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# POVERTY TRAJECTORIES AFTER RISKY LIFE COURSE EVENTS IN DIFFERENT EUROPEAN WELFARE REGIMES

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ABSTRACT: This article complements existing life course research on poverty by looking at the typical income poverty trajectories during the first five years after experiencing a risky life event such as partnership dissolution and leaving the parental home. By broadening the time frame of research into poverty transitions, a more complete picture can be drawn of the poverty patterns related to these life events. Latent class analyses of the European Community Household Panel show that the poverty risk after experiencing a life course event is not equally large and long-lasting for everyone. Broadly, four comparable latent classes can be found across Germany, Spain, Denmark and the United Kingdom: persistent non-poor, persons with a transient – or transient-recurrent – poverty risk, persons with longer-term poverty risk and late poverty entrants. Yet, the size and occurrence of the latent classes differs between countries according to welfare regime. The article discusses country differences and social determinants of the different poverty trajectories.

**Key words:** poverty dynamics; latent class analysis; welfare regimes; life course

#### 1. Introduction

With the availability of mature socio-economic panel data, the interest in life course events associated with poverty entry has grown. Most empirical poverty dynamics studies have used regression techniques to predict the determinants of a poverty transition or duration. As a result, a lot is known about the life course events leading to a transition into or out of poverty. In this article, two of these life events are chosen, partnership dissolution and leaving the parental home, and the main poverty trajectories after these events are explored. In the current literature, relatively little is known about the typical poverty paths people take in the consecutive years after a risky life event. The purpose of this article is to explore, with the latent

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class cluster analysis technique, whether different patterns of income poverty trajectories can be discerned among the people experiencing partnership dissolution and leaving the parental home. Consequently, a deeper insight into the poverty trajectories is obtained by characterizing them in terms of social class, education level and gender groups. Next to this, we will look into the role played by additional life events in the five years after the initial event. In this way, the article investigates whether different poverty trajectories are experienced for people from different social stratification groups and when multiple life events are experienced. The empirical analysis for this article employs the European Community Household Panel Study to provide a study of the poverty trajectories in four different countries: Germany, Spain, Denmark and the United Kingdom. Differences and similarities between these countries are linked to their respective welfare regimes.

# 2. Poverty in a life course perspective

Experiencing a poverty spell is often understood as a passage in a person's life trajectory. Poverty is thus embedded in the life course and is related to other biographical life events (Burkhauser and Duncan 1989). Fundamental breaks in the life course, such as a divorce, bring about the risk of entering poverty. With the availability of mature socio-economic panel data, the empirical interest in life course events associated with poverty entry has grown. A large literature on poverty mobility has focused on the triggering events preceding a poverty transition. Especially household composition changes – like divorce or leaving the parental home – and employment situation changes – e.g., becoming unemployed, retirement – can temporarily influence the chances of poverty entry (Bane and Ellwood 1986; Jenkins 1999; Di Prete and McManus 2000). Risk periods for poverty are, among others, young adulthood, lone parenthood, being unemployed, periods of sickness, etc. (Alcock 1997; Barnes *et al.* 2002).

It is by now well-established that poverty has an important temporal dimension. Empirical research has shown that most of the poverty spells in industrialised countries are short-term and poverty is often seen as a phase in ones life rather than a persistent state (Bane and Ellwood 1986; Duncan *et al.* 1993; Berger 1994). Walker (1994) pointed out that when investigating the time dimension of poverty, it is necessary to combine information on poverty prevalence, the length of the observation period and poverty duration. He distinguishes between transient, occasional, recurrent, persistent, chronic and permanent poverty. Fouarge and Layte (2005) find that the majority of poverty spells in Europe are short and only

a minority are persistent. However, a substantial share of those who leave poverty return to the poverty state relatively quickly thereafter.

Fouarge and Layte have also found that European countries differ with respect to the types of poverty trajectories their citizens experience. In Social Democratic countries, both short-term and persistent poverty are largely avoided. Liberal and Southern European countries are characterised by both high rates of poverty entry and the longer duration of poverty. Countries from the continental regime display an intermediate pattern with average rates of short-term and persistent poverty. In his comparison of Sweden, Germany and the USA, DiPrete (2002) finds a similar pattern of poverty trajectories among the different welfare regimes.

A further question concerns to what extent the different poverty patterns are unequally distributed over several occupational groups, education levels, gender groups, etc. The sociological literature seems to suggest that short-term poverty is less unequally distributed than longerterm poverty. In the literature on individualisation, there is a consensus that short-term life interruptions are relatively widespread over population groups. According to Beck's theory of reflexive modernisation, people increasingly deviate from the standard biography. Moreover, traditional structural determinants of inequality are losing their impact as life becomes less standardised and more individualised. Beck coins the term 'democratisation' of risk, by which he means that a larger portion of people share in the risks of the society they live in (Beck 1986). The experience of risky life events is not restricted to the lower social classes, and also the middle classes suffer from new forms of temporary poverty. Leisering and Leibfried (1999: 242) claim that 'temporalisation and biographisation of poverty are part of the Risk Society, in which both social structures and individuals' life projects rapidly and flexibly change, and in which breakdowns and transitional life crises are likely to hit even the middle classes'. According to the stratification literature, social stratification entails a connotation of persistence (Duncan 1968; Grusky 2001), and as such it is especially long-term poverty that will be unequally distributed among social groups. Sorensen (2000) explains that the social class notion implies that a social class structure should be especially powerful in predicting long-term wealth. Also in this context, Hauser and Warren (1997) find that occupational status is a good indicator of longterm income.

