RESEARCH SERIES
NUMBER 11
SEPTEMBER 2009

Poverty and Deprivation in Ireland in Comparative Perspective

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And
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The Economic and Social Research Institute

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This paper is available online at www.esri.ie
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ISBN 978 0 7070 0279 8

ACKNOWLEDGEMENTS

We are grateful to colleagues at The Economic and Social Research Institute and, in particular to Tim Callan and Pete Lunn, Philip O' Connell and Frances Ruane for comments on various aspects of this study. Feedback from the staff of the Office for Social Inclusion was constructive and extremely helpful. As ever, we are indebted to the team of Deirdre Whitaker, Mary Cleary and Regina Moore for their work in guiding this document through the publication process with their usual efficiency. We would also like to acknowledge the support provided by Mary Dowling throughout the course of the study.

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Poverty Rates and Living Standards

Despite a period of sustained economic growth from the mid-1990s until 2007, Irish 'at risk of poverty' levels remained stubbornly high, where 'at risk of poverty' is defined as falling below 60 per cent of median household income adjusted for household size. In the context of the enlargement of the European Union (EU), Ireland was seen to compare unfavourably not only with its prosperous EU neighbours but also with a number of New Member States.

The fact that the 'at risk of poverty' methodology leads to Irish poverty rates being higher than a number of New Member States, despite the fact that Ireland enjoys substantial advantages in terms of GDP per capita, has led to increased reservations about sole reliance on this approach to measuring poverty.

The apparent paradox presented by the results deriving from the 'at risk of poverty' methodology has encouraged a number of responses. The first, which has been evolving for some time, involves a shift from a uni-dimensional perspective, focusing solely on relative income, to a multidimensional perspective that incorporates both income and material deprivation. The second involves teasing out the implications of indices constructed at an EU-level. Critics of the 'at risk of poverty' measure have focused on the fact that middle income households in poorer European states have incomes that are lower than the relative income poverty threshold in richer countries and that a larger share of the population in a richer country, such as Ireland, is considered poor than in less affluent countries, such as Estonia. Confronted with such outcomes, a number of authors have suggested that the use of a 'state bounded approach', i.e., employing measures that are defined entirely in terms of national relativities, can be challenged both on the grounds of differences in absolute deprivation and how people feel about their material living standards.

In this paper we explore both multidimensional and Europe-wide approaches in order to compare the consequence of choice with regard to unidimensionality versus multidimensionality and geographical unit. The recent availability of data from the European Union Statistics on Income and Living Conditions (EU-SILC) instrument allows us to place the Irish situation in a broad comparative context in relation to the implications of opting for a multidimensional versus a undimensional approach and the choice of geographical unit. For some parts of our analysis we take full advantage of the range of data available in the EU-SILC and place the Irish outcomes in the context of findings relating to the other twenty-five countries. For other purposes, we focus on comparisons with six countries specifically chosen for their value in contextualising the Irish outcomes. The UK has been chosen because of the similarities in institutional

arrangements and for obvious historical reasons. The other five countries comprise a set of smaller European countries that span a range of welfare state arrangements, namely, Finland, Austria, Portugal, the Czech Republic and Estonia. The strategy we adopt involves a compromise between taking as wide a comparative perspective as possible and alternatively focusing on key comparisons that we hope will be particularly illuminating in relation to the Irish case.

'At Risk of Poverty': National Measures in Comparative European Perspective

In this paper we compare Irish poverty rates with a range of other countries using five different definitions of poverty which are described below and summarised in Table 1 below. In terms of national 'at risk of poverty' level, Ireland with a rate of 18.5 per cent in the 2006 wave of EU-SILC, ranks joint 17th of the 26 countries for which we have information.[1] It has a rate almost twice that for the Czech Republic and one-and-a- half times that of Finland and Austria, marginally higher than the UK and identical to those observed for Portugal and Estonia. However, a compelling case can be made that Ireland is distinctive not so much for its overall level of being 'at risk of poverty', but in terms of the comparatively severe consequences for poverty outcomes of factors such as exclusion from the labour market and lone parenthood. Individuals in Ireland in households where the household reference person (HRP) is in employment have an 'at risk of poverty' rate that is no higher than their counterparts in countries such as Finland and Austria. In contrast, those in households in Ireland where the HRP is unemployed, ill/disabled or inactive experience at 'risk of poverty' levels that are one-and-a-half to twice as high those found in Finland and Austria. Ireland is very similar to the UK in this respect.

Table 1: Poverty Measures, Irish Rates and Rankings

Poverty Concept	Measurement	Poverty Rate in Ireland	Irish Ranking
National At Risk of Poverty	Percentage of households below 60 per cent of national median income	18.5	17
EU At Risk of Poverty	Percentage of households below 60 per cent of EU median income	9.9	13
National Consistent Poverty	Percentage below 60 per cent of national median income and above a deprivation threshold that identifies an identical proportion of individuals to that captured by national income measure	8.7	21
EU Consistent Poverty	Percentage below 60 per cent of EU median income and experiencing enforced lack of 3+ of 7 deprivation items	5.1	13
Mixed Consistent Poverty	Percentage below 60 per cent of national median income and experiencing enforced lack of 3+ of 7 deprivation items	7.1	17

[1] In this index, a higher international ranking indicates a comparatively high poverty rate.

Similarly, while between one in four and one in five individuals in households with a lone parent HRP are found to be 'at risk of poverty' in Finland and Austria, this rises to almost one in two in Ireland. In relation to the HRP being a lone parent, Ireland shares with Estonia and, to a slightly lesser extent the UK and the Czech Republic, a profile that combines comparatively high overall levels of 'at risk of poverty' in European terms with distinctively sharp within-country differentials between individuals in such lone parent households, on the one hand, and all other households, on the other.

Ireland shares with the UK, Portugal, the Czech Republic and Estonia a life cycle pattern whereby 'at risk of poverty' rates are significantly higher for children and older people than for working age individuals. The fact that this pattern is not uniform across countries shows that social policy does not simply respond to life cycle inequalities but also shapes such patterns.

Maintaining a strictly national perspective, one can define a *consistent poverty* measure in which people are defined as poor when they are both below 60 per cent of median equivalent and above a consumption deprivation threshold where the same number of people is found as is located below the 60 per cent income line. Adopting such a dual perspective, leads to Ireland's ranking deteriorating from 17th to 21st among the twenty-six countries we consider. In every case adopting a consistent poverty approach leads to substantial reductions in poverty levels because of the low degree of overlap between low income and high deprivation. However, the extent of the overlap is even less in other countries than in Ireland. While in Ireland just less than one in two of those below the 60 per cent income line are also found above the corresponding consumption deprivation threshold, the overlap between the income poor and those exposed to high levels of deprivation level is actually higher in the Irish case than that for the remaining twenty-five countries. As a consequence, while the construction of a consistent poverty measure that maintains an entirely national or relative perspective reduces the Irish poverty rate to 8.7 per cent, it also leads to a deterioration rather than an improvement in Ireland's ranking.

'At Risk of Poverty': EU-wide Measures

A consequence of the apparently paradoxical results produced by the national 'at risk of poverty' approach has been that a number of commentators have argued in favour of the use of an EU-wide measure instead of or at least together with the national measure. This approach, which takes 60 per cent of median income in the twenty-six EU countries, produces an 'at risk of poverty' rate of 9.9 per cent for Ireland. Its ranking improves from 17th to 13th of the 26 countries included in this study. Moreover, the absolute difference between the Irish rate and those in a number of less affluent European countries becomes quite substantial. For example, the European 'at risk of poverty' level for Portugal is 46.5 per cent and for Poland it is 73.5.

A European approach thus offers a significantly different perspective. This conclusion also holds true if we pursue a consistent poverty approach at the EU level. This involves identifying those who fall below 60 per cent of median equivalent income at the EU level who are also located above a consumption deprivation threshold that identifies an identical proportion

of individuals. Adopting this measure we estimate that 5.1 per cent of the Irish sample is located above this threshold and Ireland has an identical ranking to that observed for the European 'at risk of poverty' measure. This Irish consistent poverty level compares with one of 19.3 per cent in Portugal and 45.9 per cent in Poland.

The European approach clearly produces results in terms of poverty levels that reflect substantial differences in living standards. However, one consequence of this approach is that national differences almost entirely dominate socio-economic influences. For example, those excluded from the labour market in the more affluent countries emerge with significantly lower poverty rates than those active in the labour market in the less affluent countries. This constitutes a significant disadvantage if we wish to understand the processes generating poverty and social exclusion across the European Union. Such an approach is consistent with the twin concerns of the European Commission (2004) that poverty measurement should both acknowledge that what is regarded as minimal acceptable living standards depends largely on the general level of social and economic development, and recognise that the challenge for Europe is to allow the whole population share the benefits of high average prosperity.

Combining National and European Perspectives

The Irish consistent poverty measure adopted for the National Action Plan on Social Inclusion (NAPSInc) reporting process combines an income threshold at 60 per cent of equivalised income with being above a deprivation threshold defined in terms of enforced absence of 2 or more of 11 basic deprivation items. It is not possible to apply the NAPSInc measure on a comparative basis across EU countries and we employ it here simply as a reference point for the measures that we do employ. At the European level, our analysis shows that the nearest we could come to such a measure is by adopting a deprivation threshold of 3 or more from a set of 7 consumption deprivation items. The threshold is higher in the latter case, despite the smaller number of items, because the levels of deprivation in relation to the consumption items are substantially higher than in cases of basic items relating to food and clothing. Despite the modest overlap between deprivation items for the two indices, and the application of different thresholds, the NAPSInc measure and the indicator based in the common EU-SILC data set produce almost identical estimates of poverty levels. The respective figures are 6.5 per cent and 7.1 per cent.

The measure based on the common EU-SILC data set effectively combines national and European approaches. It adopts a strictly relative or national approach to income. On the other hand, a particular level of consumption deprivation is considered as having identical significance across countries. Using this measure which identifies those who are both below the national relative income poverty line and experiencing enforced deprivation on 3 of the 7 consumption deprivation items, Ireland is ranked 17th of the 26 countries included in the study. Its consistent poverty rate of 7.1 per cent is substantially above those in the set of Scandinavian countries where the highest level of 4.4 is observed for Finland. However, it is significantly lower than in countries such as Portugal and Poland where the levels of consistent poverty are 8.9 and 14.9 per cent respectively.

Poverty levels are substantially lower when we adopt the consistent poverty measure that employs the combined national and EU-wide

approach. However, in every case socio-economic variation is much sharper with the consistent poverty indicator than with the 'at risk of poverty' measure. For the seven countries on which we have focused, poverty rates with the consistent poverty measure are extremely low for those active in the labour market. In Ireland, where the HRP is in full-time employment, less than 1 per cent of individuals are found below the combined poverty threshold. However, this rises to close to 30 per cent in Ireland where the HRP is unemployed and in the UK and the Czech Republic it exceeds 40 per cent.

Our analysis defines those not in paid work because of illness/disability, inactivity or unemployment as 'excluded from the labour market'. For those not excluded we find that the overall level of consistent poverty in each country is a great deal lower than the corresponding level 'at risk of poverty' but the pattern of differentiation across countries is almost identical. However, for the group excluded from the labour market a somewhat different pattern emerges with by far the highest levels of consistent poverty being observed for Estonia and the Czech Republic, while Ireland and the UK occupy intermediate positions. Nevertheless, if we focus on the effect of labour market exclusion on within-country relativities, Ireland remains at the upper end of the continuum although it is more favourably placed than the Czech Republic and, in particular, than the UK which is characterised by striking levels of disparity. The distinctive position of the UK stems primarily from the particularly strong impact of unemployment and the relatively low levels of income support for the unemployed in that country. The distinctive patterns of cross-national variation for those excluded from the labour market compared to all others for 'at risk of poverty' and consistent poverty are graphically illustrated in Figures 5.18 and 5.21 on pages 67 and 69 respectively.

For those who are not in lone parent households, the highest level of 9 per cent is observed in Portugal while for Ireland it is 5 per cent. In contrast, with the exception of Finland where the rate is 8 per cent, for those in lone parent households the 'at risk of poverty' rate ranges from 16 per cent in Austria to 35 per cent in Ireland. Ireland displays the highest level of consistent poverty for lone parents followed by Estonia and the Czech Republic. Within country, relativities between those in lone parent households and others are also sharpest in Ireland, followed by the UK and the Czech Republic. In every case socio-economic differentiation proves to be sharper when we focus on consistent poverty. However, while shifting to such a perspective leads to an improvement in Ireland's relative position in relation to HRP principal economic status (PES) differentials, this is not true when the HRP is a lone parent. Thus, in relation to consistent poverty, Ireland represents the worst case scenario with regard to absolute and relative outcomes for individuals in lone parent households.

Poverty in Ireland in Comparative Perspective

During the period of economic boom, 'at risk of poverty' rates in Ireland remained comparatively high in European terms. Concerns have been expressed that this outcome is an artefact of the measure of poverty employed and this is reflected in the use at national and EU level of the terminology of 'at risk of poverty'. A case can clearly be made for combining income and deprivation information to produce a consistent poverty indicator. However, applying a consistent poverty measure, while lowering poverty levels, produces no improvement in Ireland's relative

European position. Rather then being an exception in relation to the proportion of households below the income line who are not deprived, Ireland is actually at the lower end of the continuum.

Shifting to European indicators, whether in terms of 'at risk of poverty' or consistent poverty, produces a slight improvement in Ireland's ranking and confers a substantial advantage on it in terms of absolute poverty rates where comparison with Southern European countries or new member states are involved. Such indicators, however, are characterised by significant disadvantages in terms of understanding of patterns of socio-economic differentiation in relation to poverty.

An approach that combines a national or relative approach in relation to income and an 'absolute' or EU approach to deprivation leads in every case to a substantial reduction in poverty rates. However, Ireland's ranking remains unchanged in comparison with the 'at risk of poverty' indicator.

Overall, irrespective of the poverty indicator chosen, Ireland does rather badly in European poverty 'league tables'. However, such overall comparisons miss a great deal about what is distinctive about the Irish case. Where international comparisons involve individuals in households where the HRP is active in the labour market or enjoys a favourable situation in relation to marital and parental circumstances, Irish people rank more favourably on the poverty league tables, i.e. enjoy a position comparable to their European counterparts. However, where labour market exclusion or lone parenthood is involved, Irish individuals find themselves at a substantial disadvantage. Consistent poverty measures offer no panacea. While they reduce overall poverty rates, they also reveal more pronounced socio-economic inequalities. Ireland's relative position in international terms is inextricably linked with the distinctive scale of socio-economic inequalities by which it is characterised. Improving Ireland's relative position would require reducing the number of household reference persons excluded from the labour market and, even more importantly, reducing the negative consequences associated with such exclusion and with lone parenthood. Since the former objective is unrealistic in the short to medium term, it becomes even more important to address the consequences of such exclusion and lone parenthood for poverty and social exclusion.

1. INTRODUCTION

In this introduction we seek to provide a brief account of the manner in which apparently paradoxical results relating to poverty levels in EU countries have provoked various answers. Such responses have involved varying the geographical unit on which poverty and social exclusion is based and the development of indicators that reflect an appreciation that poverty and social exclusion involve more than low income. We will then outline the steps that we will take in developing a comprehensive analysis that incorporates these broader perspectives.

At the beginning of the 1990s, Irish living standards in terms of GNP per head were at two-thirds of the European average but by the end of the decade most of that gap had been closed. The most striking development in the period was an increase in the numbers employed of over 40 per cent. Unemployment fell from 16 per cent to less than 4 per cent.[1] The period 1994-2000 saw an expansion of the Irish economy that led Blanchard (2002, p. 61) to conclude: "I do not know the rules by which miracles are officially defined, but this seems to come close". Yet Irish poverty rates, as captured by the primary EU indicator of 'at risk of poverty' remained stubbornly high leaving Ireland in a position that compared unfavourably not only with its prosperous western European neighbours but also with a number of the New Member States (NMS).

In this publication we seek to put Irish poverty rates in a broader comparative European perspective. We pursue this agenda in a context where the 'at risk of poverty' indicator, based on the proportion falling below 60 per cent of adjusted equivalent income remains the key EU poverty indicator. However, increasingly concern has been expressed regarding this approach as it leads to countries, such as Ireland, exhibiting higher poverty rates than a number of New Member States. This remains true, despite the fact that Ireland enjoys substantial advantages in terms of GDP per capita and other indicators of material living conditions, may reflect the limitations of 'at risk of poverty' measures in capturing rapid changes in living standards.

The apparent paradoxes presented by the results deriving from the 'at risk of poverty' approach have encouraged a number of responses. The first, which has been evolving for some time, involves a shift from a uni-dimensional perspective focusing solely on relative income to a multidimensional perspective that incorporates both income and indicators of material deprivation. This approach builds on pioneering work by Townsend (1979) and Mack and Lansley (1985). It has been applied by

[1] For further discussion of the Irish experience of economic growth see Honohan and Walsh (2002) and for a general discussion of the social impact of the boom Fahey, Russell and Whelan (2008).

ESRI researchers at both national and European levels (Nolan and Whelan, 1996; and Maître, Nolan and Whelan, 2006). It has also underpinned the development of the Irish consistent poverty measure where those defined as poor have incomes below 60 per cent of median income adjusted for family size (Callan, Nolan and Whelan, 1993; and Whelan, 2007).

Interest in the use of material deprivation indicators has intensified at the European level. A recent OECD report *Society at a Glance* considered the relationship between 'at risk of poverty' in terms of income, and material deprivation at a national level. When considering all countries for which information is available the OECD reports that the index of deprivation it employs is only weakly correlated with the prevalence of 'at risk of poverty' while it is more strongly correlated with GDP. However, the reverse is also the case (i.e. a stronger correlation with relative income poverty and a weaker one with average per capita income) when excluding OECD countries with GDP per capita below €25,000. This suggests that material deprivation provides information about both absolute living standards and the lower end of the income distribution of each country.

The OECD analysis is based on aggregate correlations across countries and involves limited standardisation of items across countries. However, in the Irish case, on the basis of analysis of micro data, we have known for some time that income indicators and 'deprivation informed' measures such as consistent poverty provide different estimates of levels of poverty and identify rather different groups of people as being in poverty. More recently Eurostat (2006) has compared income poverty and deprivation approaches across the fourteen countries in the first wave of EU-SILC. We know from a substantial body of literature that the discrepancy between income and deprivation approaches is observed across a wide range of countries. Nevertheless, it is still true that among countries with the highest national income poverty rates, the deprivation level is also relatively high. The exception, however, is Ireland where the deprivation rates, using a number of thresholds, are significantly lower than might be expected on the basis of its 'at risk of poverty' rate.

These results have stimulated interest not only in comparing the consequences of opting for unidimensional or multidimensional approaches but also in teasing out the implications of constructing indices at a national or EU-level. This second broad approach, starts from the observation that middle income households in poorer European states have incomes that are lower than the relative income poverty threshold in richer countries, and the associated paradox that a larger share of the population in a country such as Ireland is considered poor than in Poland. In this context, Fahey (2007, pp. 36-37) suggests that the "state bounded approach", which defines income poverty entirely in terms of national relativities, can be challenged on two grounds. The first involves a consideration of cross-national differences in absolute deprivation and the second involves an assessment of how people feel about their material living standards. Recent efforts at comparing 'at risk of poverty' outcomes at both national and EU levels include Brandolini (2007).

In what follows we combine both approaches in order to compare the consequence of choice with regard to unidimensionality versus multidimensionality and the choice of geographical unit. The recent availability of EU-SILC data allows us to place the Irish situation in broad

comparative context in relation to the implications of opting for a multidimensional or a undimensional approach to poverty measurement and the choice of geographical unit whether national or European. For some parts of our analysis we take full advantage of the range of data available in the EU-SILC and will place the Irish outcomes in the context of findings from the remaining twenty-five countries. For other purposes, we will focus on six countries specifically chosen to contextualising the Irish outcomes. The UK has been chosen because of the similarities in institutional arrangements and for obvious historical reasons. The remaining countries comprise a set of five smaller European countries that span a range of welfare regime arrangements namely Finland, Austria, Cyprus, the Czech Republic and Estonia. A coherent case can be made, as has been done by Callan *et al.* (2008), for comparing Irish poverty outcomes and institutional arrangements with the 'best practice' countries, such as those operating under Scandinavian welfare state arrangements. However, a compelling argument can also be made for taking a broader comparative perspective and focusing on a sample of countries whose performance Ireland might reasonably be expected to emulate. It also constitutes an advantage where we wish to consider the consequences of choosing between income and deprivation and national and European approaches. The strategy we adopt involves a compromise between taking as wide a comparative perspective as possible and alternatively focusing on key comparisons that we hope will be illuminating in relation to the Irish case.

Our focus in this paper is on poverty and deprivation *outcomes* and the manner in which socio-economic factors contribute to such outcomes. Given the scale of the comparative analyses reported here, it will be beyond the scope of this publication to explore in detail the manner in which institutional mechanisms and policies mediate such relationships. However, we shall seek to relate our findings to the earlier analysis by Callan *et al.* (2008) which was aimed specifically at evaluating effective policies. We will endeavour to provide part of the platform required for future exercises of this kind.

In Chapter 2, using the data from EU-SILC 2006 covering twenty-six European countries, we address the challenges involved in measuring deprivation at the European level. We distinguish a number of dimensions of deprivation and assess the degree to which they can be reliably measured across the range of countries covered in the EU-SILC data set. We then proceed to document cross-national differences in deprivation levels. In particular, we focus on a consumption deprivation index that we employ subsequently as one component of a consistent poverty measure. This consumption deprivation index is shown to have a number of features that make it the most plausible candidate to serve as the deprivation component of a consistent poverty measure that comes closest to that currently employed in Ireland but that permits European comparisons.

In Chapter 3 we construct such a European-wide consistent poverty index and compare both levels of consistent poverty and the socio-economic composition of the poor using this measure and the Irish consistent poverty measure.

In Chapter 4 we develop a range of measures at national and EU-levels covering both 'at risk of poverty' and consistent poverty and compare outcomes across the full range of countries included in the EU-SILC data

set. For the seven countries on which we have decided to focus, we then proceed to consider cross-national variation in key socio-economic attributes. Our analysis is then extended to take into account the impact of such variation and the differential consequences of such attributes for cross-country differences in the levels of 'at risk of poverty' and consistent poverty.

In Chapter 5 we go beyond the relatively descriptive analysis in the earlier chapters in order to develop an analytic strategy that enables us to provide a more systematic treatment of the manner in which the distribution and consequences of socio-economic characteristics shape patterns of cross-country variation in relation to 'at risk of poverty' and 'consistent poverty'.

Finally, in Chapter 6 we synthesise our findings and draw our conclusions together.

2. MEASURING MATERIAL DEPRIVATION IN THE EUROPEAN UNION

2.1 Introduction

In this chapter we use new data from EU-SILC for twenty-six European countries to examine the structure and distribution of material deprivation in the enlarged EU. We identify three distinct dimensions of material deprivation relating to consumption, household facilities and neighbourhood environment, and construct indices of these dimensions for each country and the EU as a whole. The extent of variation across countries and welfare regimes is shown to depend on the dimension on which one focuses, as does the strength of the association with household income and subjective economic stress. The index of consumption deprivation is shown to have by far the highest correlation with income. It constitutes a highly reliable measure in itself, and allows segments of the population to be identified that are sharply differentiated in terms of their multidimensional deprivation profiles.

Building on pioneering research by Townsend (1979) and Mack and Lansley (1985), measures of material deprivation are now widely used in studying, understanding and monitoring poverty and social exclusion in industrialised countries. In a UK context, this includes for example research based on the Poverty and Social Exclusion surveys (e.g. Gordon *et al.*, 2000) and that employed in framing measures of child poverty (DWP, 2002, 2007). In 2000 the EU's Social Inclusion process adopted a battery of social inclusion indicators (commonly known as the "Laeken Indicators") that currently rely heavily on household income, but with a commitment to develop complementary indicators of deprivation. With the termination of the European Community Household Panel (ECHP) the European Union Community Statistics on Income and Living Conditions (EU-SILC) instrument is potentially the primary source for such analysis. It is from this source that the common statistical indicators endorsed by the European Laeken Council in 2001, and later refined by the Social Protection Committee to serve as an essential element in the Open Method of Coordination related to the Social Inclusion Process, will be drawn. Data from the EU-SILC organised by Eurostat are now available for most of the EU member states, and here we use these to examine the structure, distribution and consequences of material deprivation at national and EU levels. We also seek to establish whether deprivation indices can be

constructed that are satisfactory at both national and European levels, and can serve as additions to the existing portfolio of social indicators. We also address the question of how analysis of the deprivation indicators currently included in EU-SILC can inform future developments in this area particularly through the special module on deprivation being developed by Eurostat which will be part of the 2009 wave of EU-SILC.

The current interest in indicators of material deprivation is related to increasing dissatisfaction, in an EU context and within many countries, with the common approach of focusing on those falling below relative income poverty lines. It has long been argued that poverty is about 'more than just money', and recent years have seen an increasing emphasis on multidimensionality – although often on a rather *ad hoc* basis.[2] Such approaches have attempted to make use of not only income measures, but in varying combinations, indicators of consumption, housing, health and neighbourhood environment.

Following Townsend (1979), the European Union has conceived poverty as involving exclusion from the minimally acceptable way of life of the Member state in which one lives as a consequence of inadequate resources (Atkinson *et al.*, 2002). Those below relative income thresholds, falling more than a certain 'distance' below the average, could indeed be excluded as a consequence from the minimally acceptable way of life. However, in practice low income turns out to be quite unreliable in identifying households experiencing distinctive levels of deprivation (Ringen, 1988). Recognition of this fact contributed to the labelling of those below relative income thresholds in the current EU indicators as being 'at risk of poverty', whereas previously they had been simply termed "poor".

The various factors contributing to the weakness of the measured relationship between income and deprivation are becoming better understood. They include the fact that current income is an imperfect indicator of long-term or 'permanent' income, that needs to differ across households in a manner that is difficult to capture in 'equivalence scales', and that not only income but support from family, friends and neighbours, non-cash income from public provision of services, and geographical location all affect living standards.[3] The growing literature on multidimensional analysis of social exclusion shows that different methods lead to different conclusions about not only levels of poverty or exclusion, but also the groups or types of household that are identified as excluded.[4] Rather than serving as a counsel of despair, though, the lesson can be drawn that direct measures of material deprivation, seen as a complement

[2] Alternative conceptual and empirical rationales for adopting such an approach are discussed in Nolan and Whelan (2007).

[3] Extending to observation period from one to five years, while providing improved measures of both income and deprivation, does not resolve the problem of limited overlap. See Whelan *et al.* (2001, 2004).

[4] See Mack and Lansley (1985); Gordon *et al.* (2000), Bradshaw and Finch (2003); Hallerod (1996); Kangas and Ritakallio (1998); Tsakloglou and Papadopoulous (2002); Short (2005), Whelan *et al.* (2001) and Perry (2002).

rather than an alternative to income measurement, have a valuable role to play in understanding poverty and framing and monitoring policy.[5]

2.2 Measurement of Deprivation in the European Union

The current set of common EU-indicators of poverty and social exclusion used in the context of the Open Method of Coordination (OMC) relies heavily on measures of relative income poverty. The emphasis on a purely relative perspective, taking conditions in one's own country as the benchmark, has been justified by the European Commission in the following terms:

> *An absolute notion is considered less relevant for the EU for two basic reasons. First the challenge for Europe is to make the whole population share the benefits of high average prosperity and not to reach basic standards of living as in developed parts of the world. Secondly, what is regarded as minimal acceptable living standards depends largely on the general level of social and economic development, which tends to vary considerably across countries* (European Commission, 2004).

Nevertheless, as Guio (2005) observes, particular concern has been expressed about the ability of the current portfolio of indicators to satisfactorily reflect the situation of the New Member States and facilitate meaningful comparison between them and the 'old' Member States. As Fahey (2007) notes, relative poverty thresholds in the more affluent member states are above average income in the poorest member states, and the 'poor' in some countries have higher standards of living than the well-off in others. The problems are reflected in the strikingly different pictures provided by comparisons involving on the one hand 'at risk of poverty' indicators and, for example, average GDP.

One response to such concerns has been to explore the income poverty patterns that would result from adopting either sub-national or EU-level thresholds.[6] An alternative approach has focused on the development and use of material deprivation indicators. The EU is committed to developing such indicators to form part of its portfolio for the purposes of the social inclusion process, and to facilitate this a special module relating to material deprivation is to be included in the 2009 round of EU-SILC.[7] However, in the meantime significant progress can be made by analysing the indicators already included in the core EU-SILC each year, and that is what we undertake here.

