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TRENDS IN Welfare for Vulnerable Groups, Ireland 1994-2001

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EXECUTIVE SUMMARY

Introduction

A number of previous studies using the Living in Ireland surveys have allowed overall trends in poverty to be tracked for different groups, such as the elderly, children, the unemployed, lone parents etc., in terms of relative income and consistent poverty. This study provides a more comprehensive picture of how different groups have fared over the years of Ireland's economic boom and how they were positioned as the boom receded, incorporating indicators capturing a wide range of life-style dimensions and outcomes including housing and health.

KEY TRENDS OVER THE PERIOD

The general picture to emerge from this study is of a society where life-chances improved significantly over the period under review. The striking exception is the substantial increase in numbers falling below relative income poverty thresholds; by contrast, indicators based on living standards or levels of deprivation improved markedly. This was directly related to declining unemployment and reduced levels of dependence on social welfare in a period of economic boom. However, the relationship between welfare support levels and average household income remained of central importance for the vulnerable groups on whom this study focuses.

From a situation where they experienced particularly acute disadvantages in 1994, children saw a substantial improvement in their situation by 2001. This reflected a dramatic decline in the extent to which their households depended on social welfare, and by the end of the period they faced about average risks of poverty and deprivation. Older people saw their relative income poverty rates rise substantially, but the broader set of indicators of living conditions suggested an improvement in their situation.

Deprivation and psychological distress levels for the unemployed remained high, but the size of the group affected fell dramatically and their housing and neighbourhood environment improved relatively rapidly. The ill and disabled fared relatively poorly as their relative income poverty rates rose sharply and their rate of improvement in other areas was typically below average. Lone parents saw a significant reduction in their levels of welfare dependency but despite this continued to experience relatively high levels of consistent poverty and deprivation.

CHANGES IN RELATIVITIES

With the 60 per cent relative income threshold, relative income poverty rates increased more rapidly than average for older persons and for households with an ill or disabled household reference person, and less rapidly for the short-term unemployed. With the measure of consistent poverty, on the other hand, all groups experienced a significant reduction and the relativities between the groups were more stable, though the unemployed still saw an improvement in their relative position.

TRENDS IN ECONOMIC VULNERABILITY AND SOCIAL EXCLUSION

Latent class analysis is then used to identify an underlying group with a heightened risk profile in relation to income poverty, basic deprivation and economic strain. The size of the "vulnerable class" showed a sharp downward trend over the period, from just over three out of ten in 1994 to one in nine in 2001. At the same time the profile of the vulnerable class changed so that there was an even sharper differentiation between them and the rest of the population.

Economic exclusion was found to be associated with a variety of other dimensions of exclusion including housing, neighbourhood environment, health and social participation. However, the degree of association was modest, and the numbers experiencing multiple deprivation across all that range of dimensions was very small.

As far as the profile of the vulnerable class is concerned, the significance of the unemployed declined substantially while that of the ill/disabled and lone parents increased. Placing these results in the context of changing socio-economic and socio-demographic change we find that a significant reduction in exclusion levels was observed across the educational spectrum and across age, gender and urban-rural categories. Focusing on relativities we found that the advantages enjoyed by those with third level education increased over time. Rural households with a female reference person experienced a significant deterioration in their situation which was consistent with their increased dependence on social welfare.

1. INTRODUCTION

 Λ t the centre of recent debate on changes in Irish society has been the claim that, despite a period of unprecedented growth and government expenditure, the least privileged groups - and those depending on social welfare in particular - have lost out. Sometimes this is put in terms of increasing inequalities and widening differentials, but assertions of declining quality of life are also made. particularly referring to housing, health and family life. One clear message from earlier ESRI work has been that, particularly in the period under consideration, income poverty cannot serve as a sufficient indicator of economic well-being (Lavte et al., 2004). That is why it has been so important to take into account levels of deprivation, notably in what has been termed the "consistent poverty" measure which has come to play an important role in the National Anti-Poverty Strategy. The series of NAPS monitoring studies carried out at the ESRI using the Living in Ireland Surveys (LIIS) (most recently Whelan et al., 2003) have allowed overall trends in poverty to be tracked for different groups, such as the elderly, children, the unemployed, single person households etc., both in terms of relative income and consistent poverty. This has demonstrated, inter alia, the substantial divergence between trends in relative income and in deprivation, but also that different groups have been differentially affected by rapid economic growth.

In this study it is our intention to provide a rounded picture of how different groups have fared over the years of economic boom, and how they were positioned as the boom receded. It will incorporate a much wider range of life-style dimensions and outcomes, including housing and health, than previous studies, and focuses on the comparative position of groups that are of particular policy interest or concern. The specific groups to be considered are children, older people, the unemployed, those who are categorised in labour force status terms as ill or disabled, and lone parents and their children. These are often regarded in Ireland and elsewhere as groups that are vulnerable to poverty and disadvantage, and can be studied using data from large representative household surveys such as the Living in Ireland Surveys on which this study relies. (Other smaller and undoubtedly vulnerable groups such as Travellers and homeless persons cannot be studied using household surveys of this sort and need to be investigated using alternative methods.)

It is worth noting at the outset that the Living in Ireland Surveys, while serving as the key statistical source for the monitoring and analysis of poverty trends from 1994 to 2001, have now been replaced by a new household survey carried out by the Central Statistics Office (CSO) and known as "EU-SILC". Preliminary results from this new survey have been published by the CSO in early 2005, relating to the second half of 2003; the survey is on-going and will serve as the basis for monitoring poverty in the future. While the percentages falling below relative income poverty thresholds in the new survey are similar to those seen in the Living in Ireland Survey, the extent of reported deprivation in terms of non-monetary indicators of living standards is somewhat higher. This appears to relate to both changes in the precise way in which the relevant questions were framed, and the difference between an entirely new cross-sectional survey versus a long-running panel survey which sought to follow up the same people from year to year. The relationship between the sources will be investigated in depth in a future study, but in tracking change over the period of the economic boom in this study we rely on data from the ESRI Living in Ireland Survey.

In Chapter 2 we provide a detailed descriptive profile of multidimensional patterns of deprivation. Our aim is to provide what might be described as a welfare balance sheet over the period of the economic boom. Therefore, we first look at how key indicators of poverty and deprivation changed for the population as a whole, as represented by the samples surveyed in the Living in Ireland Surveys. We then present and discuss these indicators for each of the sub-groups, so both the key trends for that group and how these compared with others and with the overall sample are highlighted. We also investigate the key features distinguishing those who are at heightened risk of poverty and disadvantage from others in the same group.

In Chapter 3 we focus on trends over time in relative risk rates in relation to both relative income poverty lines and consistent poverty. Our main concerns will be the extent to which changes in the distribution of welfare groups and variations over time in the extent to which membership of such groups is associated with poverty are key factors in explaining overall trends in the numbers below poverty lines.

In Chapter 4 we extend our analysis of multidimensional change over time by applying methods that distinguish between underlying groups with radically different risk profiles on a number of indicators of economic exclusion. In so doing we will start by seeking to identify a group of respondents that we deem it appropriate to consider as vulnerable to or at risk of economic exclusion. Such exclusion involves a distinctive multidimensional risk profile that translates into exposure to multiple deprivation for a subset of the vulnerable group. We will then proceed to consider how such vulnerability or heightened risk in relation to economic exclusion is associated with wider patterns of social exclusion in relation to dimensions such as housing and health.

In Chapter 5 we summarise our overall conclusions.

2. TRENDS IN KEY INDICATORS FOR VULNERABLE GROUPS

2.1 Introduction

Our aim in this study is to analyse not only how the situations of the specific groups of interest to us here evolved over the period under review, but also to see how they fared compared to others in Irish society. So we first need to look at how key indicators of poverty and deprivation changed for the population as a whole, as represented by the samples surveyed in the Living in Ireland surveys. We present these results, and look at a set of relevant characteristics, for the sample as a whole and then proceed by presenting and discussing exactly the same sets of indicators and characteristics for each of the sub-groups to be examined. In that way both the key trends for each group, and how these compared with others and with the overall sample, should emerge. In addition, when focusing on each group we also try to bring out the key features distinguishing those who are at heightened risk of poverty and disadvantage from others in the same group.

2.2 Trends in Key Indicators for the Overall Sample So we begin by presenting a range of indicators of poverty and deprivation for the overall Living in Ireland Survey sample for 1994 and 2001. The indicators in question have been described and employed in previous ESRI studies and journal articles, but this is the first time they have all been brought together and analysed in a common framework for the sample as a whole and for sub-groups. They encompass income, non-monetary indicators of deprivation across various dimensions, combinations of low income and specific forms of non-monetary deprivation ("consistent poverty"), psychological well-being and the degree of financial difficulty respondents report.

We start with income. Table 2.1 presents two sets of indicators capturing the numbers falling below various relative income poverty thresholds – what in an Irish context is often referred to as "relative income poverty", and in the EU's Laeken indicators is termed being "at risk of poverty". In what follows we will adopt the EU terminology for convenience and refer to this as the "at risk of poverty" rate. The relative income thresholds are set as proportions of median income – the median being the mid-point of the income distribution – and are derived as 50 per cent, 60 per cent and 70 per

cent of that median. These once again are the benchmarks now most often employed in constructing such relative income thresholds. (It had been more common to use average income as benchmark and derive relative thresholds as 40 per cent, 50 per cent and 60 per cent of that average, but the mean is more sensitive than the median to outliers in sample surveys which may not be well-measured.)

Two sets of relative income thresholds are employed here, the difference between them being the adjustment made to household income to allow for household composition - since a given income will support a higher standard of living for a household consisting of only one person than a household with for example four or five members. The first set uses an equivalence scale which allows 1 for the first adult in a household, 0.66 for each additional adult, and 0.33 for each child (aged under 14 years). The income of a couple is thus divided by a factor of 1.66 to "equivalise" it, so that it can be compared with the income of an adult living alone. This is broadly the scale of relativities between different family types incorporated into the Irish social welfare system's rates of income support. For the purpose of comparison we also present results using what is known as the "modified OECD" equivalence scale, where if the first adult is 1, each additional adult takes a value of 0.5 and each child a value of 0.3. This is now often employed in international comparative studies, and by Eurostat in producing the Laeken indicators (though once again alternative scales are also used).

	1994	2001
At Risk of Poverty		
Equivalence scale 1/0.66/0.33	%	%
< 50% median	6.0	12.9
< 60% median	15.6	21.9
< 70% median	26.7	29.3
Equivalence scale 1/0.5/0.3		
< 50% median	5.8	14.1
< 60% median	18.5	22.1
< 70% median	28.3	29.9

Table 2.1: "At Risk of Poverty" Indicators, Entire Sample, 1994 and 2001

It is important to assess the sensitivity of results to the equivalence scales employed, since there is no firm basis for preferring one set over another, and this has been done regularly in, for example, previous ESRI studies monitoring trends in poverty in Ireland. It is particularly important here in comparing the situation of different groups, since the equivalence scale employed can have a substantial impact on how the position of for example the elderly – often living in households with only one or two members – compares with that of children – often living in much larger households.

We see from Table 2.1 that the "at risk of poverty" rate has risen for the LII sample as a whole over the period from 1994 to 2001, across each of the income thresholds and with both equivalence scales. The increase was most pronounced with the lowest poverty thresholds and much more modest with the highest threshold for both the equivalence scales. With the 1/0.66/0.33 scale the at risk of poverty rate doubled with the 50 per cent of median threshold, rose by about half with the 60 per cent threshold, and increased by about 3 percentage points with the 70 per cent of median threshold. Using the 1/0.5/0.3 scale the increase was slightly greater than this for the 50 per cent threshold but much less with the two higher ones. It is hardly surprising that the level of relative income threshold one chooses to focus on fundamentally affects the at risk of poverty rate at a point in time - and that choice, if not entirely arbitrary, is certainly one on which judgements are likely to differ. What is worth emphasising here is that this choice can also make a substantial difference to the increase over time. This brings out the importance, when we come to the sub-groups of interest, of making sure that the findings are not being driven by the choice of measure.

