

# 1. Introduction: the dynamic analysis of poverty and social exclusion

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Poverty and social exclusion have never been higher on the agenda of the European Union (EU). At the conclusion of the European Summit held in Lisbon in March 2000, the European Council stated that 'steps must be taken to make a decisive impact on the eradication of poverty by setting adequate targets to be agreed by the Council by the end of the year'. Following the Summit and the European Council in Nice in November 2000, each member state was required to draw up biannual National Implementation Plans for Social Inclusion, including specific indicators and monitoring mechanisms capable of measuring progress. The first set of plans were delivered to the Commission in May 2001 and have been summarized in the European Commission report, *Joint Report on Social Inclusion*, this being the 'first time that the European Union endorses a policy document on poverty and social exclusion' (European Commission, 2002, p. 9).

This represents a significant shift in policy emphasis. Prior to the Lisbon Summit of March 2000, the focus of EU concern was unemployment, and particularly long-term unemployment, as the manifestation of poverty and social exclusion with which policy should concern itself. The Lisbon summit, which emphasized the role of social policy, alongside employment and economic policies, in combating poverty and social exclusion, re-focused the European policy agenda, recognizing the multi-dimensionality of poverty and social exclusion. While unemployment remains a central concern, policy should no longer confine itself to labour market issues but should tackle poverty and social exclusion in all its manifestations. In addition to long-term unemployment, recognized risk factors for poverty and social inclusion include low education level, growing up in a vulnerable family, disability, poor health, multiple disadvantage in the area of residence, homelessness and ethnicity (ibid., 2002, pp.24–6). The existence of an intergenerational cycle of poverty and disadvantage is also recognized.

The requirement for indicators that will allow international comparison of the success, or otherwise, of national policies to address poverty and

social exclusion has been addressed by the development of a set of common indicators, agreed at the Laeken Summit of December 2001. The intention is that each country will use a common set of first- and second-level indicators in collecting and analysing national data on poverty and social inclusion (Atkinson *et al.*, 2002). These indicators include measures of the persistence of poverty over time, as well as a range of indicators of non-monetary poverty such as poor education, housing and health. With the exception of housing amenities and problems, non-monetary indicators of deprivation are not included in the set of first- and second-level indicators, but are left to member states to develop at a national level if they so choose. Two points should be noted here. First, and rather obviously, the measurement of poverty persistence among the same individuals over time, and the ability to make international comparisons of this, requires that internationally comparable data be collected and analysed from the same individuals over time. Yet the European Community Household Panel (ECHP), which is at present the only source of data that allows such comparisons of income movements over time to be made among the member nations of the EU, is to be replaced by an annual cross-sectional survey (Survey of Income and Living Conditions, or SILC). Member states are simply encouraged to collect longitudinal panel data. Secondly, the failure to include non-monetary indicators of deprivation, such as lack of ownership of consumer durables, access to commonly accepted necessities of life, or social relationships, as first- or second-level indicators, will limit the extent to which the material circumstances of the potentially poor and socially excluded population can be properly investigated and understood. Such indicators are also included in the ECHP.

The aim of this book, therefore, is to exploit the potential of the ECHP, both to understand and compare the dynamics of income poverty, as well as of non-monetary deprivation, while the opportunity still exists. In doing so, the book explores the dynamics of poverty and social exclusion in five European countries: Austria, Germany, Greece, Portugal and the UK. It thus provides a unique opportunity, not only to compare the extent of social exclusion across countries, but also to compare different trajectories of change over time. In the book we analyse the dynamics of social exclusion in each of the five countries, and place the results within a wider discussion of the different national policy contexts. We also compare across the countries and consider the implications for policy at the European level.