The deprivation items that have been included in the ECHP and EU-SILC have largely related to the *enforced lack* of items depicting material living conditions, such as capacity to afford basic requirements, possession of consumer durables, household conditions and quality of neighbourhood environment. Guio (2005) stresses that such indicators do not provide a comprehensive coverage of social exclusion because they ignore access to the labour market, education, health and social participation. They are

[5] Boarini and d'Ercole (2006, p. 12) suggest that this dual approach is consistent with Sen's (2000) argument that a comprehensive approach should encompass a focus on individuals' command over resources – capabilities – and the resulting outcomes – functionings.
[6] Kangas and Ritakallio (2007) and Brandolini (2007).
[7] See also the OECD review by Boarini and d'Ercole (2006).

simply intended to offer synthetic information on material living conditions. However, this is not necessarily a disadvantage. All-embracing definitions of social exclusions that conflate disparate dimensions often obscure rather than clarify the underlying processes of exclusion.[8]

Here we report the findings of an analysis of material deprivation using EU-SILC 2006. The data available for analysis covers twenty-six countries, twenty-four EU member states plus Norway and Iceland. The analysis will be conducted at the household level. Taking into account previous literature in the area of material deprivation, our objectives are as follows:

- To propose and test a dimensional structure for the analysis of material derivation using EU-SILC.
- To consider the levels of reliability associated with the dimensions proposed at national, welfare regime and EU levels.
- To examine the extent to which deprivation dimensions are independent or correlated.
- To assess the adequacy of measurement relating to the dimensions we identify and the possible need to develop additional dimensions.
- To document national and welfare regime variation in relation to deprivation dimensions and certain single indicators that we identify as of particular interest.
- To ask to what extent the particular form of deprivation that we label 'consumption deprivation' also captures exposure to deprivation more broadly.
- To consider the relationship between different forms of deprivation, household income and subjective economic stress.

2.3 Data Sets

EU-SILC is now the reference source for statistics on income and living conditions, and common indicators for social inclusion in the EU. It was launched in 2004 in thirteen Member States (Belgium, Denmark, Spain, Greece, Spain, France, Ireland, Italy, Luxembourg, Austria, Portugal, Finland and Sweden) and in Norway and Iceland. It was only in 2005 that the EU-SILC reached its full scale with twenty-five Member States plus Norway and Iceland. In this publication we make use of two surveys, the Eurostat EU-SILC for 2006 and the Irish EU-SILC for 2006. The Eurostat EU-SILC 2006 is used for international comparative perspective across Chapters 2, 4 and 5 while the Irish EU-SILC 2006 survey is used in Chapter 3 in an Irish context only.

The Eurostat User Database EU-SILC 2006 covers twenty-six countries, twenty-four EU members states (Malta not being in the survey) as well as Norway and Iceland. The household survey consists of 202,978 households which is a total of 536,993 individuals. The sample sizes across countries range from 8,598 individuals in Iceland to 54,512 in Italy.

The Irish EU-SILC 2006 is the survey that is used to construct the Irish component of the Eurostat data set for EU-SILC and it is a much broader survey than the Eurostat EU-SILC. The sample size of the Irish SILC is of 5,836 households and 14,634 individuals.

[8] Previous research suggests rather weak associations between the measures developed and social isolation and somewhat stronger correlations with health outcomes (see respectively Gallie *et al.* (2003), Achenson (1998)).

2.4 Income Measurement

The income measure we employ throughout this publication is the annual total household disposable income adjusted for household size using the OECD modified equivalence scale for where we wish to make cross-country international comparison and the national equivalence scale where, as for example in Chapter 3, we wish to compare outcomes employing the procedures used by Eurostat to those applied by the CSO for national calculations using the Irish data set.[9] The income reference period is the twelve months prior to date of interview.

The specifically Irish data-set as constructed by the CSO and the EU-wide data-set as constructed by Eurostat use different definitions and measures of income. Three important differences must be kept in mind.

- The first relates to the fact that the EU definition of gross income does not include income from private pensions (pensions organised independently from an employer) while they are included in the national definition of income for Ireland.
- Second, in the EU definition of income all contributions to pension plans (expect those as defined earlier) are deducted from gross income when calculating disposable income. In the Irish national calculation of disposable income no such deductions from gross income are made.
- Finally, in the EU definition of income, employers' social insurance contributions are not included while in the Irish national calculation they are included and deducted from gross income in the calculation of net income.

The most dramatic consequence of implanting these different procedures relates to the very different estimates they lead to in relation to 'at risk of poverty' levels for older people. This measure involves a different data count of the number of individuals that fall below 60 per cent of median equivalised income. For Ireland the 'at risk of poverty' rate for the population aged over 65 years is 27 per cent using the Eurostat EU-SILC 2006 while it is 14 per cent using the national Irish EU-SILC. The difference is accounted for by the different equivalence scale employed as well as the different definitions of income applied. In Ireland the national scale gives a weight of 1 to the first adult in the household then a weight of 0.66 to any subsequent adult and every child (aged 14+) is given a weight of 0.33 while the Modified OECD scale (used by Eurostat) attributes weights of 1, 0.5 and 0.3 respectively. The national scale thus produces a greater number of equivalent adults than the Modified OECD one. Scales giving a greater weight to each additional household member reduce the poverty rate of individuals in small household size (like elderly households) while increase the poverty rate of larger household (for example, households with children).

The other major factor affecting the poverty rate of the elderly is the different method of calculating the gross income mainly for two important components. The first difference relates to the fact that Eurostat does not include in gross income, pensions from individual private plans

[9] The OECD modified scale gives a weight of 1 to the first adult (aged 14+), then 0.5 to any other adults and a weight of 0.3 for each child while the national scale gives respectively weights of 1, 0.66 and 0.33.

(independent of their current or former employers or government). Second, Eurostat deducts from gross income all contributions to pension plans (with the exception of the above) when calculating net income while in the Irish calculation no such deduction is applied. Of course, the Eurostat definitions have been applied consistently across countries so Ireland will not be the only country affected in this manner.

2.5 Deprivation Items

The EU-SILC data set contains a considerably narrower range of deprivation items than the ECHP. Given the available indicators we have focused on a sub-set of items covering, as will be seen, objective information relating to consumption, household facilities and neighbourhood environment. We excluded a number of other items relating to housing deterioration because the fact that in the more affluent countries deprivation levels were zero or close to zero creates difficulties to which we refer below. We also omitted indicators relating to health because particular difficulties arise in comparing the specific items available across the range of countries included in EU-SILC.

Our analysis focuses on 17 deprivation items:

CONSUMPTION DEPRIVATION

- Afford to pay unexpected required expenses.
- Week's holiday away from home.
- Meals with meat, chicken, fish (or vegetarian)
- Can afford a PC?
- Arrears relating to mortgage payments, rent, utility bills, hire purchase.
- Inability to keep home adequately warm.
- Respondent for household can afford to have a car.

HOUSEHOLD FACILITIES

- Bath or shower in dwelling.
- Indoor toilet.
- Can afford a telephone?
- Can afford a colour TV?
- Can afford a washing machine?

NEIGHBOURHOOD ENVIRONMENT

- Pollution, grime or other environmental problems in the area caused by traffic or industry.
- Noise from neighbours or noise from the street.
- Crime, violence or vandalism in the area.
- Rooms too dark, light problems.
- Leaking roof, damp walls/ceilings/floors/foundations, rot in doors, window frames.

2.6 Analysing the Structure of Multiple Deprivation

Exploratory factor analysis led us to hypothesise that the underlying structure of deprivation could be best conceptualised in terms of three distinct but correlated dimensions:

- *Consumption deprivation* comprising seven items ranging from ones that deal with current requirements such as food and heat to more general consumption items such as being able to afford a holiday, a car or a PC, as well as avoiding arrears on regular bills such as rent or utilities.
- *Household facilities* comprising five items that relate to permanent household facilities such as bath or shower and indoor toilet, and also includes being able to afford a telephone, a colour TV and a washing machine.
- *Neighbourhood environment* comprising three items relating to noise, pollution, crime and violence.

This preliminary analysis also suggested that the items relating to 'insufficient light' and 'leaking roof' do not seem to be associated with any distinct cluster of items; we, therefore, do not include either in the dimensions to be analysed (though we do employ the "leaking roof" item on its own to capture poor housing quality at a later stage in the analysis).

Table 2.1 reports the results of a confirmatory factor analysis for dichotomous items with these three factors.[10] A confirmatory factory analysis involves a prior specification of a factor structure or underlying dimensionality. In this case we have specified which items constitute elements of, for example, the consumption deprivation dimension and of that dimension only.

The factor loadings indicate which items best measure the underlying construct or in words discriminate most sharply between those who score high or low on the index. The items that most clearly define the distinctive nature of the consumption dimension are the holidays, inability to cope with unexpected expenses, and meal with meat, fish or chicken items with loadings on the first dimension ranging from 0.8-0.9. These provide a sense of the extent to which items correlate with the underlying dimension that we are attempting to capture. The loading falls to 0.7 for inability to keep the home warm and a PC, and the lowest value of about 0.6 is observed for arrears. On the household facilities dimension the bath or shower and indoor toilet items occupy the most prominent position, with loadings of close to 1, while for telephone, washing machine and TV the coefficients are about 0.8. Finally, on the neighbourhood environment dimension both noise and pollution load at a level close to 0.8 while the crime, violence or vandalism coefficient is somewhat lower at below 0.6.

Before going on to employ this structure, it is important to note that alternative formulations seeking to distinguish "basic" from "secondary" deprivation, a distinct dimension relating to poor quality housing, and somewhat different groupings of items have been employed in recent work for Eurostat (notably Guio and Macquet, 2007) and in earlier analyses of deprivation in the pre-enlargement EU based on the ECHP (e.g. Whelan *et*

[10] Models were fitted using the M-Plus software.

al., 2001). However, the deprivation items currently included in EU-SILC are more limited than was the case with the ECHP and in our judgement it is necessary to operate with a more limited set of dimensions. The inclusion in the 2009 round of EU-SILC of a special module on material deprivation with a broader range of items will allow these issues to be pursued more satisfactorily. In the meantime, the structure outlined here can serve to demonstrate what can be learned about patterns of deprivation across the enlarged EU.

Table 2.1: Confirmatory Factor Analysis for EU-SILC 2006 Deprivation Items: Standardised Model Results

	Consumption	Housing Facilities	Neighbourhood Environment
Week's holiday away from home	0.889		
Afford to pay unexpected required expenses	0.824		
Meals with meat, chicken, fish (or vegetarian)	0.786		
Respondent for household can afford to have a car	0.711		
Inability to keep home adequately warm	0.680		
Afford a PC?	0.702		
Arrears relating to mortgage payments, rent, utility bills, hire purchase	0.565		
Bath or shower in dwelling		0.981	
Indoor toilet		0.969	
Can afford a telephone?		0.840	
Can afford a washing machine?		0.786	
Can afford a colour TV?		0.757	
Noise from neighbours or noise from the street			0.797
Pollution, grime or other environmental problems in the area caused by traffic or industry			0.817
Crime, violence or vandalism in the area			0.560

In order to demonstrate the appropriateness of undertaking cross-national analysis involving these dimensions of deprivation, the next set of Figures sets out the value of Cronbach's alpha reliability index[11] across all twenty-six countries on which the data were available, for the twenty-four EU Member States taken as a whole, for each individual country, and for five welfare regime clusters. A welfare regime can be understood as a particular constellation of social, political and economic arrangements which tend to nurture a particular welfare system, which in turn supports a particular pattern of stratification, and thus feeds back into its own stability. The central element of the approach employed by Esping-Andersen (1990) is the commodification-decommodification thesis. Decommodification

[11] alpha=[Np/[1 + p(N-1)] where N is equal to the number of items and p is equal to the mean inter-item correlation.

arises when a resource or service is provided as a matter of right and is detached from reliance on the market.

Developing this thesis leads to distinguishing the following set of welfare regimes:

- The Social Democratic regime assigns the welfare state a substantial redistributive role, seeking to guarantee adequate economic resources independently of market or familial reliance. We have included Sweden, Denmark, Iceland, Finland, Norway and Netherlands in this cluster. [12]
- The Corporatist regime involves less emphasis on redistribution and views welfare primarily as a mediator of group-based mutual aid and risk pooling, with rights to benefits depending on being already inserted in the labour market. This cluster includes Germany, Austria, Belgium, France and Luxembourg.
- The liberal regime acknowledges the primacy of the market and confines the state to a residual welfare role, social benefits typically being subject to a means test and targeted on those failing in the market. Benefits are generally of a flat rate with maintenance of a relationship with pre-contingency earnings being dependent on a 'second tier' of employer arrangements. The UK and Ireland constitute this group.
- The Southern European regime with family support systems playing a crucial role and the benefit system being uneven and minimalist in nature. This group comprises Cyprus, Greece, Italy, Portugal and Spain.
- The Post-communist group: while Alber *et al.* (2007) and Juhász (2006) note the difficulties in categorising the welfare regimes of these countries and the extent of variation across them, low levels of spending on social protection and weakness of social rights are common.[13] The Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovenia and Slovakia are included in this cluster.

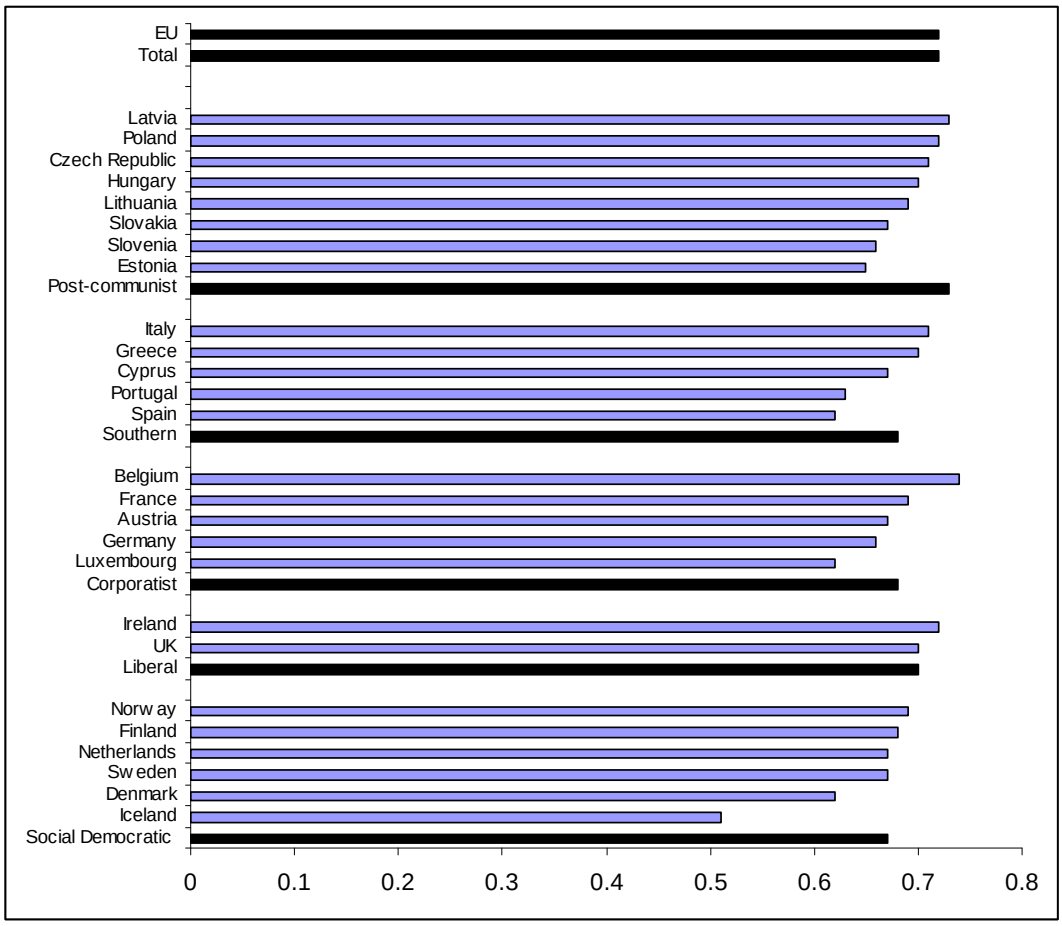
The welfare regime analysis presented in this publication is primarily of a descriptive nature and is used primarily as an aid to communicating information relating to the patterning of cross-national variation.

Each individual item can be thought of as tapping both the underlying dimension that we are trying to measure and a number of extraneous influences including measurement error. The Chronbach alpha reliability coefficients provide an indication of the extent to which the individual items can be seen to tap the same underlying dimension. The square root of Chronbach's Alpha can be interpreted as the correlation between the current deprivation index and the theoretically perfect deprivation index made up of the infinite number of items that could be used to measure deprivation. In other words an alpha of 0.7 indicates a correlation of 0.84 between the measure based on the available items and the perfect

[12] The proper allocation of the Netherlands is a matter for debate. We follow Aiginger and Guger (2006) and Muffels and Fouarge (2004) in locating it in the social democratic cluster.
[13] A number of authors including Bukodi and Róbert (2007) have distinguished Estonia, Latvia and Lithuania as a distinct liberal rather than conservative Post-communist cluster. However, introducing this distinction produces little in the way of extra explanatory power in our analysis.

measures. In Figure 2.1 focusing first on the consumption deprivation dimension, we find that at overall and EU-level the alpha value is 0.72. Relatively little variation is observed across welfare regimes, where alpha ranges from 0.67 to 0.73. Across countries, the lowest value of 0.51 is observed for Iceland and the highest of 0.74 for Belgium. The consumption deprivation dimension thus appears to be a reliable measure both within and between countries.

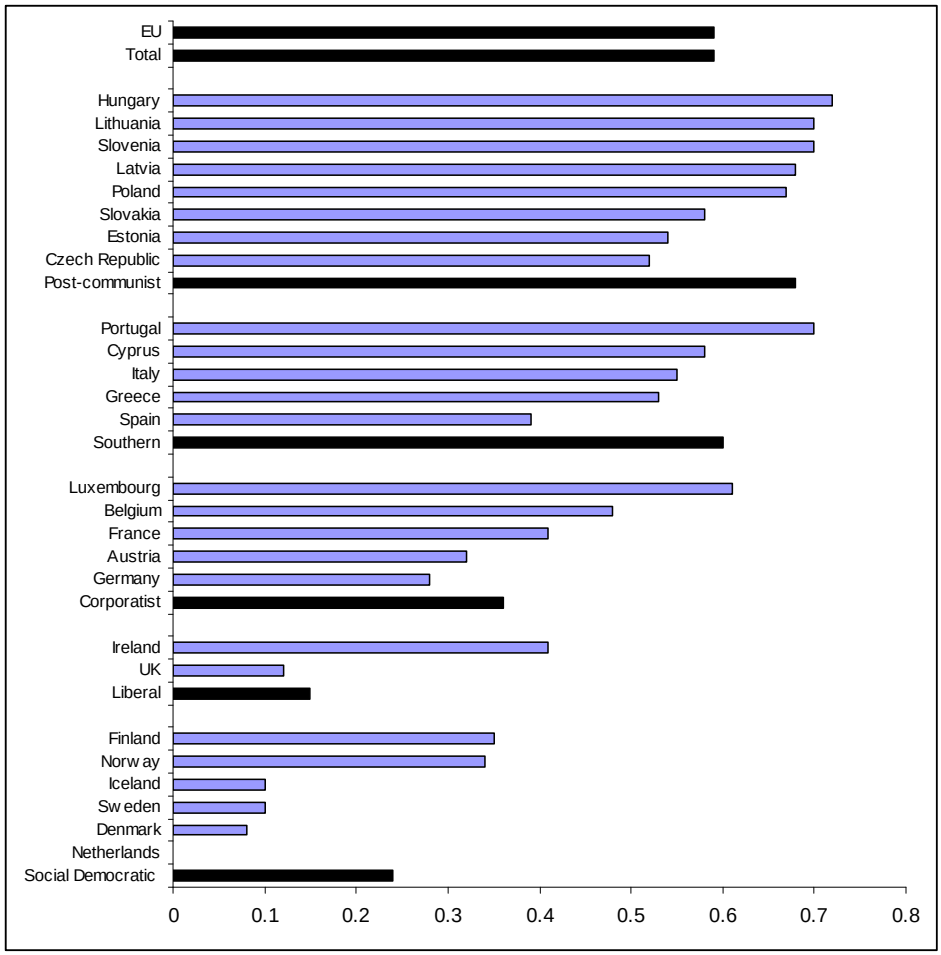
Figure 2.1: Cross National and Welfare Regime Variation in Reliability Levels for Consumption Deprivation, EU-SILC 2006



In Figure 2.2 we present the reliability results for the household facilities dimension, where the overall and EU reliability level are slightly lower at 0.59 but remain reasonably satisfactory. However, in this case reliability is a good deal more variable across welfare regimes and countries. The highest value of 0.68 is observed for the Post-communist cluster, declining to 0.60 for the Southern European cluster, 0.36 and 0.15 for the Corporatist and Liberal regimes, and 0.24 for the Social Democratic regime. This final cluster has a consistently low set of values, above 0.10 only for Finland and Norway. Within the liberal group the UK has a particularly low value of 0.12. The values within the corporatist group range from 0.61 for Luxembourg to 0.28 for Germany. Variation is less pronounced within the Southern European group, four of the five values are between 0.4 and 0.6. Portugal has the highest value of 0.7. Variation is also restricted in the Post-communist group with values ranging between 0.5 and 0.7. Variation in reliability levels is directly related to corresponding variation in levels of deprivation in the underlying items, with levels of deprivation on a number

of the household facilities items so low in more affluent countries/clusters that there is little variation.

Figure 2.2: Cross National and Welfare Regime Variation in Reliability Levels for Housing Facilities Deprivation, EU-SILC 2006



Finally turning to the neighbourhood environment dimension in Figure 2.3, given that it is made up of only three items it is unsurprising that the overall level of reliability declines to 0.57. However, as with consumption deprivation, there is rather limited variation across welfare regimes and countries. The level of reliability ranges from 0.45 for the Social Democratic regime to 0.48 for the Liberal cluster and between 0.59 and 0.61 for the remaining clusters. While the full range of variation across countries runs from 0.26 in Iceland to 0.66 for Luxembourg, nineteen of the twenty-six values are located between 0.50 and 0.66. Thus while the inclusion of additional items would be desirable in order to increase its level of reliability, the neighbourhood environment dimension proves to be relatively unproblematic.

Figure 2.3: Cross National and Welfare Regime Variation in Reliability Levels for Neighbourhood Environment Deprivation, EU-SILC 2006

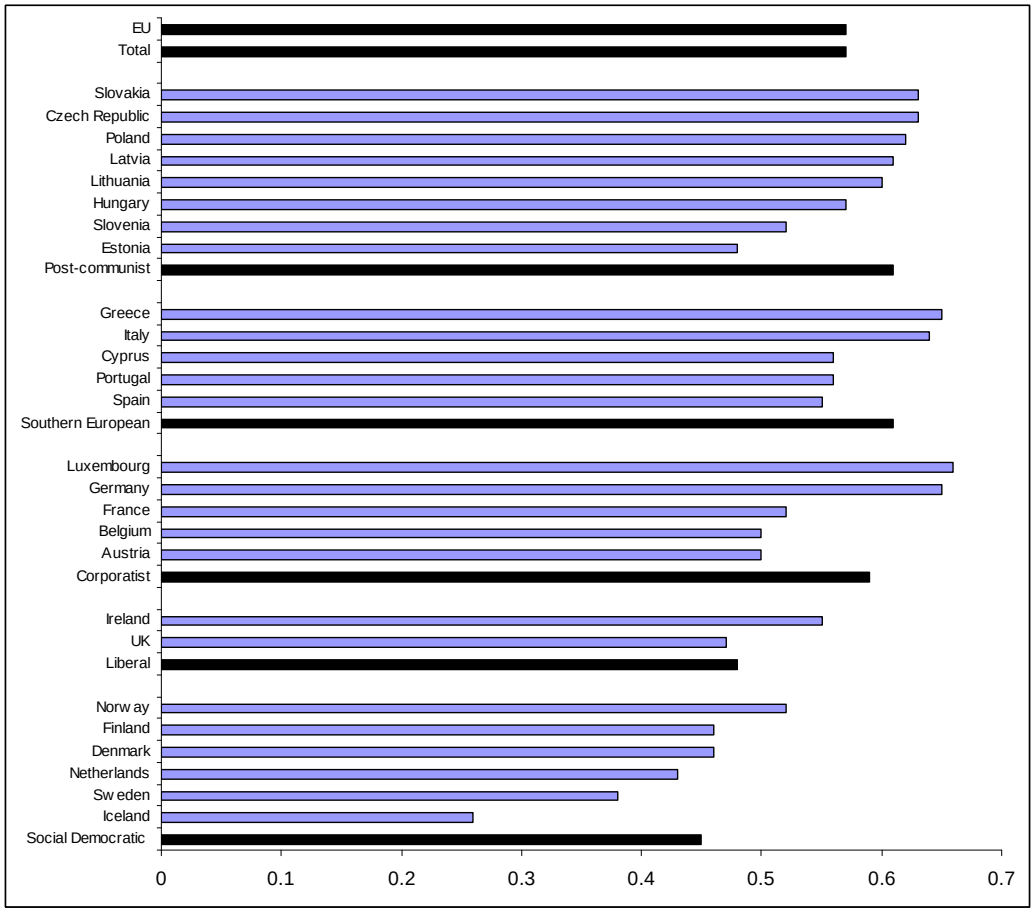


Table 2.2 shows the correlations between the deprivation dimensions. The highest correlation is between the consumption and household facilities dimensions, at about 0.30; consumption and neighbourhood environment are only weakly correlated at about 0.1, while there is essentially no association between household facilities and neighbourhood environment. The table also shows the correlation between each dimension and the level of household income, "equivalised" to adjust for differences in household size and also adjusted to take account of differences in purchasing power across countries. Consumption deprivation is seen to be strongly associated with income with a correlation of -0.534, whereas this declines to -0.299 for household facilities and to -0.009 for neighbourhood environment.

Table 2.2: Correlations Matrix for EU Prevalence Weighted Deprivation Dimensions, EU-SILC 2006

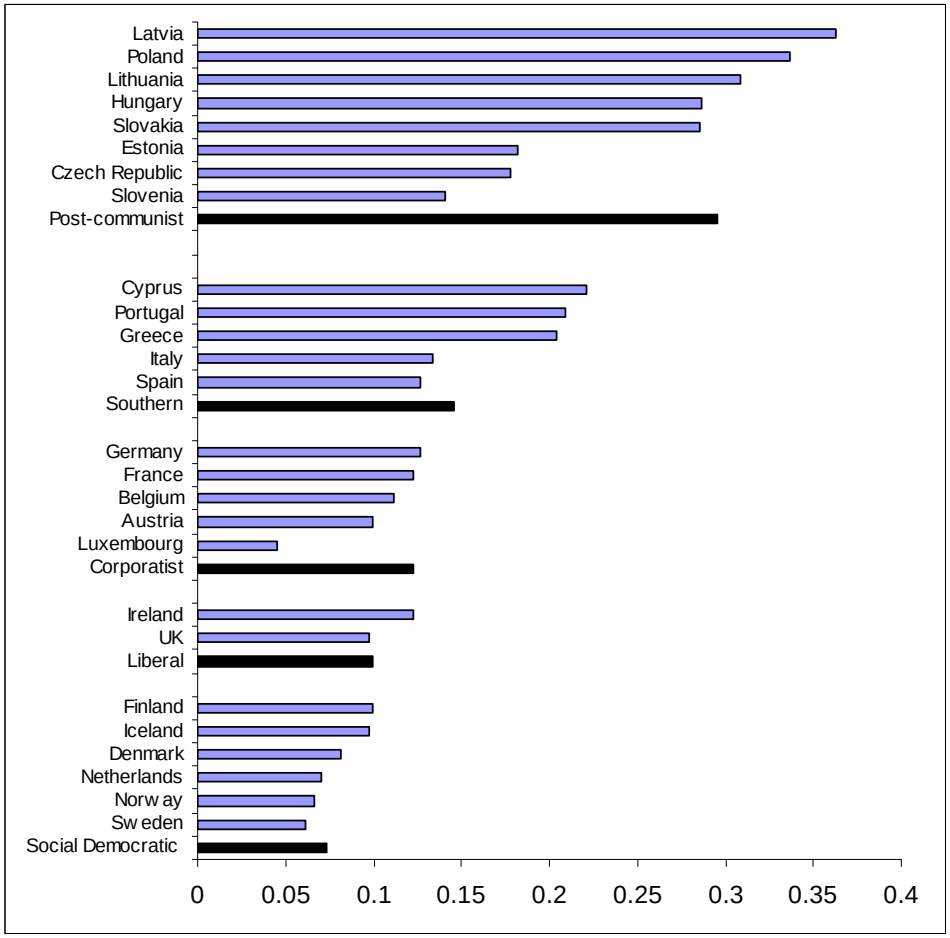
	Consumption	Household Facilities	Neighbourhood Environment	Log of PPS Equivalent Income
Consumption				
Household Facilities	0.307			
Neighbourhood Environment	0.097	0.001		
Log of PPS Equivalent Income	-0.534	-0.299	-0.009	

2.7 Cross-National Variation in Levels of Deprivation

We now look at the variation across countries and clusters in deprivation on the three dimensions. The deprivation variables for this purpose are constructed by weighting each individual item by the proportion of households possessing that item across all the countries. Enforced lack of an item that is widely available/possessed across the EU is thus given more weight than deprivation of a less-widely available one – deprivation of an item such as a PC will be counted equally across the member states irrespective of their average living standards, from Estonia at one end of the average income scale to Luxembourg at the other. Scores are standardised to range between 0 and 1 by dividing the sum of the weighted deficits on all items by the sum of EU possession levels.