While the extent of the increase varies, the striking feature of the trend in numbers "at risk" is that it rises in all cases, despite the scale of economic growth and decline in unemployment over this "Celtic Tiger" period. This is a finding that has been discussed in some detail in previous ESRI studies, which have explored both the factors underpinning this increase and its implications for poverty in the short and the longer terms. Nolan et al. (2002) and Whelan et al. (2003) highlighted the importance of the fact that social welfare support rates, though increasing in real terms, have lagged behind average or median household disposable incomes. We have discussed in some depth in previous studies the implications of this central feature of the economic boom period: that while living standards have risen substantially, including for those relying on social welfare - as we will document further here - their incomes have none the less lagged behind the very rapidly rising average or median. The question as to whether poverty is to be seen primarily in absolute versus relative terms is the key one, and a polar position at either extreme can be adopted. If one were to adopt a purely relative notion and operationalise it rigidly via a relative income threshold, then the fact that more people fall below that threshold is enough to conclude that poverty has risen. If at the other extreme one simply focuses on living standards and an income threshold held fixed in purchasing power terms over time, then poverty has unambiguously fallen sharply over the period we are reviewing, and that is the end of the story.

Both these positions in our view miss the complexity of what has actually been happening in Ireland, and fail to distinguish short-term from long-term implications. In the shorter term, the improvement in living standards and falling deprivation levels that we have documented in previous studies – and which will be seen for our sub-groups of interest in the present study – have undoubtedly had a major impact in improving welfare. In the long term, however, the

position of those on low incomes relative to the average also matters, since continuing to lag behind - even if living standards are rising - will in time leave people unable to participate in the ordinary life of their society. Both living standards and deprivation levels have to be judged against societal norms, and while these norms may not ratchet up in step with recent very rapid rises in average incomes, neither can they be unaffected by them as time goes by. This is why we have suggested that poverty targets should be framed in a tiered fashion, with improvements in living standards and reducing deprivation prioritised, but with relative income standards also entering into the picture in judging long-term success. Here our aim is to add to the picture conveyed in previous studies by exploring in more detail the trends for key groups and how those contributed to the overall evolution of the "at risk" and other poverty indicators; among other things this should help to deepen the debate about how these trends are best interpreted.

Moving on from income we then focus on deprivation, first in terms of the set of eight "basic" deprivation indicators identified and employed in our previous studies for Ireland. These items are set out in the box below; for most, the basic deprivation index reflects "enforced absence" – that is, not simply being without the item but also reporting that this is because it could not be afforded (rather than not wanted).

BASIC DEPRIVATION ITEMS

A meal with meat, chicken or fish every second day New not second-hand clothes Two pairs of strong shoes A roast or equivalent once a week A warm waterproof overcoat Had a day in the last two weeks without a substantial meal

Had a day in the last two weeks without a substantial meal Had to go without heating in the past year due to lack of money Experiencing debt problems arising from ordinary living expenses

Table 2.2 now summarises the distribution of scores on this enforced basic deprivation index in each of the years. We see that whereas 71 per cent of the 1994 sample reported no enforced deprivation of these basic items, by 2001 91 per cent said they were not experiencing any such enforced deprivation. The percentage saying they were deprived of one item fell by more than half, and the percentage deprived of two or more had fallen even more dramatically from 15 per cent to only 3 per cent. As a result the average score on this eight-item index across the sample as a whole had fallen from 0.7 at the outset to only 0.14 by 2001.

This basic deprivation indicator has been used in previous studies as one element of what has come to be termed the "consistent poverty" measure, developed in studies using Irish data going back as far as the late 1980s. The consistent poverty measure identifies a household as in poverty when it is *both* below a relative income

	1994	2001	
Basic deprivation	Distribution of scores on 8-item scale		
	%	%	
0	70.6	90.8	
1	14.4	6.6	
2+	15.0	2.6	
All	100.0	100.0	
Mean score	0.70	0.14	
'Consistent' Poverty	%	%	
< 70% median and basic deprivation	14.5	4 9	
< 60% mean and basic	1 1.0	4.0	
deprivation	17.4	4.7	

Table 2.2: Basic Deprivation and Consistent Poverty Indicators, Entire Sample, 1994 and 2001

threshold *and* reporting experience of basic deprivation. The rationale is that, due to a complex combination of conceptual and practical measurement considerations, neither low income nor deprivation (as reflected in non-monetary indicators) may reliably capture generalised inability to participate in the life of society due to lack of resources – which is how "poverty" is now most often defined in the industrialised countries, including in Ireland's National Anti-Poverty Strategy. So using both pieces of information – on income and deprivation – to focus on those "consistently" worst off helps to increase the reliability of the measure, and a range of evidence which serves to support that conclusion has been presented in previous studies.

The consistent poverty measure was originally framed in terms of income thresholds derived as proportions of mean rather than median income. This reflected the fact that average income was widely used in deriving relative income poverty lines at the time, with the switch to focusing more on lines based on the median taking place subsequently. Thus the targets specified in the National Anti-Poverty Strategy have been presented using mean-based income thresholds. For that reason we present two variants of the consistent poverty measure here as key indicators: experience of basic deprivation (in terms of the original set of items) combined with falling below 70 per cent of the median, and the same deprivation measure combined with falling below 60 per cent of mean income. While the income levels involved are similar they are not identical, and as we shall see the measured trend over time can in some cases be affected by the choice of threshold. In addition, of course, one can use lower relative thresholds - such as 40 per cent or 50 per cent of the mean and 50 per cent or 60 per cent of the median - in constructing the consistent poverty measure and we have done so in previous publications; here however we focus on the highest thresholds.

Table 2.2 shows the overall percentage of persons in households both reporting basic deprivation and below these highest relative income thresholds. In 1994 about 15 per cent of the sample were in households below the median-based threshold and experiencing basic deprivation, while the figure was 17 per cent if the mean-based threshold is used instead. If one retains the set of eight basic deprivation items originally employed for this purpose in constructing the "consistent poverty" measure up until 2001, the corresponding figure for that year (with either income threshold) is down to 5 per cent. With the relative income-based element of the measure having risen, this decline in consistent poverty reflects the very sharp fall in basic deprivation as captured by those items.

We have discussed elsewhere (notably Layte, Nolan and Whelan, 2001; Whelan *et al.* 2003) the rationale for re-examining and adapting the specific indicators employed in measuring consistent poverty to reflect changes in living standards and expectations in society over time. In particular, Whelan *et al.* (2003) argued that an amended version of the original basic indicators set might now be more satisfactory for this purpose. This comprises a set of items included not only in the Living in Ireland Surveys but also in the European Community Household Panel Survey, of which it formed the Irish component. (Some of the original basic set were included in the LII but not in the ECHP, because they drew on previous Irish research based on the large-scale household survey carried out by the ESRI in 1987.) The box below compares the items in this alternative "basic" set with the original ones already described above.

Original and Alternative Basic Deprivation Items

Original (LII) Item	Alternative (ECHP) Item
A meal with meat, chicken or fish every second day	A meal with meat, chicken or fish every second day
New rather than second hand clothes	New rather than second hand clothes
Two pairs of strong shoes	
A roast or equivalent once a week	
Warm waterproof overcoat	
No substantial meal in past two weeks	
Had to go without heating in the past year through lack of money	Keeping the home adequately warm
Experienced debt problems arising from ordinary living expenses	In arrears on rent/mortgage, utilities or hire purchase
	Replacing any worn-out furniture
	Having friends or family for a drink or meal once a month

We can see from Table 2.3 that the mean level of basic deprivation using this alternative set of items was rather higher in 1994 than with the original set employed – the average score on the index being 1.44 compared with 0.70 (in Table 2.2). In addition, although there is once again a marked decline between 1994 and 2001 in the mean basic deprivation score with this alternative set, that decline is also less pronounced than with the original set.

In addition to items capturing what we have termed "basic" deprivation, a considerable number of other non-monetary indicators were included in the household surveys we are using. This

is very useful in the present context because it allows us to provide a more comprehensive picture of trends in living standards, going beyond "poverty" or generalised deprivation, for our groups of interest. Analysis of the inter-relationships between different items has allowed us in previous work to distinguish the following dimensions or groupings:

- Basic deprivation as captured by the indicators listed above;
- Secondary deprivation as captured by indicators such as being unable to afford a car, a TV or a telephone;
- Housing services deprivation as captured by indicators such as being unable to afford central heating or a dry damp-free dwelling;
- House deterioration deprivation as captured by indicators such as the presence of rot or a leaky roof;
- Environmental deprivation as captured by indicators such as vandalism, graffiti or noise in the neighbourhood.

Table 2.3 also shows how mean scores on the deprivation indices capturing these different dimensions have changed over the period for the sample as a whole. We see that in all cases these has been a substantial decline, each of the mean scores having fallen by at least a half, with the mean score for secondary deprivation declining more rapidly than those reflecting housing or environment-related indicators.

Table 2.3: Deprivation Indicators for Different Dimensions, Entire Sample, 1994 and 2001

	1994	2001	
Dimensions of Deprivation	Mean score on index		
Basic (ECHP items)	1.44	0.55	
Secondary (ECHP items)	0.90	0.36	
Housing services	0.08	0.03	
Housing deterioration	0.26	0.13	
Environmental deprivation	0.64	0.30	
Current Life-Style Deprivation	Distribution of scores on 13-item scale		
	%	%	
0	32.7	60.3	
1	17.6	17.0	
2	12.8	9.7	
3+	36.9	13.0	
All	100.0	100.0	
Mean score	2.3	0.9	

In previous studies we have also found it useful to combine the alternative basic deprivation items with those in the secondary set to form an index of what we have termed "current life-style deprivation". This turns out to have a wider span than the basic set alone and to be quite strongly associated with variations in income level. Table 2.3 shows that, unsurprisingly, the mean score on this index also fell sharply between 1994 and 2001. Looking at the distribution of scores, we see that only one-third of households reported no enforced deprivation whatsoever on this index in 1994. By 2001, the corresponding figure was 60 per cent – and this on quite a broadly-based set of indicators, very much less restrictive than the basic set.

As well as looking at this wide range of information about households based on income and non-monetary indicators of disadvantage, it is also valuable to be able to track changes in the levels of "stress" being felt by household members, which they report via what are generally termed "subjective" indicators. We first present in Table 2.4 an indicator of psychological health status derived from what is known as the General Health Questionnaire (GHQ). A score of over 2 on this indicator, derived from a battery of questions in the survey, is indicative of a high probability of psychological distress. The table shows that over one in four people in the sample in 1994 were in households where the household reference person¹ was at or above that threshold, but this had fallen to about 14 per cent by 2001.

Table 2.4: Subjective "Stress" Indicators for Household Reference Person, Entire Sample, 1994 and 2001

	1994	2001
Subjective "Stress" Indicators	%	%
Reporting psychological distress	25.2	14.3
Reporting economic strain	30.7	10.1

The other subjective "stress" indicator we present is derived from responses to a survey question about how much difficulty the household has financially in "making ends meet". Those who respond that they are having "great difficulty" or "some difficulty" in doing so are taken to be experiencing (subjectively-assessed) economic strain. We see from Table 2.4 that in 1994 almost one in three sample individuals were in households where such economic strain was reported, but that this had fallen very sharply indeed, to only one in ten, by 2001 – reflecting the dramatic increases in employment and income levels that took place over the period.

Before turning to the trends in these key indicators for the subgroups of interest, we conclude this section by looking at some relevant features of the sample and how these have changed over time. The specific features on which we focus are those which, when tracked for our sub-groups, should help in understanding their changing circumstances. Once again these have most value when framed against the overall sample, so we discuss those sample characteristics at this point. We look first at housing tenure and

¹ The household reference person in the ECHP is defined by Eurostat as the person saying they are responsible for the household rent or mortgage, or where a couple are responsible the older of the two.

location, and then at the extent to which household income comes from the social welfare system.

Poverty and disadvantage have been shown in previous studies to be strongly associated with household tenure status, with those in rented rather than owner-occupied housing generally facing a much higher risk of poverty and disadvantage, for a complex variety of reasons (Fahey, Nolan and Maître, 2004). Table 2.5 shows the overall distribution of the sample by tenure status in 1994 and 2001. About 70 per cent of individuals in the sample lived in households that were owner-occupied (with or without a mortgage), whereas about one-tenth were purchasing the house from a local authority. About 15 per cent were in rented accommodation, either from a local authority or a private landlord.² Poverty rates had been higher in urban than rural areas in 1994 but had converged by 2001; Table 2.5 shows that about 60 per cent of the sample were in urban areas in both 1994 and 2001.