#### 3. Research questions

The aim of this study is to explore the typical poverty patterns after experiencing partnership dissolution and leaving the parental home.

In the first instance, latent class analysis will be used to distinguish the typical poverty patterns after partnership dissolution and leaving the parental home. The focus is on an exploration of poverty entry and poverty trajectories in the first five years after the life event. The poverty trajectories will be investigated in four countries from different welfare regimes: Denmark, Social Democratic; Germany, Conservative; the United Kingdom, Liberal; and Spain, Conservative (Esping-Andersen 1990; Ferrera 1996).

In the second instance, the attention is focused on describing the different poverty profiles in terms of social determinants. The interest lies in determinants of social stratification, such as social class, education level and also gender. A core question will be to investigate whether short-term poverty after experiencing one of the risky life events is less structured by social stratification determinants, compared to longer-term poverty. Furthermore, we will look into the role played by the experience of several events in the time frame of five years after the initial event.

#### 4. Data and method

The analyses for this article are performed on the European Community Household Panel Survey (ECHP). The discussion will mainly focus on four countries in the dataset: Denmark, Germany, Spain and the United Kingdom.

For this article, the population under observation comprises all individuals between 16 and 65 years old who were affected by partnership dissolution and/or leaving the parental home between 1994 and 2001, and who were not income poor the year before the event took place. The restriction of the population to those people at risk of poverty entry enables us to assess patterns of poverty entry in a five-year time-span after the life event. Additionally, this also makes the research more comparable to previous research employing event history analysis for the study of the effect of life events on poverty entry transitions.

The life course events under observation are chosen because they have shown to increase the poverty entry risk (OECD 2001; Apospori and Millar 2003). Note that students are excluded from the group of parental home leavers. The situation of students is very specific and they are often still financially maintained by the parents while studying. The poverty threshold is set at 60 percent of the median equivalised household income in a given year and country. Since the total net yearly household income in

<sup>1.</sup> For Germany and the United Kingdom, respectively the SOEP-dataset and the BHPS-data were used in the format in which they are integrated into the European Community Household Panel.

the ECHP is provided with a time lag of one year, the household income is recalculated by combining income information measured in year T+1 (though referring to the current year T) with household composition information of the current year T (for a discussion, see Debels and Vandecasteele 2008). The recent literature on poverty measurement shows that there is reason to assume that there is an overestimation of poverty mobility rates due to measurement error (Rendtel *et al.* 1998; Breen and Moisio 2004; Whelan and Maître 2006). Especially the number of poverty exits seems to be overestimated and this implies that the poverty length in this article would generally be underestimated.

The social stratification determinants used in this analysis are gender, education level and social class of the household head, defined as the main breadwinner of the household. Education level has three categories: high education level, i.e., recognised third level education (ISCED 5–7), average education level, i.e., second stage of secondary education (ISCED 3) and low education level, i.e., less than second stage of secondary education (ISCED 0–2). The social class variable is based on a reduced version of the Goldthorpe scale for the household's main breadwinner. The following classification is obtained (Goldthorpe categorization between brackets): higher and lower professional (I–II), routine nonmanual occupation (III), skilled and unskilled manual (V–VII), and self-employed (I and IV). An additional category is included for the long-term unemployed/inactive, defined as people in households where the main breadwinner has been in inactivity or unemployed for more than 12 months (ILO-definition of long-term unemployment).

Latent class cluster analysis will be applied to explore the typical poverty trajectories in the first five years after leaving the parental home and partnership dissolution. The latent class cluster analysis technique aims to find a meaningful set of categorical unobserved clusters in the population on the basis of a range of categorical indicators (Bartholomew 2004). The model with five (T=5) categorical poverty indicators  $y_{it}$  can be written as follows (Vermunt and Magidson 2005):

$$P(y_i 1 = m1, y_i 2 = m2, y_i 3 = m3, y_i 4 = m4, y_i 5 = m5)$$

$$= \sum_{x=1}^{K} P(x) \prod_{t=1}^{5} P(y_{it} = mt | x).$$

The model consists of a latent variable x with K categories. y<sub>it</sub> stands for a categorical poverty indicator for each individual i and m denotes

<sup>2.</sup> Ganzeboom and Treiman's conversion tools (1994) have been used to construct the social class typology.

a particular category (poor or not poor) of  $y_{it}$ . In this article, latent class analysis is chosen for its exploratory character and its suitability for categorical data. Additionally, the technique is innovative in the context of poverty dynamics. By broadening the time frame, it will allow for a more complete picture of the poverty entry patterns after household composition related life events. Note that other modelling techniques (event history models, models of Markovian transitions, etc.) can also look at poverty in a longitudinal perspective. These techniques typically model a single or recurrent poverty duration and/or transition. The advantage of latent class analysis is that it is not limited to a specific transition or duration. Due to its exploratory nature, it can investigate a multitude of poverty patterns occurring after the life event. The latent class models are estimated with the Latent Gold software package.