The five countries represent a range of economic and social conditions, differing in respect of levels of poverty and wealth, demographic patterns, institutional arrangements, values and social attitudes. They are countries with different types of welfare states in term of levels of spending, types and coverage of state provision, and philosophies of state involvement in

welfare. Table 1.1 provides a snapshot of the five countries in the mid-1990s, and shows the variation in size, GDP, employment and unemployment, family structures and welfare spending. Among these countries, Austria has the smallest population, has high levels of GDP per head, high male employment participation rates, low unemployment rates and high social spending. Germany is the largest country in population, with high GDP per head, fairly low employment participation rates and high unemployment rates for women, a lower proportion of young people, and high social spending. Greece has the lowest GDP per head, low employment participation rates and high unemployment rates for women, high youth unemployment, relatively few people living alone and few lone parents, low social spending and high rates of poverty. Portugal is similar to Greece in respect of GDP per head, social spending, poverty and family structures, but has a higher employment participation rate for women. The UK has relatively high unemployment rates, high rates of lone parenthood, and falls between Austria and Germany on the one hand and Greece and Portugal on the other in terms of poverty rates and social spending.

Policy approaches to poverty also differ. Germany and Austria have long-established and well developed systems of social insurance at the centre of their social security systems, with social assistance acting as a last-resort safety net. The UK has increasingly moved away from social insurance towards a greater emphasis on means-tested benefits, including wage supplements for those in work in the form of tax credits. Portugal and Greece have much less well-developed and resourced systems of social protection, with much less comprehensive coverage within social insurance schemes and more reliance upon family support and solidarity.

These countries also have somewhat different priorities in respect of tackling social exclusion, reflected in their first National Implementation Plans for Social Inclusion. The Austrian plan notes that there is already comprehensive coverage of social assistance and so does not propose many new initiatives, focusing instead on evaluation and monitoring of existing measures. The German plan emphasizes the multidimensional nature of social exclusion and identifies four priorities: integration into the labour market, reconciliation of work and family life, assistance for the most vulnerable and better allocation of social assistance. The Greek plan highlights the need for macroeconomic expansion, reductions in unemployment and greater flexibility in the labour market, reforms to welfare services, and specific support for the most vulnerable groups. The Portuguese plan emphasizes integration into the labour market, the need to develop social protection systems, and the need for the reintegration of excluded groups into society. It also sets some specific targets, including anti-poverty goals to eradicate child poverty by 2010 and to reduce absolute poverty by half

Table 1.1 Economic and social indicators, mid-1990s

	Austria	Germany	Greece	Portugal	UK
Total population (000s) <sup>1</sup>	8 020	81 422	10 426	9 902	58 395
Population of working age (15–64 years) (000s) <sup>1</sup>	5 306	54 936	6 769	6 750	37 286
GDP (million US\$) <sup>2</sup>	168 411	1 669 802	122 620	128 171	1 078 906
GDP per head (US\$) <sup>2</sup>	20 999	20 508	11 761	12 944	18 476
Male employment participation rate <sup>1</sup>	81.0	72.9	74.9	76.6	76.1
Female employment participation rate <sup>1</sup>	60.0	54.1	38.2	55.7	62.5
Unemployment rates men <sup>1</sup>	2.9	7.2	6.0	6.1	11.3
Unemployment rates women <sup>1</sup>	5.0	10.1	13.7	8.0	7.5
Youth unemployment rate (15–24 years) <sup>1</sup>	5.7	8.7	27.7	15.1	17.0
% of pop under 24 <sup>3</sup>	30.1	26.5	30.1	33.1	32.3
% of pop over 65 <sup>3</sup>	14.8	16.4	17.2	14.8	15.2
% of people living alone <sup>3</sup>	11.0	15	7.0	4.0	11.0
Lone-parent families as % of all h/holds <sup>3</sup>	3.0	2.0	2.0	2.0	5.0
% of GDP spent on social security <sup>4</sup>	25.8	28.3	17.2	16.4	21.6
% of persons in poor households <sup>3</sup>	17.0	18.0	21.0	24.0	20.0

Notes:

1 European Commission (1996).

2 OECD (1995a).

3 European Commission (1999a); poverty is defined as households below 60 per cent of median total equivalized income.

4 OECD (1996).

by 2005. The UK plan also includes a commitment to the abolition of child poverty (within 20 years). For working age people the main focus of the UK plan is on providing opportunities and support for employment, as the main route to social inclusion. There is also a commitment to tackling pensioner poverty, and to narrowing the gap between the richest and the poorest neighbourhoods.