	1994	2001
	%	%
Tenure		
Home owner	70.6	71.2
LA tenant-purchaser	10.3	12.4
Tenant/sub-tenant	17.8	15.2
Location		
Rural	40.1	41.0
Urban	59.9	59.0
Welfare Transfers (excluding Child Benefit)		
Recipients of welfare transfers	50.8	44.4
Dependence on Welfare Transfers		
Not dependent (<25% household income)	60.9	74.0
Somewhat dependent (>25% < 50%)	9.2	9.5
Semi-dependent (50% <wt<75%)< td=""><td>7.2</td><td>5.1</td></wt<75%)<>	7.2	5.1
Dependence on WT (>75%)	22.7	11.5

Table 2.5: Composition in Terms of Tenure and Urban-Rural Location, Entire Sample, 1994 and 2001

Since it will turn out to be crucial for some of our sub-groups, the role of social welfare payments for the sample as a whole is also summarised by a set of indicators in Table 2.5. First, we see that just over half of the sample in 1994 were in households which received

 $^{^2}$ A small group of about 1 per cent were in rent-free accommodation probably provided, for the most part, along with a job, so the figures do not add to 100 per cent.

some social welfare payment (other than Child Benefit).³ By 2001 this had fallen to 44 per cent, as employment levels rose and unemployment fell. We then assess dependency on these social welfare payments in terms of the proportion it comprises of total household income. We see from the table that over 60 per cent of the 1994 sample were in households where social welfare made up less than one-quarter of their income from all sources, which we consider to be "not dependent" on social welfare. By 2001 this figure had risen substantially, to 74 per cent. This mostly reflected the fact that the percentage in households where over three-quarters of all income came from social welfare - which can unambiguously be described as "welfare dependent" - fell sharply from 23 per cent to 12 per cent. The link between social welfare reliance and disadvantage was strong in 1994 but even stronger by 2001. Those receiving three-quarters or more of their income from social welfare had an at risk of poverty rate of 43 per cent in 1994 but this was almost 90 per cent by 2001; although their consistent poverty rate halved over the period, this was still a less rapid fall than for those receiving little or no income from social welfare.

The other key characteristic that will be integrated into our analysis of the various groups - intimately related to social welfare reliance - is the extent to which working-age adults in the household are at work. An in-depth analysis of overall trends in "work-rich" versus "work-poor" households in the Living in Ireland sample has been presented in the recent study by Russell et al. (2004), bringing out the significant decline over the period in the proportion of households with working-age adults that had no-one in work. The extent of potential engagement with work of course varies depending on the type of household – with a lone parent household being very different to one with four working-age adults, for example - and we will employ indicators appropriate to the specific household types as we deal with the different groups. For older people, while few are at work the impact of their working career continues to make itself felt, in particular in the extent to which they have income from an occupational pension as opposed to relying on the contributory old age pension or the means-tested noncontributory pension, and this will be incorporated into our analysis of that group.

Having described some important trends for the overall sample representing the background against which trends in the situation of specific sub-groups have to be seen, we now turn to focus on the first of these groups, which is children.

 $^{^{3}}$ We omit Child Benefit from this calculation not because its role is unimportant – since it plays an increasingly important role over the period – but because our focus is on the extent to which households were relying on social welfare schemes rather than work, capital income or occupational pensions for their incomes.

2.3 Trends in Key Indicators for Children

In exploring the situation of children (under 18 years) and how it changed over the period under review, we focus the key indicators relating to the households in which they live and do not seek to employ indicators that would refer directly to the children themselves. While child-specific indicators would be complementary and allow for a more comprehensive assessment of how the welfare of children has been evolving, concentrating on household-based measures allows us to make direct comparisons with other groups and the overall sample, a central objective of the study. (For a discussion of the use of child-specific indicators and some empirical findings for 1999, see Cantillon, Gannon and Nolan, 2004.) So where we refer to deprivation levels or income poverty "for children", we mean that the children are in households experiencing low income or deprivation.

Table 2.6 shows the same key indicators employed for the whole sample in the previous section, but now relating to children - in other words, the unit of analysis is the child, and the relevant characteristics of the household is "attached" to each individual for the purpose of the analysis. So we see first that in 1994 one child in ten was in a household with income below 50 per cent of the median using the 1/0.66/0.33 equivalence scale, one in four was below 60 per cent of the median, and over one-third were in households below 70 per cent of median income. Harking back to the "at risk of poverty" figures for the sample as a whole in Table 2.1, these were lower than those for children - children faced an above-average poverty risk at each threshold. With the 50 per cent and 60 per cent threshold the rate for children is about 58 per cent higher than the average rate for the sample, whereas with the 70 per cent threshold it is about 36 per cent higher – which is of course still a substantially heightened risk.

By 2001, the situation of children was somewhat different. Again with the 1/0.66/0.33 equivalence scale, their "at risk of poverty" rate rose with the 50 per cent threshold but fell marginally with the 60 per cent threshold and fell more substantially with the highest, 70 per cent threshold. We saw in the previous section that the corresponding rates for the entire sample rose with each of these three thresholds, and the increase with the lowest threshold was in fact a good deal more rapid than that for children. This means that the relative position of children, compared to the average at risk of poverty rate for the sample as a whole, was significantly improved with each of the thresholds. By 2001 children still faced an aboveaverage risk, but now only of the order of 10 per cent above the overall average at the lowest threshold and only 7 per cent at the middle and highest ones. None the less, against a background of a substantially rising overall average, this still meant that almost one child in four was below the 60 per cent threshold and one child in three was below the 70 per cent "at risk of poverty" threshold in 2001.

Table 2.6: Poverty and Deprivation Indicators, Children, 1994 and 2001

	1994	2001
At Risk of Poverty	%	%
< 50% median (scale 1/0.66/0.33)	9.5	14.1
< 60% median (scale 1/0.66/0.33)	24.6	23.3
< 70% median (scale 1/0.66/0.33)	36.4	31.4
< 50% median (scale 1/0.5/0.3)	9.1	14.2
< 60% median (scale 1/0.5/0.3)	25.8	23.3
< 70% median (scale 1/0.5/0.3)	36.6	33.1
Basic Deprivation	Distribution of sco	res on 8-item scale
	%	%
0	62.7	88.0
1	16.3	8.4
2+	21.0	3.6
All	100.0	100.0
Mean score	0.96	0.19
'Consistent' Poverty	%	%
< 70% median and basic deprivation	22.0	6.7
< 60% mean and basic deprivation	25.3	6.6
Dimensions of Deprivation	Mean score on index	
Basic (ECHP items)	1.81	0.69
Secondary (ECHP items)	1.08	0.38
Housing services	0.03	0.02
Housing deterioration	0.28	0.12
Environmental deprivation	0.74	0.34
Current Life-Style Deprivation	Distribution of sc	ores on 13-items
	%	%
0	26.3	57.7
1	15.6	15.5
2	11.8	12.1
3+	46.3	14.6
All	100.0	100.0
Mean score	2.5	1.1
Subjective "Stress" Indicators		
Reporting psychological distress	-	-
Reference person reporting economic strain	36.8	11.8

We noted earlier that the precise adjustment made for the greater needs of larger families, and of adults versus children, might potentially affect the picture one obtains of the position of, in this instance, children. Table 2.6 thus also shows at risk of poverty rates for children with the alternative "modified OECD" scale (1/0.5/0.3). This does not alter the broad direction of change in at risk of poverty rates for children, though the fall seen with the 70 per cent threshold is now rather less pronounced. The gap between the rates for children and the overall average is almost eliminated with the 50 per cent threshold, but still of the order of 7-10 per cent with the other two.

Turning to basic deprivation, comparison with Table 2.2 shows that the mean level of enforced basic deprivation reported by households with children in 1994 was substantially higher than the overall average. By 2001, both had fallen very substantially but the decline was slightly more pronounced for the households of children. Their mean level of basic deprivation was still above the overall average in 2001 but was now 29 per cent above average compared with 37 per cent in 1994.

With the position of children relative to the overall average improving both in terms of relative income thresholds and basic deprivation, the consistent poverty measure then also shows such an improvement. The consistent poverty measure based on the 70 per cent of median income threshold and the original set of basic deprivation indicators showed 22 per cent of children in consistent poverty in 1994. This was more than 50 per cent higher than the rate for the sample as a whole. By 2001 the corresponding figure for children was down to 6.7 per cent: while still above the overall average, the gap was now down to about 33 per cent. With the mean-based threshold the 1994 level was slightly higher and the fall greater, but the trend *vis-à-vis* the sample average was the same.

We can then focus on the various dimensions of deprivation as captured by the full range of indicators available in the surveys. A comparison with Table 2.3 now shows that in 1994 children were in households with mean scores on both the alternative basic deprivation index and the secondary deprivation index above the overall sample means – their "excess" is about 20-25 per cent of those sample averages. By 2001 the mean scores on both these dimensions had fallen for children, to about one-third of their 1994 levels. Although this was still above the sample average, the gap had narrowed.

The index of deprivation in terms of housing-related services shows a different pattern. Children were in households with a wellbelow-average mean score on this index in 1994. By 2001 this had fallen but by less than the overall average – however, both for children and for the whole sample the levels of deprivation captured were by then very low. In the case of both the index for housing deterioration and for local environmental "bads", in 1994 children were in households with above-average mean scores. By 2001 this was still true for environmental deprivation but was no longer the case for housing deterioration.

Focusing on the combined basic plus secondary Current Life Style Deprivation "CLSD" index, we see that the percentage of children in households reporting no deprivation at all in those terms rose from 26 per cent in 1994 to 58 per cent in 2001. At the other end of the scale, 46 per cent were in households scoring 3 or more on this index in 1994, and this fell to only 15 per cent. So by 2001 children were in households with a CLSD profile that was very similar to the sample as a whole, whereas in 1994 they looked rather more disadvantaged.

As far as the subjective "stress" indicators are concerned, children were not administered the personal questionnaire in the survey so we only have information on financial stress levels, provided by the adult who responded to the household questionnaire. We see that in 1994 about 37 per cent of children were in households where a high level of difficulty making ends meet was reported, significantly higher than the corresponding figure for the sample as a whole, which was 31 per cent. By 2001, on the other hand, this had declined to only 12 per cent, compared with the sample average of 10 per cent.

So the broad range of indicators available to us generally suggest a consistent picture: that children faced above average risk of poverty and deprivation in 1994, but that their situation had substantially improved by 2001. This improvement was even more rapid than that for the population as a whole, so that by 2001 children faced an about-average risk of poverty and deprivation.

The figures presented in Table 2.7 help in understanding how this occurred. The tenure profile of the households in which children live is first shown, and comparison with Table 2.5 reveals it to be very similar to that for the sample as a whole, both in 1994 and 2001. The level of dependence on social welfare payments as the main source of income for children's households was also similar to the overall sample in 1994, with about 23 per cent of children in households where these payments comprised three-quarters or more of the income received. By 2001, however, the level of welfare dependence had fallen even more sharply for children's households than it did for the sample as a whole. By that date, only 6 per cent of children were in households receiving at least three-quarters of their income from social welfare, compared with 12 per cent in the sample as a whole. So the very substantial increase in employment rates and the decline in unemployment had a very pronounced impact on households with children, greatly reducing the numbers relying on social welfare. This in turn was a major element in their exceptionally sharply declining levels of deprivation, and in their at risk of poverty rates converging on the average. As we shall see, those sub-groups remaining more heavily reliant on social welfare over the period than (households with) children also saw their real living standards improve, but did less well in comparative terms.

So reliance on social welfare is one important factor that distinguishes the children who are still in disadvantaged households from those who are not. This is clearly related to whether children are living with one or both parents, and whether the parent(s) are in work. Table 2.8 shows that the proportion of children who were living with two parents, both of whom were in work, rose sharply from below one in five to over one-third. There was a corresponding fall in the proportion living with two parents not in work, from 21 per cent to only 6 per cent. The overall proportion living with only one parent was stable over the period at about 15 per cent, but a considerably larger share of those lone parents were in work by 2001.