Focusing first on consumption deprivation in Figure 2.4, we see that the mean score varies from 0.092 for the Social Democratic regime, 0.108 for the Liberal countries, 0.135 for the Corporatist group, 0.153 for the Southern European countries, and it then more than doubles to 0.333 for the Post-communist cluster. Within cluster, variation is relatively slight and consistent with expectations. Sweden displays the lowest level of 0.061 in the Social Democratic group and Finland the highest at 0.099. Luxembourg is an exceptional case in the Corporatist cluster with a value of 0.045. For the remaining countries the range runs from 0.099 for Austria to 0.127 for Germany. Italy and Spain display the lowest values in the Southern

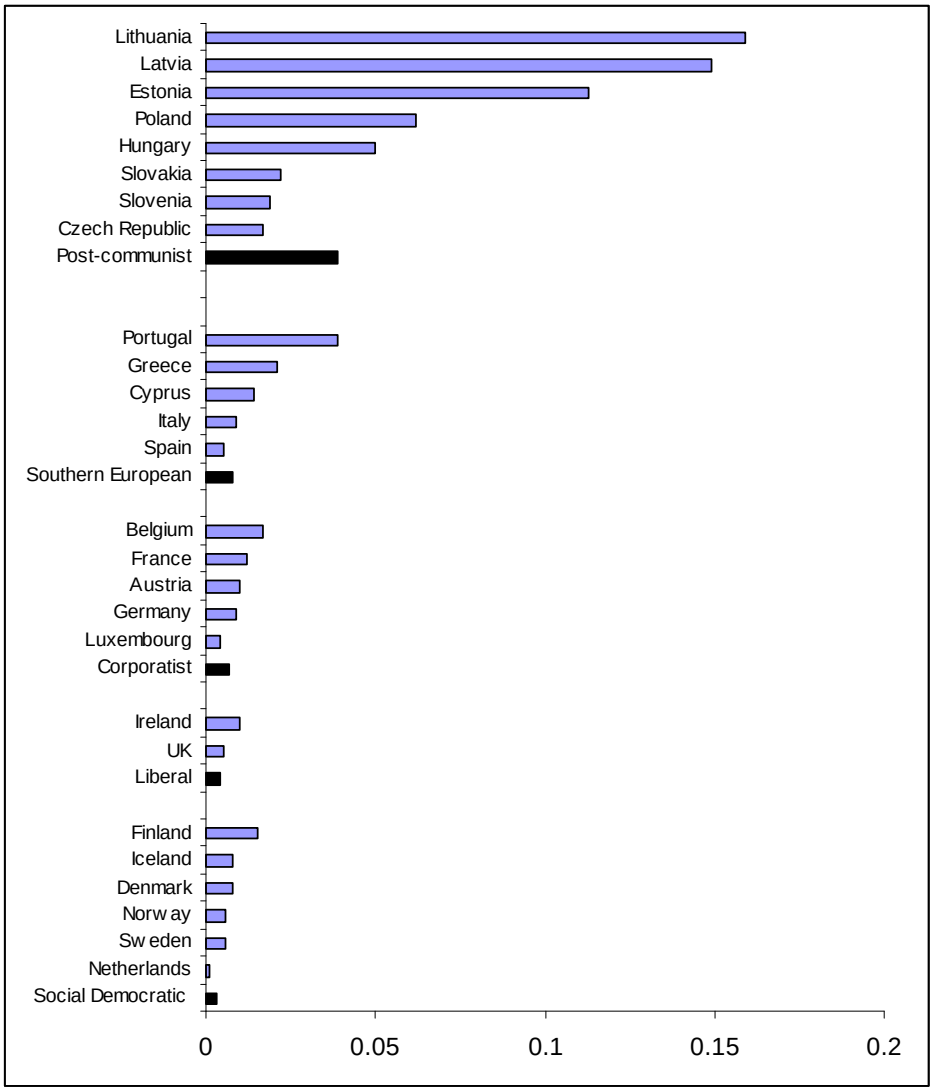
Figure 2.4: Mean Deprivation Levels for EU Prevalence Weighted for Consumption Deprivation, EU-SILC 2006



European cluster with respective values of 0.127 and 0.134 while the remaining values are all in excess of 0.200. Within the Liberal cluster the Irish value of 0.123 is slightly higher than that of 0.097 observed for the UK. Slovenia, the Czech Republic and Estonia have the lowest values in the Post-communist group ranging between 0.141 and 0.178 respectively. For the remaining countries the range runs from 0.285 in Slovakia to 0.363 in Latvia. Cross country variation accounts for about 17 per cent of the variance.

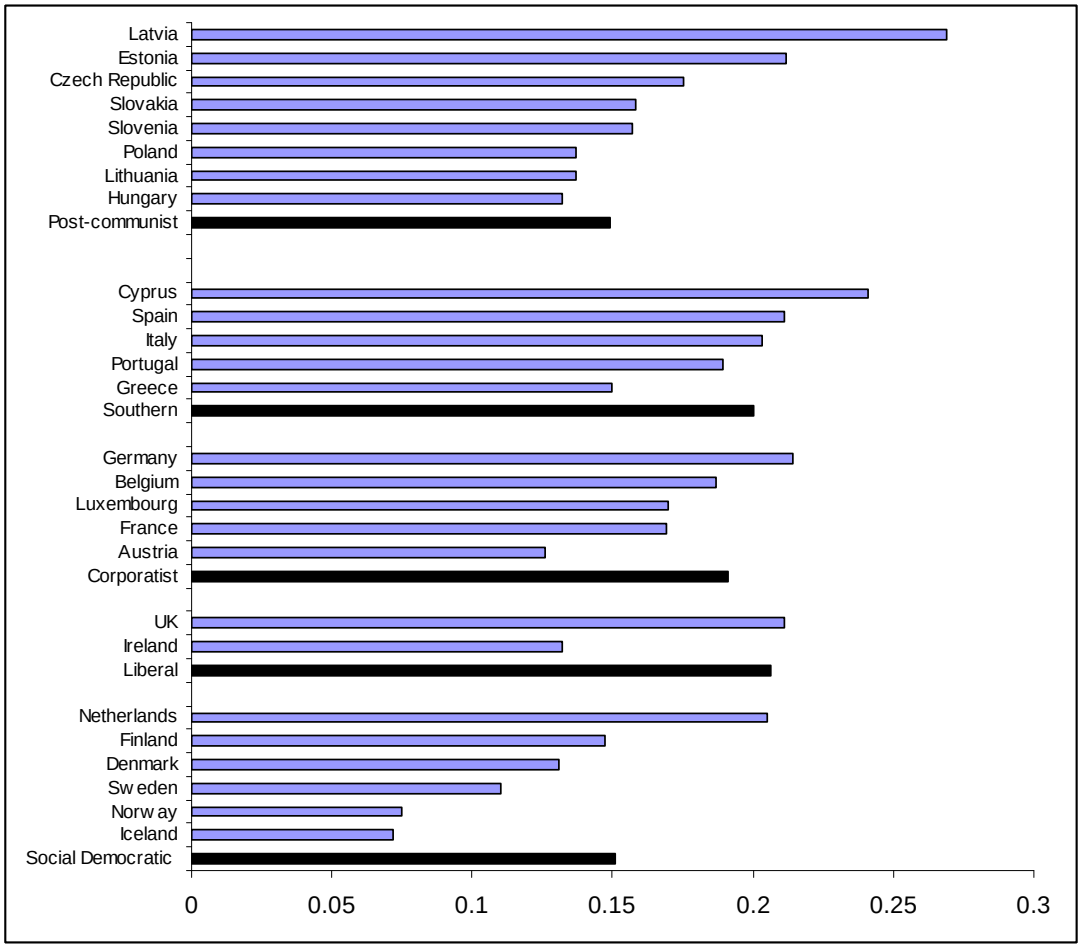
In the case of household facilities, cross-country variance accounts for 10 per cent of the total variance. In Figure 2.5 we see that the major contrast is now between the Post-communist cluster – with mean deprivation level of 0.058 – and all the other countries, where it is 0.011 or below. The highest levels within the Post-communist cluster are found for Estonia, Latvia and Lithuania, and within the Southern European group for Greece and Portugal. The Irish value of 0.010 is again slightly higher than that of 0.005 observed for the UK.

Figure 2.5: Mean Deprivation Levels for EU Prevalence Weighted for Household Facilities Deprivation, EU-SILC 2006



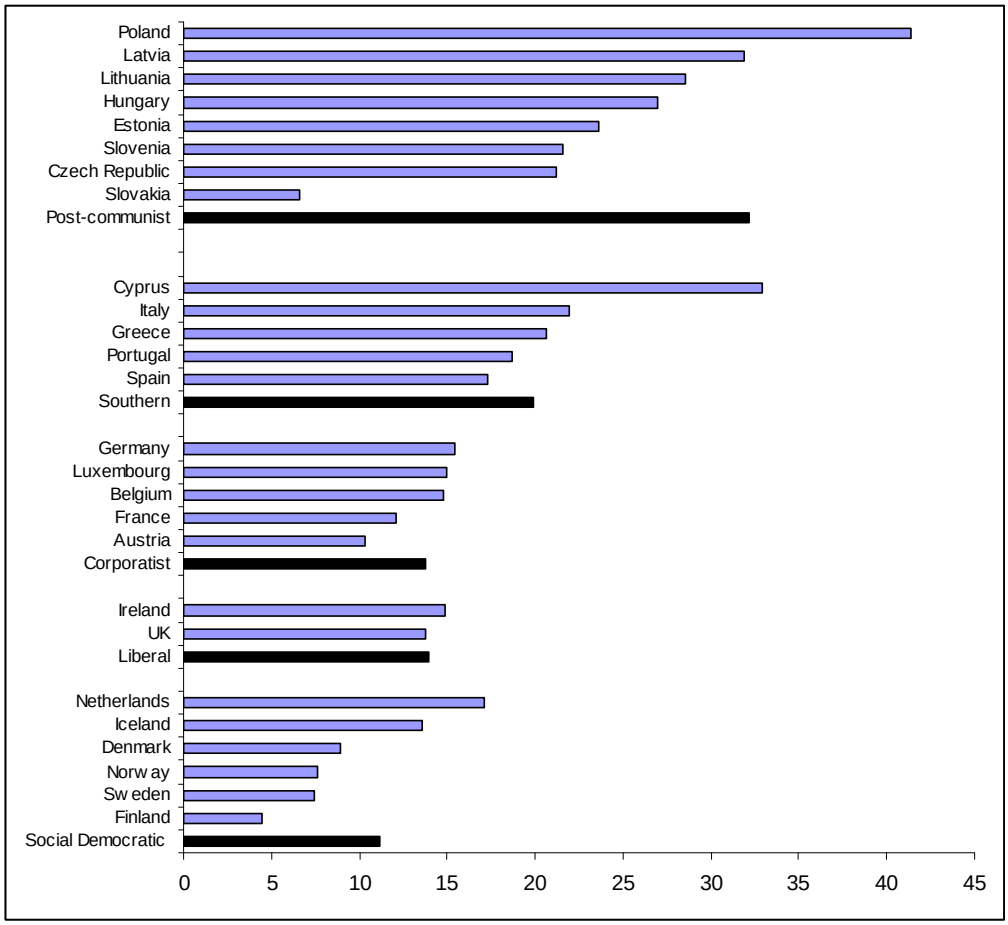
Turning to neighbourhood environment in Figure 2.6, there is substantially less variation across countries, accounting for only 2 per cent of total variance. The lowest mean level of 0.158 is observed for the Social Democratic regime, for the Liberal group the mean is 0.217, for the Corporatist group 0.193 and for the Southern European group 0.203 and for the Communist cluster 0.169. The full range of national variation runs from 0.084 in Iceland to 0.224 in Latvia. In this case the Irish value of 0.132 is lower than that of 0.211 observed for the UK.

Figure 2.6: Mean Deprivation Levels for EU Prevalence Weighted for Neighbourhood Environment, EU-SILC 2006



Finally, looking at the individual household item relating to a 'leaking roof' as shown in Figure 2.7, which was not included in any of the dimensions for the reasons outlined earlier but may tap poor housing quality, we also find clear patterns. In the Social Democratic countries 10.7 per cent report such difficulties with the levels rising to 18 per cent in Iceland and the Netherlands but not exceeding 8 per cent in any other case. For the Liberal and Corporatist countries 13.4 per cent report the problem, with the Irish figure of 14.9 being marginally higher than that for the UK. This rises to 20.8 per cent for the Southern European countries, with a distinctively high level of 32.9 per cent being found for Cyprus.

Figure 2.7: Percentages Experiencing Housing Deterioration with Leaking Roof, EU-SILC 2006



A further sharp increase to 33.7 per cent is then observed for the Post-communist countries. Within this group Slovakia has an extremely low value of 6.6 per cent. Slovenia and the Czech Republic have below average levels of just above 20 per cent. For Estonia it rises to 24 per cent and the remaining countries are found in the range running from 27 per cent in Hungary to 41 per cent in Poland. This suggests that a set of items designed to capture housing deterioration – rather than the single item currently available – would highlight the particularly disadvantaged situation of the Southern European countries and, most particularly, the Post-communist group.

While the strength of cross-country or cluster variation differs across dimensions and indicators, a clear pattern emerges whereby the Social Democratic regime is characterised by a multidimensional profile that is consistently favourable, while equally the Post-communist group is consistently disadvantaged, except in relation to neighbourhood environment. The Southern European group is the next most disadvantaged, occupying a position intermediate to the Corporatist and Post-communist clusters in relation to most outcomes; household facilities being the exception. The Liberal group enjoy advantages over the Corporatist regime in relation to consumption deprivation and household facilities, but not with regard to neighbourhood environment and the housing deterioration item.

In Table 2.3 we show the breakdown of individual consumption items by country and welfare regime in order to get a sense of variation in actual levels of deprivation across items and countries. Among the Social Democratic countries deprivation levels for the meal, heat and PC items rarely rise above 3 per cent. Among the Liberal countries this rises to between 5 to 6 per cent. However, the figure relating to a PC is twice as high in Ireland as in the UK. For the Corporatist countries the level of enforced deprivation ranges between 6 to 8 per cent. In the Southern European countries for the heat and PC items we see an increase respectively to 10 and 13 per cent. The Post-communist countries present a striking contrast with deprivation levels exceeding 20 per cent in each case but with considerable within cluster variation being observed.

In relation to enforced absence of a car the crucial contrast is between the Post-communist cluster and the remaining countries, with the relevant figure being 22 per cent in the former case and approximately 5 per cent in the latter. In the case of arrears a threefold distinction is necessary. The highest level of 18 per cent is observed for the Post-communist cluster this then falls to 12 per cent before declining further to approximately 7 per cent for the remaining clusters.

A more graduated pattern is observed in case of unexpected expenses. The lowest level of 23 per cent is found for the Social Democratic countries with Sweden proving to be something of an exception in having a distinctively low level of 14 per cent. For the Liberal group the figure rises to 29 per cent. However, the Irish level of 38 per cent is substantially higher than that in the UK. The figure rises to 36 per cent for the Corporatist countries where the overlap level is largely a consequence of relatively high numbers reporting such difficulties in France and, most particularly in Germany. Contrary to earlier trends, the figure declines to 28 per cent for the Southern European regime with Portugal and Greece exhibiting respectively, significantly lower and higher levels.

The item relating to holidays provides the sharpest cross-national differentiation. The lowest level of 14 per cent is again observed for the Social Democratic group. It rises to 23 per cent for the Liberal group and to 29 per cent for the Corporatist cluster. It then rises sharply to 42 per cent for the Southern European group before finally peaking at 61 per cent for the Post-communist group. Slovenia and the Czech Republic constitute outliers in this final group with deprivation levels approximately half those observed for the remaining countries.

Table 2.3: Individual Consumption Deprivation Items by Country, EU-SILC 2006

	Holidays	Unexpected Expenses	Meal	Car	Heat	PC	Arrears
	%	%	%	%	%	%	%
Social Democratic	14.2	22.7	2.8	6.1	3.2	2.4	6.8
Sweden	15.2	13.9	3.6	4.4	2.5	1.8	8.0
Norway	8.0	26.6	3.0	5.1	1.5	2.4	9.5
Denmark	9.7	24.0	1.8	9.6	9.4	2.4	5.3
Netherlands	15.5	23.4	2.7	5.5	2.2	1.9	4.9
Iceland	14.4	31.1	3.3	1.8	10.7	0.9	12.8
Finland	18.7	30.4	2.6	8.5	2.4	5.5	9.7
Liberal	23.0	29.4	4.4	5.3	4.6	5.4	6.3
UK	23.0	28.8	4.5	5.0	4.7	5.1	6.2
Ireland	22.7	38.0	2.4	10.4	3.8	10.3	8.3
Corporatist	28.5	36.1	8.5	5.0	6.2	6.1	7.8
Luxembourg	10.0	18.4	1.9	1.3	0.6	2.1	2.4
Austria	25.7	26.5	9.3	4.8	3.8	4.7	3.4
Belgium	24.8	21.2	4.2	6.8	14.5	6.8	6.9
France	31.5	33.3	5.6	3.7	5.9	7.8	9.7
Germany	27.1	41.0	11.1	5.8	5.5	4.9	6.9
Southern European	41.5	27.8	5.0	4.6	12.5	10.1	12.0
Spain	38.5	30.1	3.8	4.6	8.9	10.0	6.1
Italy	38.8	27.5	5.6	2.7	10.1	7.8	12.9
Portugal	59.8	16.4	3.8	10.9	39.9	18.7	6.5
Cyprus	54.0	43.1	6.3	2.0	33.8	9.1	22.0
Greece	49.7	30.7	7.9	9.1	12.0	15.2	29.9
Post-communist	60.9	52.9	26.2	21.5	21.1	21.6	17.6
Slovenia	31.2	43.4	10.7	3.4	3.0	6.6	13.8
Czech Republic	36.3	40.3	16.2	13.4	8.9	12.3	8.4
Hungary	65.8	52.4	27.7	23.3	14.8	16.4	16.6
Slovakia	57.6	49.2	36.9	27.6	9.7	22.3	10.1
Poland	67.3	57.0	28.4	22.6	28.4	25.8	22.4
Estonia	61.1	26.7	8.2	20.8	2.3	15.5	7.0
Latvia	69.4	68.7	31.9	33.7	25.2	28.8	15.0
Lithuania	67.0	57.3	23.3	21.7	27.6	22.6	14.5

2.8 The Impact of Different Forms of Material Deprivation on Subjective Economic Stress

We now consider the relationship between the different forms of deprivation and household's view of their own economic circumstances. The measure of subjective economic stress is based on the following question asked to the household reference person:

"Thinking now of your household's total income, from all sources and from all household members, would you say that your household is able to make ends meet?"

Respondents were offered six response categories ranging from "with great difficulty" to "very easily". We treat this variable as a continuous one with scores ranging from '1' corresponding to "very easily" to '6' corresponding to great difficulty. Using an ordered logit model shows the categories to be fairly equally spaced and produces similar conclusions to those we describe.

In Table 2.4, this is taken as the dependent variable and various sets of explanatory variables are tested to see their contribution to explaining variation in subjective economic stress. Equation (i) simply includes the score on our consumption deprivation index: a regression coefficient of 3.4 on this index is estimated and it accounts for 33 per cent of the variance. Equation (ii) enters the two other deprivation dimensions, and shows a negative coefficient of about -0.1 for household facilities deprivation and of almost 0.2 for neighbourhood deprivation. The relatively weak impact of these variables is reflected in the fact that taken together they produce only a marginal increase in the proportion of variance explained from 0.333 to 0.335. Finally, entering household income in Equation (iii) produces a further increase in the R^2 to 0.366. If instead we start with the other forms of deprivation and then add consumption deprivation to the equation, it increases variance explanation very substantially. Clearly, consumption deprivation is the key factor influencing levels of subjective economic stress.[14]

Table 2.4: Regression of Deprivation Dimensions on Subjective Economic Stress, EU-SILC 2006

	(i)		(ii)		(iii)	
	B	**S.E.**	**B**	**S.E.**	**B**	**S.E.**
Consumption Deprivation	3.428	.007	3.415	0.007	2.790	0.008
Household Facilities Deprivation			-0.094	0.018	-0.594	0.018
Neighbourhood Deprivation			0.195	0.005	0.234	0.005
Log of Equivalent Income PPS					-0.382	0.002
Constant	3.168		3.139		6.826	
R^2	0.333		0.335		0.366	
N	519,001		519,001		519,001	

2.9 Capturing Generalised and Restricted Forms of Deprivation

Having provided a detailed descriptive account of deprivation across the different dimensions, we now focus on the relationships between them. We are particularly interested in the extent to which different types of deprivation go together – if they were very strongly related, for example, then knowing that a household was experiencing deprivation in one dimension might suffice to identify those experiencing social exclusion understood as multifaceted deprivation.[15] The most obvious place to focus in that context is on the consumption deprivation dimension and how it relates to the other dimensions. To investigate this, Table 2.5 categorises households by the number of items they lack on this dimension, and shows how they fare on the remaining deprivation dimensions and indicators. The

[14] Of course, other factors may play a role here such as mismanagement of budgetary affairs.

[15] Such a measurement perspective can also be used to justify combining income with selected deprivation items in a "consistent poverty" measure such as that developed and applied in Ireland – see for example Whelan (2007).

strategy we pursue is similar to that employed by McKay and Collard (2003) in developing deprivation indicators for the UK Family Resources Survey. While recognising the value for many purposes of the availability of measures of a range of deprivation dimensions, we seek to demonstrate that it may not always be necessary to have a large suite of questions if a smaller set exhibit comparable discriminatory power.

Table 2.5: Multiple Deprivation Patterns by Consumption Deprivation for the EU, EU-SILC 2006

	Housing Facilities Mean	Neighbourhood Environment Mean	Housing Deterioration % Leaking Roof	Economic Stress %
All EU Consumption Deprivation				
0	0.002	0.162	9.9	12.0
1	0.006	0.185	17.4	20.8
2	0.011	0.195	23.1	36.3
3	0.023	0.224	30.6	50.2
4+	0.065	0.242	44.9	73.1

Across the whole sample about half report some enforced deprivation of consumption indicators. The level of household facilities deprivation rises gradually from 0.002 for those households reporting no consumption deprivation up to 0.065 for those with a score of four or more on the consumption index. Similarly, the score on the neighbourhood deprivation dimension goes from 0.162 to 0.242 as the level of consumption deprivation increases. The percentage reporting problems in relation to a leaking roof is only 10 per cent among those lacking no consumption items, but gradually rises to 45 per cent for those with consumption deprivation scores of four or more. So the consumption deprivation index does allow us to identify segments of the population that are also sharply differentiated in terms of their multidimensional deprivation profiles.

In Table 2.6 we show corresponding results for the seven countries on which we have chosen to focus in the remainder of our analysis. In Ireland, as we move from the lowest to the highest consumption deprivation band the housing facilities deprivation score rises from 0.001 to 0.018. The figures for the UK are almost identical. In Austria the range runs from 0.002 to 0.033, in the Czech Republic from 0.001 to 0.048 and in Finland from 0.003 to, surprisingly high level of 0.063. In Portugal the figures for the lowest band of consumption deprivation are close to those already reported but the rise is sharper and the mean level of housing deprivation reaches 0.123 in the highest consumption deprivation band. Estonia exhibits a significantly higher level of deprivation at the lower end of the consumption deprivation continuum than any of the other countries with a mean level of 0.035 this then rises gradually to reach a peak of 0.161 which constitutes the highest observed level for the countries under consideration.

As we have noted earlier, the correlation between consumption deprivation and neighbourhood environment deprivation is extremely weak. Clearly many people who experience one form of deprivation do not experience the other. Overall rather different factors are involved in

determining these distinct forms of deprivation; with degree of urbanisation clearly being a critical factor in relation to neighbourhood environment. However, as is clear from Table 2.6, for each of the seven countries we have considered, the level of the reported quality of neighbourhood environment declines as the level of consumption deprivation increases. The Irish case is in line with the general pattern with a gradual rise being observed from a mean of 0.105 in the lowest consumption deprivation band to one of 0.267 in the highest.

Table 2.6: Multiple Deprivation Patterns by Consumption Deprivation by Country, EU-SILC 2006

	Housing Facilities Mean	Neighbourhood Environment Mean	Housing Deterioration % Leaking Roof	Economic Stress %
% Consumption Deprivation				
Finland				
0 (61.4)	0.003	0.129	3.2	0.9
1 (16.7)	0.007	0.160	4.9	5.0
2 (11.1)	0.016	0.163	5.8	17.2
3 (5.5)	0.020	0.207	7.7	35.8
4+ (4.4)	0.063	0.247	14.8	54.3
Austria				
0 (60.6)	0.002	0.118	7.1	1.1
1 (17.7)	0.005	0.121	11.6	6.0
2 (10.8)	0.012	0.135	14.1	15.5
3 (6.4)	0.017	0.141	17.8	29.9
4+ (4.5)	0.033	0.225	29.5	56.5
UK				
0 (63.7)	0.002	0.186	8.9	3.2
1 (13.6)	0.003	0.223	15.7	16.8
2 (11.3)	0.005	0.249	20.3	29.1
3 (6.7)	0.007	0.290	31.3	48.9
4+ (4.8)	0.017	0.299	34.2	63.7
Ireland				
0 (54.9)	0.001	0.105	9.3	6.2
1 (20.2)	0.002	0.129	15.9	26.2
2 (10.9)	0.008	0.168	18.9	51.6
3 (7.2)	0.011	0.179	25.6	67.8
4+ (6.8)	0.018	0.267	39.3	81.2
Portugal				
0 (32.1)	0.003	0.183	8.0	9.6
1 (20.5)	0.011	0.185	13.8	25.6
2 (22.7)	0.027	0.175	21.6	46.8
3 (13.8)	0.066	0.176	24.4	59.1
4+ (10.9)	0.123	0.265	46.1	89.3
Czech Republic				
0 (43.2)	0.001	0.148	13.1	4.6
1 (20.3)	0.003	0.158	19.0	20.0
2 (14.7)	0.006	0.173	23.7	44.4
3 (9.4)	0.023	0.209	30.6	62.1
4+ (12.4)	0.048	0.269	43.0	85.7
Estonia				
0 (32.8)	0.035	0.176	10.9	0.3
1 (28.0)	0.077	0.204	21.5	4.8
2 (18.6)	0.094	0.225	30.2	17.4
3 (10.5)	0.115	0.269	36.3	36.9
4+ (10.1)	0.161	0.272	45.2	67.0

An even sharper pattern is observed in relation to housing deterioration as captured by the 'leaking roof'. As was shown earlier, levels of deprivation in relation to this item vary sharply across countries and welfare regimes. However, for each of the countries under consideration, reported difficulties in relation to housing deterioration increase systematically with rising consumption deprivation. In fact we observe an approximately fourfold increase in each case. In the Irish case the figure rises from 9 per cent to 40 per cent; figures that are almost similar to the UK. In Austria the respective figures are 7 per cent and 30 per cent and in Estonia 11 per cent and 45 per cent.

Finally, we observe even more pronounced variation across consumption deprivation bands in terms of being in a household that is experiencing difficulties in making ends meet. In Finland this rises from 1 per cent reporting zero consumption deprivation to 54 per cent for those experiencing an enforced lack of four or more items. The figures for Austria are almost identical. For the UK, reflecting the fact that stress levels are higher overall, the respective figures are 3 and 64 per cent. This trend continues for Ireland with figures of 6 and 81 per cent. The pattern of differentiation is even sharper in the Czech Republic with the relevant figures being 5 and 86 per cent. Finally, while economic stress levels are lower in Estonia than the Czech Republic the discriminatory power of consumption deprivation being even greater with the level of subjective economic stress ranging from 0.3 per cent for those experiencing zero deprivation to 67 per cent for those suffering an enforced absence of four or more items.

2.10 Conclusions

In this chapter we have employed new data emerging from EU-SILC which allows patterns of deprivation in the enlarged EU to be analysed. With the indicators currently available in this source, it distinguishes three distinct dimensions of material deprivation relating to consumption deprivation, household facilities and neighbourhood environment. Reasonably reliable indices of these dimensions can be constructed at the EU and national levels – though reliability levels are low for the household facilities dimension in the more affluent countries where very few are deprived on the available items. In constructing the deprivation indices, each item is given a weight that reflects the proportion not deprived of it across all the European Union countries for which data is available.

Analysis of patterns of deprivation across countries, individually and grouped into welfare regimes, brings out the importance of taking the multidimensional nature of material deprivation into account. The contrast between countries and welfare regimes varies across the three dimensions, in a manner that produces rather different profiles. There was more cross-country variation in consumption deprivation than in the other two dimensions, with mean levels being lowest in the Social Democratic and Liberal regimes, slightly higher in the Corporatist one, higher again in the Southern European countries, but very much higher in the Post-communist countries. With the household facilities dimension the main differentiation was that the Post-communist countries had much higher levels than the rest, while the extent of cross-country variation in neighbourhood environment was quite low.

The consumption deprivation index was seen to have a number of features that make it of particular interest. It is not only a highly reliable index in itself, it is also the dimension with by far the highest correlation with income. Furthermore, we saw that it allows us to identify segments of the population that are sharply differentiated in terms of their multidimensional profiles ranging across household facilities, neighbourhood environment, and housing deterioration. Finally, we showed that it is much more strongly related than the other dimensions to the subjectively-assessed degree of economic stress being experienced. Thus, it may come closest (with currently available indicators) to constituting a deprivation measure that could be employed together with low income to identify "consistent poverty" (Nolan and Whelan, 1996) or with low income and subjective economic stress to distinguish "core poverty" (Bradshaw and Finch, 2003) across the enlarged EU.

Finally, it is worth noting that a wider set of deprivation items than those currently included in EU-SILC would undoubtedly be valuable, allowing some elaboration of the dimensions and types of deprivation being distinguished. Analysis of data from the European Community Household Panel for the pre-enlargement EU, which contained some more items, suggested (Whelan *et al.,* 2001) that it would be useful to distinguish restrictions on consumption/social participation associated with short-term financial pressures from long-term capacity to consume, to capture both poor household quality *per se* and limited housing-related facilities, and to have positive as well as negative indicators of neighbourhood environment, such as access to services. This elaboration could be particularly important in the case of the New Member States, and can be explored with information from a special module on non-monetary deprivation to be included as part of EU-SILC in 2009.

