

Youth Poverty in Europe¹

Young adulthood is a stage of life characterised by dramatically changing circumstances for many individuals. Around the middle of the 20th century, the transition to adulthood was typically a rather brief and well-structured phase of the life cycle, but in recent decades it has become considerably more complex, and in many countries more protracted. Among the population as a whole, many events which figure prominently in the transition to adulthood have been shown to be importantly related to the risk of poverty: finding (or failing to find) employment, child-bearing, union formation and changes in living arrangements (Aassve *et al.* 2006; Fahmy 2006). However, very few studies have been made of the impact of these events among the group in which they are arguably most common: young adults. The very fact that European countries differ

widely in these demographic behaviours, suggest that also youth poverty will differ significantly. Taking the median age when young individuals gain residential independence in different European countries as an example (Figure 1) proves the point.

The rectangular points indicate the median age at which young adults start to live alone. Early home-leaving is much more common in the Scandinavian countries and the UK, while leaving home occurs much later in the Southern European countries and Ireland. There are significant country differences in other demographic behaviours as well, but the age of leaving home is particularly noticeable.

Next, consider the poverty rates among the age group of 20 – 24 year olds² that live with parents from those who do not. The former is given by the left hand side bar, the latter by the right hand side bar. It is clear that everywhere, young people who have left home are more likely to be poor than those who remain living with their parents. But again we see some very interesting differences across countries. For those living at home, young people in the Scandinavian countries are least likely to be poor, while those in the southern countries are most likely to



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1: This note is a shortened version of a previously published paper in the *Journal of European Population* 2007, (Springer). The work forms part of the project "Poverty among Youth: International Lessons for the UK", funded by the Joseph Rowntree Foundation Grant no. 803554 under the Ladders Out Of Poverty programme. The ECHP data used in the analysis were produced and made available by Eurostat. All errors and inconsistencies in the paper are our own.

2: For simplicity, we consider here the age group of 20 – 24 year olds only. The patterns for older age groups are similar, though by age 30, not many Scandinavians are recorded as living at home any longer. Aassve *et al.* 2007b provides further details of these patterns.

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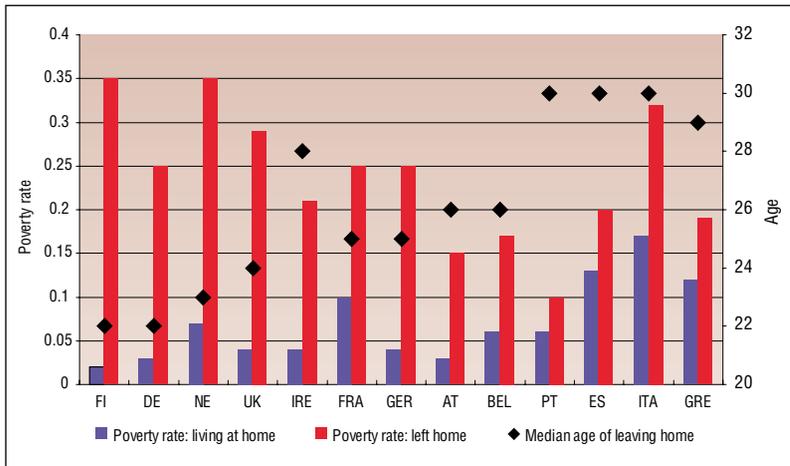


Figure 1. Poverty rates by residential status and median age of leaving home

Source: Iacovou (2002) using ECHP for 1994.

be poor. Among those *living away* from home, the pattern is reversed, with young Scandinavians more likely to be poor than those in the southern countries. Figure 1 shows that the increased probability of being poor associated with having left home is highest in those countries where leaving home occurs earlier and lowest in those countries where it typically occurs later. The data used to produce these figures is derived from the European Community Household Panel (ECHP), a set of comparable large-scale longitudinal studies set up and funded by the European Union. The data has a number of advantages, among them, that it provides probably the best opportunity to date for meaningful cross-country comparisons using micro-level information.

As is clear from these data sources, there is a strong relationship between independent living and youth poverty. In order to understand why this is so, it is necessary to understand how poverty is normally defined. The standard way is to take the sum of all household members' net income and divide this by an equivalence scale, the purpose being to account for economies of scale in the household (that is, two people can live more cheaply sharing a household dwelling than one person living on her own)³. Next, the poverty threshold is defined as the median of the net equivalised household income for a given country in a given year. If then, the income of a given household falls below this threshold, the household and all the individuals living in it, are deemed poor. Despite many drawbacks, this remains the standard way of measuring poverty in Europe. This way of constructing a poverty status variable warrants a few comments. First, it is clear that with this definition, eradicating poverty *totally* is pretty much impossible. Second, poverty measured in this way also reflects income inequality in the country of interest. The most important implication for the relationship between independent living and youth poverty is that as young individuals leave the parental home, their household income will in most cases fall, often dramatically so, simply because

3: Whereas the equivalence scale matters for the poverty level, it does not impact the poverty ranking of countries. In our application, the equivalence scale will affect the estimate of leaving home on entering poverty in a particular country, but it will not affect the comparative perspective. We use the modified OECD equivalence scale which is a common choice in poverty studies.

their parents' income do not longer count in the household income of the young individual. The parental home acts therefore as an important shelter against poverty. This raises the very interesting question: why are there such strong differences in leaving home and youth poverty across European nations? Why do young individuals in Scandinavian countries decide to leave home at such an early age when it clearly increases the risk entering poverty, at least for a short time? Why not stay at home longer, as their Mediterranean counterparts do, and thereby avoid poverty?