	1994	2001
	%	%
Tenure		
Home owner	66.3	69.5
LA tenant-purchaser	10.2	11.2
Rent free	0.9	0.3
Tenant/subtenant	22.6	19.1
Location		
Rural	39.6	40.6
Urban	60.4	59.4
Welfare Transfers (excl CB)		
Recipients of welfare transfers	47.2	37.4
Dependence on Welfare Transfers		
Not dependent (<25% household income)	63.0	80.9
Somewhat dependent (>25% < 50%)	6.6	8.0
Semi-dependent (50% <wt<75%)< td=""><td>7.8</td><td>5.7</td></wt<75%)<>	7.8	5.7
Dependent on transfers (>75%)	22.6	5.5

Table 2.7: Composition in Terms of Selected Household Characteristics, Children, 1994 and 2001

Table 2.8: Children by Parents' Labour Force Status, 1994 and 2001

	1994	2001
	%	%
Couple, both employed	18.9	38.5
Couple, one employed	45.9	42.2
Couple, neither employed	21.0	6.4
Lone parent, employed	3.1	6.2
Lone parent, not in work	11.1	8.6
	100.0	100.0

So this marked increase in parental work underpins the improvements in the position of children over the period. Whether parents work also plays a key role in distinguishing the children who remain disadvantaged, as can be seen from Table 2.9, which shows how a selection of our key poverty and disadvantage indicators vary by parental working. We see that in 1994 only a very small proportion of children with two working parents were below the 60 per cent of median threshold or in consistent poverty; they also had very low average scores on the CLSD deprivation index, and only one in six said they had great difficulty making ends meet. Where both parents were in the household but only one was working these indicators suggested the situation was somewhat worse, but where neither parent was working all the indicators were very much worse indeed – about two-thirds were at risk of poverty and nearly as many were consistently poor. Turning to children living with only one parent, it is striking that where that parent is working poverty rates are in fact lower than in couple households where one partner is in work – although a higher proportion said they are having great difficulty making ends meet. Where the lone parent is not working, however, poverty rates are much higher – though still not as high as for couples where neither is working.

Table 2.9: Poverty and Disadvantage for	or Children by Parents	' Labour Force Status	, 1994 and
2001			

	At Risk of Poverty (60% line)	Consistent Poverty	Mean CLS Deprivation	Difficulty Making Ends Meet
1994	%	%		%
Couple, both employed	1.7	2.2	1.2	15.3
Couple, one employed	14.7	7.0	1.8	25.7
Couple, neither employed	65.1	60.1	5.2	62.9
Lone parent, employed	7.6	4.0	3.1	47.8
Lone parent, not in work	36.0	50.0	5.5	69.2
2001				
Couple, both employed	3.8	0.7	0.5	3.8
Couple, one employed	24.3	2.7	0.7	11.0
Couple, neither employed	76.3	37.2	2.7	43.5
Lone parent, employed	18.8	8.4	1.4	11.7
Lone parent, not in work	56.3	32.9	4.0	29.7

Comparing 1994 with 2001, broadly the same pattern applies. The proportion at risk of poverty with the 60 per cent threshold has risen for all these categories (with the shift in the distribution from high to lower risk categories being behind the marginal decline in the overall percentage of children at risk). That increase was most pronounced for the lone parent categories, but the highest at risk rate is still seen where there are two parents but neither is at work. In terms of consistent poverty there remains a stark contrast between the very high rates where no-one is working and the very much lower ones when one parent is working, and this is reflected in their mean deprivation scores and in their subjectively-assessed economic level of difficulty making ends meet.

2.4 Trends in Key Indicators for Older People A natural comparison with the evolving circumstances of Irish children is with older people. In both European countries and the United States, there has been much debate about the incomes and living standards of children versus older people, with the suggestion in some countries of a potential conflict between generations, or at least concern about treating them fairly. The relative position of the two groups in fact varies quite widely from one country to another. Children face relatively high risks of low income in the USA and in some but by no means all EU member states, and older people do relatively well in income terms in some countries but much worse in

others. Both groups are also the focus of particular attention from policy-makers in Ireland and elsewhere. So there is particular interest in investigating recent trends in income poverty and deprivation for older people in Ireland and comparing the results not just with the population as a whole but also with the pattern for children just described.

Table 2.10 shows our range of key indicators for older people, defined as 65 years of age or more. As was the case with children, we attach the relevant indicator for the household they live in to each older person, and then use these to assess the situation of those individuals - some of whom are living alone or as a couple, but there are of course others living in broader households, most often with their grown-up children. So the table once again shows first the percentage of older persons at risk of poverty - falling below relative income thresholds – with the 1/0.66/0.33 equivalence scale. We see that this rose very sharply indeed for older people between 1994 and 2001. The 50 per cent and 60 per cent of median thresholds showed their "at risk" rates were fully six or seven times higher in 2001 than they had been in 1994. The highest rate, 70 per cent threshold it increased by proportionately less but still more than doubled. As a result, by 2001 more than half of all individuals aged 65 years or over lived in households below even the highest of these relative income thresholds.

While the at risk of poverty rate also rose for the sample as a whole, as we have seen, it did so much less sharply. The result was a dramatic turn-around in the relationship between the position of older people and the sample as a whole. In 1994, at risk of poverty rates for older people were substantially below average with the 50 per cent and 60 per cent thresholds, and close to but still below average with the 70 per cent threshold. By 2001, on the other hand, the rate for older people was about 40 per cent higher than the overall average with the 50 per cent threshold, and almost twice that average with the 60 per cent and 70 per cent thresholds.

Using the alternative "modified OECD" equivalence scale produces rather different at risk rates for older people with certain thresholds (notably the 60 per cent threshold in 1994 and the 50 per cent one in 2001), but the very sharp increase between 1994 and 2001, to rates well above the overall average, is again seen.

This also meant an even more dramatic turnaround over this period in the situation of older people compared with children in Ireland, since poverty risk rates for the latter fell. Older people moved from a situation where they had very much lower at risk of poverty rates than children in 1994 to one where they had much higher rates than children in 2001. With the 60 per cent of median income threshold, for example, in 1994 older persons faced an at risk rate that was only a quarter of that for children. By 2001, that rate for older persons was nearly twice as high as the figure for children. So it is critically important to also be able to investigate the implications of this reversal in income position for living standards and deprivation.

Table 2.10: Poverty and Deprivation Indicators, Older People, 1994 and 2001

	1994	2001
	%	%
At Risk of Poverty		
< 50% median (scale 1/0.66/0.33)	2.9	18.2
< 60% median (scale 1/0.66/0.33)	6.0	44.2
< 70% median (scale 1/0.66/0.33)	24.5	56.3
< 50% median (scale 1/0.5/0.3)	3.9	28.9
< 60% median (scale 1/0.5/0.3)	18.1	47.3
< 70% median (scale 1/0.5/0.3)	38.5	57.5
Basic deprivation	Distribution of scores on 8-item sca	
	%	%
0	81.7	92.9
1	10.6	4.8
2+	7.7	2.3
All	100.0	100.0
Mean score	0.36	0.12
'Consistent' Poverty	%	%
< 70% median and basic deprivation	7.0	3.9
< 60% mean and basic deprivation	11.0	3.9
Dimensions of Deprivation	Mean score on index	
Basic (ECHP items)	0.96	0.50
Secondary (ECHP items)	0.57	0.28
Housing services	0.27	0.09
Housing deterioration	0.27	0.19
Environmental deprivation	0.43	0.27
Current Life-Style Deprivation	Distribution of scores on 13-items	
	%	%
0	44.9	62.2
1	18.0	19.3
2	12.4	7.7
3+	24.8	10.9
All	100.0	100.0
Mean score	1.5	0.8
Subjective "Stress" Indicators		
Reporting psychological distress	27.4	25.6
HRP Reporting economic strain	22.6	12.0

The picture with respect to deprivation turns out to be rather different. Table 2.10 shows that older people saw a substantial fall in their mean scores on the original basic deprivation index. Their mean score in 2001 was only one-third of its 1994 level. This was a more modest decline than that seen for the sample as a whole, but was by any standards substantial. With the mean score for the elderly only half that for the overall sample in 1994, even a slower decline still left it marginally below that overall average in 2001. The same story is told by the distribution of scores on the basic deprivation index: in 1994, 82 per cent of older people were in households reporting no enforced deprivation, considerably higher than the 71 per cent in that position in the sample as a whole. By 2001 the percentage reporting no such deprivation had risen to 93 per cent for older persons, which was much closer to but still slightly above the 91 per cent for whom that was the case in the overall sample.

The combination of the at risk of poverty and the basic deprivation indicators to form the consistent poverty measure then shows a substantial fall for older people over the period. The base for the income threshold makes a good deal of difference to the scale of the decline in this case: with 70 per cent of the median as the income element of the measure the rate falls from 7 per cent to 4 per cent, whereas with 60 per cent of the mean the 1994 level was 11 per cent but the 2001 was again 4 per cent so the fall was sharper. This illustrates the sensitivity of the measured position of older people to the exact location of the income level provided by the state old age pension. By 2001 the consistent poverty rate for older people was closer to the overall average than in 1994 but still below it -a very different picture to that conveyed by relative income thresholds alone.

Once again the comparison with children is of interest. In 1994 the consistent poverty rate for older people was very much lower than that facing children. By 2001 the gap had narrowed, but the rate for older people was still only a little more than half that for children. So once again the relative position of the two groups looks very different when we move from reliance on income to incorporate indicators of basic deprivation into the picture.

Focusing on the set of indicators for the five dimensions of deprivation then allows us to extend this analysis. We see that there was a substantial decline in mean levels of deprivation for the elderly across all five dimensions, including the basic dimension now with the alternative set of indicators. As far as basic and secondary deprivation are concerned, the pace of decline was less than for the overall sample but, having been well below the sample average in 1994, older people were still below that average by 2001. This is then also reflected in the CLSD combined deprivation index, where the percentage scoring zero rose from 45 per cent to 62 per cent for older people by 2001, and then compared with a figure of 60 per cent for the sample as a whole.

The indices for the other dimensions of deprivation show a different picture in comparative terms. Older people had levels of

deprivation in terms of housing services that were well above average in both 1994 and 2001 – although still, it must be emphasised, low in absolute terms. They also had higher than average mean levels of housing deterioration. As far as local environmental "bads" were concerned, older people had a belowaverage mean level in each year but were closer to that average by 2001.

Once again drawing out the comparison with children, older people in 2001 had lower mean levels of deprivation on four out of the five dimensions we have distinguished – the exception being deterioration in housing quality, which is not surprising. The relative position of children *vis-à-vis* older people did however improve in terms of the basic and secondary indicators between 1994 and 2001.

Our final set of indicators relate to stress, and here we see first that about one in four older people were at or above the GHQ threshold in 2001, and that this was little changed from 1994. While this was not much different from the sample average in 1994, that average declined sharply by 2001. By 2001, then, older people had a much higher probability than average of being at or above the threshold. For the indicator of financial strain, on the other hand, there was a marked decline over the period in the percentage of older people reporting difficulty in making ends meet, from 23 per cent to 12 per cent. This brought the 2001 figure close to the sample average, though having been significantly below it in 1994 the decline was less pronounced than for the overall sample.

Table 2.11 then sets out some relevant characteristics of the households in which older persons live. Compared with the sample as a whole, they are more likely to be in owner-occupied housing and much less likely to be renting, with only 6 per cent in rented accommodation. The proportion living in rural areas is also slightly higher than the overall average in 2001, which had not been the case in 1994. The most dramatic feature is however their level of dependence on social welfare payments. Over 90 per cent of older people in 2001 were in households in receipt of some social welfare payment, and these payments comprised at least half of total household income for 60 per cent of older people. The corresponding figure for the sample as a whole was only 16 per cent. Almost half of all older persons were in households where social welfare accounted for three-quarters or more of all income received. In addition, the trend over time was different for older people. We saw earlier that for the sample as a whole there was a sharp fall between 1994 and 2001 in the proportion dependent on social welfare. For older people there was also a fall in dependence but it was very modest, with the percentage in households receiving at least half their income from other sources declining from 63 per cent to 60 per cent.

	1994	2001
	%	%
Tenure		
Home owner	78.9	74.9
LA tenant-purchaser	9.5	17.4
Rent free	2.2	1.7
Tenant/subtenant	9.4	6.0
Location		
Rural	49.9	44.1
Urban	50.1	55.9
Welfare Transfers (excl CB)		
Recipients of welfare transfers	84.9	92.3
Dependence on welfare transfers		
Not dependent (<25% household income)	23.4	20.6
Somewhat dependent (>25% < 50%)	13.7	20.0
Semi-dependent (50% <wt<75%)< td=""><td>10.7</td><td>12.3</td></wt<75%)<>	10.7	12.3
Dependent on transfers (>75%)	52.3	47.1

Table 2.11: Composition in Terms of Selected Characteristics, Older People, 1994 and 2001

Again the contrast with children is even more pronounced, both in terms of levels and trends in dependence. By 2001 only 6 per cent of children were in households where three-quarters or more of the income came from social welfare, compared to 47 per cent for older people. While the figure for older people had been only slightly higher than that in 1994, for children it had been 23 per cent. So the improvement in the relative situation of children vis-à-vis older people over the period was clearly linked to the marked decline in welfare reliance among children, not paralleled for older people. None the less, it must be stressed once again that while the very high levels of welfare dependence among older people by 2001 are reflected in high at risk of poverty rates, once one moves beyond income the range of non-monetary indicators we have employed give a much more positive perspective on their living standards. Except for the specific area of problems with housing, these suggest that the position of the elderly was if anything above rather than below average in 2001.