3. COMPARING IRISH AND EUROPEAN CONSISTENT POVERTY MEASURES

3.1 Introduction

In the previous chapter we developed deprivation indices to enable comparisons to be made across the range of countries in EU-SILC. In the following chapter we consider a range of European comparisons relating to 'at risk of poverty' indicators and a variety of consistent poverty measures that span the spectrum from national to EU levels. Our purpose in this chapter is to develop a consistent poverty measure that allows for cross-national comparisons while staying as close as possible to the Irish consistent poverty measure on which the relevant NAPSinc target is based.

Our analysis will proceed as follows. Having described the Irish specific and EU common EU-SILC deprivation items, we will proceed to compare parallel measures of what we describe as consistent poverty. Having done so, we will then examine the degree to which they overlap and the extent to which membership of such categories is determined by similar or different socio-economic factors.

3.2 Income Measure

The income measure we employ throughout this publication is annual total household disposable income adjusted for household size using the OECD modified equivalence scale for international comparisons and the national equivalence scale for national purposes.[16] The income reference period is the 12 months prior to date of interview.

In this publication we are making use of two surveys, the national survey when we focus only on Ireland, as in Chapter 2, and an EU survey from Eurostat for all other chapters. Both surveys have different definitions and measures of income and mainly three distinctions can be made.

- The first one is that the EU definition of gross income does not include income from private pensions (pensions organised

[16] The OECD modified scale gives a weight of 1 to the first adult (aged 14+ years), then 0.5 to any other adults and a weight of 0.3 for each child while the national scale gives respectively weights of 1, 0.66 and 0.33.

independently from an employer) while they are included in the national definition of income for Ireland.

- Second, in the EU definition of income all contributions to pension plans (expect those as defined earlier on) are deducted from gross income when calculating disposable income. In the Irish national calculation of disposable income no such deductions from gross income are done.
- Finally in the EU definition of income, employer's social insurance contributions are not included while in the Irish national construction they are included and deducted from gross income in the calculation of net income.

3.3 Deprivation Indicators

The Irish component of EU-SILC includes 11 items relating to food, clothing, furniture, debt and minimal participation in social life that were found to constitute a highly reliable index of basic deprivation. The revised Irish consistent poverty measure counts individuals as poor if they experienced enforced deprivation and fell below the relative income poverty line relating to 60 per cent of median equivalised income. The consistent poverty measures incorporating the 11-item basic deprivation index has been shown to differentiate sharply between respondents in terms of the range of deprivation dimensions identified above and a set of indicators relating to the subjective experience of economic pressures. The index is thus confirmed to be a highly reliable and valid measure of such poverty.[17]

In attempting to construct a comparable measure at European level, we are hampered by the fact that the range of indicators relating to basic deprivation and, indeed, consumption deprivation more generally, are a great deal more restricted than in the case of the Irish specific module. In fact only 2 of the 11 basic deprivation items are available. As a consequence it is impossible to develop the distinction between basic deprivation and consumption deprivation that was applied in the Irish case. Exploratory analysis suggested that the most sensible alternative to the basic deprivation index was the 7-item deprivation index discussed in detail in Chapter 2.

In Table 3.1 we show the deprivation levels relating to the 16 items comprising the 2 common items, the 9 basic deprivation items available in the Irish case only and the 5 additional items available on a EU-wide basic deprivation that have been included in the consumption deprivation index. Focusing first on the items forming part of the Irish consistent poverty index, we can see from Table 3.1 that the deprivation levels for these relating to heat, food, clothing, furniture and social participation ranges from a low of 3.1 per cent to 13.7 per cent with 7 of the 9 items involving levels below 10 per cent. The two common items relating to a meal with meat, chicken or fish (or vegetarian equivalent) every second day and keeping the home adequately warm involve very low deprivation levels of respectively 2.4 and 3.8 per cent. In contrast the 5 additional items incorporated into the consumption deprivation index relating to holidays, a car, a PC, unexpected expenses and arrears involve much higher levels of deprivation. These range from 8.2 per cent for arrears relating to mortgage,

[17] See Whelan and Maître *et al.* (2006) and Whelan (2007).

rent or hire purchase to 22.7 per cent for a week's annual holiday away from home. Four of the five items involve deprivation levels above 10 per cent.

As we noted earlier the range of deprivation items available in EU-SILC is a great deal more restricted than was the case in relation to the ECHP. As a consequence of this it is not possible to make the distinction between basic deprivation and consumption deprivation. Indeed in order to construct a reliable index of consumption deprivation it is essential that we incorporate all seven of the available items. However, as we have shown in the index, some of these items are characterised by substantially higher levels of enforced absence than the items comprising the Irish basic deprivation. Consequently, if we were to adopt a deprivation threshold of 2+ as in the Irish case we would observe substantially higher poverty rates which in our judgement would be an artefact of the contrasting set of items involved in the two cases. A range of analyses examining the associations between alternative measures based on alternative thresholds and respondents reports of economic stress confirmed that a consistent poverty measure incorporating a threshold of 3+ consumption items came closest to matching the Irish consistent poverty index which involves a threshold of 2+ items on the basic deprivation scale.

Table 3.1: Irish, EU and Common Deprivation Indicators, EU-SILC 2006

	EU Common % Deprived	Irish % Deprived
Holidays	22.7	
Unexpected expenses	38.0	
Car	13.6	
PC	10.3	
Arrears	8.2	
Meal	2.4	
Warm house	3.8	
Heating		5.7
Shoes		3.1
Roast		4.4
Clothes		5.5
Coat		2.1
Furniture		13.7
Friends/drink, meal		10.7
Evening out		8.8
Presents		3.3

3.4 Comparing EU Common and Irish Specific Measures of Consistent Poverty

It is important to remember that, in comparing the Irish and EU consistent poverty measures, that not only are the deprivation measures differently constituted but the measures of income employed at national and EU level are different.

For both the Irish and EU consistent poverty measures the income threshold we employ is 60 per cent of household equivalised income. The additional deprivation threshold involved in the first case involves enforced absence of 2+ of the 11 basic deprivation items and in the second enforced absence of 3+ of the 7 consumption deprivation items. Despite the different manner of construction of the indices, in the Irish case they produce very similar estimates of the overall level of consistent poverty.

For the EU common measure the rate is 7.1 per cent while for the Irish specific measure we observe a rate of 6.5 per cent.[18]

While the two measures produce almost identical poverty rates, the question remains as to the extent to which they identify the same people. From Table 3.2 we can see that only 6.5 per cent of those not consistently poor on the EU common measure are so on the Irish specific measure. On the other hand, 28 per cent of those consistently poor on the former are not so on the latter. Thus, there is a very considerable overlap but there remains a significant difference in the groups identified as consistently poor.

Table 3.2: Relationship Between EU and Irish Specific Measures of Consistent Poverty at 60 Per Cent of Median Income, EU-SILC 2006

Irish 11-item Basic Deprivation Index	EU-SILC 7-item Consumption Deprivation Index Consistently Poor	
	% No	% Yes
No	93.5	28.3
Yes	6.5	71.7
Total	100	100

Of course in assessing the significance of the different forms of classification it is important to remember that the 28.3 per cent relates to a much smaller base than the 6.5 per cent. The consequences of this are revealed in Table 3.3 where we report the percentages found in the four possible combinations produced by cross-classifying the EU common measure by the Irish specific measure. Looking first at the category comprising those who are consistently poor on neither of the indicators we find that 91.5 per cent of individuals fall into this category. Those consistently poor on the EU indicator but not on the Irish comprise 2 per cent of the population while those fitting the reverse pattern comprise 1.4 per cent of the population. Finally, 5.1 per cent of individuals are found to experience consistent poverty irrespective of which measure is employed.

Table 3.3: Population Percentages Found in Possible Combinations of EU Common and Irish Specific Indicators of Consistent Poverty, EU-SILC 2006

Irish Specific 11 Items Consistently Poor	EU-SILC Common 7 items Consistently Poor		
	No	Yes	Total Population
No	91.5	2.0	93.5
Yes	1.4	5.1	6.5
Total Population	92.9	7.1	100.0

In order to explore the manner in which the EU common and the Irish specific measures differ we proceed to examine the socio-economic composition of the four categories identified in Table 3.4. Three factors

[18] Almost identical results were found using the 2004 wave of EU-SILC.

prove to be important. These comprise the labour force status of the household reference person (HRP) and housing tenure. Overall the differences are limited. The Irish measure is more likely to pick up people in households where the HRP is self employed with the respective figure being 15.3 per cent versus 13.9 per cent. It is unlikely to include under 30 years old individuals in households with the relevant figures being 8.8 per cent and 12.2 per cent. Finally, those poor on the Irish measure are slightly less likely to be private tenants with respective levels being 13.4 per cent and 15.4 per cent.

Since the measures identify substantially overlapping groups in order to get a complete picture of the implications of operating with one rather than the other; we proceed to look at differences in socio-economic composition between the four possible combinations of the two measures in terms of the key socio-economic factors differentiating them. In Table 3.4 we show the composition of the four combinations of EU common and Irish specific forms of consistent poverty in relation to the three socio-economic attributes referred to above. It is apparent that there are striking contrasts between the group consistently poor on each measure, only poor on neither and those poor on both. Only 15 per cent of the latter are found in a household where the HRP is an employee compared to 49 per cent for the former. However, the critical comparison for our present purposes is between those consistently poor on the Irish specific measure only and those consistently poor on the EU-common measure only. Both of these groups are characterised by comprising a small number of employees with the figure being 15 per cent in the Irish specific instance and 10 per cent in EU common case. The major contrast between the groups is that none of those consistently poor on the EU common measure only are drawn from the self-employed while this is true of 11 per cent of those poor on the Irish-specific measure only. The former group comprises only 2.8 per cent of individuals who are retired compared to 7.3 per cent in the Irish case. Correspondingly, the respective numbers ill/disabled are 21.3 and 12.9 per cent and in relation to being in full-time home duties or in the HRP education they are 44 and 34 per cent.

Focusing on stage of the life cycle we find that the group consistently poor on the EU common measure only is much more likely to be made up of individuals in households where the HRP is aged 30 years or less with the respective figures being 15.9 per cent and 0.4 per cent. Correspondingly, this group is less likely to be made up of those in households where the HRP is aged between 30-49 years where the relevant figures are 47.2 and 55.5 per cent and, more particularly, those over 66 years where the respective figures are 4.1 and 11.1 per cent.

Finally, those consistently poor on the EU common measure are more likely to be tenants than those captured by the Irish specific measure only with the respective figures being 16.0 and 6.7 per cent. They are correspondingly less likely to be home owners with the relevant figures being 34.9 and 43.9 per cent.

It is clear that the focus on current deprivation in the EU-SILC common measure captures individuals in households where the HRP is young, excluded from the labour market and living in private accommodation. These groups seem not to experience the extremes of deprivation captured in the basic deprivation index. However, they are

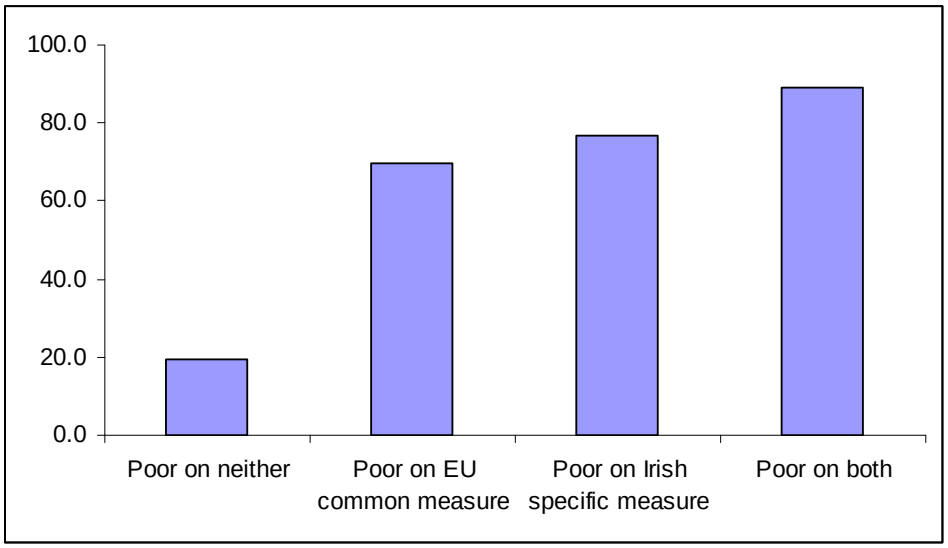
clearly differentiated from those experiencing neither form of consistent poverty in terms of restrictions on their living standards. In contrast, those captured solely by the Irish specific measure while experiencing unacceptable levels of basic deprivation are less likely to be experiencing consumption deprivation. The latter is likely to be related to having possessed some items for some time and to the fact that for some older people their lesser likelihood of being deprived in relation to such items as a holiday away from home and a PC may reflect taste rather than economic circumstances.

Table 3.4: Labour Force Status, Age Group and Housing Tenure Composition by the EU Common and Irish Specific Consistent Poverty Typology, EU-SILC 2006

	Poor on Neither	Poor on EU Common Measure	Poor on Irish Specific Measure Only	Poor on Both
	%	%	%	%
HRP LFS				
Employee	48.8	10.1	15.2	15.3
Self Employed including farmers	17.0	0.0	11.2	2.2
Unemployed	3.8	21.8	19.0	22.3
Ill/Disabled	3.5	21.3	12.9	12.5
Retired	11.1	2.8	7.3	3.3
In Full Time Home Duties	14.5	42.3	34.5	40.1
Education	1.3	1.6	0.0	4.3
Total	100.0	100.0	100.0	100.0
HRP Age group				
Under 30 years	6.8	15.9	0.4	10.7
30-49 years	45.5	47.2	55.5	57.3
50-64 years	32.2	32.9	33.0	29.1
65+ years	15.4	4.1	11.1	2.8
Total	100.0	100.0	100.0	100.0
Tenure				
Owner	78.9	34.9	43.9	29.4
Private tenant	10.1	16.0	6.7	15.2
Local authority tenant	11.0	49.1	49.4	55.4
Total	100.0	100.0	100.0	100.0

It remains true that both intermediate groups are sharply differentiated but are found to enjoy an identical status irrespective of the index employed. This is illustrated again in Figure 3.1 when we break down the risk that individuals are living in households exposed to subjective economic stress by the consistent poverty typology. The results refer to the number of HRPs reporting that their households have "great difficulty" or "difficulty" in making ends. For those poor on neither measure the figure is 19.5 per cent while for those poor on both it rises to 89 per cent. Both groups poor in relation to only one index come much closer to the latter rather than the former group. For the Irish specific measure only, it is 77 per cent while for the EU common measure only it is 70 per cent.

Figure 3.1: Level of Economic Stress by Consistent Poverty Typology, EU-SILC 2006



3.5 Conclusions

In this chapter, taking into account the substantially limited information relating to deprivation contained in the common EU-SILC module compared to the Irish specific version, we have attempted to construct a consistent measure that comes as close as possible to that applied in the Irish case.

Seven out of ten of those identified as consistently poor using the EU-index we have employed would also be so classified using the Irish index. Overall, the socio-economic distributions are broadly similar which ever index we employ. However, it should be kept in mind that, in particular, the EU-index is more likely to identify individuals living in households with younger HRPs. Overall though our results provide considerable reassurance that European comparisons based on this and related indices are likely to be meaningful and informative.

4. Comparative Analysis of 'At Risk of Poverty' and Consistent Poverty Rates

4.1 Introduction

In this chapter we explore the consequences of shifting from a national to a European perspective and from an 'at risk of poverty' to a consistent poverty perspective. We also examine the outcomes associated with different combinations of these approaches.

As we have noted earlier the 'at risk of poverty' indicator based on the proportion falling below 60 per cent of adjusted equivalent income remains the key EU poverty indicator. However, increasingly concern has been expressed concerning an approach that leads to countries, such as Ireland, exhibiting higher poverty rates than a number of New Member States despite enjoying substantial advantages in terms of GDP per capita and other indicators of material living conditions.

These concerns have produced responses that have focused both on the geographical level at which poverty should be measured and the need to extend measurement beyond income. In this chapter we pursue both lines of enquiry. Focusing first on 'at risk of poverty' we proceed to produce measures at national level and for the 24 EU countries included in the EU-SILC 2006 data-set. We then develop a number of consistent poverty measures across geographic units. These indicators are constructed by combining information on 'at risk of poverty' and consumption deprivation. The three indicators are as follows:

- A *national consistent poverty indicator*. This is constructed by identifying a deprivation threshold at the national level that identifies a fraction of the population that corresponds as closely as possible to the number below the 60 per cent of the national median equivalised income. This measure maintains a strictly relative perspective. The difference in poverty rates observed when comparing the outcomes from this measure with the national 'at risk of poverty' are entirely due to the level of within country overlap between being found below the 60 per cent of median threshold and on the other hand

being located above the corresponding consumption deprivation threshold. This approach will affect national rankings only to the extent that the income and deprivation measures overlap more closely in some countries rather than others.

- The second indicator is an EU consistent poverty measure. In this case those defined as consistently poor are both the 'at risk of poverty' using the EU threshold and above the deprivation threshold that identifies a fraction of the population as close as possible to that found below the corresponding income threshold.
- The final measure constructed is a *mixed consistent poverty indicator* combining income information at the national level with information relating to consumption deprivation at the EU-level. Building on our analysis in Chapter 3 this identifies those who are below 60 per cent of the median of the equivalent income national threshold and are experiencing an enforced lack of three or more of the seven consumption deprivation items. This approach can be seen as combining a national relative perspective on income with an 'absolute' perspective on deprivation. However, it is only an absolute if we wish to argue that the composition of the consumption index and the threshold should remain unchanged over time irrespective of changes in living standards. We are clearly not in favour of such a proposal and we suggest that it is more sensible to think of this indicator as combining a national income threshold with a European deprivation perspective in that enforced absence of a particular item is given equal weight irrespective of whether it occurs in Sweden or Slovenia.

Each of these indicators offers a different perspective on poverty at national and European levels. Rather than arguing for the absolute superiority of one rather than another measure, it seems more sensible to evaluate the measures in the context of the particular purposes for which they are being employed. However, to anticipate our subsequent analysis, in relation to the questions that we seek to address, the national 'at risk of poverty' measure and the mixed consistent poverty indicator prove to be of particular importance. Our detailed analysis of socio-economic differentiation in Chapter 5 will focus on these two indicators. However, in order to justify this restricted focus, in this chapter we provide an overview of the outcomes associated with the full range of measures.

By adopting a comparative perspective, allowing for variation in geographical unit and comparing uni-dimensional and multidimensional approaches, we seek to develop a deeper understanding of Irish poverty rates. Our initial analysis takes advantage of the availability of the full range of cross-national information in the European Union. We then proceed to examine the consequences of choice of poverty indicator for our understanding of socio-economic variation in exposure to poverty and the manner in which this varies across countries. At that point we will narrow our focus to what we consider to be the most informative poverty indicators for that purpose and will focus our attention on comparing the Irish case to the UK and the set of five smaller European countries that we have identified as being of particular value in putting the Irish case in comparative perspective. These comprise Finland, Austria, Portugal, the Czech Republic and Estonia which span the range of welfare regimes we identified earlier.

4.2 A Comparative Perspective on At Risk of Income Poverty

In Table 4.1 we set out the findings in relation to both the national and EU 'at risk of poverty' levels. Taking an overall perspective, we can see that the lowest national 'at risk of poverty' level is observed for the Social Democratic countries where a rate of 11 per cent is observed. This rises to 13 per cent for the Corporatist cluster and to 19 and 20 per cent for the Liberal and Southern European clusters. The figure for the Post-communist group is 17 per cent. With the exception of that group, variation within welfare regimes is rather limited. Within the Liberal group the Irish rate of 18.5 is marginally lower than that of 19.2 for the UK. It is, however 1.7 times higher than the average rate for the Social Democratic group and 1.4 times higher than for the Corporatist cluster. Ireland ranks joint 17 of the 26 countries for which we have reported. It has a rate almost twice that for the Czech Republic and a one half times those of Finland and Austria and identical to those observed for Portugal and Estonia.

When we switch our attention to the EU 'at risk of poverty' indicator, a dramatically different picture emerges. At welfare regime level, the major contrast that emerges is between the Post-communist group and, to a lesser extent, the Southern European cluster and the remaining welfare regimes. Once again the lowest 'at risk of poverty' rate is observed for the Social Democratic cluster with a level of 6 per cent. This rises to 9 and 10 per cent for the Corporatist and Liberal clusters respectively.

Within the Social Democratic cluster, we observe a reduction in poverty rates with the smallest change being observed for Sweden where the relevant figure declines from 12.6 per cent to 9.2 per cent. The largest shift is observed for Norway where the respective figures are 11.2 per cent and 3.5 per cent. The decline in poverty rates is also substantial within the Corporatist cluster but a good deal more variable. The largest shifts are for Luxembourg and Austria where the rate declines from 14.0 per cent to 1.2 per cent and from 12.6 per cent to 4.7 respectively. The changes for the other countries while significant are on a more limited scale. As a consequence a sharp contrast is observed within the Corporatist group between on the one hand Luxembourg and Austria and on the other hand Belgium, France and Germany. Within the Liberal group we observe an approximate halving of rates. Substantial variation is observed within the Southern European cluster. Little change is observed for Italy and Spain. For Greece on the other hand the level rises from 20.5 per cent to 27.6 per cent. By far the most striking change is observed in relation to Portugal where the poverty rate moves from 18.5 per cent to 46.5 per cent. In sharp contrast that for Cyprus declines from 15.8 per cent to 8.5 per cent. Thus the latter two countries, which look rather similar when we view them from the perspective of national poverty rates, occupy sharply contrasting positions when we adopt an EU metric measure. Within the Post-communist group we observe a slight increase for Slovenia. However, this proves to be very much the exception. In every other case we see a very sharp rise in 'at risk of poverty' rates as our focus shifts from the national to the EU-level. In the Czech Republic this involves a fourfold increase from 9.8 per cent to 40.3 per cent. In the remaining six countries, it leads to poverty rates at the level ranging from two-thirds to three-quarters of the population.

Table 4.1: National and EU 'At Risk of Poverty' Rates by Country, EU-SILC 2006

	'At Risk of Poverty' - 60% of National Median Equivalent Income %	'At Risk of Poverty' - 60% of EU Median Equivalent Income %
Social Democratic	11.1	6.1
Sweden	12.6	9.2
Norway	11.2	3.5
Denmark	11.7	5.9
Netherlands	9.9	4.8
Iceland	9.7	3.4
Finland	12.5	7.9
Liberal	19.2	9.8
UK	19.2	9.8
Ireland	18.5	9.8
Corporatist	13.0	9.0
Luxembourg	14.0	1.2
Austria	12.6	4.7
Belgium	14.7	8.2
France	13.1	8.9
Germany	12.7	9.7
Southern European	19.7	22.9
Spain	19.9	22.4
Italy	19.6	18.3
Portugal	18.5	46.5
Cyprus	15.8	8.5
Greece	20.5	27.6
Post-communist	16.7	66.0
Slovenia	11.7	14.7
Czech Republic	9.8	40.3
Hungary	15.9	66.6
Slovakia	11.6	69.7
Poland	19.1	73.5
Estonia	18.3	65.3
Latvia	23.1	75.5
Lithuania	20.0	76.6

The Irish rate of 9.8 is identical to that for the UK. In terms of overall ranking Ireland is placed joint thirteenth of the twenty-six countries. Of the countries on which we have chosen to focus, only Austria with a rate of 4.7 per cent has a substantially lower level of poverty at the EU-level. Finland enjoys a slight advantage over Ireland with a rate of 7.9 per cent. However, all three of these countries now enjoy highly favoured positions in comparison with the Czech Republic, Portugal and Estonia for whom we observe respective rates of 40.3 per cent, 46.5 per cent and 65.3 per cent.

4.3 Levels of Consistency Between 'At Risk of Poverty' and Consumption Deprivation

Before proceeding to analyse consistent poverty rates, it will be helpful to develop an understanding of the extent of cross-national variation in the degree of consistency between 'at risk of poverty' indicators and measures based on the consumption deprivation index. In Table 4.2 we show the degree of overlap between those below the relevant income threshold and those above the corresponding deprivation thresholds. Focusing first on the purely national measures, we note that regimes with the lowest rates of 'at risk of poverty' also have the lowest degree of overlap with consumption deprivation with the respective figures being 32 and 36 per cent for the Social Democratic and Corporatist regimes. It rises to just above 41 and 42 per cent for the Southern European and Post-communist clusters before peaking at 47 per cent for the Liberal one. Variation within regimes is relatively restricted. These findings suggest that at the national level switching from an 'at risk perspective' to an entirely relative consistent poverty approach is likely to heighten the contrast between the Social Democratic and Corporatist welfare regimes and all others.

Table 4.2: Income Poverty – (Consumption Deprivation 3+) Consistency Rates, EU-SILC 2006

	National %	Mixed (3+) Deprivatio) %	EU %
Social Democratic	32.0	23.4	30.6
Sweden	31.7	18.0	24.3
Norway	32.3	19.8	31.6
Denmark	34.7	26.4	35.9
Netherlands	27.8	21.9	25.7
Iceland	24.6	17.1	35.2
Finland	40.6	35.9	47.8
Liberal	47.1	29.5	35.1
UK	47.0	28.9	33.9
Ireland	47.8	39.0	53.4
Corporatist	36.3	39.2	45.4
Luxembourg	40.2	16.4	34.3
Austria	33.3	31.4	39.4
Belgium	44.8	42.7	49.1
France	38.6	38.6	42.4
Germany	33.3	39.9	47.5
Southern European	41.3	37.1	39.3
Spain	33.0	28.3	29.5
Italy	45.9	37.1	41.1
Portugal	41.2	48.2	41.6
Cyprus	32.2	60.2	63.9
Greece	43.2	52.9	53.6
Post-communist	42.2	73.5	58.7
Slovenia	37.3	42.4	44.6
Czech Republic	38.7	64.1	44.6
Hungary	41.3	72.0	55.8
Slovakia	32.1	66.9	56.0
Poland	43.4	76.7	62.4
Estonia	45.2	49.5	35.7
Latvia	41.7	77.9	67.1
Lithuania	46.8	78.1	57.2

At the EU level the lowest consistency rate of 31 per cent is again associated with the Social Democratic regime. On this occasion it is followed by the Liberal and Southern European regimes with consistency levels of 35 and 39 per cent. The figure then rises to 45 and 59 per cent for the Corporatist and Post-communist regimes. Compared to the EU 'at risk of poverty' rankings we can expect a relative deterioration in the position of the two latter groups and an improvement in the position of the Liberal group. However, within the Liberal group there is a clear contrast between the UK and the Irish case with the consistency rate for the former being considerably lower at 34 per cent than that pertaining to the latter of 53 per cent. Finally, focusing on the 'mixed' deprivation measure, we observe a sharp contrast between the Post-communist cluster and all others with the former exhibiting a consistency rate of 74 per cent while it does not rise above 40 per cent for the remaining clusters. Within the remaining clusters the overlap is more limited for the Liberal and Social Democratic regimes. We can, therefore, expect the position of the Post-communist group to be significantly worse in relation to an EU consistent poverty indicator than with regard to an 'at risk of poverty' measure.

4.4 A Comparative Analysis of Consistent Poverty Rates

In Table 4.3 we set out a breakdown of national, EU and mixed consistent poverty rates. Focusing first on the national measure, we observe the lowest rate of 3.4 per cent for the Social Democratic regime. It increases slightly to 4.6 per cent for the Corporatist group. The latter is followed by the Post-communist, Southern European and Liberal regimes with rates of respectively 7.1, 8.1 and 9.0. Variation in rates within regimes is extremely weak with the exception of the Post-communist group where the Czech Republic, Slovakia and Slovenia have particularly low rates. The only countries to display higher rates than Ireland are the UK, Italy, Latvia and Lithuania.

Focusing on the EU consistent poverty rates, a strikingly different pattern emerges. The Social Democratic regime displays a particularly low rate of 1.8 per cent. This rises to 3.4 and 4.0 per cent for the Liberal and Corporatist groups respectively, it then rises fairly sharply to 9.0 per cent for the Southern European group. However, such differences are limited in the context of the contrast between the rate of 38.8 per cent for the Post-communist group and those pertaining to the remaining regimes. Variation within regimes is relatively weak. Within the Corporatist group, Luxembourg and Austria have distinctively low rates. Among the Southern European countries, Greece and Portugal have distinctively high rates while in the Post-communist regime Estonia, the Czech Republic and, most particularly, Slovenia have particularly low rates. Ireland ranks 14 of the 26 countries.

The mixed consistent poverty measure produces a less striking pattern of differentiation but one that leads to a similar hierarchy of regimes. Once again the lowest rate of 2.5 per cent is associated with the Social Democratic regime. The figure rises to 5.0 and 5.7 for the Corporatist and Liberal clusters respectively. It then increases to 7.3 per cent for the Southern European group before peaking at 12.3 per cent for the Post-communist cluster. Ireland with a rate of 7.1 per cent ranks 15 of the 26 countries.