It is clear, therefore, that despite the changing focus of the EU policy agenda described above, these plans continue to emphasize the importance of employment and labour market issues, although locating these within different contexts.

One of the main aims of this book is to contribute to policy development through an analysis that develops knowledge about the nature and persistence of social exclusion in different national contexts. In the next part of this chapter, therefore, previous research in this area is briefly reviewed and further consideration given to the importance of a dynamic approach to the definition and proposed measurement of poverty and social exclusion within the EU, before we give a more detailed introduction to the ECHP and to our particular approach to analysing the dynamics of social exclusion.

## THE DYNAMICS AND MULTI-DIMENSIONALITY OF POVERTY AND SOCIAL EXCLUSION

The standard definition of poverty used by the EU is that ‘the poor shall be taken to mean persons, families and groups of persons where resources (material, cultural and social) are so limited as to exclude them from a minimum acceptable way of life in Member States in which they live’ (European Commission, 1984). The standard way of measuring poverty is to count ‘individuals living in households where the household income is below 60 per cent of national equivalized median income’. While there is widespread, if by no means unanimous, agreement about this way of defining and measuring poverty, the definition of social exclusion remains a contested term and one which is phrased in different ways by different authors (for example, Paugam, 1996; Room, 1995, 1999; Berghman, 1995; Atkinson, 1998; Levitas, 1998; Hills, 1999; Hills *et al.*, 2002; Micklewright, 2002). However, all these definitions have in common an approach that defines social exclusion not only in terms of income poverty and the lack of material resources, but also in terms of the processes by which some individuals and groups become marginalized in society. They are excluded not simply from the goods and standards of living available to the majority but also from their opportunities, choices and life chances.

Less has been said in these debates about the importance of measuring

poverty and social exclusion (however defined) over time and in more than one dimension for the same individuals and families. Take, for example, two individuals of working age living in the same country. The first has been income poor for only one or two months, is in good health, has high-level educational qualifications and has no children to support. The second has been income poor for most of his adult life, suffers from a disability, has no educational qualifications and two young children. Measuring poverty only at a point in time and only according to low income will suggest that both individuals are experiencing the same circumstances and would benefit from the same (limited) policy intervention. Policy based on a static 'point-in-time', unidimensional definition of poverty is likely to compensate some individuals unnecessarily while underestimating the needs of those who are multiply deprived over a long period.

When we move from national to international comparisons, further complications are added, since the rates at which people experience income and other forms of poverty and social exclusion, however defined, vary from country to country. There are also differences in the types of families and households most at risk of poverty, and the circumstances in which poor people live. Understanding these complexities requires an approach that goes beyond income to include a wider range of indicators of multidimensional disadvantage and beyond current situation to include analysis of change over time. This sort of analysis has been made possible by the advent of panel data sets, including the ECHP, which is the basis for the analysis in this book.

## ANALYSING SOCIAL EXCLUSION USING ECHP DATA

The ECHP, which started in 1994, collects a range of socioeconomic data for the same respondents on an annual basis. Eurostat has published some descriptive analysis of non-monetary deprivation across the EU12 countries using the ECHP data (European Commission, 1999a, 2000b, 2002). Gallie and Paugam (2000) have used ECHP data to examine the living standards and social participation of unemployed people. They found that living standards depend to a considerable extent on the intervention of the welfare state and that the degree of social integration depends on the type and stability of family structures. Whelan *et al.* (2001, 2002) examined the relationship between persistent income poverty and multiple deprivation and showed that only a modest proportion of the persistently poor can be characterized as being exposed to such deprivation. Barnes *et al.* (2002) summarized findings from cross-sectional analysis of the ECHP data and

focused on inter-country comparisons. The present volume reports on a dynamic analysis, one that explores the dynamics of social exclusion both cross-nationally and through detailed analysis at the national level.

