Het)	2004-2011 11115	2004-2011 OK	2010-2011 OK	2003-2011 (1115	2003-2003 UK	2004-2011 (111)	2004-2011 UK	2003-2011 OK	2004-2011 OK	2003-2011 OK

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VAR	DESCRIPTION	FI	FR	HR	HU	IE	IS	IT	LT	LU	LV
	Regular taxes on wealth		2004-2006 mis		2005-2010 ok			2004-2006 mis		2003 mis 2004-2007 ok	2005-2006 mis
HY120G	- Household (gross)	2004-2011 ok	2007-2011 ok	2010-2011 ok	2011 mis	2004-2009 mis	2004-2011 ok	2007-2011 ok	2005-2011 ok	2008-2011 mis	2007-2011 ok
HY120N	Regular taxes on wealth - Household (net)	2004-2011 mis	2004-2011 ok	2010-2011 ok	2005-2011 mis	2004-2009 mis	2004-2011 mis	2004-2011 ok	2005-2011 mis	2003-2011 mis	2005-2011 ok
HY130G	Regular inter-household cash transfer paid (gross)	2004-2011 ok	2004-2005 mis 2006-2011 ok	2010-2011 ok	2005-2010 ok 2011 mis	2004-2009 ok	2004-2011 ok	2004-2006 mis 2007-2011 ok	2005-2011 ok	2003-2011 ok	2005-2006 mis 2007-2011 ok
HY130N	Regular inter-household cash transfer paid (net)	2004-2011 mis	2004-2011 ok	2010-2011 ok	2005-2011 mis	2004-2009 ok	2004-2011 mis	2004-2011 ok	2005-2011 mis	2003-2011 mis	2005-2011 ok
HY140G	Tax on income and social insurance contributions (gross)	2004-2011 ok	2004-2005 mis 2006-2011 ok	2010-2011 ok	2005-2010 ok 2011 mis	2004-2009 ok	2004-2011 ok	2004-2006 mis 2007-2011 ok	2005-2011 ok	2003-2011 ok	2005-2006 mis 2007-2011 ok
	Tax on income and social insurance contributions										
HY140N	(net)	2004-2011 mis	2004-2011 mis	2010-2011 ok	2005-2011 mis	2004-2009 ok	2004-2011 mis	2004-2011 mis	2005-2011 mis	2003-2011 mis	2005-2011 ok
HY145N	Repayment/receipts for tax adjustment (net)	2004-2011 mis	2004-2011 ok	2010 mis 2011 ok	2005-2011 mis	2004-2009 ok	2004-2011 mis	2004-2011 ok	2005-2011 mis	2003 mis 2004-2011 ok	2005-2011 mis

## Table 12C: EU-SILC Income Components availability in countries MT-UK

VAR	DESCRIPTION	MT	NL	NO	PL	PT	RO	SE	SI	SK	UK
	Employee cash or near					2004-2006 mis					
PY010G	cash income (gross)	2006-2011 ok	2005-2011 ok	2004-2011 ok	2005-2011 ok	2007-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 ok	2005-2011 ok
	Employee cash or near										
PY010N	cash income (net)	2006-2011 mis	2005-2011 mis	2004-2011 mis	2005-2011 ok	2004-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 mis	2005-2011 mis
				2004 mis							
				2005-2006 ok		2004-2007 ok					
				2007 mis		2008-2009 mis					
PY021G	Company car (gross)	2006-2011 ok	2005-2011 ok	2008-2011 ok	2005-2011 ok	2010-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 ok	2005-2011 ok
						2004-2006 mis					
						2007 ok					
						2008-2009 mis					
PY021N	Company car (net)	2006-2011 mis	2005-2011 mis	2004-2011 mis	2005-2011 ok	2010-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 mis	2005-2011 mis
	Cash benefits or losses										
	from self-employement					2004-2006 mis					
PY050G	(gross)	2006-2011 ok	2005-2011 ok	2004-2011 ok	2005-2011 ok	2007-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 ok	2005-2011 ok
	Cash benefits or losses										
	from self-employement										
PY050N	(net)	2006-2011 mis	2005-2011 mis	2004-2011 mis	2005-2011 ok	2004-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 mis	2005-2011 mis
	Pensions received from				2005-2009 ok						
	individual private plans				2010 mis	2004-2006 mis					
PY080G	(gross)	2006-2011 ok	2005-2011 ok	2004-2011 ok	2011 ok	2007-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 ok	2005-2011 ok