Once again we can usefully probe key features distinguishing older people who face poverty risk and deprivation from those who do not. Two such features may be particularly important: whether the older person is living alone, with their partner, or in a broader household – often a multi-generational one – and whether income comes from the means-tested versus contributory social welfare pensions or also from other sources, notably occupational pensions or income from work. Table 2.12 shows that in 2001 almost onethird of older people were living alone, 29 per cent were living with their partner only, and almost 40 per cent were in a household which contained other adults – and this was little changed over the period. There was a significant change in income sources, on the other hand, in that the percentage of older people in households relying purely on the means-tested old age pension fell markedly, from 28 per cent in 1994 to 17 per cent in 2001, with a corresponding increase in the numbers receiving the contributory pension.

	1994	2001
Household Composition	%	%
Living alone	32.3	31.3
Living with partner	28.8	29.4
Living with others	39.0	39.4
	100.0	100.0
Income Composition		
Old Age Non-contributory pension	28.4	17.3
Old Age Contributory pension Old Age Contributory and private	24.1	38.5
pension	7.7	10.4
Other	39.8	33.8
	100.0	100.0

Table 2.12: Older People by Household and Income Composition,1994 and 2001

Tables 2.13 and 2.14 show the extent to which these factors are associated with disadvantage for older people, once again illustrated with a sub-set of our poverty and disadvantage indicators. We see from Table 2.13 that in 2001 older people living alone had substantially higher at risk of poverty and consistent poverty rates than older couples, with the lowest rates being for older people living in broader households. Similarly, Table 2.14 shows that in 1994 those relying on means-tested old age pension had particularly high at risk of poverty and consistent poverty rates; by 2001, these were still high but those with contributory pension but no income from an occupational pension also had high rates, with those receiving occupational pensions in a much better position. However, this still meant that only one in twelve of those on the means-tested old age pension were in consistent poverty.

	At Risk of Poverty (60% line)	Consistent Poverty	Mean CLS Deprivation	Difficulty Making Ends Meet
1994	%	%		%
Living alone	4.9	14.1	1.4	20.5
Living with partner	7.8	2.9	1.4	18.8
Living with other adults	5.1	5.0	1.9	29.9
Other	5.6	3.4	1.6	25.8
2001				
Living alone	69.6	6.1	0.9	8.1
Living with partner	49.3	4.1	0.6	8.4
Living with other adults	28.9	3.6	0.9	14.2
Other	15.5	0.9	0.7	19.8

Table 2.13: Poverty and Disadvantage for Older People by Household Composition, 1994 and 2001

Table 2.14: Poverty and Disadvantage for Older People by Pension/Income Composition, 1994 and 2001

	At Risk of Poverty (60% line)	Consistent Poverty	Mean CLS Deprivation	Difficulty Making Ends Meet
1994	%	%		%
Old Age Non-contributory pension, no				
contributory or occupational pension	11.4	12.8	1.7	29.3
Old Age Contributory pension, no				
occupational pension	2.3	2.0	2.0	24.8
Occupational pension	2.7	2.4	0.9	12.2
2001				
Old Age Non-contributory pension, no				
contributory or occupational pension	62.8	8.1	1.1	12.6
Old Age Contributory pension, no				
occupational pension	64.2	6.5	1.0	16.0
Occupational pension	11.7	1.2	0.4	9.4

2.5 Trends in Key Indicators for the Unemployed We now turn to our next population sub-group of interest, namely the unemployed. As throughout, our analysis treats individuals – in this case unemployed individuals – as the focus, but for the most part concentrates on key indicators relating to the household in which they live. (It should be noted that this group differs from the category distinguished in our previous publications monitoring trends in poverty, in that it encompasses all individuals categorised as unemployed, rather than individuals living in households where the reference person is unemployed.) In focusing on the unemployed, unlike children or older people, the central point about the period under review is of course that the size of the group itself changed dramatically as unemployment fell to remarkably low levels. Table 2.15 shows the full range of indicators for the unemployed in 1994 and 2001. We see first that the percentage at risk of poverty in this group was already high in 1994, at least with the 60 per cent and 70 per cent of median income thresholds. More than half were in households below that highest threshold (with the 1/0.66/0.33 equivalence scale). By 2001, these rates had risen substantially, with a particularly dramatic increase with the lowest, 50 per cent of median threshold. Compared with the at risk rates for the sample as a whole, this was a much more substantial increase with the lowest threshold, but also greater with the other two. As a consequence, by 2001 the at risk rate for the unemployed was almost three and a half times the sample average with the lowest threshold, and more than twice those averages with the intermediate and highest thresholds. In 1994, by contrast, all three rates for the unemployed were less than twice those for the sample as a whole.

Using the alternative, modified OECD, equivalence scale then makes little difference to the levels or trends in the proportion of the unemployed at risk of poverty.

Turning to enforced basic deprivation, the table also shows high levels for the unemployed with the original set of items. In 1994, their mean level on the eight-item index was 1.6 – compared with a sample average of 0.7. The period to 2001 saw a very substantial fall, to only 0.3. However, this was about the same proportionate decline as that for the sample as a whole, so the unemployed at that stage still had about twice the mean level of basic deprivation of the sample as a whole. It is worth emphasising, though, that by 2001 fully 84 per cent of the unemployed were in households reporting no basic deprivation in terms of this original set of items.

Combining low income with this set of deprivation items, we then see that the consistent poverty rate for the unemployed fell from 36 per cent in 1994 to 16 per cent in 2001, with the 70 per cent of median threshold. With the 60 per cent of mean threshold the decline was rather greater but the 2001 level was similar. This very substantial decline lagged somewhat behind that for the overall sample, so that by 2001 the consistent poverty rate for the unemployed was about three times the sample average, up from two and a half times in 1994.

It is worth emphasising that although their at risk of poverty rates are not much higher than those of older people, the unemployed report very much higher levels of basic deprivation and as a consequence have much higher consistent poverty rates. The mean level of basic deprivation among older people was less than half that of the unemployed in 2001, and their consistent poverty rates was only about one-quarter of that for the unemployed.

The full range of indicators of deprivation for the unemployed can then be considered. Table 2.15 also shows that deprivation levels fell sharply for the unemployed across all five dimensions between 1994 and 2001. This decline was substantial for both basic deprivation with the alternative set of items and secondary deprivation, but still left the unemployed with mean deprivation levels about twice the sample average. This is also the case with the CLSD measure which combines them – though once again it merits emphasis that more than half the unemployed in 2001 were reporting enforced lack of either none or only one of this quite broad-ranging set of items.

Table 2.15: Poverty and Deprivation Indicators, Unemployed, 1994 and 2001

	1994	2001	
At Risk of Poverty	%	%	
< 50% median (scale 1/0.66/0.33)	10.3	44.1	
< 60% median (scale 1/0.66/0.33)	29.8	52.0	
< 70% median (scale 1/0.66/0.33)	52.5	65.4	
< 50% median (scale 1/0.5/0.3)	9.0	44.0	
< 60% median (scale 1/0.5/0.3)	35.6	50.3	
< 70% median (scale 1/0.5/0.3)	52.5	66.6	
Basic deprivation	Distribution of scores on 8-item scale		
	%	%	
0	44.4	84.1	
1	18.0	9.3	
2+	37.6	6.7	
All	100.0	100.0	
Mean score	1.63	0.28	
'Consistent' Poverty	%	%	
< 70% median and basic deprivation	36.3	15.6	
< 60% mean and basic deprivation	44.2	15.0	
Dimensions of Deprivation	Mean score on index		
Basic (ECHP items)	2.66	1.03	
Secondary (ECHP items)	1.61	0.66	
Housing services	0.16	0.01	
Housing deterioration	0.47	0.16	
Environmental deprivation	0.91	0.20	
Current Life-Style Deprivation	Distribution of scores on 13-items		
	%	%	
0	9.6	31.1	
1	13.0	26.5	
2	8.8	13.0	
3+	68.6	29.5	
All	100.0	100.0	
Mean score	4.2	1.7	
Subjective "Stress" Indicators			
Reporting psychological distress	39.8	34.7	
HRP Reporting economic strain	53.5	20.0	

The housing and environment-related dimensions show a different picture. With all three the pace of decline in mean levels was considerably faster for the unemployed than for the sample as a whole. Indeed, with the housing services and environmental "bads" indices this brought the unemployed from well above to substantially below the mean levels for the sample as a whole.

Finally, we turn to our "stress" indicators. The indicator of psychological distress – the only one of our set that relates to the individual rather than his or her household – shows an interesting picture. In 1994, about 40 per cent of unemployed individuals were at or above the GHQ threshold, substantially higher than the corresponding figure for the sample as a whole which was 27 per cent. Whereas the sample average had fallen by almost half by 2001, however, the figure for the unemployed fell by much less to 35 per cent, leaving a much wider gap between the two.

Our indicator of household financial stress was also relatively high for the unemployed in 1994. It then fell very sharply between then and 2001, but not as rapidly as the overall sample average. As a result the gap between the unemployed and the overall sample also widened with this indicator, though less than was the case with the GHQ.

The compositional characteristics set out in Table 2.16 show that the unemployed had a much higher than average proportion living in About one-third were rented accommodation. in rented accommodation in 2001, though this was down from 40 per cent in 1994. The proportion in urban areas, at two out of three, was also well above average. Unsurprisingly, they were also likely to be in receipt of or depending on social welfare transfers. In 1994, almost all the unemployed were in households receiving some such transfer, and about 63 per cent had three-quarters or more of their household income coming from that source. It is striking however that by 2001 this last figure was down to only 38 per cent, and more than half the unemployed were in households with more than half their income coming from other sources. (Indeed, about 15 per cent of the unemployed were in households receiving no welfare payments at all.)

So what distinguishes the unemployed who are particularly likely to be in poverty from those who are not? Two key features are likely to be the length of time they have spent unemployed, and whether anyone else in the household is working. The role of duration of unemployment can be illustrated by contrasting those who have been out of work for less than a year, those unemployed for between 1 and 3 years, and those unemployed for 3 years or more – the very long-term unemployed. Not only did the overall unemployment rate fall dramatically between 1994 and 2001, there was also a substantial change in the composition of the unemployed by duration. In 1994, 40 per cent of the unemployed in the Living in Ireland Survey were unemployed for less than a year, 24 per cent were unemployed for between 1 and 3 years, and 46 per cent were unemployed for 3 or more years. By 2001, the percentage of the unemployed who were short-term had risen sharply to 62 per cent, with only 11 per cent
unemployed between 1 and 3 years and 27 per cent unemployed for 3 years or more.

	1994	2001
	%	%
Tenure		
Home owner	40.3	55.2
LA tenant-purchaser	17.8	12.1
Rent free	1.7	-
Tenant/subtenant	40.1	32.7
Location		
Rural	32.2	34.6
Urban	67.8	65.4
Welfare Transfers (excl CB)		
Recipients of welfare transfers	97.2	84.4
Dependence on welfare transfers Not dependent (<25% household		
income)	13.2	35.7
50%)	11.5	15.7
Semi-dependent (50% <wt<75%)< td=""><td>11.9</td><td>10.7</td></wt<75%)<>	11.9	10.7
Dependent on transfers (>75%)	63.3	37.9

Table 2.16: Composition in Terms of Selected Characteristics, Unemployed, 1994 and 2001

The importance of this compositional shift is brought out in Table 2.17, which compares selected disadvantage indicators for these duration groupings. It shows that by 2001 more than four out of five of the very long-term unemployed were below the 60 per cent of median threshold, compared with over half those unemployed for 1-3 years and one-third of those unemployed for less than a year. The increase in at risk of poverty rates from 1994 applied to all three sub-groups but was more pronounced for the long-term and very long-term unemployed. The consistent poverty measure tells a similar story, in that it fell sharply for the short-term unemployed but much less so for the long-term unemployed. In 1994, over 40 per cent of the very long-term unemployed were both below 70 per cent of median income and reporting enforced deprivation in terms of our original set of basic items, and by 2001 this had come down only to 36 per cent. Differentials across the groups in mean CLS deprivation and the proportion reporting serious difficulty making ends meet were more modest but still showed the longer-term unemployed as more disadvantaged.