The approach is 'dynamic' in two main senses. First, in respect of the life course, the analysis focuses on four 'transition' or 'risk' groups who might be anticipated to be at particular risk of poverty and social exclusion:

1. young adults (who may be leaving school, entering work or further education, leaving home, forming families);
2. lone parents (who are caring for children without a partner for a period of time);
3. people experiencing sickness or disability (which may be limiting employment or other opportunities); and
4. people retiring from employment (who are becoming reliant on other sources of income apart from their own earnings).<sup>1</sup>

Two of these – young adulthood and retirement – are universal life course transitions that everyone experiences, wherever they live, provided, of course, that they live long enough. The other two – lone parenthood and sickness/disability – are risks faced only by some people and there are substantial differences across countries in the extent of these. Focusing upon these times of transition allowed us to consider the extent to which life course changes make people particularly vulnerable to poverty and social exclusion.

The project is also dynamic in the sense that it aims to follow individuals over time. The four risk groups identify people at different stages of the life course, but to understand how the transitions affect individuals an examination is also needed of the nature and extent of the changes they experience. In practice, for statistical reasons (see further below), we have concentrated on changes within the four risk groups over a 12-month period.

As ever with empirical work of this sort, a number of issues of definition and measurement had to be resolved. Here four key areas are discussed: the static and dynamic definition of the risk groups, the choice of data, the static and dynamic definition and measurement of income and the static and dynamic definition and measurement of non-monetary material deprivation and multidimensional disadvantage.

## DEFINING THE RISK GROUPS

The project focuses upon four 'transitions' or 'risk' groups, as described above, and a detailed definition of each group is shown in Table 1.2. Each

*Table 1.2 'Risk group' definitions*

Risk group	Definition
Young adults	Individuals between 16 and 29 years of age.
Lone parents	Individuals 16 years and over and below state retirement age: 1. who live without a cohabiting partner but with at least one dependent child (under 16 years or in full-time education), 2. who live without a cohabiting partner but with children – all of whom are non-dependent.
Sick or disabled people	Individuals 16 years of age and over and below state retirement age, whose health in general is very bad, or who are severely hampered in daily activities.
Retired people	Adults over 45 years of age who declare themselves as retired, or adults who do not declare themselves as retired but who are over state retirement age and not working full-time (16 or more hours per week).

of these represents times of transition that may make people particularly vulnerable to poverty and social exclusion.

The complexity of the issues involved in making comparisons across countries is apparent when defining the four risk groups. Although the transition from youth to adulthood is an inevitable and universal process, the characteristics that are used to differentiate a young person from an adult vary between countries and this is reflected in the provisions made for young people, and the rights and responsibilities given to them. Each country has its own age-based definition of a 'young person'. In the countries in our study, ages range from 15 to 19 years in Greece to 15 to 30 years in Germany. These differences in definition result in variations in the proportion of each country's population that is identified as belonging to the transitional group. For the purposes of this analysis a common age-based definition was chosen – those between 16 and 29 years of age – which approximately encompasses the range found in the different countries.

Defining lone parenthood also meant creating a compromise between different national definitions. Some countries define lone parenthood according to the age of the youngest child, but the age limit varies. Austria, for example, limits the definition of lone parenthood to families where the youngest child is under 15 years old, whereas the UK age limit is under 16 years, or under 18 years if the child is not in employment. Germany,

Portugal and Greece consider any single person with never married children living in their household, whatever their age, to be a lone parent.

These patterns raise questions about the most appropriate definition of lone parenthood for cross-national comparative purposes. Often the focus of research has been on lone parents with dependent children only (for example, Hobson, 1994; Kilkey and Bradshaw, 1999). This makes sense when we are seeking to compare the circumstances of those who are solely responsible (financially and in other ways) for children. However, the focus on dependent children ignores the circumstances of quite a substantial group of lone parents, especially in the southern countries. Thus two main groups of lone parents have been chosen: those living with at least one dependent child (under 16 years or in full-time education) and those living with only non-dependent children. This allows an examination of whether these demographic differences are reflected in differences in incomes and a comparison of what may be very different experiences of lone parenthood in these countries.