Table 4.3: National and EU Consistent Poverty Rates by Country, EU-SILC 2006

	National	Mixed (3+ Deprivation Threshold)	EU
	%	%	%
Social Democratic	3.4	2.5	1.8
Sweden	4.1	2.1	2.2
Norway	2.9	1.8	0.8
Denmark	4.0	3.0	2.1
Netherlands	2.7	2.1	1.2
Iceland	2.4	1.7	1.2
Finland	5.0	4.4	3.8
Liberal	9.0	5.7	3.4
UK	9.0	5.6	3.3
Ireland	8.7	7.1	5.1
Corporatist	4.6	5.0	4.0
Luxembourg	5.6	2.3	0.4
Austria	4.1	3.9	1.8
Belgium	6.6	6.3	4.0
France	5.0	5.0	3.8
Germany	4.1	4.9	4.4
Southern European	8.1	7.3	9.0
Spain	6.5	5.6	6.6
Italy	9.0	7.3	7.5
Portugal	7.6	8.9	19.3
Cyprus	5.1	9.5	5.4
Greece	8.8	10.8	14.8
Post-communist	7.1	12.3	38.8
Slovenia	4.4	4.9	6.5
Czech Republic	3.8	6.3	18.0
Hungary	6.6	11.5	37.3
Slovakia	3.7	7.8	39.0
Poland	8.3	14.6	45.9
Estonia	8.3	9.1	23.3
Latvia	9.6	18.0	50.6
Lithuania	9.4	15.6	43.8

Table 4.4 shows the impact on Ireland's European ranking, involving all twenty-six countries, of varying the poverty measure. As we can see, the choice of measure has little effect. In terms of the 'at risk of poverty', a shift from a national to a European perspective produces a slight improvement in its ranking from 17th to 13th. However, moving from an 'at risk of poverty' perspective to a consistent poverty approach at the national level actually produces a deterioration in the Irish ranking to 21st. The EU consistent poverty measure and the mixed consistent poverty measure give Ireland rankings identical to that for national 'at risk of poverty'. Thus, the relatively poor Irish performance cannot be accounted for by the decision to opt for a uni-dimensional or multidimensional approach. However, for both measures a shift from a national to an EU perspective brings about a significant improvement of the Irish position in relation to the Southern European countries and, most particularly, to the Post-communist cluster.

Table 4.4: Relative Rank of Ireland by Type of Poverty Measure, EU-SILC 2006

	Irish Rank
National 'At Risk of Poverty'	17
EU 'At Risk of Poverty'	13
National Consistent Poverty	21
EU Consistent Poverty	13
Mixed Consistent Poverty	17

In order to explore the distinctive nature of the Irish case, we need to go beyond national poverty rates and explore variation across key socio-economic groups. The overall EU measures do provide us with a clear sense of the consequences of operating with EU rather than national standards and the implications of the scale of variation in absolute income levels and living standards across EU countries. However, since the contrast between the Post-communist regime and all other countries tends to dominate comparisons involving such indicators, its use is unlikely to be particularly revealing in exploring the distinctive features of the Irish case. Similarly, shifting from a national 'at risk of poverty' perspective to an entirely relative national consistent poverty measure seems not to be particularly informative in relation to cross-national differences. The shift produces substantial reductions in poverty rates. The overlap between being 'at risk of poverty' and being above the corresponding deprivation threshold is limited. However, cross-national variation in the extent of such overlap is relatively weak. As a consequence, analysis involving this measure is unlikely to provide significant additional insights into the nature of cross-national variation. Therefore, in what follows our focus will be on the national 'at risk of poverty' indicator and the mixed consistent poverty measure that combines the former with the 3+ consumption deprivation.

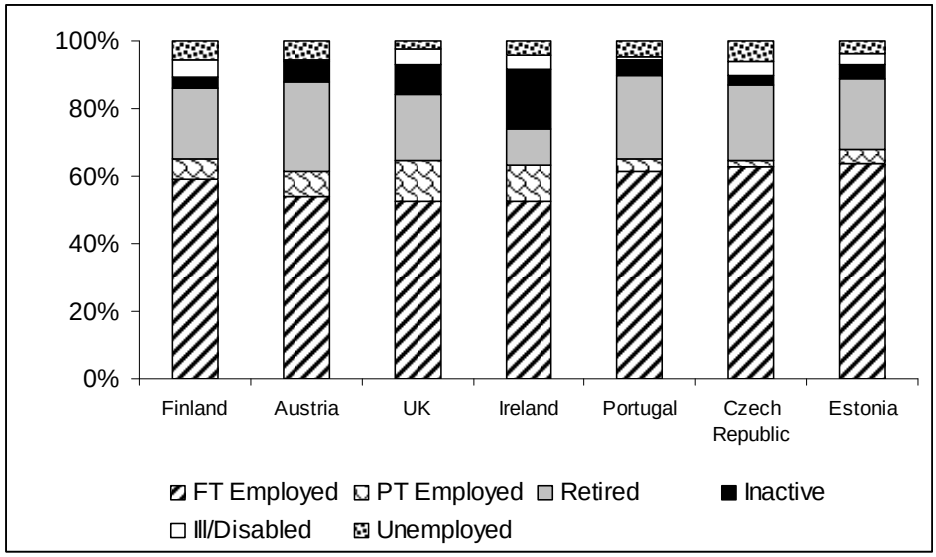
4.5 Cross-national Variation in Social Demographic Attributes

In what follows we focus on Ireland, the UK, Finland, Austria, Portugal, the Czech Republic and Estonia. We shall seek to establish the extent to which the cross-national differences in poverty rates that we have observed can be accounted for by corresponding differences in the distribution and impact of key socio-economic variables. Our exploratory analysis indicated that the crucial variables in this respect are the Principal Economic Status (PES) of the Household Reference Person (HRP), the age of the HRP and the HRP being a lone parent and stage in the life-cycle.

In Figure 4.1 we set out cross-national variation in the PES of the HRP. The UK and Ireland display the lowest level of HRPs in full-time employment with levels of 52.4 per cent and 52.7 per cent. For the remaining countries the rate varies from 54.1 per cent in Austria to 63.9 per cent in Estonia. In contrast, the UK and Ireland have the highest rates of part-time employment with respective rates of 12.0 and 10.7 per cent. Consequently, overall variation in employment rates across countries is restricted; running from 61.6 per cent in Austria to 67.9 per cent in Estonia. Correspondingly, the percentage outside employment runs from 38.4 to 32.1 per cent. However, related to the traditionally low participation of women in Ireland, the retirement level in Ireland at 10.5 per cent is almost half the rate for the next lowest country which is the UK. Variation outside Ireland is quite restricted. Correspondingly, the percentage inactive

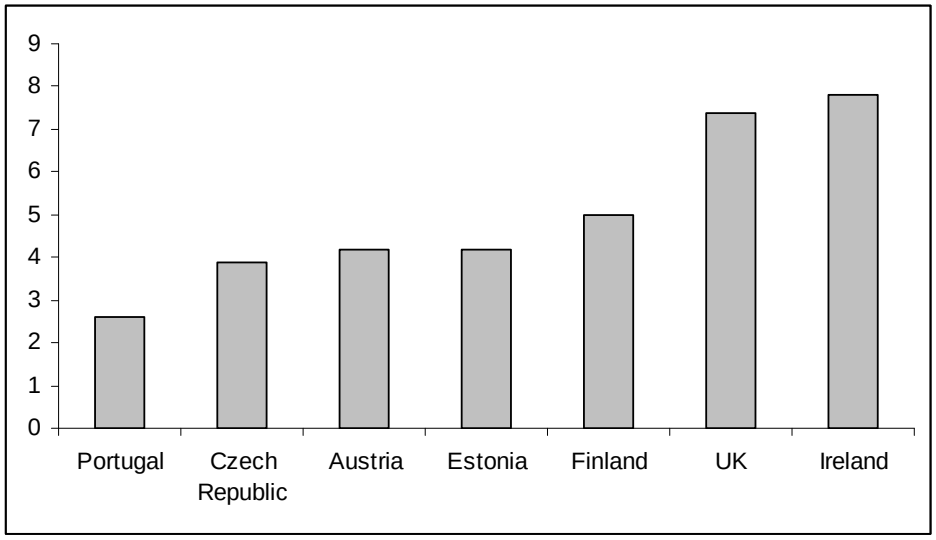
in Ireland at 17.5 is over twice that of the next highest level which is again found in the UK. Combining the inactive/ill/disabled/unemployed categories highlights the distinctive nature of the Irish case. The combined total in these categories reaches 26.1 per cent. The next highest figure is 15.6 per cent in the UK. For the other countries the figure ranges between 10.1 per cent for Portugal to 14.2 per cent in Finland.

Figure 4.1: HRP Principal Economic Status by Country, EU-SILC 2006



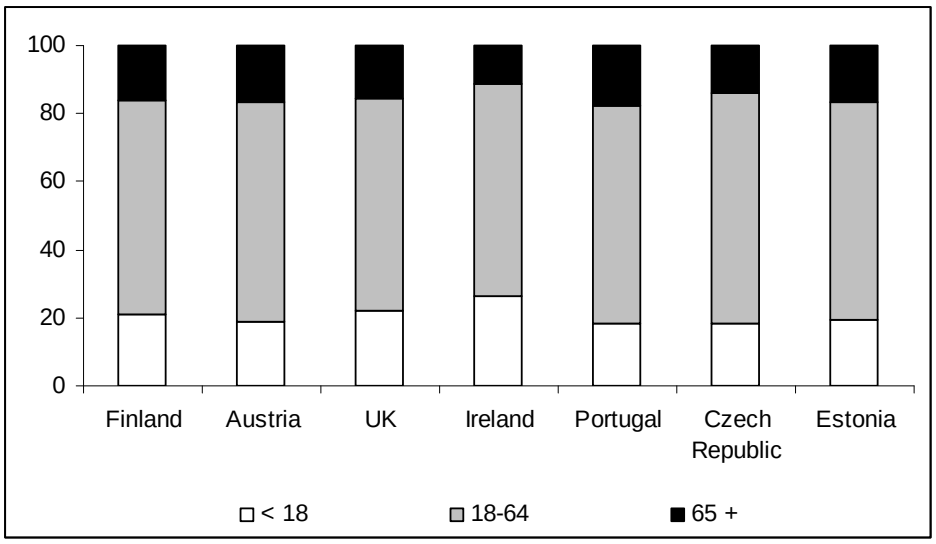
In Figure 4.2 we set out the distribution of lone parenthood across countries. The highest rates of 7.8 and 7.4 per cent are observed for Ireland and the UK respectively. For the remaining countries the figure varies between 2.6 per cent in Portugal to 5.0 per cent in Finland.

Figure 4.2: Lone Parent HRPs by Country, EU-SILC 2006



In Figure 4.3 the distribution across age groups by country is shown. Ireland has a lower than average number in the 65+ years category with a level of 11.2 per cent compared to 18 years per cent in Portugal. Correspondingly, it has an above average number in the under 18 category with a figure of 26.4 per cent compared to 18.3 per cent.

Figure 4.3: Age Group by Country, EU-SILC 2006



4.6 Cross-national Variation in Poverty Rates by Socio-economic Variation

In this section we will provide a descriptive account of cross-national variation in poverty rates by key socio-economic characteristics. In Table 4.5 we show the breakdown of 'at risk of poverty' rates by HRP PES and country. Variation within the full-time employment categories is relatively limited. The highest levels are found respectively in Estonia and Portugal with rates of 10.1 per cent and 13.1 per cent. For the remaining countries, the relevant figure ranges between 4.5 and 7.4 per cent and for five of the seven countries the observed rates for part-time employment are located in the narrow range running from 16.5 to 18.1 per cent. However, for Portugal this rises to 37 per cent and for the Czech Republic it falls to 11 per cent. The latter also proves to be an exception in relation to retirement with an 'at risk of poverty' rate of 6 per cent. Austria also has a relatively low rate of 13 per cent. For the remaining countries, the rate varies from 18 per cent in Finland to 28 per cent in the UK. Focusing on the inactive, we see that the UK is quite distinctive in having a rate of 51 per cent. At the other extreme the rate for Finland is 18 per cent. For the remaining countries it ranges between 25 per cent for Austria to 39 per cent for Portugal. For being ill/disabled the highest rate of 55.6 per cent is observed for Estonia. For the remaining countries, the major contrast is between Ireland and the UK with rates of 46 and 41 per cent and Finland and the Czech Republic both of which have a rate of 18 per cent. In relation to unemployment, the UK and Ireland are again distinctive with 'at risk of poverty' rates of over 60 per cent. The two New Member states have levels of over 50 per cent while the lowest rate of 30 per cent is observed for Portugal. Overall the UK and Ireland stand out as countries in which those excluded from the market pay a particularly high price in terms of being 'at risk of poverty'.

Table 4.5: 'At Risk of Poverty' by HRP Principal Economic Status by Country, EU-SILC 2006

	FT Employed %	PT Employed %	Retired %	Inactive %	Ill/Disabled %	Unemployed %
Finland	4.5	17.3	18.3	18.1	18.4	41.6
Austria	7.4	16.5	12.5	24.9	28.1	35.2
UK	6.6	18.1	27.7	50.8	40.6	63.7
Ireland	5.7	17.7	20.7	36.3	45.5	61.6
Portugal	13.1	37.2	22.4	38.9	32.4	29.9
Czech Republic	5.6	11.3	6.0	29.8	18.1	50.1
Estonia	10.1	18.0	18.0	35.4	55.6	52.1

Shifting our focus to consistent poverty, we can see from Table 4.6 that it is an extremely rare phenomenon among the full-time employed with the rate rising above 2 per cent only in Portugal and the New Member States. A significant increase is observed for part-time employees and with the exception of Portugal the rate ranges between 6 to 9 per cent. Rates are also rather low for the retired. Portugal again has an unusually high rate of 11 per cent, as does Estonia with one of 13 per cent. However, for the remaining countries the rate ranges between 3 to 4 per cent. In relation to being inactive, the major contrast is between Finland and Austria where rates continue to be low at between 8-9 per cent and the remaining countries where they range between 18 per cent for Ireland and 26 per cent for the UK. For illness/disability, Finland and Austria occupy the most favourable position with rates of 10 and 7 per cent. On this occasion the Czech Republic comes closer to these countries with a rate of 13 per cent. At the opposite end of the spectrum, the figure rises to 37 per cent for Estonia. For the remaining countries, the figure goes from 18 per cent for the UK to 23 per cent for Ireland.

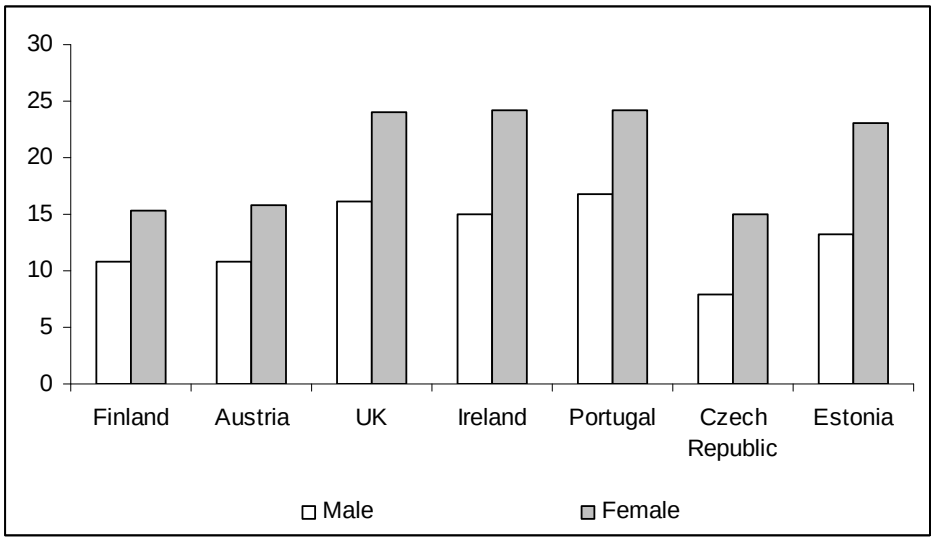
By far, the highest rates are observed for the unemployed. Finland and Austria are again at the lower end of the spectrum but the lowest figure of 19 per cent is found for Portugal. In contrast for the Czech Republic, the UK, Ireland and Estonia the rates are over 40 per cent. Overall, we can distinguish a number of different profiles in relation to the consequences of exclusion from the labour market. The costs of such exclusion are consistently high in Ireland, the UK and Estonia. In contrast, they are generally weak in Finland and Austria. In the remaining countries the effects are uneven, with unemployment having a relatively strong impact in the Czech Republic and inactivity and illness/disability in Portugal.

Table 4.6: Consistent Poverty (Consumption Deprivation 3+) by HRP Principal Economic Status by Country, EU-SILC 2006

	FT Employ. %	PT Employ. %	Retired %	Inactive %	Ill/ Disabled %	Unemployed %
Finland	0.5	7.3	4.1	8.7	9.7	24.6
Austria	1.6	6.0	3.2	8.2	7.0	20.4
UK	0.9	6.0	2.3	26.0	17.7	40.9
Ireland	0.9	7.2	3.3	18.0	22.6	29.8
Portugal	5.3	20.5	11.2	23.3	19.0	18.8
Czech Republic	2.8	7.3	2.9	22.2	12.5	42.5
Estonia	4.2	8.9	12.6	20.3	37.4	35.4

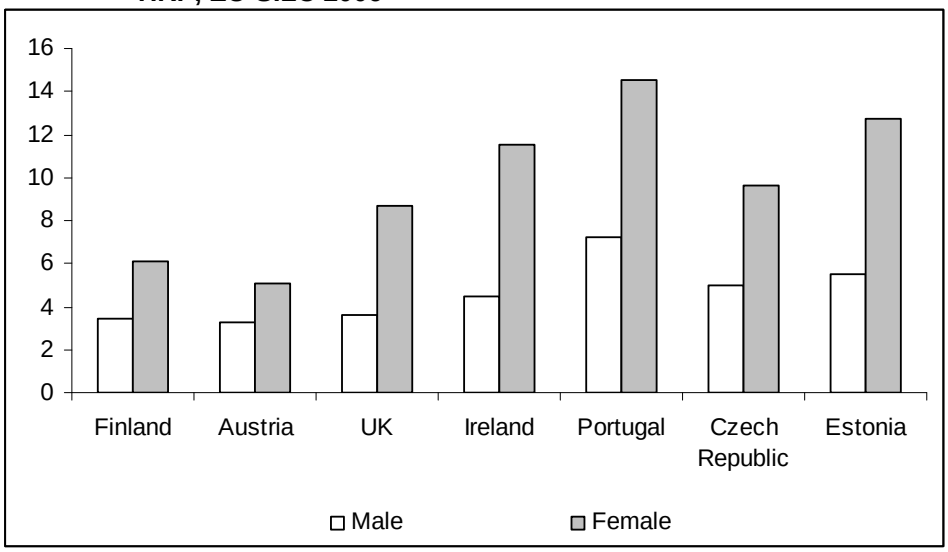
In Figure 4.4 we set out the breakdown of 'at risk of poverty' rates by the sex of the HRP. In every case rates are higher for female HRPs. For men rates vary from a low of 8 per cent in the Czech Republic to a high of 15/16 per cent in Ireland/the UK. For women the figure goes from 15 per cent in the former to 24 per cent in the latter.

Figure 4.4: 'At Risk of Poverty' by Sex of HRP, EU-SILC 2006



In Figure 4.5 we look at the corresponding results for consistent poverty. While the ranking of countries varies, it is again true that in every case women display higher rates. For men the level rises above 5 per cent only for Portugal and the New Member States. In contrast, for women it does not fall below 5 per cent. The lowest rates of 5-6 per cent for women are found in Austria and Finland. For the UK and the Czech Republic the figure rises to 9 and 10 per cent respectively before increasing to 12 and 13 per cent for Ireland and Estonia and finally 15 per cent for Portugal.

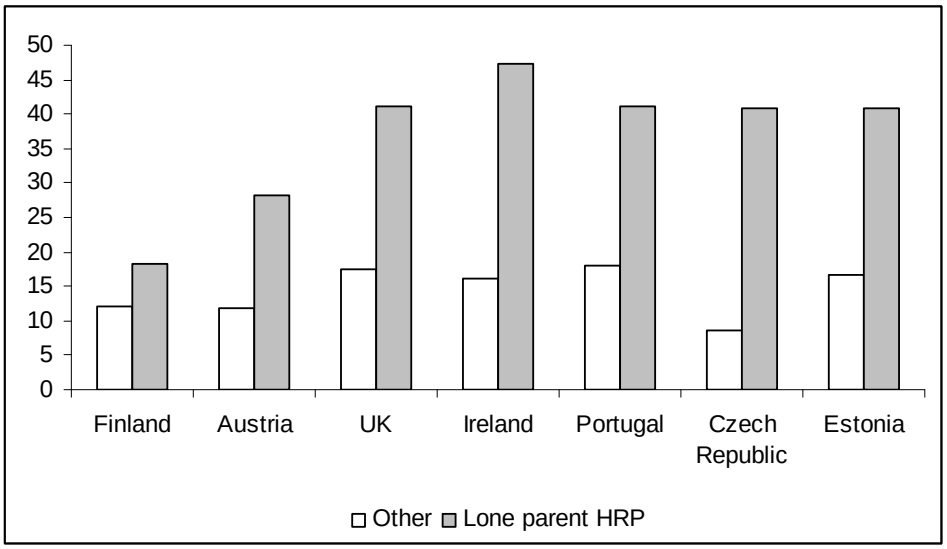
Figure 4.5: Consistent Poverty (Consumption Deprivation 3+) by Sex of HRP, EU-SILC 2006



In Figure 4.6 we look at the manner in which being a lone parent HRP influences 'at risk of poverty' rates. For those households that do not have a lone parent HRP the level goes from 9 to 18 per cent. For lone parent

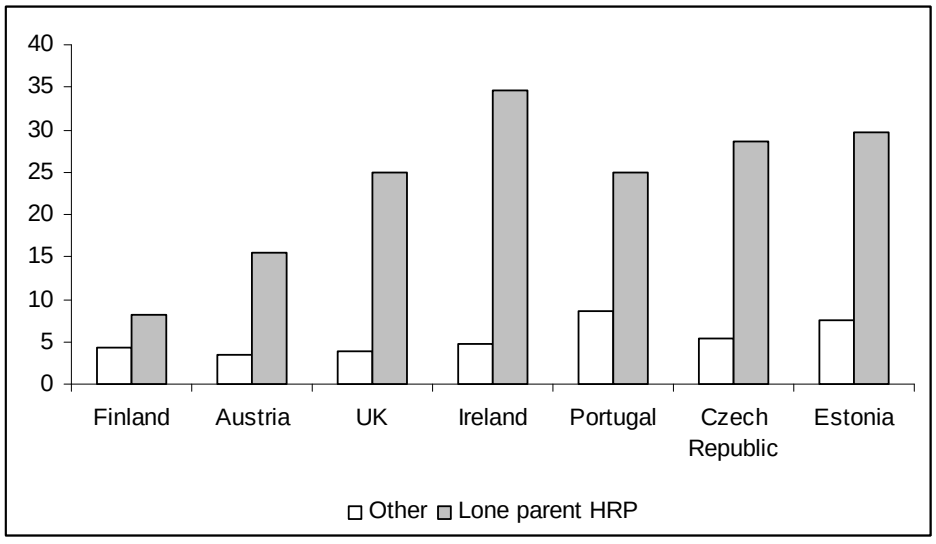
HRPs it runs from 18 per cent in Finland to 47 per cent in Ireland. In five of the seven cases the figure exceeds 40 per cent.

Figure 4.6: 'At Risk of Poverty' By Lone Parent HRP, EU-SILC 2006



In Figure 4.7 we look at the corresponding pattern for consistent poverty. Among those not in lone parent households, the highest level of 9 per cent is observed in Portugal. In contrast, with the exception of Finland where the rate is 8 per cent, for those in lone parent households the 'at risk of poverty' rate ranges from 16 per cent in Austria to 35 per cent in Ireland. For the remaining countries, the figure lies between 25 and 30 per cent.

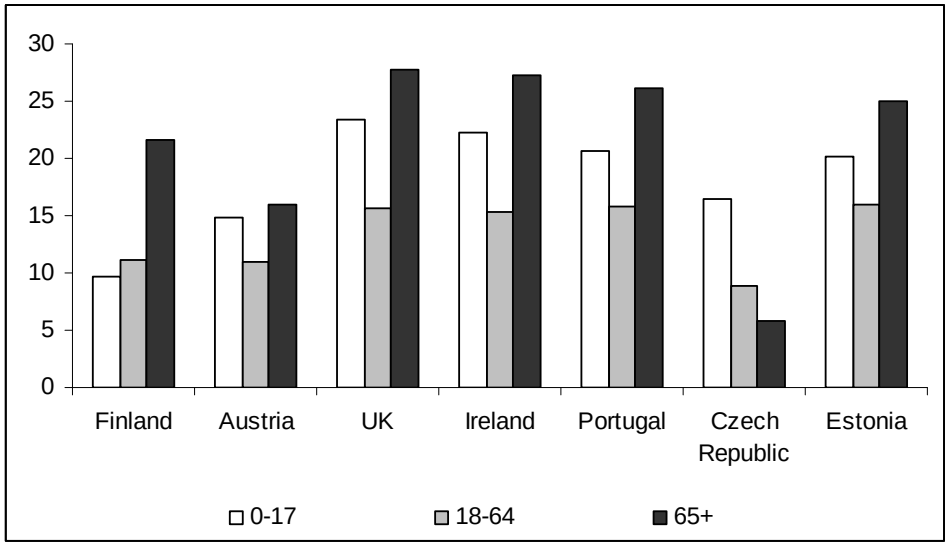
Figure 4.7: Consistent Poverty (Consumption Deprivation 3+) Lone Parent HRP, EU-SILC 2006



In Figure 4.8 our focus shifts to the effect of age group on 'at risk of poverty' levels. Variation across country is particularly sharp for those aged less than 18 years. Consistent with our earlier findings, we can see that the lowest rates of 10 and 15 per cent are found in Finland and Austria. They are followed by the Czech Republic with a rate of 17 per cent. Further increases to 20 and 21 per cent are observed for Estonia and Portugal. The rates peak at 22 and 23 per cent respectively for Ireland and the UK. For those aged 18 to 64 years the lowest rate of 9 per cent is observed for the

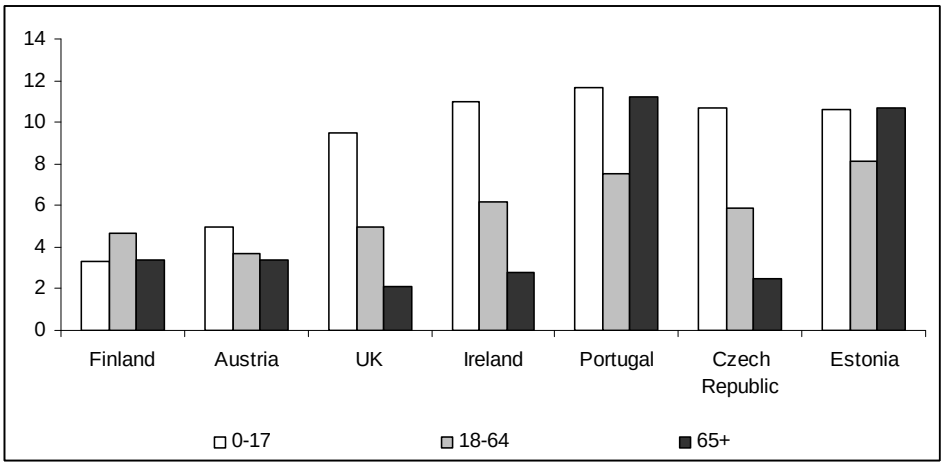
Czech Republic. It is followed by Finland and Austria both on 11 per cent. The remaining countries are clustered in the range between 15 and 16 per cent. The pattern for older people is somewhat different with the Czech Republic with a rate of 6 per cent constituting even more of an outlier than in the previous case. Among the remaining countries, the outcomes are somewhat less diverse than in the case of children. Austria has a relatively low rate of 16 per cent but the remaining five countries are found in the interval running from 22 per cent in Finland to 28 per cent in the UK.

Figure 4.8: 'At Risk of Poverty' by Age Group by Country, EU-SILC 2006



Focusing on the comparable results for consistent poverty set out in Figure 4.9, we see that for children there is a sharp contrast between Finland and Austria with respective rates of 3 and 5 per cent and the remaining countries where the level goes from 10 per cent in the UK to 12 per cent in Portugal. Once again variation is more restricted in the working age group and the range of outcomes runs from 4 and 5 per cent respectively in Austria and Finland to 8 per cent in Portugal and Estonia. The latter countries are also quite distinctive in terms of their consistent poverty levels for older people. While the rate for these countries reaches 11 per cent, the figure for the remaining ones lies between 2 and 3 per cent

Figure 4.9: Consistent Poverty (Consumption Deprivation 3+) by Age Group by Country, EU-SILC 2006



4.7 Conclusions

In this chapter we have sought to look at the impact of levels of poverty and Ireland's relative position in terms of such outcomes of shifting from a national to a European perspective and from a purely income base approach to one combining income and deprivation.

In terms of 'at risk of poverty' levels , shifting from a national to a European level sees Ireland's relative position among the twenty-six countries included in our analysis improve from 17th to 13th and sees it enjoying a considerable advantage over Southern European and Post-communist countries that is not evident at the national level.