	At Risk of Poverty (60% line)	Consistent Poverty	Mean CLS Deprivation	Difficulty Making Ends Meet
1994	%	%		%
Unemployed < 1 year	21.9	23.4	3.2	40.4
Unemployed 1 < 3 years	22.0	36.6	4.4	54.6
Unemployed 3 years or more	39.0	45.1	4.8	61.3
2001				
Unemployed < 1 year	35.0	5.1	1.6	13.2
Unemployed 1 < 3 years	56.0	26.4	1.7	20.5
Unemployed 3 years or more	81.1	35.7	2.6	43.5

Table 2.17: Poverty and Disadvantage for	r the Unemployed by Duration of Unemployment,
1994 and 2001	

So the long-term and very long-term unemployed by 2001 – although comprising very much smaller groups in the population – had become even more distinctively marginalised than they had been before Ireland's economic boom. In terms of relative incomes, and both the narrow set of non-monetary indicators included in our original basic set and the broad range incorporated in our CLSD measure, they are very seriously disadvantaged compared with not only the population as a whole but the rest of the unemployed. They are also particularly likely to be in rented accommodation and to be heavily reliant on social welfare payments.

As well as the duration of the individual's employment, the household context in which this is experienced is critical, in particular whether there are other adults in the household at work. This changed a good deal between 1994 and 2001, as Table 2.18 shows. In 1994, 64 per cent of the unemployed were in households where there was no-one at work, whereas by 2001 this had fallen to 44 per cent (on which see Russell *et al.*, 2004 for a detailed analysis of "work-poor" households). The proportion in households where not just one but two or more people were at work increased correspondingly over the period.

Table 2.18: Unemployed by Number in Household at Work, 1994 and 2001

	1994	2001
Number at work in household	%	%
No-one at work	63.5	44.5
1 adult at work	25.3	35.3
2 or more adults at work	11.2	20.2
	100.0	100.0

The importance of this shift for poverty and disadvantage among the unemployed is brought out in Table 2.19, which compares selected indicators for these sub-groups of the unemployed. We see that all four indicators show the unemployed living in households where no-one is at work as in a much worse situation than others. The at risk of poverty rate for such individuals reached 88 per cent by 2001, compared with only 6 per cent for unemployed individuals in households where two or more people are at work. Similarly, the consistent poverty rate, though lower than in 1994, was still 25 per cent for unemployed in workless households compared with half that where one person was in work and a minimal level where two or more were at work.

Table 2.19: Poverty and Disadvantage for the Unemployed by Number in Household At Work, 1994 and 2001

	At Risk of Poverty (60% line)	Consistent Poverty	Mean CLS Deprivation	Difficulty Making Ends Meet
1994	%	%		%
No-one at work	42.6	52.6	5.0	62.8
1 adult at work	10.6	12.2	3.2	39.4
2 or more adults at work	0	2.1	2.2	32.4
2001				
No-one at work	88.4	24.8	2.2	33.8
1 adult at work	32.5	12.2	1.2	11.5
2 or more adults at work	6.1	1.2	1.2	4.5

2.6 Trends in Key Indicators for the Ill/Disabled

We now turn our attention to those who are categorised in labour force participation terms as ill or disabled. These are identified in the Living in Ireland Survey, as in other similar surveys, by a series of questions probing the exact nature of the individual's engagement with the labour force. By following a sequence of responses to questions on work and labour market status in the survey, it is possible to identify a group who have said they are 'unable to work due to illness or disability'. The specific questions employed in the Living in Ireland Survey are similar but not identical to those used in this context in the CSO's Quarterly National Household Survey.⁴ In 2001, almost 4 per cent of all working-age adults were in that category, with a considerably higher proportion of males than females. Note that, as with the unemployed, this group differs from the category distinguished in our previous publications monitoring trends in poverty in that it encompasses all individuals in the labour force category in question, rather than individuals living in households where the household reference person is in that category.

It should be noted that some other individuals of working age and not at work are classified in other categories in terms of their principal economic status – such as retired or inactive – but when asked why they are not seeking work say it is because of

⁴ Respondents are first asked if they are working 15 or more hours a week. Those not at work or working less than 15 hours a week are asked what is their main activity. They are then asked if they are seeking work and if not, what is the reason. If they respond 'personal illness or disability', they are then coded as 'unable to work due to personal illness or disability'.

illness/disability. Others, when asked about their health status, report that they have a chronic illness or disability, but in labour force terms may be categorised as in work or unemployed. So the group on which we are focusing here is strictly based on a labour force categorisation rather than on the presence or absence of illness or disability. This group is of particular interest, not least because they are particularly likely to be in receipt of social welfare transfers. (Analyses of labour force participation of all those reporting chronic illness or disability in the Living in Ireland Survey is presented in Gannon and Nolan (2004), and Gannon and Nolan (2005) look *inter alia* at poverty and deprivation for those individuals.)

Table 2.20 shows the key indicators of disadvantage for those in the "ill/disabled" labour force category. We see first that their at risk of poverty rates rose very rapidly indeed between 1994 and 2001. By 2001, almost 60 per cent were below even the lowest of the relative income thresholds, and three-quarters were below the highest one. This represented a dramatic increase in risk rates, particularly with the 50 per cent and 60 per cent of median threshold. With those thresholds the at risk rate for this group went from below the sample average in 1994 to being between 3 or 4 times that average by 2001. Once again the alternative figures derived using the modified OECD scale tell very much the same story.

At risk of poverty rates for the ill/disabled labour force category are thus not much lower than those for the long-term unemployed, and considerably higher than for the unemployed as a group.

Focusing on basic deprivation, the pattern is similar to the longterm unemployed, in that we see a sharp decline in deprivation levels but this lags substantially behind the average, so that in relative terms the position of this group worsens significantly. While their mean score on the basic deprivation index (with our original set of items) fell from 1.2 to 0.4, this meant that it was 3 times the sample average by 2001 compared with about 1.5 times in 1994.

With the proportion below relative income thresholds increasing so sharply and basic deprivation falling less rapidly than on average, the consistent poverty rate for this group also declines relatively slowly, from about 28 per cent in 1994 to 19 per cent in 2001 with the 70 per cent of median threshold. (Using the 60 per cent of mean threshold instead, the decline is sharper but to the same 2001 figure.) This means that the consistent poverty rate for this group also went from being about twice the sample average in 1994 to four times that average in 2001.

The position of those who are categorised as ill/disabled in labour force terms is an intermediate one between the unemployed as a group and the very long-term unemployed, having levels of poverty risk, basic deprivation and consistent poverty that are higher than the former but lower than the latter.

	1994	2001
At Risk of Poverty	%	%
< 50% median (scale 1/0.66/0.33)	4.9	58.1
< 60% median (scale 1/0.66/0.33)	15.1	70.8
< 70% median (scale 1/0.66/0.33)	42.8	76.1
< 50% median (scale 1/0.5/0.3)	4.2	58.8
< 60% median (scale 1/0.5/0.3)	32.6	70.6
< 70% median (scale 1/0.5/0.3)	47.6	75.5
Basic deprivation	Distribution of so	cores on 8-item scale
	%	%
0	52.2	78.4
1	24.1	10.6
2+	23.7	11.0
All	100.0	100.0
Mean score	1.16	0.44
'Consistent' Poverty	%	%
< 70% median and basic deprivation	27.9	19.4
< 60% mean and basic deprivation	33.7	19.4
Dimensions of Deprivation	Mean sc	ore on index
Basic (ECHP items)	1.89	1.20
Secondary (ECHP items)	1.11	0.64
Housing services	0.25	0.01
Housing deterioration	0.40	0.15
Environmental deprivation	0.54	0.23
Current Life-Style Deprivation	Distribution of	scores on 13-items
	%	%
0	14.5	29.1
1	20.3	20.5
2	17.4	16.1
3+	47.7	34.3
All	100.0	100.0
Mean score	3.0	1.8
Subjective "Stress" Indicators		
HRP GHQ above threshold	51.8	44.8
HRP Reporting economic strain	47.9	19.3

Table 2.20: Poverty and Deprivation Indicators, III/Disabled, 1994 and 2001

Turning to the broad range of indicators of deprivation, Table 2.20 also shows that mean levels of basic deprivation with our alternative set of items, and of secondary deprivation, fell substantially for this group. However, they fell by less than for the sample as a whole, and their mean score on the combined CLSD index in 2001 was about twice that for the sample as a whole – much the same as the figure for the unemployed as a group.

In terms of the other dimensions of deprivation, this group saw a particularly sharp fall in the indices of housing services deprivation, to well below the sample average, and in terms of environmental "bads" was also below the sample average by 2001. The housing deterioration index showed a sharp decline and was not much above the sample average by that date.

Finally, we focus on the subjective indicators of stress for this group. Over half were at or above the GHQ threshold in 1994, and this had declined only modestly to 45 per cent by 2001 – which was substantially higher than even the figure for the very long-term unemployed at that date. On the other hand, while six out of ten reported serious difficulty in making ends meet in 1994, this fell particularly sharply in 2001 to under 20 per cent. This meant that by 2001 the ill/disabled in labour force terms were reporting levels of financial difficulty that were very similar to the unemployed.

Turning to the characteristics of the group, we see in Table 2.21 that a much higher proportion than average - over 40 per cent were living in rented accommodation. The ill/disabled group have also become more concentrated in that tenure category over time, with only 26 per cent renting in 1994. Their distribution between urban and rural areas was not much different to the sample as a whole in either year. Their levels of dependence on social welfare payments are however distinctively high. Almost all are in households in receipt of some social welfare payments. In 2001, over 60 per cent were living in households where three-quarters or more of the income came from social welfare, and a further 10 per cent were in households where that proportion was between 50 per cent and 75 per cent. It is also noteworthy that levels of dependence were not much lower in 2001 than they had been in 1994, in contrast to the pattern we saw for the unemployed. By 2001 levels of welfare dependence were much higher for those in the ill/disabled labour force category than they were for the unemployed.

Indeed, that comparison can serve to summarise the position of this group across the range of indicators and characteristics we have studied, in that they can broadly speaking be characterised as more disadvantaged than the unemployed as a group. As was true for the unemployed, whether someone in the household is at work is also a key factor distinguishing the ill/disabled who are at risk of poverty or consistently poor and those who are not. Here the contrast with the unemployed in terms of trend over time is noteworthy. In 1994, two-thirds of the ill/disabled were in households where no-one was at work, with one-fifth in households with one person at work and one-tenth in households where two or more people were at work. By 2001, there had been only a marginal increase in the proportion in households where someone was at work, with 63 per cent still in "workless" households.

	1994	2001
	%	%
Tenure		
Home owner	54.4	44.5
LA tenant-purchaser	19.3	11.9
Rent free	0.3	2.2
Tenant/subtenant	26.0	41.5
Location		
Rural	40.0	42.6
Urban	60.0	57.4
Welfare Transfers (excl CB)		
Recipients of welfare transfers	96.7	96.7
Dependence on welfare transfers		
Not dependent (<25% household income)	11.6	21.4
Somewhat dependent (>25% < 50%)	11.2	6.2
Semi-dependent (50% <wt<75%)< td=""><td>12.5</td><td>10.5</td></wt<75%)<>	12.5	10.5
Dependent on transfers (>75%)	64.7	61.9

Table 2.21: Composition in Terms of Selected Characteristics, III/Disabled, 1994 and 2001

Table 2.22 then shows the contrast between these different household contexts in terms of selected disadvantage indicators. By 2001 virtually all of the ill/disabled in households with no-one at work were below the 60 per cent of median income threshold, and one-quarter were still in consistent poverty. Where there was one person at work both figures were much lower, and where two or more were at work hardly anyone was even at risk of poverty – although their mean CLS deprivation score was still quite high.