The approach followed does not provide complete information on the five-year poverty trajectories of all individuals in the sample. Some respondents experienced the life event in a wave towards the end of the observation period 1994-2001 and no complete five-year poverty trajectory could be recorded. Next to attrition due to the end of the panel study, some people dropped out of the panel prematurely. The latter type of attrition is potentially more problematic because the reason why an individual does not participate further in the panel study could be related to the poverty outcome experienced. However, the data provide information on at least a part of the poverty trajectory experienced by people for whom there is some missing information. Individuals with an incomplete poverty trajectory are included in the likelihood estimation of the latent class model. A person is assigned to a latent class on the basis of the available information on his/her poverty trajectory. Within the group of people experiencing the same recorded poverty trajectory, observations are assumed to be missing at random (MAR) (Vermunt and Magidson 2005). The option of including missings in the latent class estimation is an attractive way of dealing with attrition patterns in the ECHP. Additionally, the data are weighted to correct for initial panel non-response and sample design issues.

Several complementary approaches are used to assess model fit (Magidson and Vermunt 2004). Different Bayesian (BIC) and Akaike's Information Criteria (AIC) are compared. Next to that, the bivariate residuals, the percentage reduction in L<sup>2</sup> compared to the one-cluster model and the percentage of misclassifications are also investigated. Generally, lower values of BIC and AIC statistics as well as a small L<sup>2</sup> are preferred (Magidson and Vermunt 2004). Note that the significance of the likelihood based L<sup>2</sup> fit statistic cannot be fully relied on when missing values are included under the MAR assumption (see Vermunt 1996).

Therefore, the BIC and AIC statistics will have more importance in the assessment of model fit.

In section 6, we will try to obtain a better understanding of the latent classes by linking inactive covariates to them. This will allow us to assess the distribution of the latent variable for a certain level of the covariate of interest. The strategy involves estimating the probability of being classified in a certain latent class given a particular value on the covariate z. This is based on an aggregate of the individual posterior class membership probabilities for a particular value of z (see Vermunt and Magidson 2005). The covariates are treated as inactive exogenous variables and hence they do not influence the latent class solution.

# Poverty patterns after leaving the parental home and partnership dissolution

In this section, different latent class solutions are presented for the poverty trajectories people take after leaving the parental home and partnership dissolution.

For the analysis of poverty trajectories after leaving the parental home, latent class analyses are performed for Denmark, Spain, Germany and the United Kingdom. The separate country latent class solutions show two latent classes for Germany and Denmark and three latent classes for Spain and the United Kingdom. While the number of latent classes is not equal between the four countries under study, the characterization of the groups seems to be partly similar. A group of persistently non-poor as well as a transient poor group appears in all countries. In addition to that, we distinguish a group with longer-term poverty risk in the United Kingdom and a group with a late poverty entry risk in Spain. The separate country analyses thus indicate that a multi-group model with partial measurement invariance should be preferred. The multi-group analysis presented in Table 1 confirms this as the BIC and AIC measures of fit show a better fit for the model of partial measurement invariance than for the model with no measurement invariance.

The conditional probabilities in Table 2 give us some more insight into the different latent classes as they show the probability of being poor in a specific year given that one belongs to a certain class. The poverty entry chance in the 'persistent non-poor' class can be considered negligible since the conditional probability does not exceed 0.06 in any of the five years after leaving the parental home. The second cluster has a high poverty entry chance of 81 percent in the first year after partnership dissolution. The poverty chance in this group shows a gradual drop in the subsequent years with a 27 percent poverty chance in the fifth year after partnership

TABLE 1. Multi-group latent class fit statistics for the different poverty trajectory solutions after leaving the parental home (Denmark, Germany, Spain, United Kingdom, 1994–2000, ECHP)

	df	L <sup>2</sup>	BIC (LL)	AIC (LL)	AIC3 (LL)	Classification error
No measurement invariance (ES, UK: 3 clusters – DK, DE: 2 clusters)	670	606.92	4592.41	4270.57	4326.57	7 0.07
Partial measurement variance	702	629.40	4366.24	4228.31	4252.31	L 0.07

dissolution. This cluster is characterized by a transient poverty risk. The next latent class consists of people who stay in a precarious situation with increased poverty vulnerability for several years after leaving the parental home. The poverty probability of this group exceeds 50 percent in all five years. Finally, the fourth latent class comprises people who are unaffected by the poverty entry risk immediately after leaving the parental home. However, they have a 'late' poverty risk as they show a heightened poverty risk in the third, fourth and fifth year after the event.