To answer these questions, let us introduce a statistical tool for assessing the different effects of leaving home on entering poverty, again using our ECHP data. We are interested in estimating the effect of leaving home on poverty entry, *net* of other observed factors which influence the likelihood of entering poverty. Ideally, we would like to compare the risk of poverty for individuals leaving home, with the risk for the *same* individuals if they did *not* leave home (the 'counterfactual' situation). The problem is, of course, that for any given individual the two scenarios are mutually exclusive (a person cannot leave home and stay at home at the same time), preventing a direct comparison between the two. Instead, we use a simple matching technique where we compare individuals leaving home with others who stay at home, but are similar in all available characteristics (Rosenbaum and Rubin 1983). The method can be explained as follows: youths who are observed living in the parental home in time period t are divided into two groups: 1) $D_i = 1$ those who left home by time $t+1$ (the 'treatment'), and 2) $D_i = 0$, a 'control' group (those who were still living at home at $t+1$). Each youth in the 'treatment' group is then paired with one or more youths in the 'control' group, who are as similar as possible in terms of a range of observable characteristics *measured prior to the event*, and the difference between groups in the outcome variable (in this case poverty in year $t+1$) is measured. If the differences in characteristics between the 'treatment' and 'control' groups are captured by the observable covariates, then matching methods yield an unbiased estimate of the average impact of leaving home on the treated individuals, i.e. those who actually left home (see Aassve *et al.* 2007a and 2007b for further details). There are several different algorithms by which individuals may be matched: these are explained in Becker and Ichino (2002), Smith and Todd (2005) and Caliendo and Kopeinig (2005).

To understand this better, we may think of an outcome \mathcal{Y} , defined under two observed or hypothetical scenarios: \mathcal{Y}^1 , which is the outcome in the case that the young person receives the treatment, and \mathcal{Y}^0 , which is the outcome in the case that he or she does not receive the treatment.

| | Outcome if leaves home | Outcome if stays at home |
|---------------------------|--|--|
| Treatment group (leavers) | $\mathcal{Y}^1 \mid D=1$ (observed) | $\mathcal{Y}^0 \mid D=1$ (unobserved) |
| Control group (stayers) | $\mathcal{Y}^1 \mid D=0$ (unobserved) | $\mathcal{Y}^0 \mid D=0$ (observed) |

We are interested in the effect of the 'treatment' on both the treatment and the control groups. For the treatment group, this effect is termed *ATT* (Average Treatment Effect on the Treated) and measures the differ-

ence between the average outcome measure for those who leave home, and the average outcome measure for the same group under the hypothetical scenario that they had not left home. Another useful statistic is the Average Treatment Effect on the Controls (*ATC*), which measures the effect of leaving home on entering poverty for those staying at home – if they had instead left home. This measure refers to the group who does not leave home, and estimates the difference between the average outcome measure in (a) the hypothetical case that they did leave home, and (b) the actual case in which they did not leave home.

Under the assumption of homogeneous treatment effect, *ATT* and *ATC* should give the same results. However, this is rarely the case. Heckman et al. (1997) have shown that treatment effects are rarely homogeneous. In our setting, it was not clear a priori which way the selection effect would go. It may be that young adults who would face a higher risk of poverty if they left home are more likely to stay home for longer because they are aware of this higher risk. This would imply that the ‘true’, ‘causal’ effect of leaving home was actually higher than that suggested by the unadjusted relationship between home-leaving and poverty rates. On the other hand, it may be that certain characteristics are associated with *both* a higher propensity to leave the parental home *and* a higher risk of poverty on leaving home. In this case, the raw figures would exaggerate the extra risk of poverty experienced by home-leavers, and the effect attributable to the home-leaving event would be lower.

Figure 2 plots *ATTs* for each country against the proportion of young people living independently in each country. There is a clear correlation: in those countries where home-leaving occurs early, the extra risk of poverty associated with the home-leaving event is higher, whereas in those countries where home-leaving occurs later, the associated extra risk of poverty is lower. Thus age is likely to be an important driver behind the observed patterns. Since in Finland (and other Scandinavian countries), young individuals leave home at such young age, they are also more likely to experience poverty.