	At Risk of Poverty (60% line)	Consistent Poverty	Mean CLS Deprivation	Difficulty Making Ends Meet
1994	%	%		%
No-one at work	22.2	38.8	3.1	47.6
1 adult at work	2.5	10.1	3.0	52.0
2 or more adults at work	0	0	2.4	38.4
2001				
No-one at work	98.4	24.9	1.9	24.2
1 adult at work	35.2	14.4	1.4	13.0
2 or more adults at work	1.2	0.6	2.2	7.1

Table 2.22: Poverty and Disadvantage for the III/Disabled by Number in Household At Work, 1994 and 2001

2.7 Trends in Key Indicators for Lone Parents

We now turn to the last of the groups we have selected as the focus for this study, namely lone parents, who are known to be vulnerable to socio-economic disadvantage and are of concern to policy from a variety of perspectives. Consistent with our practice so far the individual is the unit of analysis, but relevant household indicators and characteristics are studied. In this case, however, we may want to also take household characteristics into account in defining the group itself. While lone parents are often stereotypically thought of in terms of a lone adult living with one or more child, a substantial proportion of those parenting alone - without a spouse or partner - are in fact living in households with other adults. Often these are multi-generational households, but sometimes one of the lone parent's own children is aged 18 years or over. This household context for lone parents and their children may have a considerable impact on their incomes, living standards and other aspects of disadvantage. For this reason we start by looking at the position of all lone parents and their children, and only then focus on those in "single adult with child(ren) only" households to see the extent to which the latter are indeed in a particularly exposed position.

Table 2.23 shows the full set of key indicators for all lone parents and their children. Their at risk of poverty rate rose over the period with the 50 per cent of median income threshold, but was relatively stable with the two higher thresholds. This still left their at risk rates well above average in 2001 with all three lines, though considerably lower than for example the unemployed.

Focusing on basic deprivation, we see that in 1994 this group had a very high mean score on the original 8-item set, at 1.8. This was 21/2 times the sample average and higher than the corresponding figure for the unemployed in that year. Between then and 2001 their mean score fell to 0.51, but this was still significantly slower than the speed of decline for the sample as a whole, or indeed for the unemployed. Turning to consistent poverty, 34 per cent were below 70 per cent of median income and reporting enforced basic deprivation in 1994, and while this fell very substantially to 17 per cent by 2001, that was about three times the figure for the sample as a whole, and similar to that for the unemployed.

As far as the various dimensions of deprivation are concerned, the means levels of basic deprivation (with our alternative set of indicators) and secondary deprivation were again high for lone parents in 1994 and fell a good deal less than average between then and 2001. This left their mean on the combined CLSD measure at 4.7 in 1994, which was three times the sample mean. Their position on the other three dimensions of deprivation was also disadvantaged. Finally, the levels of self-assessed economic strain displayed by this group were very high in 1994, and while falling rapidly over the period was still twice the sample average by 2001.

	1994	2001
At Risk of Poverty	%	%
< 50% median (scale 1/0.66/0.33)	8.0	25.1
< 60% median (scale 1/0.66/0.33)	24.9	32.9
< 70% median (scale 1/0.66/0.33)	50.4	45.4
< 50% median (scale 1/0.5/0.3)	7.7	25.1
< 60% median (scale 1/0.5/0.3)	32.2	32.9
< 70% median (scale 1/0.5/0.3)	50.1	56.2
Basic deprivation	Distribution of s	cores on 8-item scale
	%	%
0	38.6	72.7
1	25.8	16.4
2+	35.6	10.9
All	100.0	100.0
Mean score	1.80	0.51
'Consistent' Poverty	%	%
< 70% median and basic deprivation	34.5	17.5
< 60% mean and basic deprivation	43.7	16.6
Dimensions of Deprivation	Mean so	ore on index
Basic (ECHP items)	3.02	1.43
Secondary (ECHP items)	1.78	1.01
Housing services	0.05	0.05
Housing deterioration	0.43	0.24
Environmental deprivation	1.04	0.42
Current Life-Style Deprivation	Distribution of	scores on 13-items
	%	%
0	10.7	28.6
1	8.7	17.5
2	7.3	12.0
3+	73.2	41.8
All	100.0	100.0
Mean score	4.7	2.4
Subjective "Stress" Indicators		
Reporting psychological distress	-	-
HRP Reporting economic strain	59.1	19.0

 Table 2.23: Poverty and Deprivation Indicators, Lone Parents and Their Children, 1994

 and 2001

The situation of this group can be usefully compared with that of the sub-set comprising lone parents and their children living in households where there is no other adult. Table 2.24 shows the corresponding indicators for this narrower group, and we see that they are indeed more disadvantaged. Their at risk of poverty rates are uniformly higher than those for the broader group shown in Table 2.23, with both the choice of threshold and of equivalence scale affecting the size of that gap. Mean deprivation levels and consistent poverty rates are also higher, with 24 per cent below 70 per cent of median income and experiencing basic deprivation compared with 17 per cent in Table 2.23.

Table 2.24: Poverty and Deprivation Indicators, Persons in Lone Parent Households, 1994 and 2001

	1994	2001
At Risk of Poverty	%	%
< 50% median (scale 1/0.66/0.33)	8.4	37.9
< 60% median (scale 1/0.66/0.33)	36.3	42.9
< 70% median (scale 1/0.66/0.33)	65.1	51.0
< 50% median (scale 1/0.5/0.3)	8.8	38.7
< 60% median (scale 1/0.5/0.3)	50.6	43.0
< 70% median (scale 1/0.5/0.3)	68.6	73.0
Basic deprivation	Distribution of sco	res on 8-item scale
	%	%
0	35.8	60.1
1	30.3	25.6
2+	33.8	14.2
All	100.0	100.0
Mean score	1.78	0.67
'Consistent' Poverty	%	%
< 70% median and basic deprivation	48.5	23.7
< 60% mean and basic deprivation	42.8	24.4
Dimensions of Deprivation	Mean scor	e on index
Basic (ECHP items)	2.64	1.80
Secondary (ECHP items)	1.78	1.12
Housing services	0.05	0.09
Housing deterioration	0.42	0.30
Environmental deprivation	1.19	0.48
Current Life-Style Deprivation	Distribution of sc	ores on 13-items
	%	%
0	13.2	19.7
1	3.8	18.3
2	14.8	16.2
3+	68.2	45.9
All	100.0	100.0
Mean score	4.7	2.8
Subjective "Stress" Indicators		
HRP GHQ above threshold	40.7	25.7
HRP Reporting economic strain	62.1	22.9

The heightened level of risk and disadvantage where there is no other adult in the household is particularly important given the trend that can be seen over the period towards lone parents with no adult children being more concentrated in that household type. In 1994, 57 per cent of lone parents with children all aged under 18 years were in households comprising only one adult with children, whereas by 2001 this had risen to 69 per cent. This in itself represents a significant increase in exposure to risk and disadvantage for lone parents and their children.

The selected characteristics we have discussed earlier for other groups are shown in Table 2.25 both for all lone parents and those in "lone parent households" only. We see first that while over 40 per cent of lone parents are in rented accommodation, a very high proportion – almost two-thirds – of those in 2001 "lone parent households" are in such accommodation, even higher than for the long-term unemployed. The proportion in urban areas is also very high for both, though it had fallen between 1994 and 2001.

Table 2.25: Composition in Terms of Selected	d Characteristics,	Persons in	Lone Pare	nt
Households, 1994 and 2001				

	1994		2001		
	Lone Parents Households		All Lone Parents	Lone Parent Households	
	%	%	%	%	
Tenure					
Home owner	36.7	27.1	36.1	21.5	
LA tenant-purchaser	16.5	16.7	21.8	13.1	
Tenant/subtenant	45.0	53.0	42.2	65.4	
Location					
Rural	22.6	20.6	26.8	29.2	
Urban	77.4	79.4	73.2	70.8	
Welfare Transfers (excl CB)					
Recipients of welfare transfers	88.3	84.2	83.1	79.5	
Dependence on welfare transfe	ers				
household income)	20.1		39.4		
Somewhat dependent (>25% < 50%)	22.7		22.7		
(50% <wt<75%)< td=""><td>19.9</td><td>23.0</td><td>19.2</td><td>18.9</td></wt<75%)<>	19.9	23.0	19.2	18.9	
Dependent on transfers (>75%)	47.9	55.9	18.8	27.9	

Dependence on social welfare is unsurprisingly high for all lone parents and particularly high for those in "lone parent households", where about 80 per cent were receiving some form of social welfare payment (other than Child Benefit) in 2001, only marginally down from 84 per cent in 1994. However, the extent of dependence on these payments is perhaps more limited than might have been expected: even for lone parent households, only 28 per cent had three-quarters or more of their income from that source. This reflected a substantial change since 1994, when far more – well over half – were that dependent on social welfare. This in turn is related to whether the lone parent is in paid work. In 1994, 72 per cent of all lone parents were not in work, whereas by 2001 about half were in work, which is a substantial shift.

Table 2.26 shows the extent of the gap in selected poverty and disadvantage indicators between cases where the lone parent is and is not in work. The figures shown are first for all lone parents, and then for lone parents where there is no other adult in the household. We see that the consistent poverty rate, for example, fell sharply for lone parents not in work between 1994 and 2001, but was still 30 per cent in the later year for all lone parents and 37 per cent for lone parent households – whereas very few of those in work were in consistent poverty. Indeed even the percentage at risk of poverty is very low – well below the overall sample average – when the lone parent is at work. What is perhaps most striking are the high levels of consistent poverty, basic and secondary deprivation and difficulties making ends meet faced by lone parent households where that parent was not in work.

	At Risk of Poverty (60% line)	Consistent Poverty	Mean CLS Deprivation	Difficulty Making Ends Meet
All Lone Parents				
1994	%	%		%
Not at work	32.2	45.4	5.4	65.4
At work	5.8	5.7	2.7	42.6
2001				
Not at work	53.5	30.0	3.8	30.4
At work	13.4	6.2	1.1	8.3
In Lone Parent Households				
1994	%	%		%
Not at work	46.5	56.6	5.3	66.8
At work	6.1	0.1	3.1	48.3
2001				
Not at work	64.3	37.4	4.6	35.0
At work	18.5	11.6	1.7	9.5

Table 2.26: Poverty and Disadvantage for Lone Parent Households by Whether At Work, 1994 and 2001

2.8 Conclusions

Our aim in this chapter has been to set out how a range of key indicators of poverty and deprivation changed over the period from 1994 to 2001 for six groups that are thought to be vulnerable – in different ways and to varying extents – to socio-economic disadvantage and exclusion. Both the key trends for each group, and how these compared with others and with the overall sample, have been discussed. Some relevant characteristics of the groups, notably their tenure status, extent of dependence on social welfare transfers,

and the extent to which household members are in paid work have also been discussed and their impact on the likelihood of being disadvantaged highlighted.

We looked first at how these indicators changed over time for the Living in Ireland sample as a whole, to provide the background against which trends for the various sub-groups have to be interpreted. This brought out that the "at risk of poverty" rate, vis-àvis different relative income thresholds, rose for the sample as a whole over the period, whereas the extent of "basic" deprivation and "consistent poverty" - capturing the combination of income below a relative threshold and basic deprivation - both fell sharply. Previous ESRI studies have highlighted the factors underpinning these trends, notably the fact that employment levels and incomes rose very rapidly while social welfare support rates, though increasing in real terms, lagged behind other incomes (see, for example, Nolan et al. (2002) and Whelan et al. (2003)). Deprivation measures distinguishing five different dimensions also declined sharply for the sample as a whole, as did the proportions registering psychological distress and the perception of serious financial difficulties in the household.

So the key indicators for the sample as a whole for the most part suggest a society in which things were improving substantially, the exception being the increasing proportions found falling a significant distance below average income. This was underpinned by falling levels of welfare dependence, but the relationship between welfare support levels and average income remained of central importance for those remaining dependent on welfare, and thus for many in the vulnerable groups we are distinguishing.

The first of these vulnerable groups was children. The broad range of key indicators available capturing the situation of their households generally suggest that children were more likely than the overall sample to be exposed to poverty and deprivation in 1994, at the start of the period we are examining. However, their situation had substantially improved by 2001, even more rapidly than for the population as a whole, so that by then children faced an aboutaverage risk of poverty and deprivation. This reflected inter alia the pronounced impact of the economic boom on levels of welfare dependence for households with children: by 2001 only 6 per cent of children were in households where three-quarters or more of the income came from social welfare. A marked increase in parental working was seen to underpin this improvement in the position of children over the period. Parental working also plays a key role in distinguishing the children who remain disadvantaged: very few of those with two parents in paid work in the household are at risk of poverty, and even having one parent in work is associated with very much lower at risk of poverty and consistent poverty rates than where there is no working parent.

The trends seen for the second group we focused on, older people, contrast in some respects with those for children. High levels of welfare dependence among older people are reflected in high "at risk of poverty" rates in 2001 – about twice the sample average – and a substantial increase in those rates since 1994. However, once one moves beyond income the range of nonmonetary indicators employed here give a much more positive perspective on the living standards of older people. Except for the specific area of problems with housing, these suggest that the position of the elderly was if anything above rather than below average in 2001. Even those living alone, although they face high at risk of poverty rates, have consistent poverty rates close to the average – although those living alone and those relying on the state old age pensions did have higher consistent poverty rates than other older people.