VAR	DESCRIPTION	MT	NL	NO	PL	PT	RO	SE	SI	SK	UK
	Pensions received from				2005-2009 ok						
	individual private plans				2010 mis						
PY080N	(net)	2006-2011 mis	2005-2011 mis	2004-2011 mis	2011 ok	2004-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 mis	2005-2011 mis
	Unemployment benefits					2004-2006 mis					
PY090G	(gross)	2006-2011 ok	2005-2011 ok	2004-2011 ok	2005-2011 ok	2007-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 ok	2005-2011 ok
	Unemployment benefits										
PY090N	(net)	2006-2011 mis	2005-2011 mis	2004-2011 mis	2005-2011 ok	2004-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 mis	2005-2011 mis
						2004-2006 mis					
PY100G	Old-age benefits (gross)	2006-2011 ok	2005-2011 ok	2004-2011 ok	2005-2011 ok	2007-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 ok	2005-2011 ok
PY100N	Old-age benefits (net)	2006-2011 mis	2005-2011 mis	2004-2011 mis	2005-2011 ok	2004-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 mis	2005-2011 mis
						2004-2006 mis					
PY110G	Survivor benefits (gross)	2006-2011 ok	2005-2011 ok	2004-2011 ok	2005-2011 ok	2007-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 ok	2005-2011 ok
PY110N	Survivor benefits (net)	2006-2011 mis	2005-2011 mis	2004-2011 mis	2005-2011 ok	2004-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 mis	2005-2011 mis
						2004-2006 mis					
PY120G	Sickness benefits (gross)	2006-2011 ok	2005-2011 ok	2004-2011 ok	2005-2011 ok	2007-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 ok	2005-2011 ok
PY120N	Sickness benefits (net)	2006-2011 mis	2005-2011 mis	2004-2011 mis	2005-2011 ok	2004-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 mis	2005-2011 mis
	Disability benefits					2004-2006 mis					
PY130G	(gross)	2006-2011 ok	2005-2011 ok	2004-2011 ok	2005-2011 ok	2007-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 ok	2005-2011 ok
PY130N	Disability benefits (net)	2006-2011 mis	2005-2011 mis	2004-2011 mis	2005-2011 ok	2004-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 mis	2005-2011 mis
	Education-related					2004-2006 mis					
PY140G	allowances (gross)	2006-2011 ok	2005-2011 ok	2004-2011 ok	2005-2011 ok	2007-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 ok	2005-2011 ok
	Education-related										
PY140N	allowances (net)	2006-2011 mis	2005-2011 mis	2004-2011 mis	2005-2011 ok	2004-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 mis	2005-2011 mis
	Income from rental of a					2004-2006 mis					
HY040G	property or land (gross)	2006-2011 ok	2005-2011 ok	2004-2011 ok	2005-2011 ok	2007-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 ok	2005-2011 ok
	1.						2007-2009 ok				
	Income from rental of a	2006 2011	2005 2044	2004 2044	2005 2044	2004 2044 1	2010 mis	2004 2044 1	2005 2044 1	2005 2011	2005 2044
HY040N	property or land (net)	2006-2011 mis	2005-2011 mis	2004-2011 mis	2005-2011 ok	2004-2011 ok	2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 mis	2005-2011 mis
111/0500	Family/children related	2006 2011	2005 2011	2004 2044 1	2005 2044 1	2004-2006 mis	2007 2044 1	2004 2044 1	2005 2044 1	2005 2044	2005 2044 1
HY050G	allowances (gross)	2006-2011 ok	2005-2011 ok	2004-2011 ok	2005-2011 ok	2007-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 ok	2005-2011 ok
	Family /abilduan valated						2007-2009 ok				
HY050N	Family/children related	2006 2011 mis	2005-2011 mis	2004-2011 mis	2005 2011 ok	2004 2011 ok	2010 mis	2004 2011 als	2005 2011 ok	2005-2011 mis	2005 2011 mis
HTUSUN	allowances (net) Social exclusion not	2006-2011 mis	2005-2011 11115	2004-2011 11115	2005-2011 ok	2004-2011 ok	2011 ok	2004-2011 ok	2005-2011 ok	2003-2011 11115	2005-2011 mis
	elsewhere classified					2004-2006 mis					
HY060G	(gross)	2006-2011 ok	2005-2011 ok	2004-2011 ok	2005-2011 ok	2004-2006 mis 2007-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 ok	2005-2011 ok
1110000	Social exclusion not	2000-2011 0K	2003-2011 0K	2004-2011 UK	2003-2011 UK	2007-2011 UK	2007-2011 UK	2004-2011 OK	2003-2011 UK	2003-2011 UK	2003-2011 OK
	elsewhere classified										
HY060N	(net)	2006-2011 mis	2005-2011 mis	2004-2011 mis	2005-2011 ok	2004-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 mis	2005-2011 mis
11100014	Housing allowances	1000 1011 11113	1000 2011 11113	2001 2011 11113	2003 2011 OK	2004-2011 ok 2004-2006 mis	2007 2011 OK	_00 : 2011 0K	2003 2011 OK	2000 2011 11113	LOUD EUTI IIIIS
HY070G	(gross)	2006-2011 ok	2005-2011 ok	2004-2011 ok	2005-2011 ok	2004-2000 mis 2007-2011 ok	2007-2011 mis	2004-2011 ok	2005-2011 ok	2005-2011 ok	2005-2011 ok
	Housing allowances										
HY070N	(net)	2006-2011 mis	2005-2011 mis	2004-2011 mis	2005-2011 ok	2004-2011 ok	2007-2011 mis	2004-2011 ok	2005-2011 ok	2005-2011 mis	2005-2011 mis
	Regular inter-household				2000 2011 OK			200 : 2011 OK	2000 2011 011	2000 2022 11113	2000 2022 11110
	cash transfers received					2004-2006 mis					
HY080G	(gross)	2006-2011 ok	2005-2011 ok	2004-2011 ok	2005-2011 ok	2007-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 ok	2005-2011 ok
	1 10/					011 0.1	0				