The definition of ill-health and disability in respect of access to state welfare provisions varies between countries and within countries. It is sometimes based on incapacity to carry out certain activities and sometimes linked to a person's ability to participate in the labour market. The definition of sickness or disability chosen for the project is based on age and subjective assessments of individuals' health – individuals 16 years of age and over and below state retirement age, whose health in general is very bad, or who are severely hampered in daily activities. The definition is relatively strict, identifying those who believe their health to be very bad (the fifth point of a five point scale) or who feel severely hampered in their daily activities. The focus is kept on working age people in order not to conflate issues of ill-health and ageing.

Finally, at the time of the research official retirement ages varied between men and women in all countries, with women retiring at 60 in most countries – five years earlier than men. The *actual* age of retirement, however, is often much lower and with a smaller difference between men and women. Some countries make statutory provision for certain groups of workers to take earlier retirement with a pension, and workers also have the option of reaching private arrangements with their employers. Retirement may also be a tricky concept for women who have had no, or little, labour market participation and who may not, therefore, define themselves as retired. The definition chosen for the project – those over 45 years of age who say they are retired and those over state retirement age who are not working full-time even if they do not say that they are retired – is intended to pick up both early retirees and women even if they do not describe themselves as retired.

The original intention of the project was to examine what happens to individuals as they enter or leave a particular risk group: become a lone parent, for example, or take another partner, become sick or disabled, enter retirement, and so on. In practice, however, the data did not usually provide sufficient numbers of people making these transitions because, over the course of 12 months, the numbers making such changes (becoming a lone parent, for example) are relatively small. Such analyses have been made where possible but, in general, we have concentrated upon changes in employment, income and living standards within the four risk groups over a 12-month period.

In fact, small sample sizes limit the analysis in a number of ways. For the cross-sectional analysis, small sub-group sizes make it difficult to carry out detailed examination of some groups. The number of lone parents, for example, is very small in some of the countries under study. For the dynamic analysis, small numbers mean that we have been unable to analyse transitions into and out of the risk groups (as noted above) and, instead, have focused on changes within each group. Again, for lone parents, small numbers also limit what is possible. Where possible, statistical techniques based on linear models have been used, which do not require such large sample sizes.<sup>2</sup>

## WAVES OF DATA

The panel design of the ECHP survey allows the same individuals to be followed over time by annually re-interviewing original sample members (those in households selected for inclusion in the first wave of the survey) on a yearly basis. The majority of dynamic analysis presented in this book uses data from waves 2 and 3 of the ECHP. This limited time span is less than ideal for dynamic analysis, but this was the only ECHP information available at that time. Initial analysis of the ECHP used the first wave of data (reference year 1994) but experience with wave 1 data, combined with reports from other users, suggested that data quality was not as good as for wave 2. It was therefore decided to concentrate upon wave 2 as the base for the longitudinal analysis. Cross-sectional and longitudinal sample sizes for adults aged 16 years and over for each country are presented in Table 1.3.<sup>3</sup>

As with all panel surveys, the ECHP suffers from non-response and attrition. The size of subsequent wave samples falls short of the original panel sample collected in the first year because of non-contact, non-response, failure to follow up sample cases for other reasons, and households ceasing to exist. Analysis of non-response shows that, on the whole, cross-sectional response rates of the ECHP are comparable to those of similar complex

Table 1.3 Cross-sectional and longitudinal populations, adults 16 years of age and over,<sup>1</sup> ECHP, 1995–6

	Cross-sectional sample		Longitudinal sample
	Wave 2	Wave 3	Wave 2–Wave 3
Austria	7437	7270	6579
Germany	9002	8744	8539
Greece	12271	11605	11125
Portugal	11858	11706	10964
UK	8386	6938	6645

Note: <sup>1</sup> Samples restricted to adults who completed a personal interview.

national surveys. At a longitudinal level, more than 75 per cent of all people participating in the ECHP had been interviewed in all of the first three waves of the survey (European Commission, 2000b).<sup>4</sup>

## THE DEFINITION AND MEASUREMENT OF INCOME, POVERTY AND POVERTY MOVEMENTS

Income and income poverty are key concepts in almost all studies of deprivation, yet are extremely difficult concepts to define. In the cross-sectional analysis of the project (Barnes *et al.*, 2002) the detailed income information collected from all household members was used to measure annual equivalized net disposable household income<sup>5</sup> (as is standard in income analysis, income is adjusted to reflect the needs of the household).<sup>6</sup> The definition of income poverty used was that approved by Eurostat, the statistical arm of the European Commission. They set a poverty line at 60 per cent of the median of total net equivalized household income (for all population members, including children).