Adopting a consistent poverty perspective at the national level reduces poverty rates significantly for all countries. The limited overlap between those with low incomes and those experiencing deprivation is by no means unique to Ireland. In fact, consistency levels are actually lowest in the countries with the lowest 'at risk of poverty' rates. As a consequence of this, the relative position for Ireland deteriorates to 21st. Focusing on a European consistent poverty measure produces an outcome identical to that observed for the EU 'at risk of poverty' measure; with Ireland ranking 13th and again enjoying a substantial advantage over Southern European and Post-communist countries. Finally, a measure of consistent poverty that combines a national 'at risk of poverty' measure with an 'absolute' or EU consumption deprivation threshold gives a relative ranking for Ireland that is identical to that provided by the national 'at risk of poverty' approach with Ireland placed 17th and enjoying an advantage over a number but by no means all of the Post-communist countries.

It is on this final measure of consistent poverty together with the national 'at risk of poverty' measure that we focus in our subsequent analysis and all further references to consistent poverty can be taken to refer to the former indicator. Our analysis will also focus on comparing Ireland with the UK and a set of five smaller European countries.

In terms of factors that might be expected to affect poverty rates, our analysis has shown that Ireland is distinguished by having a particularly high number of individuals who are not active on the labour market including those unemployed, ill/disabled and in full-time home duties and a smaller number who are in full-time employment and retired. It also has a relatively high number of lone parents and children and a smaller number of older people.

Focusing on the impact of such variables, we find that, in the case of 'at risk of poverty' where the HRP is an employee the situation of individuals in Ireland is no less favourable than in any of the remaining countries involved in our comparison. In contrast, rates for those excluded from the labour market are comparatively high in Ireland. This is also true for women, lone parents and children. Similar patterns are observed for consistent poverty.

5. Comparative Analysis of 'At Risk of Poverty' and Consistent Poverty Levels and Patterns

5.1 Introduction

In this chapter we intend to pursue a number of different comparisons. The first involves comparisons within countries. How, do older people fare in Ireland in comparison with younger age groups in the country in terms of risk of poverty? The second involves comparisons of the same groups across countries. How does the situation of older people compare to their counterparts in Finland. Finally, we can compare outcomes for different groups in different countries. What is the scale of the disparity between younger people in Finland and older people in Ireland? Here we address each of these questions and we do for a range of poverty measures. In particular, we consider the extent to which answers to such questions are affected by shifting from a uni-dimensional to a multidimensional perspective and by shifting one's focus from a a national to a European level. In comparison with our earlier analysis, the questions we address in this chapter largely concern relativities rather than absolute differences.

In order to answer these questions, it is necessary to move from univariate to a bivariate approach. An examination of the cross-tabulation of percentage outcomes, as set out in Chapter 4, provides a common sense way of understanding the manner in which poverty outcome varies across countries. However, there are a number of disadvantages associated with this mode of analysis. The first is that differences that are simply due to sampling error may be confused with true substantive differences. More importantly it does not allow us to test systematically for the statistical significance of effects and, most particularly in this case, interaction effects. Neither can we evaluate the size of different effects on a common metric.

If we consider the results set out in Figure 4.4 relating the impact of sex of the HRP on 'at risk of poverty' rate we see that in Ireland the rates for men and women respectively are 15.0 per cent and 24.2 per cent while for the Czech Republic they are 7.9 per cent and 15.0 per cent. The respective absolute percentage differences are 9.2 per cent and 7.1 per cent. If we were to be guided solely by these figures, then we would conclude that the

impact of sex differences was greater in Ireland. In doing so we would be led astray. The forgoing calculations are affected not only by the impact of sex but by national differences in 'at risk of poverty' rates. In other words, the fact that the absolute 'at risk of poverty' level is higher for women in Ireland compared to those in the Czech Republic is, in part, a consequence of the fact that overall rates are higher in Ireland. An appropriate measure of the effect of the impact of sex differences *per se* needs to disentangle such effects.

A more extreme example may illustrate this point more vividly. If in one country the poverty rates for women and men were 10 per cent and 5 per cent while in another they were 25 and 20 per cent the absolute difference would be 5 per cent in both cases. However, most people would be extremely unwilling to consider these cases as involving equal disparities.

We can move towards a resolution of such issues by calculating *relativities* rather than *absolute* percentages. So for the example above the relativity or disparity ratio between men and women is Ireland is 1.6 (24.2/15) while for the Czech Republic it is 1.9 (15.0/7.90). This calculation gives an entirely different answer to the question of whether the sex of the HRP has a stronger effect in the Czech Republic or Ireland. A limitation of these simple relativities or disparity ratios is that they are affected not just by the association between the variables but by the marginal distributions. Thus in our current example they are affected not just by the association between sex of the HRP and being 'at risk of poverty' but by the proportion of women in both countries and the proportions 'at risk of poverty'. As a consequence, we are not comparing like with like. What we want is a 'pure' measure of association that is unaffected by such factors.

Such a measure is given by what is known as an 'odds ratio'. The former notion is a rather straightforward one. If a team is considered as having a one in three chance of winning a match then its odds on winning are 2:1 or 'two to one against'. If its chances on the other hand were two out of three its odds would be 1:2 or 'two to one on'. Taking the example above, in the Irish case the odds on women being 'at risk of poverty' is 0.319 (24.2/75.8) for men it is 0.176 (15/85). The odds ratio is then calculated as 0.319/.176=1.81. In other words, the odds on being 'at risk of poverty' versus not being so are over two times higher for women rather than men. For the Czech Republic the disparity ratios for men and women are respectively 0.086 (7.9/92.1) and 0.176 (15.0/85.0) and the odds ratio is 2.05. Our analysis, therefore, reveals that the degree of association between the sex of the HRP and 'at risk of poverty' is just about equal in the two countries.

Logistic regression is a regression model used for prediction of the probability of occurrence of an event. It makes use of predictor variables that may be either numerical or categorical. It is particularly appropriate to the situation in which the dependent variable is dichotomous (or binary). The results of logistic regression models can be expressed in the form of odds ratios that tell us how much change there is in the odds of one outcome versus the alternative given a unit change in any other given variable – but holding all other variables in the analysis constant.

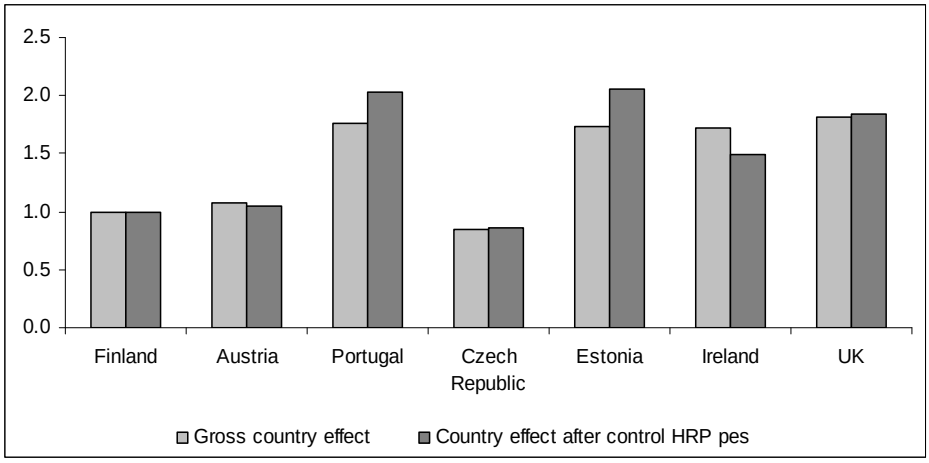
5.2 Cross-national Variation in the Impact of Socio-economic Characteristics of the HRP on 'At Risk of Poverty'

HRP PRINCIPAL ECONOMIC STATUS

In Figure 5.1 we show variation in the odds of being 'at risk of poverty' across the seven countries before and after controlling for the principal economic status of the HRP. In order to document such relativities, it is necessary to choose a reference point. In this case we have chosen those with a HRP in full-time employment in Finland. As we saw earlier, these individuals have an 'at risk of poverty' rate of 12.5 per cent. This group is assigned a value of 1 and the odds of being poor for all other groups is expressed as a multiple of the odds for this benchmark group.

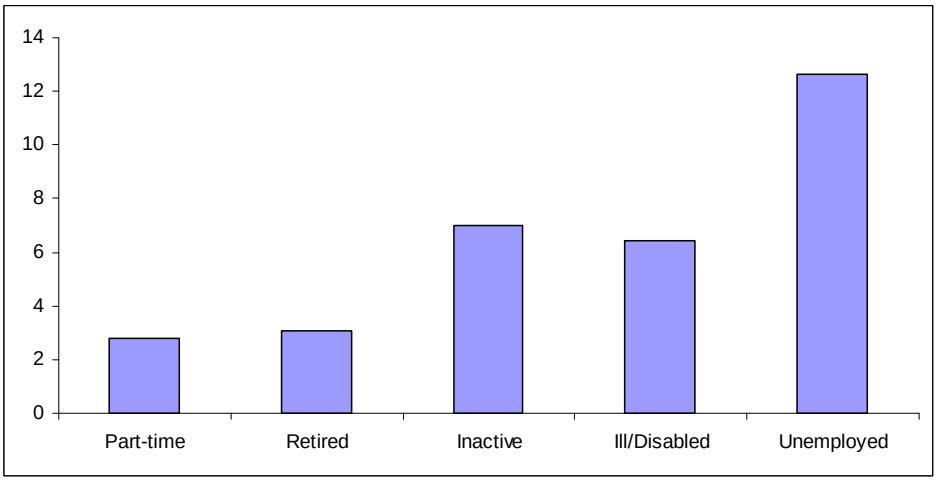
From Figure 5.1 we can see that before controlling for any other factors, the odds ratio for at risk of income poverty for the seven countries under consideration varies from 0.8 for the Czech Republic, indicating that it enjoys a marginal advantage over the reference category Finland, to 1.8 for the UK reflecting the extent of the disadvantage it experiences relative to Finland. Austria is closest to Finland, while four countries including Ireland are found in the range running from 1.7 to 1.8. Controlling for the HRP's PES has little effect for Austria, the UK and the Czech Republic. However, in the Irish case introducing this control reduces the odds ratio from 1.7 to 1.5. Thus, part of the higher Irish 'at risk of poverty' rate is accounted for by the manner in which its PES distribution differs from the other countries. As we saw earlier, Ireland has a relatively low number in the full-time employment category and a distinctively high number in the inactive group. For Portugal and Estonia, on the other hand, controlling for PES increases the odds ratio. For the former it goes from 1.8 to 2.0 and for the latter from 1.7 to 2.1. These findings indicate the overall level of 'at risk of poverty' in these countries is actually greater than we would expect on the basis of their HRP PES distributions. Thus while Ireland, Portugal and Estonia look almost identical at the gross level, when we control for PES the Irish outcome looks significantly better with the magnitude of its odds ratio being approximately three-quarters of those relating to the other countries.

Figure 5.1: Odds Ratios for 'at Risk of Poverty', Country Effects Before and After Control for HRP Principal Economic Status (PES), EU-SILC 2006



From Figure 5.2 we can see that controlling for the distribution of individuals across countries, overall part-time time employment of the HRP increases the odds of 'at risk of poverty' by 2.8 per cent. This rises to 3.1 for retirement. A sharp increase to 6.4 and 7.0 is observed for being ill/disabled and inactive respectively. It peaks at 12.6 per cent for unemployment.

Figure 5.2: Odds Ratios for 'at Risk of Poverty' by HRP Principal Economic Status, EU-SILC 2006

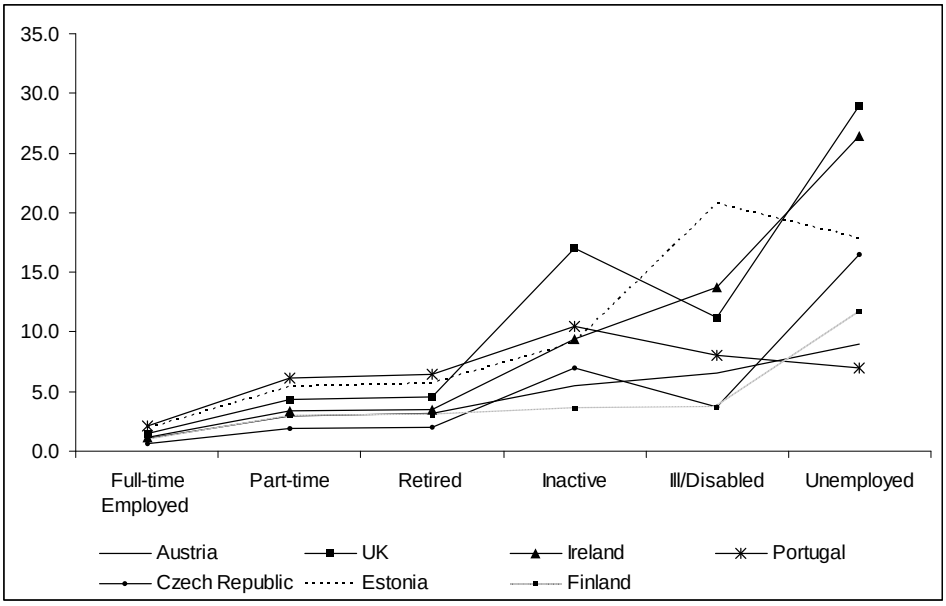


The foregoing analysis assumes that these effects are uniform across countries. However, allowing for interaction between the country effects and PES, shows that this assumption cannot be sustained. Exploratory investigation showed that the most appropriate set of assumptions keeps the impact of part-time work and retirement uniform across countries but allows the effect of being inactive, being ill/disabled and unemployed to vary across countries.

In exploring the patterns of variation across countries it is necessary to keep complementary perspectives in mind in order to get a full picture. The first takes both *within and between* country relativities in to account by taking a particular group in one country as the benchmark. It captures overall variation in odds on a single continuum. The second focuses on relativities *within* countries and then asks how the magnitude of such effects varies across countries.

Figure 5.3 documents variation in the impact of HRP principal economic status across countries on odds of being 'at risk of poverty' across the seven countries in our analysis. We can see that very little such variation across countries is observed for those in full-time unemployment. For Austria and Ireland the odds ratios are 1.0 and 1.1. This means that those in full-time employment in Finland do not enjoy any advantage over their counterparts in these countries in terms of their likelihood of being at 'risk of poverty'. For the UK the figure rises to 1.5 and for Portugal and Estonia it is close to 2.0; indicating that these groups occupy less favourable positions than their counterparts in Finland. For the Czech Republic, on the other hand, the figure falls to 0.7 indicating that those in households with HRPs in full-time employment in this country are marginally more favourably positioned than those in Finland.

Figure 5.3: Cross-national Variation in the Impact of HRP Principal Economic Status on Being 'At Risk of Poverty' (Odds Ratios Relative to HRP Full-time Employee in Finland), EU-SILC 2006



As a consequence of the fact that the impact of the HRP being part-time and retired are being held constant across countries, the odds ratios for both are arrived at simply by multiplying those relating to full-time employment by 2.9 and 3.1 respectively. The relativities across countries thus remain uniform. With HRP full-time employees as the reference category the lowest odds ratio for part-time employed of 1.9 is observed for the Czech Republic and the highest of 6.2 for Portugal. The remaining countries are found in the range running from 2.9 to 5.4. A similar pattern is observed for retirement with the values running from 2.0 in the Czech Republic to 6.5 for Portugal.

A rather different situation is observed in relation to the impact of being inactive which varies significantly across countries. The weakest effect is found for Finland where the odds on being 'at risk of poverty' are 3.1 times higher for the inactive than for full-time employees. Maintaining the latter group in Finland as the reference category this disparity rises to 5.5 for Austria and to 7.0 for the Czech Republic. It increases further to 9.1 and 9.4 for Estonia and Ireland, for Portugal it reaches 10.5 and a distinctively high value of 17.1 is observed for the UK.

Significant variation across countries is also observed with regard to illness and disability. In Finland and the Czech Republic the relevant odds ratio reaches 3.7. This rises to 6.5 and 8.1 respectively for Austria and Portugal. It then increases to 11.3 and 13.8 respectively for the UK and Ireland before peaking at 20.7 for Estonia.

The sharpest pattern of cross-national variation is observed in relation to unemployment. With full-time employees in Ireland as the reference category, the weakest effect is observed for Portugal with an odds ratio of 7:1. This rises to 9.0 for Austria and 11.7 for Finland. It then climbs fairly sharply to 16.5 for the Czech Republic and to 17.9 for Estonia. The Liberal countries emerge as quite distinct in terms of the consequences of

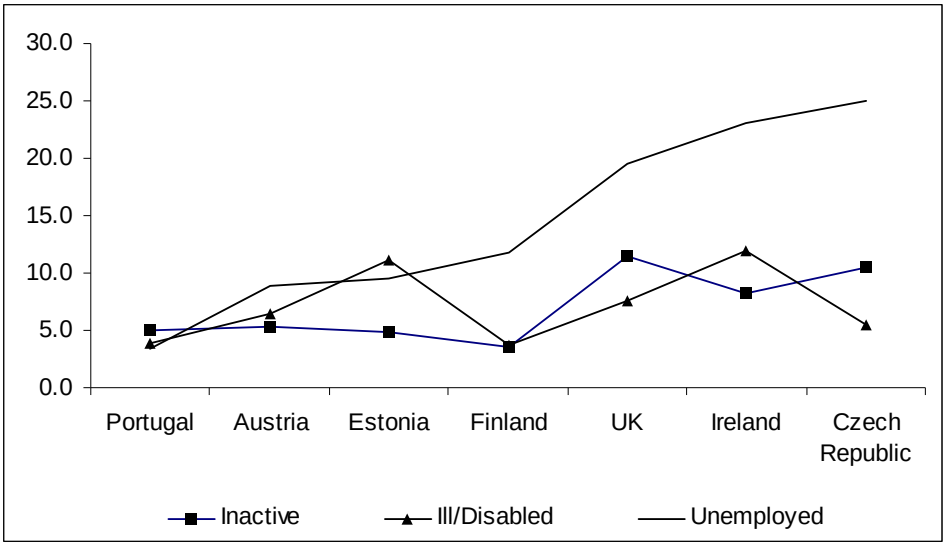
unemployment for 'at risk of poverty' levels. For Ireland we observe a value of 26.4 and a further increase to 29.0 is observed for the UK.

The foregoing results take the full-time employed in Finland as the reference category and consequently incorporate within and between country differences by locating combinations of country and HRP PES on a single continuum. Operating with a within country perspective and taking those in full-time employment in each country as the benchmark we compare the outcomes for those groups where the impact has been shown to vary significantly.

In Figure 5.4 we show the breakdown of such internal relativities and the manner in which their magnitude varies across countries. As we can see, the impact of the HRP being inactive is particularly weak in Finland and particularly strong in Ireland, the Czech Republic and the UK. Taking those in full-time unemployment as the benchmark, the impact of being inactive increases the ratios from 3.6 in Finland to over 8 in Ireland, 11 in the Czech Republic and 12 in the UK.

The impact of illness/disability is relatively weak in both Finland and Portugal and a good deal stronger in Ireland, Estonia and the UK. The odds ratio ranges from 3.1 in Portugal and 3.7 Finland to 7.7 in the UK, 10.9 in Estonia and 12.5 in Ireland.

Figure 5.4: Cross-national Variation in the Impact of Principal Economic Status of the HRP by Country (Reference Category Full-time Employed in Each Country), EU-SILC 2006

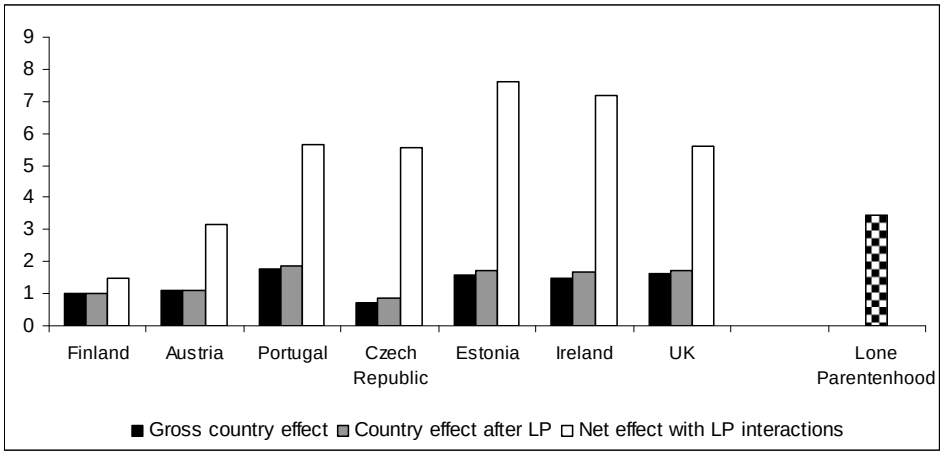


Once again taking a within country perspective, we find that the impact of the HRP being unemployed varies from 3.3 in Portugal to approximately 9 in Austria and Estonia, close to 12 in Finland, 19 in the UK and 23 in Ireland and 25 in the Czech Republic. The impact of unemployment in Finland is a great deal stronger that the effects relating to inactivity and illness and disability. Nevertheless, it is substantially weaker than the corresponding effects in Ireland, the UK and the Czech Republic.

HRP LONE PARENTHOOD

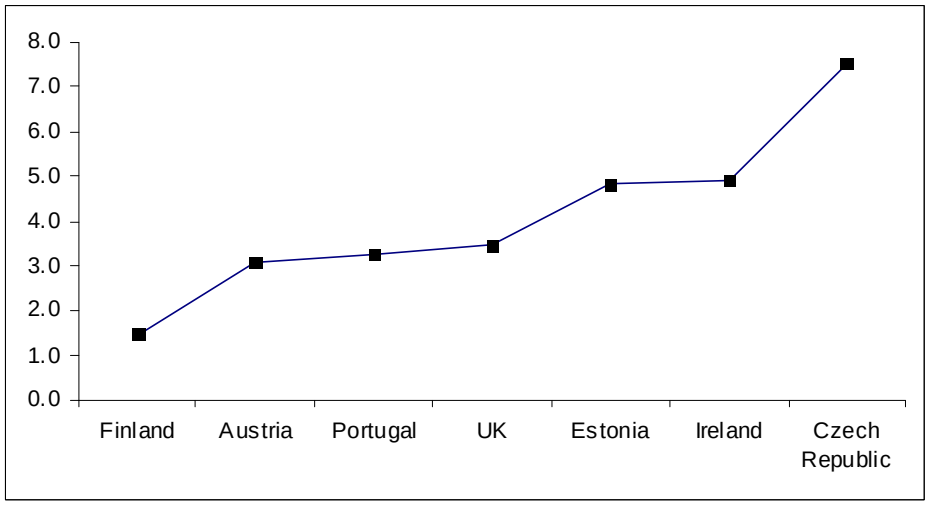
As we observed in Chapter 4, individuals living in households with a female HRP have significantly higher 'at risk of poverty' rates. However, when we control for other factors, variation in the impact of the sex of the HRP on 'at risk of poverty' levels is relatively weak and not statistically significant. Therefore, at this point we proceed to focus directly on the impact of the HRP being a lone parent. Variation across countries in the extent of lone parent HRPs has little effect on cross-country differences in being 'at-risk of poverty'. Allowing for country effects, reveals an overall odds ratio for HRP lone parenthood of 3.5. However, as is clear from Figure 5.5, substantial variation is observed across country. In Finland the impact of lone parenthood is extremely weak; raising the odds on 'at risk of poverty' by 1.5 relative to other households in Finland. This rises to 3.2 for Austria and to between 5.6 and 7.6 for the remaining countries.

Figure 5.5: Gross and Net Country Odds Ratios for 'at Risk of Poverty' Controlling for HRP Lone Parenthood, EU-SILC 2006



Adopting a within country perspective we can see from Figure 5.6 that the impact of the HRP being a lone parent rises from 1.5 in Finland to between 3.1 to 3.5 in Austria, Portugal and the UK. The figure rises to 4.8 and 4.9 for Estonia and Ireland respectively and finally peaks at 7.5 for the Czech Republic.

Figure 5.6: Cross-national Variation in the Impact of HRP Lone Parenthood by Country (Odds Ratios Relative to Non-lone Parent HRP in Individual Countries), EU-SILC 2006

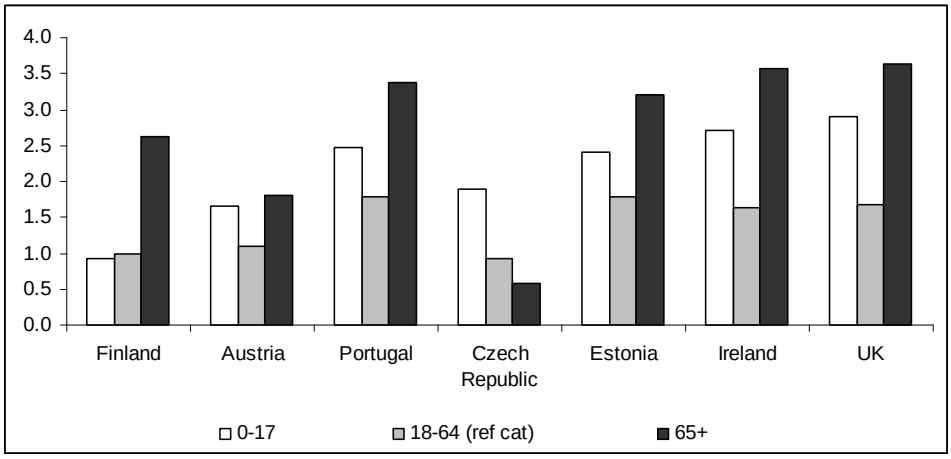


LIFE CYCLE EFFECTS

At this point we consider the manner in which the impact of life cycle stage varies across countries. Controlling, for cross-national variation in individuals across stages of the life cycle has little impact on country effects. However, once again we observe significant variation across countries. From Figure 5.7, we can see that within the working age group (18-64 years) we observe very little difference in the odds of being 'at risk of poverty' between Finland, Austria and the Czech Republic. The odds for the remaining countries are between 1.6 to 1.8 times higher. Taking those aged 18-64 years in Finland as the reference point, we can see that the impact of being aged less than 18 years in Finland has little effect on odds of 'at risk of poverty' with the relevant odds ratio being 0.9. In every other country the effect is greater with the increase in the odds ratio varying from 1.5 in Portugal to 2.3 in the Czech Republic.

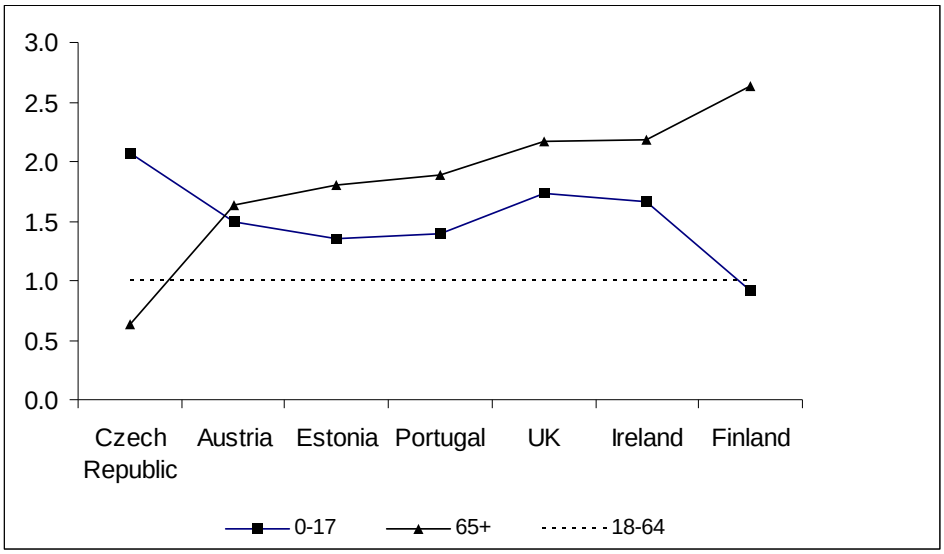
The situation in relation to older people is a good deal different. Being aged 65 years or over in Finland raises the odds of being 'at risk of poverty' by 2.6. In every other country the impact is much weaker. With the exception of the Czech Republic, the scale of the reduction ranges from 0.6 in Estonia to 0.83. In the Czech Republic the reduction is much sharper with a value of 0.243.

Figure 5.7: Cross-national Variation in Impact of Life Cycle for 'At Risk of Poverty' (Odds Ratios Relative to Working Age Group in Finland), EU-SILC 2006



In Figure 5.8, adopting a within country perspective, with the working age group in each country acting as the reference category, we find that while older people in Finland have a 2.6 higher odds of being 'at risk of poverty', this declines to 2.1 and 2.3 for the UK and Ireland. There is a further decline to 1.8 and 1.6 respectively for Estonia and Austria. Finally it declines to 0.7 for the Czech Republic indicating that it is exceptional in that the odds on being 'at risk of poverty' are actually lower for older individuals than for the working age group. The impact of childhood rises from 0.9 in Finland to 1.4 and 1.5 in Portugal and Austria, to 1.7 in Ireland and the UK and finally to 2.1 in the Czech Republic. The implications of being an older person is least in the Czech Republic where the odds ratio is 0.6. It rises to between 1.6 to 1.9 for Austria, Estonia and Portugal. It then rises to 2.2 for Ireland and the UK before peaking at 2.6.