The latent class sizes of the different poverty trajectories can be compared between countries. The probability of being in the persistent non-poor cluster varies between 69.6 percent in Denmark and 87.7 percent in Spain. Especially in Denmark, the persistent non-poor cluster is relatively small, but as much as 30.4 percent of the people leaving the parental home experience a transient poverty risk. This is in line with previous research results showing that young adulthood is a life stage of increased economic vulnerability in Scandinavian countries (Mayer 2001). The poverty rate among young people living alone is higher in the Scandinavian countries than in any other country (Wildeboer Schut et al. 2001). Note that the occurrence of only two latent classes in Denmark could be due to the relatively small sample size in this country. On the other hand, the chance of being affected by poverty entry after leaving the parental home appears to be lowest in Spain. Only 6 percent of people are affected by an immediate transient poverty risk while another 6.2 percent belong to the group of late poverty entrants. An explanation for the country differences can be found in differential moving-out-of-house patterns. In Southern European countries for instance, children generally leave the parental home at an older age, when their economic situation can be expected to be more stable. Assve et al. (2002) find a diverging effect of the impact of economic security on the decision to leave the parental home among European countries. Employment and income security are very important factors in the decision of young adults to leave the parental home in Southern European countries. The importance of these factors is

A latent class approach

TABLE 2. Latent class sizes and response probabilities of poverty patterns after leaving the parental home (Denmark, Germany, Spain, United Kingdom, 1994–2000, ECHP)

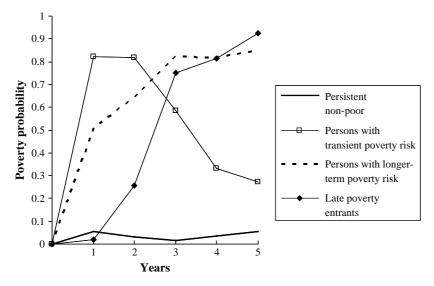
	Persistent	Persons with	Persons with	Late poverty
	non-poor	transient poverty risk	longer-term poverty risk	entrants
Latent class sizes by country				
Denmark ( $N = 187$ )	69.6%	30.4%	_	-
Spain (N = 940)	87.7%	6.0%	_	6.2%
Germany ( $N = 716$ )	86.7%	11.3%	_	-
United Kingdom ( $N = 526$ )	81.0%	11.5%	7.5%	=
Conditional probabilities				
Poor first year after leaving parental home	0.06	0.82	0.51	0.02
Poor second year after leaving parental home	0.03	0.82	0.64	0.26
Poor third year after leaving parental home	0.02	0.59	0.82	0.75
Poor fourth year after leaving parental home	0.04	0.33	0.82	0.81
Poor fifth year after leaving parental home	0.06	0.27	0.85	0.93

much more modest in the United Kingdom, and it appears to be negligible in the Scandinavian countries.

Furthermore, the results show that when young people are affected by a poverty risk after leaving the parental home, this is predominantly a transient risk. In Denmark and Germany, the latent classes with longer-term or late poverty risk cannot be distinguished. In the United Kingdom, the group with the transient poverty risk after leaving the parental home is larger than the group of people affected by a longer-term poverty risk.

Note that previous research has also shown that the occurrence of income poverty among young adults leaving home does not necessarily entail a general low welfare level (Schwenk 1999). It is assumed that parents still share many resources with their children after they moved out of the house.

For the poverty trajectories after partnership dissolution, the latent class analysis was performed on a pooled European-wide dataset.<sup>3</sup> The reason is that for this life event a relatively small number of cases were present for several of the countries and hence the European-wide analysis



**Figure 1.** Predicted probability of being poor in the years after leaving the parental home by latent class membership (Denmark, Germany, Spain, United Kingdom, 1994–2000, ECHP)

<sup>3.</sup> The following countries are included in the model: Germany, Denmark, The Netherlands, Belgium, France, United Kingdom, Ireland, Italy, Greece, Spain, Portugal, Austria and Finland.

gives a more robust latent class solution. However, the latent class sizes for Denmark, Spain, Germany and the United Kingdom are presented as an illustration. The fit statistics in Table 3 show the best fit for a four-cluster model, with 80.94 percent reduction in L<sup>2</sup> compared to the one-cluster model and the lowest Akaike's Information Criterion values (AIC and AIC3).

In Table 4 and Figure 2, the chosen four-cluster latent class solution is presented in more detail. The four latent classes could be labelled as persistent non-poor, persons with transient-recurrent poverty risk, persons with longer-term poverty risk and late poverty entrants. The conditional probabilities associated with the different latent classes are similar to the analysis for leaving the parental home. One difference relates to the second cluster. The poverty chance of this cluster could be characterized as transient-recurrent, since the poverty risk in this group starts off high, then drops gradually but shows an increase to 47 percent in the fifth year after partnership dissolution.