One issue that causes some difficulties for longitudinal analysis is the timing of the income data in relation to all the other data collected in the ECHP survey. The income measure used in cross-sectional analysis has the disadvantage that it refers to the calendar year before the interview and so does not relate to the same time period as the other household and individual information. This disadvantage becomes absolutely crucial in dynamic analysis because changes in the household circumstances (such as sickness of an income earner) from one year to the next are not reflected in the corresponding income data. This means that attempts to relate changes in household circumstances to changes in the detailed income data produce

paradoxical results, because of the difference in the timing of the different pieces of information. To deal with this problem the question that asks the main respondent to estimate the household's current monthly income has been used.<sup>7</sup>

When looking at poverty dynamics, the focus of analysis is on individuals who make significant moves into or out of poverty (above or below the poverty line). Analysis is not restricted simply to crossing the poverty line, as this may mean that some individuals' income may rise, or fall, by only a few Euros per year. Poverty dynamics is therefore defined in terms of both crossing the poverty line<sup>8</sup> and moving a significant distance in the income distribution. There are a number of possible methods that can be used to measure significant movements into (or out of) poverty. The method adopted here states that to enter (escape from) poverty an individual must be above (below) the poverty line in wave  $t$  and below (above) the poverty line in wave  $t + 1$ , and move at least five percentile points in the relative income distributions.

Of particular interest to poverty researchers are the rate and the magnitude of movements into and out of poverty. It is possible to distinguish between four groups of individuals according to their poverty turnover: those who have remained in poverty over the two years, those who have entered poverty, those who have exited from poverty and those never in poverty over the two years.

In addition to determining groups of individuals according to their poverty turnover status, it is also possible to identify the rates of movement between groups, or poverty transitions. These identify the likelihood of moving into (entrance rate) or out of (exit rate) poverty, given an individual's position in the previous year. The poverty entrance rate is calculated as the proportion of people not in poverty in wave  $t$  who enter poverty in wave  $t + 1$ . The poverty exit rate is calculated as the proportion of those in poverty in wave  $t$  who escape poverty in wave  $t + 1$ . Likewise, poverty persistence and avoidance rates can be calculated. The poverty persistence rate is calculated as the proportion of those in poverty in wave  $t$  who remain in poverty in wave  $t + 1$ . The poverty avoidance rate is calculated as the proportion of those not in poverty in wave  $t$  who remain not in poverty in wave  $t + 1$ .

## THE DEFINITION AND MEASUREMENT OF MULTIDIMENSIONAL DISADVANTAGE, SOCIAL EXCLUSION AND RELATED TRANSITIONS

The multidimensional qualities of the ECHP mean that it is possible to explore transitions into and out of states of non-monetary deprivation (as

well as combining both income and deprivation measures). The deprivation measures used include items under the headings of household amenities (items such as having a separate kitchen, hot running water and central heating); household durables (items such as a television, a telephone and access to a car or van); and household necessities (items such as being able to afford a holiday once a year, new rather than second hand clothes and to replace worn-out furniture).

As with household income, working out a summary measure of who is deprived is not straightforward. One approach when calculating deprivation rates is to construct a 'proportional deprivation index' to take account of each household's possession of such items relative to that in the population as a whole. In this method, to be without an item owned by a large proportion of the population indicates greater deprivation than to be without an item owned by a lesser proportion. To ensure relativity between countries, only items that are owned by the majority of each country's population are included in the analysis. This approach to measuring relative deprivation has not often been used before, particularly in an international context.