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VAR	DESCRIPTION	MT	NL	NO	PL	PT	RO	SE	SI	SK	UK
	Regular inter-household										
	cash transfers received										
HY080N	(net)	2006-2011 mis	2005-2011 mis	2004-2011 mis	2005-2011 ok	2004-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 mis	2005-2011 mis
	Interests, dividents,										
	profits from capital										
	investment in unincorporated profits					2004-2006 mis					
HY090G	(gross)	2006-2011 ok	2005-2011 ok	2004-2011 ok	2005-2011 ok	2004-2006 mis 2007-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 ok	2005-2011 ok
1110300	Interests, dividents,	2000-2011 OK	2003-2011 OK	2004-2011 OK	2003-2011 OK	2007-2011 OK	2007-2011 OK	2004-2011 OK	2003-2011 OK	2003-2011 OK	2003-2011 OK
	profits from capital										
	investment in										
	unincorporated profits										
HY090N	(net)	2006-2011 mis	2005-2011 mis	2004-2011 mis	2005-2011 ok	2004-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 mis	2005-2011 mis
	Income received by	2006-2007 ok									
	people aged under 16	2008-2009 mis				2004-2006 mis					
HY110G	(gross)	2010-2011 ok	2005-2011 ok	2004-2011 ok	2005-2011 ok	2007-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 ok	2005-2011 ok
	Income received by people aged under 16										
HY110N	(net)	2006-2011 mis	2005-2011 mis	2004-2011 mis	2005-2011 ok	2004-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 mis	2005-2011 mis
11111014	Regular taxes on wealth	2000 2011 11113	2003 2011 11113	2004 2011 11113	2003 2011 OK	2004-2011 ok 2004-2006 mis	2007 2011 OK	2004 2011 0K	2003 2011 OK	2003 2011 11113	2003 2011 11113
HY120G	- Household (gross)	2006-2011 mis	2005-2011 mis	2004-2011 mis	2005-2011 ok	2007-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 ok	2005-2011 ok
	Regular taxes on wealth										
HY120N	- Household (net)	2006-2011 mis	2005-2011 mis	2004-2011 mis	2005-2011 ok	2004-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 mis	2005-2011 mis
11112011	Regular inter-household	2000 2011 11113	2003 2011 11113	2004 2011 11113	2003 2011 OK	2004 2011 OK	2007 2011 OK	2004 2011 OK	2003 2011 OK	2003 2011 11113	2003 2011 11113
	cash transfer paid					2004-2006 mis					
HY130G	(gross)	2006-2011 ok	2005-2011 ok	2004-2011 ok	2005-2011 ok	2007-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 ok	2005-2011 ok
	Regular inter-household										
HY130N	cash transfer paid (net)	2006-2011 mis	2005-2011 mis	2004-2011 mis	2005-2011 ok	2004-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 mis	2005-2011 mis
	Tax on income and social										
	insurance contributions					2004-2006 mis					
HY140G	(gross)	2006-2011 ok	2005-2011 ok	2004-2011 ok	2005-2011 ok	2007-2011 ok	2007-2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 ok	2005-2011 ok
	Tax on income and social						2007-2009 ok				
	insurance contributions						2010 mis				
HY140N	(net)	2006-2011 mis	2005-2011 mis	2004-2011 mis	2005-2011 ok	2004-2011 mis	2011 ok	2004-2011 ok	2005-2011 ok	2005-2011 mis	2005-2011 mis
LIVATATA	Repayment/receipts for	2006 2011 ***	2005 2011 min	2004 2011 ***	2005 2011 61	2004-2006 mis	2007-2009 ok	2004 2011 ***	2005 2011 61	2005 2011 ***	2005 2011 mile
HY145N	tax adjustment (net)	2006-2011 mis	2005-2011 mis	2004-2011 mis	2005-2011 ok	2007-2011 ok	2010-2011 mis	2004-2011 mis	2005-2011 ok	2005-2011 mis	2005-2011 mis