The persistent non-poor form the biggest group, with an overall share of 73.9 percent of the people experiencing partnership dissolution. The transient-recurrent poverty risk is by far the most likely poverty risk after partnership dissolution, with a 15.4 percent overall occurrence. In comparison, the longer-term and late poverty clusters are clearly smaller with, respectively, 5.5 and 5.3 percent. The latent class sizes by country generally indicate rather less country differences than for leaving the parental home. Unsurprisingly, the persistent non-poor cluster is smallest in the United Kingdom and largest in Denmark, comprising respectively 71.7 and 78.1 percent of the people affected by partnership dissolution. Further country differences show a small longer-term poverty risk in Denmark. On the other hand, the longer-term poverty risk is relatively large in the United Kingdom and Germany. In the case of the United Kingdom, this is in line with previous research findings showing a longer duration of poverty in Liberal welfare regimes (Fouarge and Layte 2005). Further analysis for Germany has shown that mainly women suffer from the longer-term poverty risk. An explanation for the relatively large group with longer-term poverty risk can be sought in the remaining importance of the male breadwinner model. In section 6, we will explore the gender dimension of the poverty patterns further. Finally, the fourth latent class comprises people who are unaffected by the poverty entry risk immediately after partnership dissolution. However, they have a 'late' poverty risk as they show a heightened poverty risk in the fourth and fifth year after the event. The late poverty class concerns a poverty pattern that remained undetected in previous - mainly regression-based - research. The latent class consists of 5.3 percent of the overall population under examination and seems to be larger in the United Kingdom and Spain.

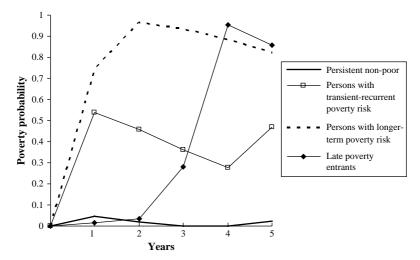
TABLE 3. Latent class fit statistics for the different poverty trajectory solutions after partnership dissolution (13 countries, 1994–2000, ECHP pooled dataset, weighted)

	df	$L^2$	BIC (LL)	AIC (LL)	AIC3 (LL)	Classification error	% Reduction in L <sup>2</sup> (compared to 1-cluster model)
1-cluster solution	203	1715.03	8388.35	8357.28	0.00%	_	=
2-cluster solution	197	420.47	7143.07	7047.72	7085.72	7.82%	75.48%
3-cluster solution	191	357.49	7129.38	7023.74	7040.74	9.59%	79.16%
4-cluster solution	185	326.96	7148.13	7005.21	7028.21	14.79%	80.94%
5-cluster solution	179	320.08	7190.53	7010.33	7039.33	15.96%	81.34%

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TABLE 4. Latent class sizes and conditional probabilities of the four-cluster model showing poverty patterns after partnership dissolution (13 countries, 1994–2000, ECHP pooled dataset)

	Persistent non-poor	Persons with transient-recurrent poverty risk	Persons with I onger-term poverty risk	Late poverty entrants
Latent class sizes				
Overall ( $N = 3493$ )	73.9%	15.4%	5.5%	5.3%
Denmark ( <i>N</i> = 316)	78.1%	15.0%	2.9%	3.9%
Spain ( $N = 241$ )	75.2%	14.0%	5.3%	5.5%
Germany ( $N = 509$ )	72.9%	16.4%	6.3%	4.5%
United Kingdom (N = 453)	71.7%	16.1%	5.7%	6.5%
Conditional probabilities				
Poor first year after partnership dissolution	0.05	0.54	0.74	0.02
Poor second year after partnership dissolution	0.02	0.46	0.97	0.04
Poor third year after partnership dissolution	0.00	0.36	0.93	0.28
Poor fourth year after partnership dissolution	0.00	0.28	0.89	0.95
Poor fifth year after partnership dissolution	0.02	0.47	0.82	0.86



**Figure 2.** Latent class solution of the four-cluster model showing poverty trajectories after partnership dissolution (13 countries, 1994–2000, ECHP pooled dataset).

The social determinants of this latent class will be investigated later in the article.

In sum, we find that the main pattern after both leaving the parental home and partnership dissolution concerns the persistent non-poor. When affected by poverty after one of the life events, transient or transient-recurrent poverty is more common than longer-term poverty. Consequently, the latent class analysis shows a fourth latent class consisting of people with a late poverty entry risk.

### 6. Social determinants of the poverty trajectories

In this section, the poverty trajectories found through latent class analysis are linked to determinants of social stratification and additional life course events. This will give a better insight into the social profile of the poverty trajectories. The interest lies in the first place in three social stratification determinants: gender, education level and social class of the household head. Furthermore, we will assess how the experience of additional events relates to the type of poverty trajectory people go through.