Figure 3 plots the two sets of estimates for each country. In Finland and Denmark, the *ATT* is higher than the *ATC*, implying that young people who remain living at home would actually face a *lower* risk of falling into

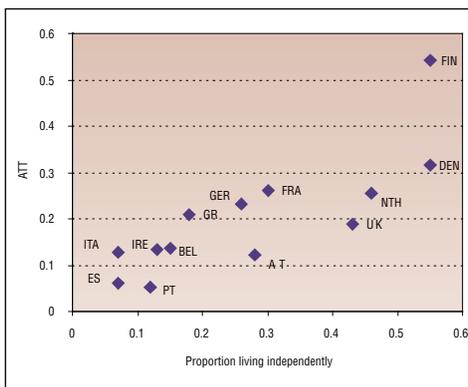


Figure 2. Percentage living independently vs ATT 20–24
Source: Aassve et al. (2007b)

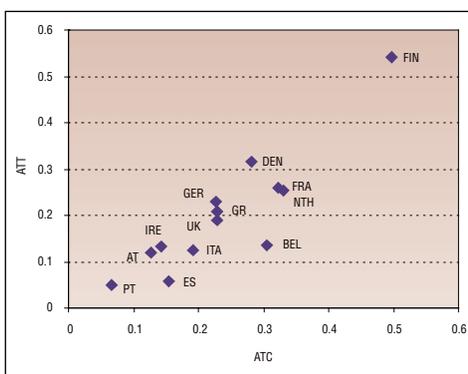


Figure 3. ATC against ATT 20–24

poverty if they left home, than those who actually leave home. This is highly counter-intuitive, since if young adults as a group were behaving as rational economic agents, one would expect those with a lower risk of poverty to leave home. In all other countries, this is in fact the case: either by a small margin (Portugal, Austria, Ireland and Germany) or by a more substantial margin (all other countries: the margin is greatest in Belgium and Spain, but is also sizeable in Italy).

The results therefore leave us with two puzzles to explain. First, why do we observe the earliest home-leaving in precisely those countries where young people lose the most, financially speaking, by leaving home? And second, how do we explain the highly counter-intuitive result that in some countries home-leavers have a *higher* risk of poverty than stayers? By comparing estimates of *ATT* and *ATC*, we find that in most cases the former is smaller than the latter, which is the result we would expect: young adults tend to stay at home if leaving home increases the poverty risk. As a result, our analysis shows that young individuals do take into account perceived poverty risk (or their financial circumstances) when making decisions about leaving home. In other words, young individuals opt to stay at home longer as a means to avoid economic hardship. Interestingly, this is not the case for Finland and Denmark. In these two cases, *ATT* is slightly larger than the *ATC*, implying that young adults choose to leave home, despite the fact that the likelihood of experiencing poverty would have been lower if they had stayed at home. In essence, this means that in those countries where young adults have the most to lose, they also leave home earlier. Moreover, in these very same countries, poverty would have been lower, had they not chosen to leave home. Whereas past studies have focussed on explaining why young individuals in Mediterranean countries leave home so *late*, perhaps the more relevant question in this setting is why do young adults in Scandinavian countries leave home so *early*? Certainly, leaving home in Scandinavian countries implies dramatically higher poverty rates, and it would be of interest to know why young individuals indeed choose to leave home under such circumstances. There are several plausible explanations. One can be found in the age profile for poverty in Scandinavian countries. Whereas poverty rates in Finland and Denmark peak around age 23 to 25, mainly as a result of leaving home, they drop dramatically from then onwards, and by the early thirties, young Scandinavian adults have by far the lowest poverty rates of all countries included in our analysis (Aassve *et al.* 2006). Thus, young adults in Scandinavian countries who leave home at an early age might very well be aware that this increases their poverty risk, but they might be equally aware that if they indeed do face economic hardship, it will in most cases be of a temporary nature. Important factors are, of course, the well functioning labour markets in Scandinavian countries together with generous welfare benefits and high wages (Breen and Buchmann, 2002). From a statistical point of view, this implies that there is low 'state dependence'. In other words, experiencing poverty during one's young adult years does not have serious scarring effects for adult life. The situation is different in Mediterranean countries. We know that youth unemployment rates are high (except in Portugal) and very often young individuals find it difficult to obtain stable employment. Moreover, youth wages in Mediterranean countries are low. As a result, the parental home provides for many young adults an important shelter against

economic hardship, as is clearly indicated by our estimates of the *ATT* and *ATC*. Another issue concerns educational infrastructure. Whereas the Scandinavian norm (and also in many conservative countries and the UK) is for young individuals to move away from home to undertake university studies, the picture is different in Italy and Spain, for instance. In Italy, an essential part of education policy has been to ensure geographic spread in the location of universities, with the aim of helping young adults stay at home whilst attending higher education (Billari *et al.* 2007). Social norms play an important part in this picture. Clearly, living in the parental home until one's early thirties in a Scandinavian country would be very much against the norm, whereas it would be widely accepted as normal behaviour in a Mediterranean country. In the long run, social norms are of course not exogenous, but depend on the institutional setting in which young individuals reside. Such differences in social norms are reflected by the fact that the destinations from leaving the parental home differ widely across countries. Leaving home in Mediterranean countries frequently coincides with marriage, whereas the majority of those leaving home in northern countries do so to live alone.

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