# ImPRovE: Poverty Reduction in Europe. Social Policy and Innovation

Poverty Reduction in Europe: Social Policy and Innovation (ImPRovE) is an international research project that brings together ten outstanding research institutes and a broad network of researchers in a concerted effort to study poverty, social policy and social innovation in Europe. The ImPRovE project aims to improve the basis for evidence-based policy making in Europe, both in the short and in the long term. In the short term, this is done by carrying out research that is directly relevant for policymakers. At the same time however, ImPRovE invests in improving the long-term capacity for evidence-based policy making by upgrading the available research infrastructure, by combining both applied and fundamental research, and by optimising the information flow of research results to relevant policy makers and the civil society at large.

The two central questions driving the ImPRovE project are:

How can social cohesion be achieved in Europe?

How can social innovation complement, reinforce and modify macro-level policies and vice versa?

The project runs from March 2012 till February 2016 and receives EU research support to the amount of Euro 2.7 million under the 7<sup>th</sup> Framework Programme. The output of ImPRovE will include over 55 research papers, about 16 policy briefs and at least 3 scientific books. The ImPRovE Consortium will organise two international conferences (Spring 2014 and Winter 2015). In addition, ImPRovE will develop a new database of local projects of social innovation in Europe, cross-national comparable reference budgets for 6 countries (Belgium, Finland, Greece, Hungary, Italy and Spain) and will strongly expand the available policy scenarios in the European microsimulation model EUROMOD.

More detailed information is available on the website http://improve-research.eu.

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