In Table 5 relative risk ratios are calculated over the different categories of the social determinants on the basis of the latent class membership probabilities. The covariates used are treated as inactive, so that they do not influence the latent class solution. For the group with transient and transient-recurrent poverty risk, the group with longer-term poverty risk

TABLE 5. Relative risk ratios of belonging to the different poverty trajectory groups after leaving the parental home (DK, ES, DE, UK) and partnership dissolution (Europe) according to social determinants (1994–2000, ECHP pooled dataset)

	Leaving parental home	P	artnership dissolution		
Ref. Persistent non-poor	Transient poverty risk	Transient-recurrent poverty risk	Longer-term poverty risk	Late poverty risk	
Social stratification determinants					
Gender household head (Ref. Male)					
Female	1.57 [1.26–1.97]	2.39 [2.05–2.80]	3.24 [2.50–4.20]	1.23 [0.97–1.58]	
Education level household head (Ref. High)					
Middle educated	1.42 [1.03-1.95]	1.43 [1.16-1.76]	2.13 [1.44-3.15]	0.94 [0.67-1.30]	
Low educated	2.50 [1.86-3.35]	1.91 [1.55–2.36]	3.82 [2.62-5.57]	1.51 [1.11-2.07]	
Social class (Ref. Professional)					
Routine non-manual	2.45 [1.75-3.43]	2.58 [20.07-3.22]	5.22 [3.42-7.96]	1.27 [0.88-1.48]	
Manual	1.62 [1.16–2.25]	1.20 [0.94-1.54]	2.25 [1.40-3.61]	1.38 [0.98-1.95]	
Self-employed	1.87 [1.11–3.13]	1.72 [1.26-2.35]	2.88 [1.62-5.12]	1.68 [1.07-2.62]	
Long-term unemployed/inactive	4.99 [3.44–7.26]	4.44 [3.54–5.58]	12.86 [8.54–19.37]	2.53 [0.76–3.62]	
Concurrent life events					
Additional life event within a 5-year period					
Partnership dissolution (Ref. None)	1.58 [1.07-2.33]	_	_	_	
Job loss (Ref. No job loss)	1.86 [1.37-2.51]	2.39 [1.79-3.18]	3.72 [2.55-5.44]	2.19 [1.39-3.44]	
Child birth (Ref. No child birth)	0.98 [0.75–1.29]	1.46 [1.12-1.90]	1.76 [1.20-2.59]	1.56 [1.04-2.34]	

Note: 90% confidence intervals are given between square brackets.

N leaving the parental home: 2369.

N partnership dissolution: 3493.

and the late poverty entrants, odds of belonging to either the respective group or the persistent non-poor are calculated. Consequently, the relative risk ratio gives the odds ratio of two social groups, e.g., male versus female for belonging to the given poverty cluster versus the reference group of persistent non-poor. To assess the significance of the odds ratios, 90 percent confidence intervals have been calculated around the estimated ratios. Note that the relative risk ratios are calculated for the joint country latent class solutions. In the case of leaving the parental home, multigroup analyses have shown that the poverty profiles are statistically equivalent between the countries. Furthermore, separate analyses per country did not show any substantial differences to the effect of social determinants, but it did reduce the power of the analysis considerably.

The first column of Table 5 shows the relative risk ratios for leaving the parental home. Note that only the ratios for the transient poverty group are given for this event. The longer-term and late poverty latent class are omitted because they are small categories which only occur in one of the countries each. The relative risk ratios show that the effect of the social stratification determinants is as expected for the group with transient poverty risk. People with a female household head, the lower educated and people from the routine non-manual, self-employed and long-term unemployed/inactive class have the highest transient poverty risk after leaving the parental home. The concurrent life events partnership dissolution and job loss do generally increase ones odds of experiencing transient poverty after leaving the parental home.

In the second column of Table 5 we see that the association with social stratification determinants is similar for the transient-recurrent poverty risk after partnership dissolution. In fact, there is also a clear and strong effect of gender, education level and social class on both the transient and longer-term poverty risk after partnership dissolution. People with a female household head in the year after partnership dissolution have a higher chance of being at risk of both transient-recurrent poverty and longer-term poverty. This finding is in accordance with previous research on the gender inequality in poverty after partnership dissolution (Sorensen 1994; Jarvis and Jenkins 1999; Uunk 2004). Yet, this analysis goes a step further and shows that the gender inequality in the poverty risk after partnership dissolution holds for both the short and longer-term poverty risk. Next, we find that the lower education levels have a higher risk of transient-recurrent and longer-term poverty. Turning to the social class determinant, we find that all social classes have higher odds of being transient-recurrent or longer-term poor than the professional class. The confidence intervals show that this is significant in all cases except with the transient-recurrent poverty risk for the manual class. The highest relative risk ratios are found with the routine non-manual and

the long-term unemployed/inactive. The odds of being at long-term poverty risk after partnership dissolution is as much as 12.86 times higher for the long-term unemployed/inactive than for people from the professional class. Overall, the social inequality determinants are as expected. Note that we can assume that the social divisions according to gender, education level and social class would be more pronounced when measurement error was accounted for (see Whelan and Maître 2006).

When comparing transient-recurrent with longer-term poverty, the results suggest that the longer-term poverty risk after partnership dissolution is more unequally distributed over the three social stratification groups than the transient-recurrent poverty risk. The relative risk ratios of the three social stratification determinants are larger for the longer-term poverty latent class than for the transient-recurrent poverty group. Moreover, the confidence intervals suggest that these differences are significant for the low educated, routine non-manual and long-term unemployed/inactive. This finding is in line with social stratification literature suggesting that social classes ought to be especially strong predictors of longer-term income and wealth (Hauser and Warren 1997; Sorensen 2000). According to the literature on individualisation, contemporary poverty – and especially temporary poverty – has become less strongly determined by social position. One could say that the poverty risk transcends social boundaries and has become a more widespread phenomenon (Leisering and Leibfried 1999). Our findings indicate that whereas both transient-recurrent and persistent poverty are stratified by gender, education level and social class, this is less strongly the case for transient-recurrent poverty.