To calculate the index, each individual is given a score for each item of zero if they possess the item and one if they do not. This score is then multiplied by the proportion of the population that possesses the item to give an 'item deprivation score'. These scores are then aggregated to give an 'overall deprivation index' (this is done separately for amenities, durables and necessities). As with income poverty, a 'deprivation line' is then calculated at 60 per cent of the median 'overall deprivation index' (80 per cent for amenities and durables, given their high ownership in the population) and anyone who falls below this is deemed to be 'in deprivation'.

As well as looking at income poverty and material deprivation, the analysis also considers social relationships. Three indicators of social relationships are used. The first denotes whether an individual is not a member of a club or organization, the second whether an individual talks to neighbours once or twice a week or less, and the third whether an individual meets friends or relatives (who live outside the household) once or twice a week or less. Unlike income poverty, deprivation and social exclusion dynamics are not restricted to individuals who make 'significant' movements across the deprivation line. This is because the properties of the deprivation index are different to those of income: in particular, it is difficult to relate a deprivation score, and hence a change in deprivation score, to a precise level of resources as is possible with income. Therefore both deprivation and social exclusion transitions are defined according to annual changes in the binary indicator of deprivation (1 if in deprivation and 0 if not in deprivation).

## BOOK CONTENTS

Chapter 2 contains an inter-country comparison of the dynamic analysis of poverty and social exclusion for each of the life course or 'risk' groups. Chapters 3 to 7 place these findings in a national context. Results relating to the life course or 'risk' groups for each country are described in the context of welfare policies affecting each group at the time the data were collected. Finally, Chapter 8 provides a synthesis of the cross-national comparisons in the individual country chapters and considers their policy implications at both national and European levels. It also raises methodological issues that have arisen in the research and that have implications for future analysis and data collection.

## NOTES

1. Note that unemployment has been analysed, not as a transition in itself, but as an event that can face people in any of these transitions. This was done in order to be able to analyse how unemployment, and labour market exit more widely, affect each of the groups. For a detailed analysis of unemployment using ECHP data, see Gallie and Paugam (2000).
2. The analysis presented in this book conforms to the Eurostat requirements in respect of sample sizes. These requirements are set up to prevent inaccurate reporting of results due to small sample size. The thresholds for longitudinal analysis are (a) below 10 observations (unweighted sample), base too small, results not published (shown in tables by \*); (b) from 10 to 29 observations (unweighted sample), small base, so analysis must be read with caution; results may be published but are to be individually identified (shown in tables in brackets). Exactly the same rule applies for cross-sectional analysis, except that the thresholds are put respectively at 20 and 49 observations.
3. The majority of analysis focused on adults of 16 years of age and over, as they qualified to answer the individual interview, containing such information as health, social relations and labour-market activity. Those under 16 years of age were included in some analysis, as household characteristics (income, deprivation and so on) could be attributed to them.
4. As with all surveys, non-response bias can occur when households and individuals that failed to respond to the survey are systematically different from those who do respond. This can result in biased estimates when the survey results are used to make generalizations regarding the whole population. The normal method of compensating for survey non-response is to use weights that adjust the responding survey units for those that fail to respond. The ECHP applied this method in formulating both cross-sectional and longitudinal non-response rates, which were combined with weights to account for design effect and to correct the distribution of households and individuals on variables such as age, sex, main activity status and other relevant characteristics. Appropriate weights are used in all analysis presented in this book.
5. Net disposable income covers all market incomes (including wages, self-employment income, investment income, rent received) plus social transfers received, including all types of pensions plus private transfers, minus income taxes and social insurance contributions.
6. This assumes that there is considerable sharing between household members that allows for the reasonable supposition that children benefit from the income of their parents and that non-working adults benefit at least in part from the income of their working partner.

The equivalence scale used in the ECHP survey is the modified OECD scale. The modified OECD scale adopts a multiplier of 1.0 for the first adult, 0.5 for every other adult and 0.3 for every child under 14.

7. This question relies on the competence of the main respondent to estimate the household's monthly income. An alternative option would be to use the detailed income data from the next wave to represent household income for the current wave. Although probably a more reliable approach, this was impossible within the time scale of this project.
8. The poverty line for each wave is calculated using each cross-sectional population (adults and children) sample.