Figure 5.8: Variation in the National Impact of Life Cycle by Country (Working Age 18-64 years in Each Country as the Reference Category), EU-SILC 2006



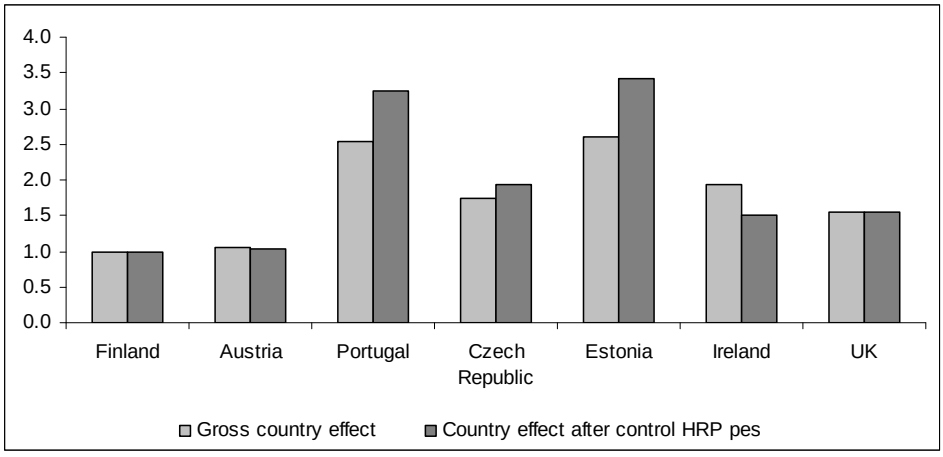
Overall, we can see that Finland provides an example of a society where the 'at risk of poverty' level for older people is a relatively high risk in comparison with children and the working age group; both of whom experience very low rates. However, in comparative international terms the absolute level of 'at risk of poverty' for older people in Finland remains low. For the remaining countries, the lowest levels are observed for the working age group. Ireland, the UK, Portugal and Estonia display extremely similar patterns in terms of the distribution of risk across the life-cycle whereby the odds are significantly higher for children than the working age group and then increase further for older people. Within age groups, their absolute levels are rather similar. In the Czech Republic we also observe a curvilinear pattern but in this case it is older people who display the lowest rates and children are particularly disadvantaged. However, absolute levels are extremely low in comparison with other countries. In Austria the contrast is between the working age group and all others but the level of risk is low in comparative terms.

5.3 Cross-national Variation in the Impact of Socio-economic Characteristics of the HRP Consistent Poverty Relativities

HRP PRINCIPAL ECONOMIC STATUS

Turning our attention again to consistent poverty, in Figure 5.9 we show the gross country effects and the net effects controlling for HRP PES. The pattern of consistent poverty is clearly rather different from that relating to being 'at risk of poverty'. Finland and Austria have by far the lowest odds. The effects, as reflected in the odds ratios, relating to the Liberal countries are significantly higher being respectively 1.5 for the UK and 1.9 for Ireland. In relative terms, the remaining countries, however, are significantly more disadvantaged than in the case of 'at risk of poverty'. For the Czech Republic the odds on consistent poverty are 1.7 times higher than for Finland and Austria. For Portugal this disparity rises to 2.5 and for Estonia to 2.6. Controlling for cross-national differences in HRP PES has little effect on the outcomes for Finland, Austria and the UK. For Ireland, however, it leads to a reduction in the odds ratio from 1.9 to 1.5 indicating that a significant part of its higher rate of consistent poverty is accounted for by the distinctive nature of its HRP PES distribution. For Ireland part of the explanation of higher rates lies in the distinctive nature of the distribution of individuals across the Principal Economic Status. However, for other countries a relatively favourable distribution of household reference persons across categories of the principal economic status classification conceals the underlying scale of their problems. Thus for the Czech Republic allowing for the distribution of PES actually leads to an increase in the odds ratio from 1.7 to 1.9, while in Portugal and Estonia we see quite substantial increases respectively from 2.5 to 3.2 and 2.6 to 3.4. Thus in these countries, on the basis of their PES distributions, we would expect to see substantially higher levels of consistent poverty than we actually observe.

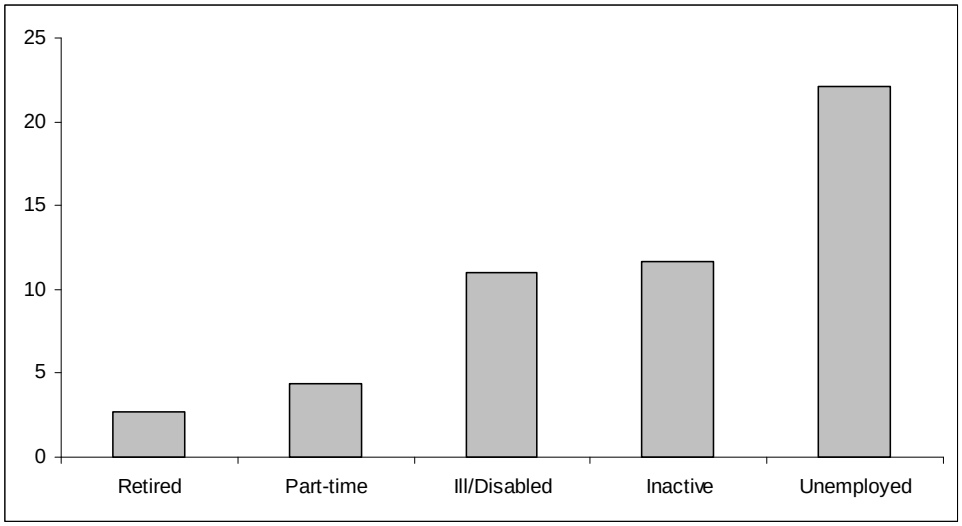
Figure 5.9: Cross-national Variation in the Impact of Principal Economic Status of the HRP on Consistent Poverty by Country (Odds Ratio Relative to Category Full-time Employees in Each Country), EU-SILC 2006



Assuming for the moment that the impact of principal economic status is uniform across countries, from Figure 5.10 we can see that across all countries, taking those in full-time employment in Finland as the benchmark, the HRP being in part-time work raises the odds on being in consistent poverty by 5.1. The impact of being retired is weaker and leads to an increase in the odds of 2.7. For being inactive and unemployed this

increases respectively to 8.4 and 9.5. Finally, for unemployment it peaks at 29.0.

Figure 5.10: Odds Ratios for Consistent Poverty by HRP Principal Economic Status (Reference Category HRP Full-time Employee), EU-SILC 2006



Once again, the validity of the foregoing conclusion depends on the assumption that the impact of PES is uniform across countries. As with 'at risk of poverty' outcomes, this proves not to be the case and we observe significant interactions between countries and HRP PES as set out in Figure 5.11. Our final model assumes that the impact of part-time work and that of retirement are uniform across countries. In contrast, the impact of being inactive, ill/disabled and unemployed is allowed to vary cross-nationally. Such variation within the full-time employment category is relatively limited. This is particularly true in the most affluent countries with the odds ratio ranging between 0.9 and 1.2 for the UK, Finland, Ireland and Austria. The Irish value is 1.0. Thus the Liberal countries, which perform significantly worse than Finland and Austria in relation to experience of 'at risk of poverty' among full-time employees, do no worse with regard to consistent poverty. Taking into account not only the risk of falling below 60 per cent of equivalent income but also whether individuals are in households where three or more consumption deprivation items bring about an improvement in the relative position of full-time employees in Ireland and the UK in comparison with their counterparts in Finland and Austria.

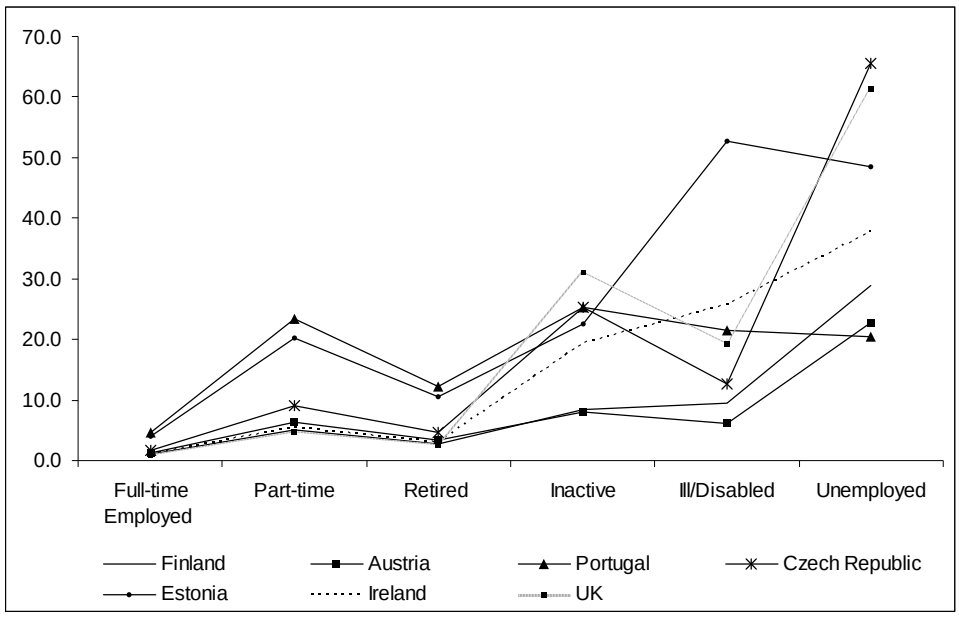
A slight increase to 1.8 is observed for the Czech Republic and a rather sharper one to 4.0 and 4.6 for Estonia and Portugal. Because of our assumption that the impact of part-time work and retirement are uniform across countries the odds ratio for these outcomes, in relation to the reference category of full-time employees in Finland, can be calculated by multiplying the outcomes for the full-time employed by 5.1 and 2.6 respectively. Consequently, in each case the pattern of relativities observed for full-time employees is preserved. In the case of part-time work, this means that the scale of disadvantage relative to the benchmark groups of full-time employees in Finland ranges from 4.7 in the UK to 23.5 in Portugal. The Irish value is 5.5. For the retired the range runs from 2.4 in the UK to 12.2 in Portugal. The Irish value is 2.9.

When we focus on cross-national variation in the impact of those categories involving exclusion from the labour market, we find that the scale of the impact of such exclusion is substantially higher. In Finland a HRP being inactive raises the odds on being consistently poor in comparison with full-time employees by a factor of 8. The figure for Austria is identical However, it then rises sharply to between 19 and 25 for Ireland, Estonia, Portugal and the Czech Republic before peaking at 31 for the UK. These results and those that follow relating to other forms of labour market exclusion demonstrate decisively that, rather than the impact of principal economic status being relatively uniform, variation for those excluded from the labour market is substantially greater than for the most favoured categories. The advantaged experience relatively similar outcomes across countries while the disadvantaged experience considerable variation in their mis-fortunes.

Maintaining full-time employees in Finland as the benchmark, we find that the impact of being ill and disabled is marginally higher than that of being inactive in Finland and correspondingly weaker in Austria. For the Czech Republic it rises to 13. It then ranges from 19 to 26 for the UK, Portugal and Ireland. Finally, we see a very sharp rise to 53 for Estonia.

By far the strongest effect is observed for HRP unemployment. The minimum value of 21 is observed for Portugal. This rises respectively to 23 and 29 for Austria and Finland. Further increases to 38 and 49 are observed for Ireland and Estonia. Finally, we observe a further sharp escalation to 61 and 66 respectively for the UK and the Czech Republic.

Figure 5.11: Cross-national Variation in the Impact of HRP Principal Economic Status on Consistent Poverty (Odds Ratios Relative to HRP Full-time Employee in Finland), EU-SILC 2006

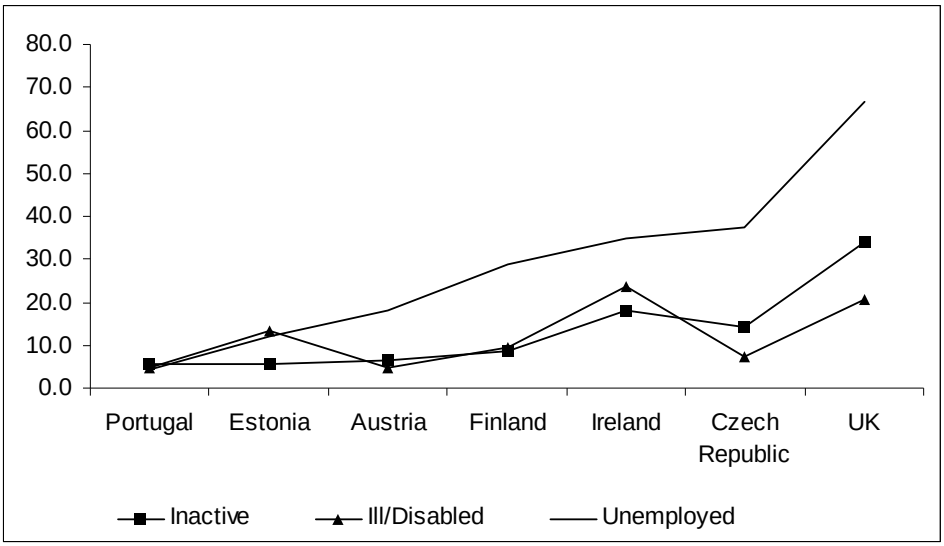


Taking a within country perspective, where the benchmark is the full-time employed in the individual countries, in Figure 5.12 we find that for Portugal, Estonia, Austria and Finland the impact of the HRP being inactive ranges from 5.5 to 8.4. It then rises significantly to respectively 14.3 and 17.9 for the Czech Republic and Ireland. Finally, it rises sharply to 33.8 for the UK.

Portugal, Austria and Finland are also found at the lower end of the continuum in relation to illness/disability with values of 4.7, 4.9 and 9.5 respectively. The positions of Estonia and the Czech Republic are inverted on this occasion with values of 13.2 and 7.2 being observed. The highest values of 23.2 for Ireland are observed and 20.8 for UK but on this occasion the former displays the highest values.

Portugal is quite distinctive in relation to the impact of HRP unemployment with a relatively low odds ratio of 4.5. This rises to 12.2 for Estonia and to 18.3 for Austria. It then increases substantially to between 29 to 37.2 for Finland, Ireland and Austria and the Czech Republic. The UK once again constitutes an outlier with a value of 66.7.

Figure 5.12: Cross-national Variation in the Impact of HRP Principal Economic Status on Consistent Poverty (Odds Ratios Relative to Full-time Employees in Each Country), EU-SILC 2006



Overall, we can see that from the perspective of within country relativities, Portugal, Austria and Estonia are at the lower end of the continuum in terms of the impact of principal economic status. However, in the case of Finland the impact of unemployment is substantially greater than the other effects. The Czech Republic displays a weak effect in relation to being inactive, a moderate one with regard to illness/disability and a strong impact for unemployment. Differentiation in relation to principal economic status is sharpest in relation to Ireland and the UK but the latter is quite distinctive with regard to the magnitude of the impact associated with inactivity and unemployment.

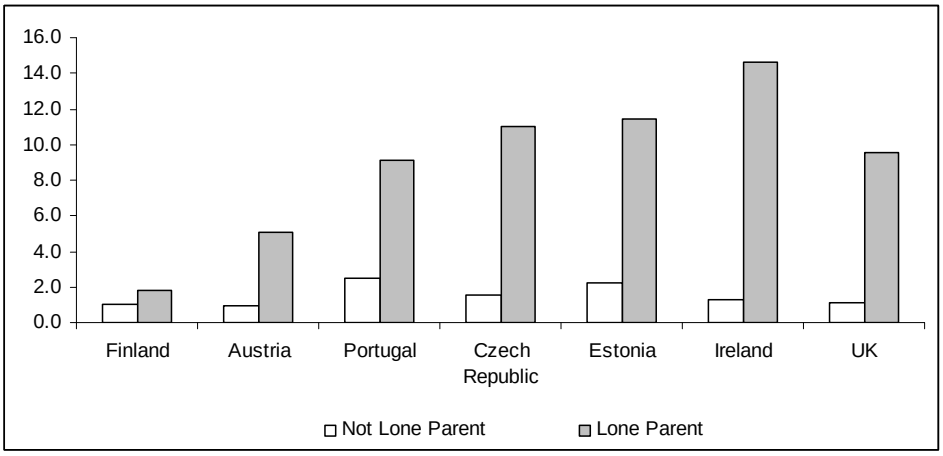
HRP LONE PARENTHOOD

As with 'at-risk of poverty', individuals in a household with a female HRP are significantly more likely to experience consistent poverty. However, controlling for sex has little impact on country differences and its impact disappears once we control for lone parenthood and labour market exclusion. As a consequence, we proceed directly to an examination of the impact of lone parenthood. Controlling for the cross-national differences in the level of HRP, lone parent has little effect on our estimates of country effects. However, in the UK and Ireland it does produce a limited

reduction. In the former case it declines from 1.55 to 1.42 and in the latter from 1.94 to 1.79. Thus, some part of relatively higher 'at risk of poverty' rate in Ireland is accounted for by a correspondingly higher number of lone parents.

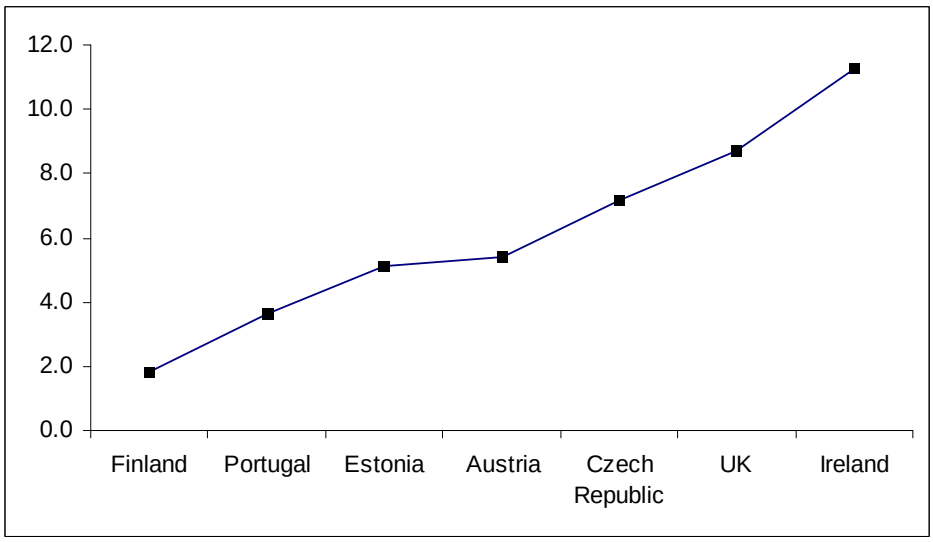
Allowing for cross-national variation in the impact of HRP lone parenthood on consistent poverty outcomes and taking those in non-lone parent households in Finland as the benchmark, in Figure 5.13 we show the breakdown of consistent poverty by lone parenthood. Cross-national variation within the non-lone parent group is relatively weak. It ranges from 0.9 in Austria to 2.5 in Portugal and exceeds 2 only in the latter and Estonia. With those outside lone parent households in Finland as the reference category being in such a household in Finland raises the odds by 1.8. For Austria this rises to 5.1, before climbing to in excess of 9 for Portugal and the UK. It then rises to approximately 11 for the Czech Republic and Estonia before peaking at almost 15 for Ireland.

Figure 5.13: Cross-national Variation in the Impact of Lone Parenthood on Consistent Poverty (Odds Ratios Relative to Non-lone Parents in Finland), EU-SILC 2006



In Figure 5.14 we take a within country perspective. The weakest effect of 1.2 relates to Finland. It is followed by Portugal at 3.6 and Estonia and Austria with values of over 5.2 and 5.7. It then rises to 7.3 and 8.6 for the Czech Republic and the UK before peaking at 11.2 for Ireland.

Figure 5.14: Variation in the National Impact of HRP Lone Parenthood on 'At Risk of Poverty' by Country (Odds Ratios Relative to Working Age 18-64 Years in Each Country), EU-SILC 2006

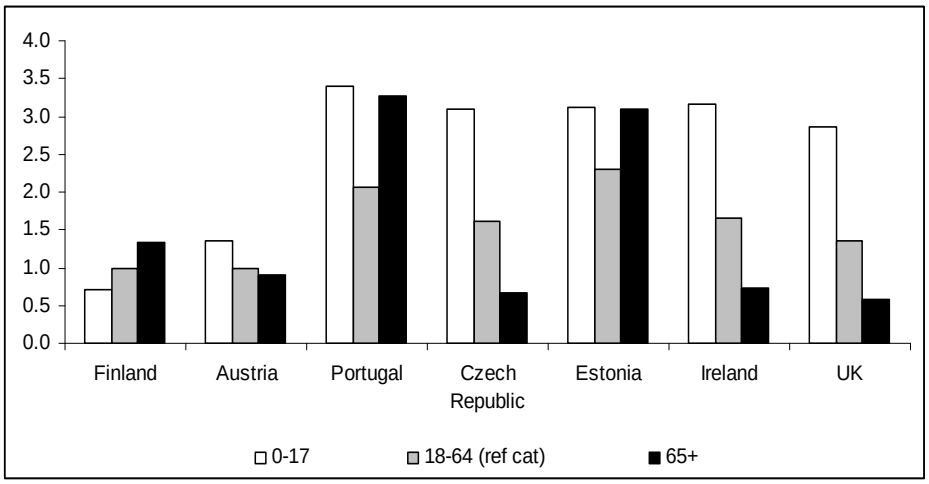


LIFE CYCLE EFFECTS

The NESC (2005) report on the *Developmental Welfare State* drew attention to the need for policymakers to recognise the varying needs and expectations of individuals concerning income and other forms of provision at different stages of the 'life cycle'. Reference to the 'life cycle' has also become increasingly prevalent in discussions relating to the National Action Plan for Social Inclusion (NAPinclusion) 2007-2016. The life cycle perspective recognises that risks are linked across problem areas while difficulties experienced at any specific life cycle phase may be either a consequence of earlier difficulties or a precursor of later problems. Whelan and Maître (2008) undertook a detailed application of the life cycle perspective to the Irish case. Here we develop the argument they set out in that publication that conclusions regarding the impact of the life cycle are not independent of the particular indicator of poverty on which one focuses. We also demonstrate that the observed pattern of life cycle effects varies substantially across countries. Social policy does not just respond to life cycle patterns, it actively shapes them. However, our analysis reveals that variation in the distribution of individuals across the life cycle does little to account for country effects. Controlling for the latter we find that children are significantly disadvantaged in comparison to other age groups with an overall odds ratio of 1.6 being observed.

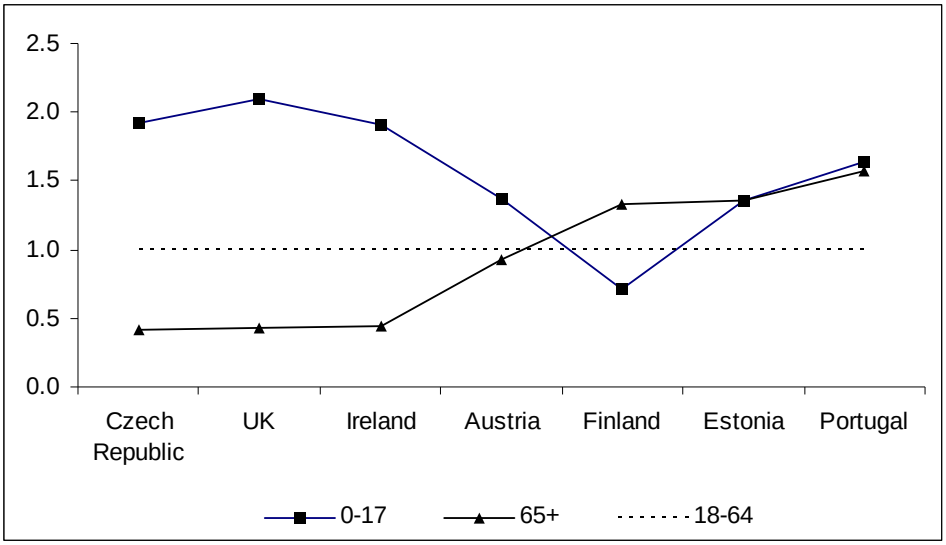
Once again, however, as illustrated in Figure 5.15, we observe significant variation across countries. Taking the working age group in Finland as the benchmark, variation within the working age group is relatively restricted ranging from 1.0 in Finland and Austria to 2.1 and 2.3 in Portugal and Estonia. The remaining countries have values between 1.4 and 1.6 with Ireland at the upper end. Variation in the youngest age group is more substantial. Finland and Austria display particularly low values of 0.7 and 1.3 respectively. However, they provide a sharp contrast with the remaining five countries where childhood raises the odds on being in consistent poverty in comparison with working age individuals in Finland by between 2.9 and 3.4 with the Irish values of 3.2 being the second highest after Portugal.

Figure 5.15: Cross-national Variation in the Impact of Life Cycle on Consistent Poverty (Odds Ratios Relative to Full-time Unemployed in Finland), EU-SILC 2006



In Figure 5.16 we take a within country perspective with the benchmark being the working age group in each country. This group enjoys an advantage over children in all countries except Finland. The scale of this advantage ranges from 2.1 in the UK to 0.7 in Finland. The remaining countries have values ranging from 1.4 to 1.9, with Ireland at the upper end of the continuum.

Figure 5.16: Variation in the Impact of Life Cycle on Consistent Poverty by Country (Reference Category Working Age Individuals 18-64 years in Each Country), EU-SILC 2006



Taking an overall view in relation to consistent poverty, we find that Austria is a country with rather limited life cycle relativities although older people do somewhat worse than others. Estonia and Portugal exhibit a pattern of life cycle differences whereby both children and older people do significantly worse than the working age group. In Finland, on the other hand, children do rather better than the working age group while older people do worse. In the Czech Republic, UK and Ireland a quite different pattern emerges whereby older people have relatively low rates of consistent poverty while children are characterised by rather high rates.

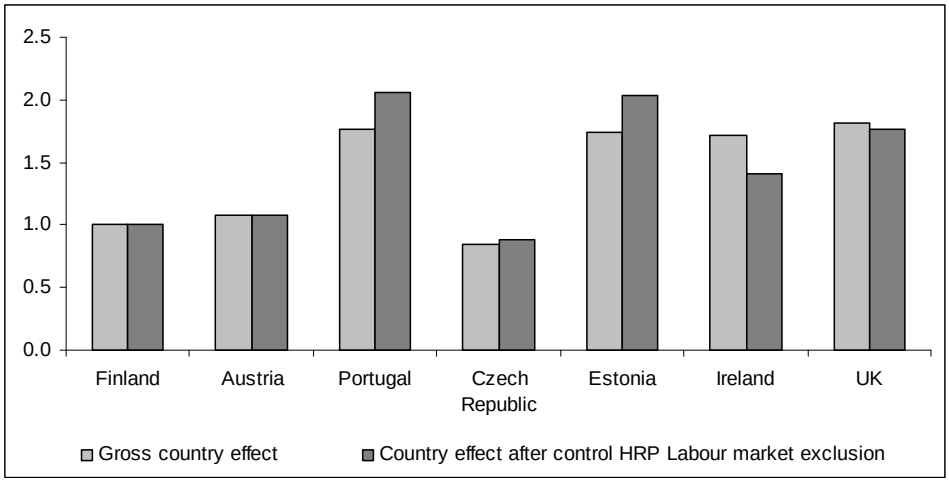
5.4 Labour Market Exclusion

Our analysis suggests that when we take into account the principal economic status of HRP and whether the HRP is a lone parent, the sex and life cycle stage of the HRP no longer has a statistically significant impact. The crucial factors appear to be principal economic status of the household reference person and the HRP being a lone parent. Multivariate analysis in relation to the latter factors indicates that controlling on one had relatively little effect on the coefficients relating to the latter. Their effects are cumulative rather than significantly overlapping.

Given the scale of the effects we have observed in relation to principal economic status in this section we extend our analysis by combining those inactive, ill/disabled and unemployed into a single category of labour market excluded. We then repeat the analysis conducted earlier in relation to both 'at risk of poverty' and consistent poverty. In other words, we first run a model with only country effects. We then add the impact of labour market exclusion and finally allow for the latter to vary across country. The impact of part-time work and retirement are kept uniform across countries.

In Figure 5.17 we show the net impact of labour market exclusion. While controlling for variation in the extent of such exclusion, has in most cases little effect on the country coefficients, in the Irish case it reduces the odds ratio in comparison with Finland from 1.7 to 1.4 while for Estonia it increases from 1.7 to 2.1. Thus, while at a gross level Ireland and Estonia display very similar levels of 'at risk of poverty' rates the Irish rate is partly accounted for by level of market exclusion while the Estonian rate is a good deal lower than we would expect.