When turning our attention to the concurrent life events, we see that the experience of additional life events job loss and child birth after partnership dissolution both increase the risk of belonging to the transient-recurrent, longer-term as well as late poverty entry group. This shows that multiple risky life events clearly put individuals at greater risk of entering poverty. An interesting finding in this respect relates to the social determinants of the late poverty entrants. On the one hand we see that this group is difficult to characterize in terms of gender, education level and social class. Yet, the concurrent life events job loss and birth of a child are significantly related to the late poverty outcome. The late poverty entry group is thus not immediately affected by the poverty triggering effect of partnership dissolution. They do however face a later poverty entry risk when the life event of partnership dissolution is combined with another risky life event.

Overall, we can conclude that both transient-recurrent as well as longerterm poverty are clearly linked to the social stratification determinants and concurrent life events. Yet, short-term poverty is less structured by social stratification determinants compared to the longer-term poverty risk. The late poverty entry risk is clearly related to the experience of consecutive life events.

#### 7. Discussion

This article dealt with the exploration of poverty patterns in the first five years after experiencing leaving the parental home and partnership dissolution. Latent class analysis was proposed as an innovative method to explore the typical poverty trajectories after experiencing a risky life event. There are some general tendencies, but results also differ between European countries and according to life event. In what follows, the main findings are summarised.

Generally, four broad latent classes could be distinguished after experiencing one of the life events under study: persistent non-poor, people with a transient – or transient-recurrent – poverty risk, people with a longer-term poverty risk and late poverty entrants. Unsurprisingly, the majority of people affected by one of the life events under study remain persistent non-poor. This is true in the four countries we focussed on. However, a substantial share of the population is affected by a certain poverty risk associated with experiencing a life event. The results in this article showed that the poverty risk after partnership dissolution and leaving the parental home has mainly a transient character. The longer-term and late poverty clusters were generally smaller.

Furthermore, the analysis shows some interesting country differences. The poverty trajectories after partnership dissolution reflect some country differences found in research on poverty duration. While Denmark shows the smallest long-term poverty risk, Germany and the United Kingdom have the largest long-term poverty group. For the United Kingdom this could be explained by the residual welfare state and for Germany long-term poverty after partnership dissolution is mainly a female problem. For the poverty trajectories after leaving the parental home, the largest difference occurs between Spain and Denmark. It is found that while the poverty risk after leaving the parental home is negligible in Spain, Danish young people are particularly vulnerable to experiencing a short-term poverty risk after leaving home. This finding is in line with previous research which indicates that young people in Southern European countries wait for economic security before starting their own household.

In the last part of the article, the withheld latent classes were further analysed and social determinants were linked to the poverty trajectories as covariates. We found gender, education and social class inequalities for both the transient and longer-term poverty group. This indicates that individuals in the highest social strata of the different European countries under study avoid both transient and longer-term poverty risks in their life course. However, the results also gave some indication that the transient poverty risk is less structured by gender, educational and social class inequality than the longer-term poverty risk. This is in line with literature on the predictive power of social class (Sorensen 2000) and it sheds some light on the individualisation of temporary poverty (Leisering and Leibfried 1999). Next to a short and longer-term poverty immediately after the event, also a relatively small but clearly differentiated cluster of late poverty entrants was found. Further investigation showed that this cluster cannot easily be characterised in terms of gender, education level or social class. Yet, we find that the late poverty entry group is often affected by consecutive life events, happening at the same time or shortly after the initial risky life event. The experience of multiple life events puts people thus at a larger poverty risk.

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#### References

Aasve, A., Billari, F. C., Mazzuco, S. and Ongaro, F. (2002) 'Leaving home: A comparative analysis of ECHP data', Journal Of European Social Policy 12: 259-75.

Alcock, P. (1997) Understanding Poverty, Basingstoke: Macmillan.

Apospori, E. and Millar, J. (eds) (2003) The Dynamics of Social Exclusion in Europe: Comparing Austria, Germany, Greece, Portugal and the UK, London: Elgar.

Bane, M. J. and Ellwood, D. (1986) 'Slipping into and out of poverty: The dynamics of spells', *Journal Of Human Resources* 21: 1–23.

Barnes, M., Heady, C. and Middleton, S. (eds) (2002) *Poverty and Social Exclusion in Europe*, London: Elgar.

- Bartholomew, D. J. (2004) 'Factor analysis and latent structure: Overview', in *International Encyclopedia of the Social & Behavioral Sciences*, Oxford: Elsevier.
- Beck, U. (1986) Risikogesellschaft. Auf dem Weg in eine andere Moderne, Frankfurt Am Mein: Suhrkamp.
- Berger, P. A. (1994) 'Individualisierung und Armut', in M. M. Zwick (ed.), Einmal arm, immer arm? Neue Befunde zur Armut in Deutschland, Frankfurt Am Main/New York: Campus Verlag.
- Breen, R. and Moisio, P. (2004) 'Poverty dynamics corrected for measurement error', *Journal of Economic Inequality* 2: 171–91.
- Burkhauser, R. V. and Duncan, G. J. (1989) 'Economic risks of gender roles: Income loss and life events over the life course', *Social Science Quarterly* 70: 3–23.
- Debels, A. and Vandecasteele, L. (2008) 'The time lag in annual household-based income measures: Assessing and correcting the bias', *Review of Income and Wealth* 54: 71–88.
- Di Prete, T. and Mcmanus, P. (2000) 'Family change, employment transitions and the welfare state: Household income dynamics in the United States and Germany', *American Sociological Review* 65: 343–70.
- Diprete, T. A. (2002) 'Life course risks, mobility regimes and mobility consequences: A comparison of Sweden, Germany and the United States', *American Journal of Sociology* 108: 267–309.
- Duncan, G. J., Gustafsson, B., Hauser, R., Schmauss, G., Messinger, H., Muffels, R., Nolan, B. and Ray, J.-C. (1993) 'Poverty dynamics in eight countries', *Journal of Population Economics* 6: 215–34.
- Duncan, O. D. (1968) 'Social stratification and mobility: Problems in the measurement of trend', in E. B. Sheldon and W. E. Moore (eds), *Indicators of Change: Concepts and Measurements*, New York: Russel Sage Foundation, pp. 675–719.
- Esping-Andersen, G. (1990) *The Three Worlds of Welfare Capitalism*, Oxford: Polity Press.
- Ferrera, M. (1996) 'The "southern" model of welfare in social Europe', *Journal of European Social Policy* 6: 17–37.
- Fouarge, D. and Layte, R. (2005) 'Welfare regimes and poverty dynamics: The duration and recurrence of poverty spells in Europe', *Journal of Social Policy* 34: 407–26.
- Ganzeboom, H. B. G. and Treiman, D. J. (1994) *International Stratification and Mobility File: Conversion Tools*, Utrecht: Department of Sociology.
- Grusky, D. B. (ed.) (2001) Social Stratification: Class, Race and Gender in Sociological Perspective, Colorado: Westview Press.

- Hauser, R. M. and Warren, J. R. (1997) 'Socioeconomic indexes for occupations: A review, update, and critique', *Sociological Methodology* 27: 177–298.
- Jarvis, S. and Jenkins, S. P. (1999) 'Marital splits and income changes: Evidence from the British household panel survey', *Population Studies* 53: 237–54.
- Jenkins, S. (1999) 'Modelling household income dynamics', *Journal of Population Economics* 13: 529–67.
- Leisering, L. and Leibfried, S. (1999) *Time and Poverty in Western Welfare States. United Germany in Perspective*, New York: Cambridge University Press.
- Magidson, J. and Vermunt, J. K. (2004) 'Latent class analysis', in D. Kaplan (ed.), *The Sage Handbook of Quantitative Methodology for the Social Sciences*, Thousand Oaks, CA: Sage Publications, pp. 75–198.
- Mayer, K. U. (2001) 'The paradox of global social change and national path dependencies: Life course patterns in advanced societies', in A. Woodward and M. Kohli (eds), *Inclusions and Exclusions in European Societies*, London: Routledge, pp. 89–109.
- OECD (2001) 'When money is tight', in *Employment Outlook*, Paris: OECD.
- Rendtel, U., Langeheine, R. and Berntsen, R. (1998) 'The estimation of poverty dynamics using different measurements of household income', *Review of Income and Wealth* 44: 81–98.
- Schwenk, O. G. (1999) Soziale Lagen in der Bundesrepublik Deutschland, Opladen: Leske & Budrich.
- Sorensen, A. (1994) 'Women's economic risk and the economic position of single mothers', *European Sociological Review* 10: 173–88.
- Sorensen, A. (2000) 'Symposium on class analysis. Towards a sounder basis for class analysis', *American Journal of Sociology* 105: 1523–58.
- Uunk, W. (2004) 'The economic consequences of divorce for women in the European Union: The impact of welfare state arrangements', *European Journal of Population* 20: 251–85.
- Vermunt, J. K. (1996) Log-Linear Event History Analysis: A General Approach With Missing Data, Unobserved Heterogeneity, and Latent Variables, Tilburg: Tilburg University Press.
- Vermunt, J. K. and Magidson, J. (2005) *Technical Guide for Latent Gold* 4.0. Basic and Advanced, Belmont, MA: Statistical Innovations Inc.
- Walker, R. (1994) Poverty Dynamics: Issues and Examples, Aldershot: Avebury.

- Whelan, C. T. and Maître, B. (2006) 'Comparing poverty and deprivation dynamics: Issues of reliability and validity', *Journal of Economic Inequality* 4: 302–23.
- Wildeboer Schut, J. M., Vrooman, J. C. and De Beer, P. T. (2001) On Worlds of Welfare: Institutions and their Effects in Eleven Welfare States, The Hague: Social and Cultural Planning Office of The Netherlands.
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