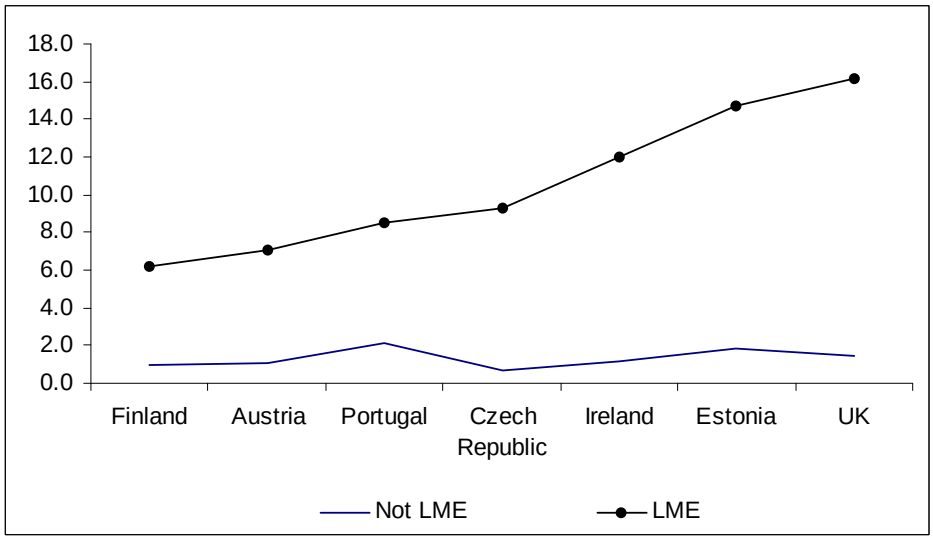
Figure 5.17: Gross and Net Impact of Country Impact on 'At Risk of Poverty' Controlling for Labour Market Exclusion, EU-SILC 2006



Across all countries, being in a household where the HRP is excluded from the labour market, raises the odds on being 'at risk of poverty' by a factor of 8.3. However, as would be anticipated by now, this effect varies substantially across countries and this pattern is set out in Figure 5.18. If we take those in full-time employment in Finland as the reference category, we find that variation within the category of full-time employees is relatively resricted ranging from 0.7 in the Czech Republic to 2.1 in Portugal. Ireland with a value of 1.2 is at the lower end of the spectrum relatively close to Finland and Austria. The UK with a value of 1.5 occupies an intermediate position. The Estonian value of 1.9 comes closest to that of Portugal.

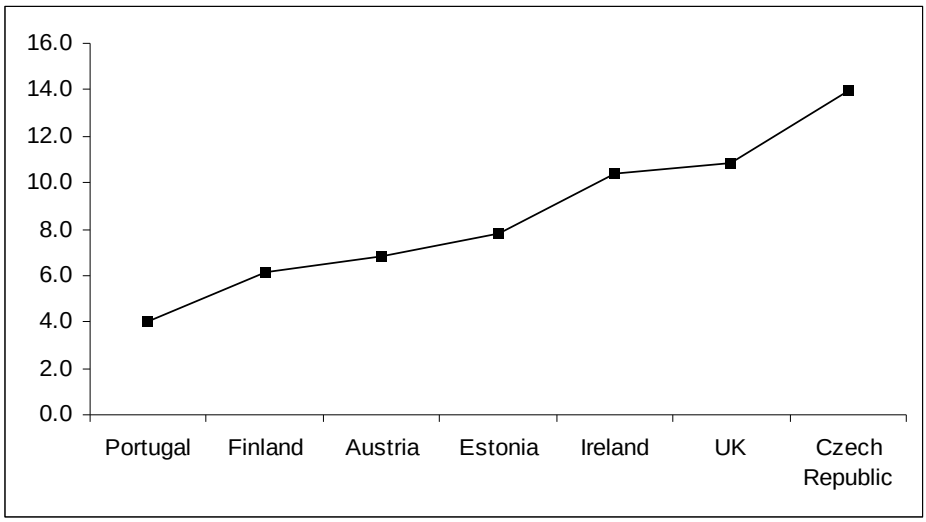
Cross-national variation among those excluded from the labour market is much greater. For those in households where the HRP is excluded in Finland the odds on 'at risk of poverty' are 6.2 times higher than for their compatriots in households where the HRP is in full-time employment. Retaining the same benchmark this figure rises to 7.0, 8.6 and 9.3 in Austria, Portugal and the Czech Republic respectively. Further significant increases to 12.0 and 14.9 are observed for Ireland and Estonia before the figure peaks at 16.2 for the UK.

Figure 5.18: Cross-national Variation in the Impact of HRP Labour Exclusion on 'At Risk of Poverty' (Reference Category HRP Full-time Employees in Finland), EU-SILC 2006



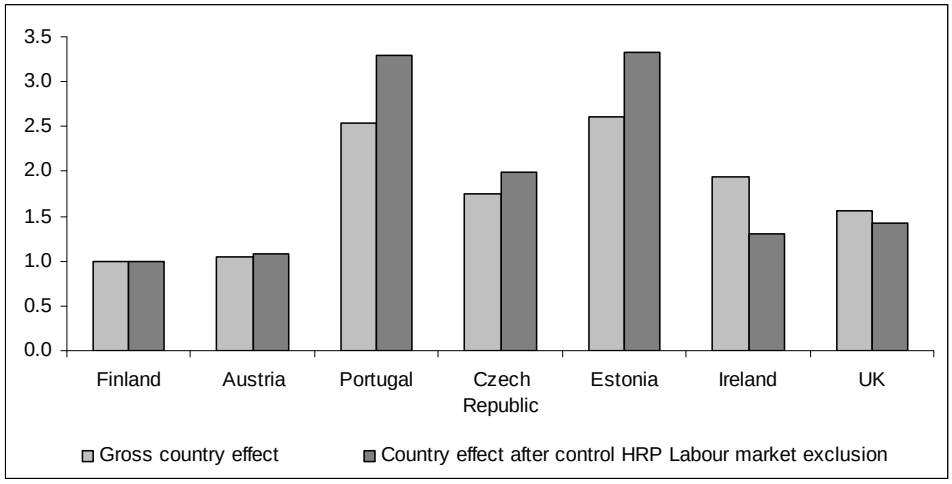
If instead of assessing countries on an overall continuum incorporating both within and between country variation, we concentrate on relativities within country, the pattern set out in Figure 5.19 emerges. The weakest relative impact of labour market exclusion occurs in Portugal where the odds on 'at risk of poverty' are four times higher for the excluded than for full-time employees. This rises to 6.2, 6.8 and 7.8 for Finland, Austria and Estonia. It then rises significantly to 10.4 and 10.8 for Ireland and the UK respectively. It then peaks at 14 for the Czech Republic. The pattern of relativities here can appear to diverge significantly from those shown earlier which incorporated both within and between countries effects. It is possible for a group to experience substantial disadvantage in comparison with other groups in their own country while at the same time being favourably placed in comparison with their counterparts in other countries this is the case with the HRPs who are excluded from the labour market in the Czech Republic

Figure 5.19: Variation in the Relative Impact of HRP Labour Market Exclusion on 'At Risk of Poverty' by Country (Reference Category HRP Full-time Employed in Each Country), EU-SILC 2006



Switching our focus to consistent poverty, in Figure 5.20 we show the gross and net country coefficients for consistent poverty with labour market exclusion as the control variable. Controlling for variation in the distribution of exclusion across countries has no effect for Austria. For the Czech Republic it leads to a slight increase from 1.7 to 2 and to more substantial increases for Portugal and Estonia for whom net coefficients of 2.5 and 2.6 respectively increase to 3.3. Thus, for the less affluent countries, their distinctly unfavourable situation in relation to consistent poverty is to some extent masked by a relatively favourable situation in relation to overall numbers excluded from the labour market. The opposite is the case in relation to the UK and, in particular, Ireland. Controlling for the scale of exclusion, leads to reductions in the odds ratio from 1.6 to 1.4 in the former case and from 1.9 to 1.3 for the latter.

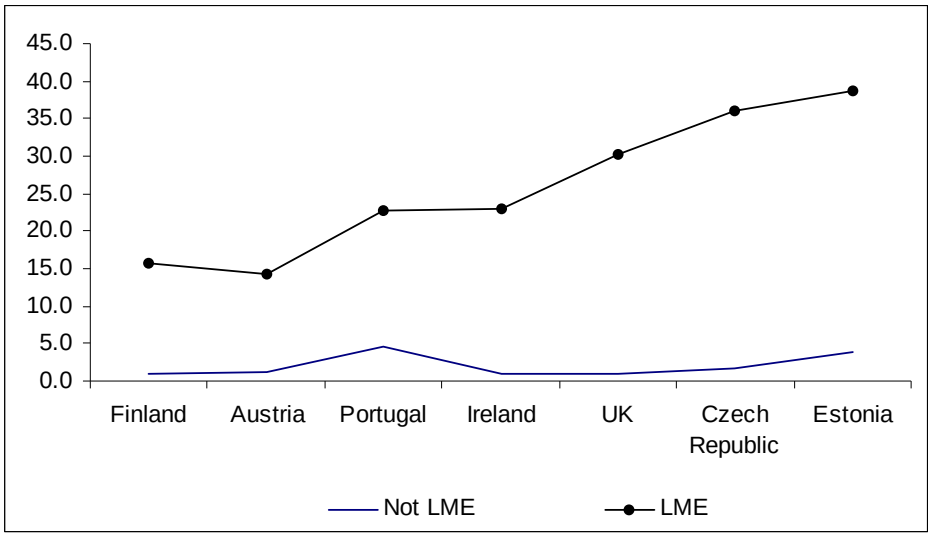
Figure 5.20: Gross and Net Impact of Country Impact on Consistent Poverty Controlling for Labour Market Exclusion, EU-SILC 2006



A model that assumes uniform impact across countries shows labour market exclusion raising consistent poverty by a factor of 14.6. In Figure 5.21 we show the impact of allowing for cross-country variation in labour market exclusion on such poverty with the non-excluded in Finland as the benchmark. The impact of labour market exclusion is substantially greater for consistent poverty than for 'at risk of poverty'. Cross-country contrasts between more and less affluent countries are also sharper in relation to the former than the latter. This is reflected in differences within the non-excluded category. Variation between Finland, Austria, the UK and Ireland is extremely restricted with the odds ratio ranging between 0.9 and 1.2. A further increase to 1.9 is observed for the Czech Republic. We then observe a sharp escalation to 4.0 and 4.6 for Estonia and Portugal.

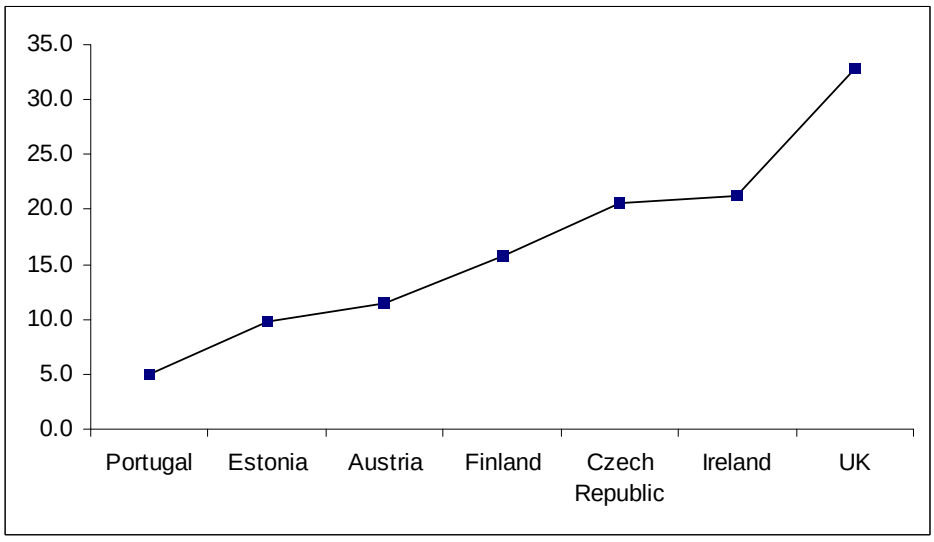
Notwithstanding such variation, the impact of labour market exclusion is striking. With the non-excluded as the benchmark, in Finland exclusion raises the odds on consistent poverty by a factor of 16. Maintaining the same reference category, the only country where this effect is weaker is Austria with a value of 14. This rises to 23 for Portugal and Ireland. A further increase then occurs to 30 for the UK. Finally it climbs to 36 and 38 respectively for the Czech Republic and Estonia.

Figure 5.21: Cross-national Variation in the Impact of HRP Labour Exclusion on Consistent Poverty (Reference Category HRP Full-time Employee in Finland), EU-SILC 2006



In Figure 5.22 we once again revert to within country perspective. Having done so, we find that Portugal and Estonia are exceptions in that the relative impact of labour market exclusion on consistent poverty is only marginally greater than in the case of 'at risk of poverty'. The respective odds ratios are 4.9 and 9.7. In every other case the impact in relation to consistent poverty is substantially higher. For Austria and Finland the respective values are 11.4 and 15.8. It then rises to 20.5 and 21.3 for Ireland and the Czech Republic. It finally peaks at 32.8 for the UK.

Figure 5.22: Variation in the Relative Impact of HRP Labour Market Exclusion on Consistent Poverty by Country (Reference Category HRP Full-time Employed in Each Country), EU-SILC 2006



5.5 Conclusions

In this chapter our attention shifted from a descriptive account of absolute differences across countries and socio-economic groups to one focusing on an analysis of patterns of relativities. This is the approach that we must adopt if we are to be in a position to answer two questions. The first one relates to the extent to which the gross differences in poverty rates that we observe across countries can be accounted for by corresponding cross-national variation in the distribution of socio-economic groups. The second question relates to the differential impacts across countries of such characteristics on poverty outcomes.

The distribution of individuals across age groups and of household reference persons by sex, lone parenthood and the life-cycle plays very little role in accounting for cross-national differences. In contrast, differences in the distribution of household reference persons by Principal Economic Status does play a significant role in explaining Ireland's relatively poor performance in relation to poverty levels. When we allow, in particular, for the large number of household reference persons in Ireland that are inactive in the labour market, we reduce the disadvantage experienced by Ireland in relation to 'at risk of poverty' by 13 per cent and of that relating to consistent poverty 21 per cent.

Such calculations presume that the socio-economic factors we have discussed have uniform effect across countries and this turns out not to be the case. In exploring patterns of variation across countries, it is necessary to keep complementary perspectives in mind in order to get a full picture. The first takes both within and between country relativities in to account by taking a particular group in one country as the benchmark. It captures overall variation in odds. The second focuses on relativities within countries and then asks how the magnitude of such effects varies across countries.

Variation in levels of 'at risk of poverty' are limited among those in households where the HRP is not excluded from the labour market. It is true, however, that rates for Estonia and Portugal are significantly higher than average. Among those excluded from the labour market, taking into account both within and between country differences, Ireland appears at the higher end of the spectrum in terms of level of 'at risk of poverty'. It displays a level below Estonia and the UK but above the remaining countries. The Irish case is also characterised by high within country inequalities in 'at risk of poverty' level between the excluded and non-excluded. In this respect it occupies a position close to the UK and involving a degree of disparity that is exceeded only in the Czech Republic.

Finland, Austria and Portugal are characterised both by relatively low overall levels of 'at risk of poverty' for those labour market excluded and narrow differentials between this group and those not excluded. Portugal and the Czech Republic display comparable overall levels of 'at risk of poverty' for the excluded but contrasting profiles in relation to within country relativities with differentials being extremely limited in the former but taking their largest values in the latter. Estonia is characterised by a high overall level of 'at risk of poverty' and an intermediate degree of inequality. Ireland and the UK are distinctive in that they display a pattern of both higher absolute levels of being 'at risk of poverty' and comparatively sharp differentials.

Focusing on the impact of labour market exclusion on consistent poverty, we find that its impact is substantially greater than in the case of being 'at risk of poverty'. For those not excluded from the labour market, we find that, while the overall levels of poverty are a great deal lower than in relation to 'at risk of poverty,' the pattern of differentiation across countries is almost identical. However, for the labour market excluded a somewhat different pattern emerges with by far the highest levels of consistent poverty being observed for Estonia and the Czech Republic while Ireland and the UK now occupy intermediate positions. However, if we focus on the effect of labour market exclusion on within country relativities, Ireland and, in particular, the UK are characterised by striking levels of disparity between the excluded and non-excluded while such effects are particularly weak in Portugal and Estonia.

Cross-national variation in the impact of the HRP being a lone parent on levels of being 'at risk of poverty' is a good deal more restricted than in the cases of labour market exclusion. However, once again Ireland is found at the upper end of the continuum of risk together with Estonia and the Czech Republic. Taking into account within country relativities, we find that Finland is quite distinctive in displaying both extremely low levels of being 'at risk of poverty' and very little difference in the rate of poverty between lone parents and others. Austria and Portugal are in turn the next most favoured countries. The UK occupies an intermediate position in relation to both absolute levels and national relativities. The Czech Republic occupies the mid-ground in relation to the former but is characterised by the strongest within country differentials. Finally, both Ireland and Estonia are found at the upper end of the continuum irrespective of whether one takes an absolute or relative perspective.

Shifting our focus to consistent poverty, we once again find that cross-national variation in the impact of the HRP being a lone parent is greater than in the case of 'at risk of poverty' although the pattern remains relatively similar. However, on this occasion Ireland fares worst in terms of both absolute and relative outcomes. In the latter terms, the UK situation shows a deterioration while the situation of Estonia and the Czech Republic shows some improvement.

In relation to the life cycle, it is generally true that working age individuals are advantaged in comparison with children and older people. Differences and relativities, however, are a great deal less sharp than in relation to principal economic status and lone parenthood. Finland constitutes an exception with regard to children with no effect being observed but along with Ireland and the UK has the strongest effect for older people. In contrast children in the Czech Republic are relatively disadvantaged compared with older people. Age differentiation is sharpest in the UK and Ireland with effects for both older people and children being at the upper end of the continuum.

Overall our analysis suggests that Ireland is distinctive not so much in terms of its overall levels of 'at risk of poverty' and consistent poverty but in relation to the consequences that follow from the high number of household reference persons excluded from the labour market and even more importantly the comparatively severe consequences in terms of poverty outcomes of such exclusion and lone parenthood.

6. CONCLUSIONS

6.1 Critiques of the 'At Risk of Poverty' Method

In this paper we have sought to put Irish poverty rates in a broader European perspective. We have done so in a context in which persistently high 'at risk of poverty' rates, defined as being below 60 per cent of median income, during a period of economic boom have led many to question the validity of such measures. An additional challenge to conventional poverty indicators has been posed by critics who question the appropriateness of the 'state bounded' approach which measures poverty with sole reference to the country itself. Both forms of critique focus on the counter- intuitive findings that the poverty rates for a number of New Member States are lower than for a range of other EU countries that enjoy substantial advantages over them in terms of GDP per capita and other indicators of material living standards.

In addressing these concerns we have adopted a two-tiered comparative approach. For some purposes we have taken advantage of the full range of data available in EU-SILC to place the Irish outcomes in the context of the results relating to the twenty-five other countries included in the survey. At a second level the Irish outcomes have been compared to those for the UK and five small European countries spanning the range of welfare regimes.

In terms of geographical units, our analysis has encompassed both national and EU-level perspectives. At the level of outcome indicators we considered both unidimensional and multidimensional approaches. Our analysis has applied both of these approaches at both national and EU-levels.

Our analysis has involved comparing Irish poverty rates with a range of other countries using five different definitions of poverty which are summarised in Table 6.1.

6.2 Measuring Material Deprivation in an Enlarged Union

Our initial analysis focused on establishing a set of deprivation dimensions sufficiently reliable to permit comparisons across European countries. For the purposes of this study the crucial measure was provided by the consumption deprivation index. This dimension of deprivation was shown to have by far the highest correlation with income. It also allowed us to identify segments of the population that are sharply differentiated in terms of their multidimensional deprivation profiles and subjective economic stress. It comes closest to constituting a deprivation measure that could be employed together with low income to identify consistent poverty (Nolan and Whelan, 1996).

6.3 Comparing Irish and EU Consistent Poverty Measures

In Chapter 3 we made use of the more limited information relating to deprivation in the common EU-SILC data set to construct a consistent poverty measure that comes as close as possible to that applied in the Irish case. The fact that we have been reasonably successful in doing so is shown by the fact that 70 per cent of those identified as consistently poor using the EU-index would also be so classified using the Irish index. Overall the socio-economic distributions are broadly similar irrespective of the index we employ.

6.4 Comparative Analysis of 'At Risk of Poverty' and Consistent Poverty Rates

In Chapter 4 we documented the impact on levels of poverty and Ireland's relative position in terms of such outcomes of shifting from a national to a European perspective and from a purely income based approach to one combining income and deprivation.

In terms of 'at risk of poverty' levels, shifting from a national to a European level sees Ireland's relative position among the twenty-six countries included in our analysis improve from 17th to 13th and sees it enjoying a considerable advantage over Southern European and Post-socialist countries that is not evident when employing indices calculated at the national level.

Adopting a consistent poverty perspective at the national level reduces poverty rates significantly for all countries when compared to outcomes deriving from the national 'at risk of poverty' approach. The limited overlap between those with low incomes and those experiencing deprivation is by no means unique to Ireland. In fact, the overlap between low income and being above the consumption deprivation threshold is actually lowest in the countries with the lowest 'at risk of poverty' rates. As a consequence of this, the relative position for Ireland deteriorates to 21st if one employs a purely national consistent poverty measure. Focusing on a European consistent poverty measure produces an outcome identical to that observed for the EU 'at risk of poverty' measure, with Ireland ranking 13th and again enjoying a higher ranking than the Southern European and Post-socialist countries. Finally, a measure of consistent poverty that combines a national 'at risk of poverty' measure with an 'absolute' or EU consumption deprivation threshold gives a relative ranking for Ireland that is identical to that provided by the national 'at risk of poverty' approach with Ireland placed 17th and occupying a higher position in the 'league table' than most of the post-socialist countries.

Ireland's relative position improves when one adopts a European perspective. This is not the case for consistent poverty when a national income perspective is combined with a European deprivation threshold. However, some of the more extreme anomalies concerning Ireland's position relative to the post-socialist countries are removed.

Table: 6.1 Poverty Measures, Irish Rates and Rankings, EU-SILC 2006

Poverty Concept	Measurement	Poverty Rate in Ireland	Irish Ranking
National 'At Risk of Poverty'	Percentage of households below 60 per cent of **national** median income	18.5	17
EU 'At Risk of Poverty'	Percentage of households below 60 per cent of **EU** median income	9.9	13
National Consistent Poverty	Percentage below 60 per cent of **national** median income and above a deprivation threshold that identifies an identical proportion of individuals to that captured by national income measure	8.7	21
EU Consistent Poverty	Percentage below 60 per cent of **EU** median income and experiencing enforced lack of of 3+ of 7 deprivation items	5.1	13
Mixed Consistent Poverty	Percentage below 60 per cent of **national** median income and experiencing enforced lack of of 3+ of 7 deprivation items	7.1	17

6.5 Comparative Analysis of 'At Risk of Poverty' and Consistent Poverty Levels and Patterns

In Chapter 5 our focus was on the comparative European analysis of levels and patterns of both the 'at risk of poverty' measure and the consistent poverty measure. In the comparative analysis the consistent poverty measure combines the national income indicator with a European or absolute measure of deprivation involving enforced deprivation of three or more consumption deprivation items.

The fact that Ireland is characterised by relatively high numbers of household reference persons who are lone parents and/or are inactive in the labour market actually makes a limited contribution to its comparatively higher poverty rate. This is true irrespective of whether one focuses on 'at risk of poverty' or consistent poverty.

Further analysis reveals that Ireland is distinctive not so much in terms of its levels of poverty but in relation to the patterns of socio-economic differentiation that characterise such levels. In this respect it is important to keep in mind that while switching from an 'at risk of poverty' perspective to a consistent poverty approach reduces measured poverty rates in all cases it also reveals a much sharper pattern of socio-economic inequalities. Multivariate analysis reveals that the key differentiating factors in relation to variation in poverty levels are (i) the HRP not being employed the labour market and (ii) being a lone parent.

(i) LABOUR MARKET EXCLUSION

The largest cross-national variation is observed in relation to the principal economic status of the HRP. Thus, where the HRP is in employment the situation of individuals in Ireland is no less favourable than in any of the other countries involved in our comparison. In contrast, levels of 'at risk of poverty' for those excluded from the labour market, through unemployment, illness/disability or being inactive, are comparatively high in Ireland. Similar patterns are observed for consistent poverty although in every case socio-economic differentiation is greater for consistent poverty than for 'at risk of poverty'. Our analysis documents how specific socio-economic groups, such as lone parents, fare in comparison with other groups in Ireland. It also describes how lone parents compare with their counterparts in other countries. It thus takes into account both within and between country relativities, Ireland appears at the higher end of the spectrum in terms of the overall level of 'at risk of poverty' although somewhat below Estonia and the UK. It is also characterised by a high level of internal inequality between those individuals in households where the household reference person is excluded from the labour market and the rest of the population. In this respect it closely resembles the UK and only the Czech Republic displays a higher level of inequality. Ireland shares the distinctive pattern of high absolute and relative 'at risk of poverty' rates with the UK.

Focusing on consistent poverty, we find that the impact of labour market exclusion is substantially greater than in the case of being 'at risk of poverty'. For those not active in the labour market, we find that, while the overall levels of poverty are a great deal lower than in relation to 'at risk of poverty,' the pattern of differentiation across countries is almost identical. However, for those not active in the labour market, a somewhat different pattern emerges with by far the highest levels of consistent poverty being observed for Estonia and the Czech Republic while Ireland and the UK occupy intermediate positions. In contrast, if we focus on the effect of labour market exclusion on within country relativities, Ireland remains at the upper end of the continuum although it is more favourably placed than the Czech Republic and, in particular, the UK which is characterised by a striking level of disparity. The distinctive position of the UK stems primarily from the particularly strong impact of unemployment.

(ii) LONE PARENTHOOD

In relation to the HRP being a lone parent Ireland shares with Estonia and, to a slightly lesser extent the UK and the Czech Republic, a profile that combines comparatively high levels of 'at risk of poverty' with distinctively sharp within country differentials between individuals in such lone parent households and the rest of the population.

The household reference person being a lone parent also has a stronger impact in the case of consistent poverty than in relation to 'at risk of poverty'. Ireland displays the highest level of consistent poverty for lone parents followed by Estonia and the Czech Republic. Within country relativities between those in lone parent households are also sharpest in Ireland, followed by the UK and the Czech Republic. In every case socio-economic differentiation proves to be sharper when we focus on consistent poverty. However, while shifting to such a perspective leads to an

improvement in Irelands' relative position in relation to HRP PES differentials, this is not true for the HRP being a lone parent. Thus, in relation to consistent poverty, Ireland represents the worst situation with regard to absolute and relative outcomes for individuals in lone parent households.

During the period of economic boom, the Irish 'at risk of poverty' rates remained comparatively high in European terms. Concerns have been expressed that this outcome is an artefact of the measure of poverty employed. This is reflected in the use at national and EU levels of the terminology of 'at risk of poverty' which appears to be motivated to a significant extent by a reluctance to accept the 'reality' of the high levels of measured poverty associated with the use of this methodology. A case can clearly be made for combining income and deprivation information to produce consistent poverty indicators. However, if one maintains a completely national perspective, a shift to a consistent poverty measure, while lowering poverty levels, produces no improvement in Ireland's relative European position. Rather than Ireland being an exception in the proportion of individuals below the relative income line who are found not to be above the appropriate deprivation threshold, this figure is actually higher in most other countries. As a consequence, shifting from an 'at risk of poverty' measure to a consistent poverty measure actually reduces the estimated poverty rate somewhat less in Ireland than in most other countries.

Shifting to European-based indicators, whether in terms of 'at risk of poverty' or consistent poverty, produces a limited improvement in Ireland's ranking and confers a substantial advantage on it in terms of absolute poverty rates where comparison is made with Southern European countries or new member states. Such indicators, however, are characterised by significant disadvantages in relation to understanding of patterns of socio-economic differentiation in relation to poverty. Between country differences come to dominate outcomes to an extent that higher socio-economic groups in less affluent countries are characterised by substantially higher poverty levels that those relating to lower socio-economic groups in more affluent countries.

Employing an approach that combines a national or relative approach in relation to income and an 'absolute' or EU approach to deprivation leads in every case to a substantial reduction in poverty rates. However, Ireland's ranking remains unchanged in respect of the 'at risk of poverty' indicator although its absolute position, in the sense of the percentage gap in poverty level improves in relation to a number of members states. This approach comes close to the NAPsInc measure of consistent poverty. It adopts a strictly relative or national approach to income. On the other hand, a particular level of consumption deprivation is considered as having identical significance across countries. Such an approach is consistent with the concerns of the European Commission (2004) that poverty measurement should both acknowledge that what is regarded as minimal acceptable living standards depends largely on the general level of social and economic development and recognise that the challenge for Europe is to allow the whole population share the benefits of high average prosperity.

Overall, irrespective of the poverty indicator chosen, Ireland does rather badly in European poverty 'league tables'. However, such comparisons miss a great deal about what is distinctive about the Irish case. International comparisons involving individuals in households where the HRP is active in the labour market or enjoys a favourable marital status show Irish people to be at no particular disadvantage. However, where labour market exclusion or lone parenthood is involved Irish individuals find themselves at a substantial disadvantage. Consistent poverty measures offer no panacea. While it is true that they produce a substantial reduction in poverty rates, this, nevertheless is accompanied by much sharper patterns of socio-economic inequalities. Ireland's relative position in international terms is inextricably linked with the distinctive scale of internal inequalities. Improving Ireland's relative position would seem to require reducing the number of household reference persons excluded from the labour market and, even more importantly, reducing the negative consequences associated with such exclusion and lone parenthood. Since in the current economic circumstances the former objective is unrealistic in the short to medium term, it becomes even more important to address the consequences of labour market exclusion and lone parenthood for poverty and social exclusion.

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Published by
The Economic
and Social
Research Institute
Whitaker Square
Sir John Rogerson's
Quay
Dublin 2

ISBN 978 0 7070 0279 8