For the unemployed, our third group and one that shrunk rapidly in size over the period, deprivation levels across the five dimensions we distinguished also fell sharply between 1994 and 2001. However, their basic and secondary deprivation levels remained substantially above average. By 2001, although their at risk of poverty rates were not much higher than those of older people, the unemployed report very much higher levels of basic deprivation and as a consequence have much higher consistent poverty rates in 2001. For housing services and environment-related dimensions of deprivation, on the other hand, the pace of decline was considerably faster for the unemployed than for the sample as a whole, so that the unemployed had below-average levels of deprivation by 2001. The unemployed still faced high levels of psychological distress and self-perceived difficulty in making ends meet in 2001, and in each case the gap between them and the sample average had widened substantially since 1994. A substantial proportion were in households in rented accommodation and dependent on social welfare transfers, though the extent of that dependency had fallen markedly since 1994.

Among the unemployed, both duration of unemployment and whether anyone else in the household was in paid work were key features in terms of the extent of disadvantage reported. Those who had been out of work for between 1 and 3 years, and even more so those unemployed for 3 years or more, were seen to face much higher at risk of poverty and consistent poverty rates than the shorter-term unemployed. By 2001, more than four out of five of the very long-term unemployed were below 60 per cent of median income, and their consistent poverty rate was over 7 times the figure for the sample as a whole. While unemployment fell very rapidly and the proportion of the unemployed who were short-term rose substantially, the remaining small group of longer-term unemployed were increasingly marginalised. Whether someone else in the household was in paid work was also of critical importance: the proportion of unemployed in a workless household fell sharply over the period, but most of those who were in that position by 2001 were below 60 per cent of median income, and one-quarter were in consistent poverty.

We then examined the situation of those who are categorised in labour force status terms as ill or disabled. Their at risk of poverty rates rose very rapidly indeed between 1994 and 2001, so that by the latter year almost 60 per cent were below the lowest relative income

threshold and three-quarters were below the highest one. Basic deprivation levels fell but in relative terms the position of this group worsened to three times the sample average by 2001. Their consistent poverty rate also declined relatively slowly, and so went from about twice the sample average in 1994 to four times that average in 2001. Their relative position improved in terms of housing and environmental deprivation, and self-assessed levels of financial difficulty, but not in terms of psychological distress. A high proportion were in households in rented accommodation and dependent on social welfare transfers. Once again, whether there was someone else in the household at work plays a key role, and unlike the unemployed there was no marked fall over the period in the proportion living in "workless households". For the 63 per cent of the ill/disabled who were living in workless households in 2001, almost all were below the 60 per cent of median income threshold and one-quarter were in consistent poverty.

Finally, we analysed the situation of lone parents and their children. We looked both at all lone parents, and at the sub-set living in "lone parent households" - where the lone parent is the only adult. The "at risk of poverty" rate rose for both with the lowest, 50 per cent of median relative income threshold, but the trend with the 60 per cent and 70 per cent thresholds varied with the choice of equivalence scale - the only occasion on which this choice made such a difference to our findings. In 1994 both the broader and narrower group had a high mean level of basic deprivation, and this declined relatively slowly to 2001, leaving it above the unemployed group. The same applied to their consistent poverty rate, and they also saw a below-average improvement in other dimensions of deprivation. A high proportion of lone parent households in particular lived in rented accommodation, and in 1994 also had particularly high levels of welfare dependence. However, the extent of dependence on welfare fell sharply to 2001, by which time their levels of welfare dependence were much lower than for the unemployed. Where the lone parent was in work levels of poverty risk and consistent poverty were low, but what was perhaps most striking were the high levels of consistent poverty, basic and secondary deprivation and difficulties making ends meet faced by lone parent households where that parent was not in work.

3. TRENDS OVER TIME IN RELATIVE RISKS OF POVERTY FOR KEY WELFARE GROUPS

3.1 Introduction

In this chapter we focus on trends over time in both income poverty and consistent poverty rates. Our key concerns are the extent to which both changes in the distribution of welfare groups and variations over time in the relative risk levels of such groups are key factors in explaining overall trends. Our focus is not on absolute trends in poverty rates which have been documented earlier. Instead we direct our attention to trends in relative risk between groups. Our analysis involves a focus on the six key welfare groups described below. In each case the unit of analysis is the individual and thus the groups are not mutually exclusive. Where we refer, for example, to the unemployed we intend to designate individuals in households where the reference person is unemployed. The manner in which we have defined these groups means that in our multivariate analysis the reference or benchmark group against which deviations are measured is individuals aged between 18 and 65 years who are outside the types of welfare group households that we have defined.

- 1. Children under 18 years.
- 2. Adults over 65 years.
- 3. Households where the reference person is unemployed.
- 4. Households where the reference person is long-term unemployed, i.e. has been unemployed for more than twelve months.
- 5. Households where the reference person is ill or disabled.
- 6. Lone parent households.

For each poverty line we seek to answer the following questions:

- What is the observed or gross trend in risk of poverty?
- To what extent can the overall trend be accounted for by changes over time in the *size* of the key welfare groups? In putting this question we seek to examine what the trend would look like if the size of the welfare groups had changed over time but all other things had remained equal.

• Finally we proceed to ask to what extent the trend in poverty can be accounted for by the combined effect of changes in the size of the welfare groups and the poverty risks associated with them? Once again this question can be rephrased as seeking to establish what the poverty trend would have looked like if neither the size nor the risk levels of the vulnerable had changed and all other things had remained equal.⁵

Thus what we seek to establish is the extent to which overall change can be partitioned between the impact of changes in the size of vulnerable groups, their changing risks of poverty and all other factors contributing to change. Taking as a point of comparison the analysis of social mobility, the former can be thought of as reflecting structural change. The latter, on the other hand, can be seen as capturing changes in the outcome of the "competition" between groups over time to avoid poverty, abstracting from changes in the size of the groups. One possibility is that change over time is entirely accounted for by corresponding changes in the size and relative risk levels of vulnerable groups. At the other extreme these latter effects could be operating in the opposite direction to the general trend over time and thus serve to moderate the overall trend.

For each poverty line, having dealt with the questions set out above, we then process to examine how they have fared relative to each other over time in terms of risk of poverty. Thus irrespective of the overall trend we ask, for example, how did the experience of children under 18 years compare with that of adults over 65 years? Have the relative positions of these groups changed over time? Have some groups been particular beneficiaries of change while others have lost out?

The analysis that allows us to answer these questions involves a nested set of logistic regressions that are set out in detail in Appendix Tables 3.1 and 3.2. However, in the body of this chapter we seek to present the key results in a more accessible manner through the use of graphic presentation. In relation to both overall trends over time and the changing relative positions of key welfare groups this involves a focus on odds ratio. The idea of odds is one that is familiar to anyone with a knowledge of gambling. Thus, rather than saying that a horse has a 60 per cent chance of winning, we say that the odds of winning are 6:4 or 1.5:1. Similarly rather than saying that a horse has a 40 per cent chance of winning we say that the odds are 4:6 or 1:1.5 or .666:1. The odds ratios we report refer to the odds of being poor rather than non-poor for one group rather than another. Thus if 20 per cent or one in five women were poor compared to 10 per cent or one in ten men, then the odds ratio summarising the inequality in exposure to poverty between women

⁵ Our analysis does not explicitly take into account the fact that in the absence of changes in the distribution of vulnerable groups the poverty threshold would have been lower in 2001. However, the available evidence suggest that allowing for this factor would have little effect on the thrust of our conclusions.

and men would be (.20/0.10) equal to 2:1. Were the risk rates to be reversed then the odds ratio would be (0.10/0,20) 1:2 or 0.5:1. Thus the value of an odds ratio depends crucially on the reference group in relation to whom it is specified. It is a measure of *relative* advantage or disadvantage. The major advantage of the odds ratio is that it not affected by the size of the groups being compared or the absolute rates for such groups. In other words, in the example we have chosen its value will not be dependent on either the percentage of men or women or the percentage of poor or non-poor. This attribute means that we can legitimately compare odds ratio across different groups or tables. In each case we report just the numerator of the odds ratio. Thus an odds ratio of 2:1 appears in the presentation of our results simply as 2 and, correspondingly an odds ratio of 1:2 or 0.5:1 appears as 0.5.

3.2 Trends in the Impact of Welfare Group Membership on Income Poverty

We start by examining the trend over the time for poverty at 60per cent and 70 per cent of median income as set out in Figure 3.1. The benchmark for each odds ratio that we report is the gross poverty effect in 1994 which is assigned an odds ratio of one. In the situation where the gross odds ratio relating to change over time is greater than one, thus indicating an increase in the level of poverty, and introducing controls for changes in a particular influence reduces the observed odds ratio this suggests that the overall level of change can be accounted for by changes in the factors for which we have controlled. Where the introduction of such controls leads to an increase in the observed coefficient it suggests that, in the absence of the changes for which we have controlled, the observed change would have been more pronounced. Where the gross coefficient is less than one, indicating a trend towards a reduction in poverty levels, the opposite will hold true. Thus an increase in the odds when we introduce controls for other influences suggests that such factors can help account for the downward trend. On the other, hand a reduction in the odds ratio would suggest that the decline in poverty would have been even more pronounced if the changes for which we have controlled had not taken place.

At the 60 per cent line the gross odds ratio displays a value of 1.52 indicating that by 2001 the overall odds on being below this threshold had increased by over 50 per cent in comparison with the reference or benchmark point of 1994. At the second stage we ask what the trend would look like allowing for changes in the size of the key vulnerable groups but constraining the impact of membership of such groups to be constant over time. The outcome, as we can see from Figure 3.1 is that the odds ratio would have been 2.2. Thus, rather than the changing pattern of welfare groups providing an explanation of the observed increase in the risk of poverty, in the absence of such change the increase would have been significantly greater. The most significant factor involved here is obviously the dramatic reduction in the number of household reference persons unemployed. Finally, we allow for variation over time in the risk levels for the key welfare groups. This produces a

slight reduction in the odds ratio to 1.95 indicating that the changing pattern of relative risks operated to dissipate some of the gains from the changing distribution of vulnerable groups compared to the situation that would have held if risk levels had stayed constant over the period. Thus in this case the observed shifts in size and risk levels operated in different directions.





A somewhat different pattern was observed at the 70 per cent median income line. The overall increase in odds of being poor between 1994 and 2001 was a good deal more modest, as reflected in the odds ratio of 1.14. However, controlling for changes in the size of welfare groups leads to a sharp increase to 1.52. Thus once again we find that, in the absence of changes in the scale of the key welfare groups, the increase in risk of poverty would be a good deal greater. However, unlike the situation at the 60 per cent line, controlling for changing risk levels leads to a further increase in the odds ratio to 1.62. This value indicates the scale of increase in poverty that we might have expected to observe at the 70 per cent line in the absence of change in size of the key welfare groups or the relative risk rates. Thus at this threshold the changes in the size of the welfare groups and relative risk levels both operated to ameliorate the trend towards increased poverty. Thus at the 70 per cent line the factors contributing to the rise in the overall risk levels were independent of changes relating to the key welfare groups either in the terms of the size of such groups, the balance of disadvantage between such groups or between them, taken as a whole, and our reference category. However, at the 60 per cent level, while this was largely true, changes in size and risk levels of welfare groups operated in different directions with the former moderating the trend towards increased poverty and the latter contributing to it.

In order to provide an assessment of the extent to which changes in the size of vulnerable groups and the changing risk patterns reduced the tendency towards an increase in risk of poverty we proceed as follows. For each of our estimates of the relevant odds ratio we take the difference between this coefficient and the odds ratio of one that constitutes the estimate for 1994 before any controls are introduced. We then asked to what extent the overall reduction involved in the gross estimate can be accounted for by controlling for changes in the size of the vulnerable groups and then for both size and changing risk levels. The results are set out in Figure 3.2. In the case of 60 per cent of median income controlling for size changes reduces the difference in odds ratio by 57 per cent. This estimate assumes that risk levels across vulnerable groups remained constant; allowing these to vary also gives an estimate of 45 per cent. Thus the changing risk levels led to a decrease of 12 per cent in the reduction that that size changes would have brought about in a situation of uniform risks across time. At the 70 per cent line taking account changes in the size of the groups reduces the difference in odds ratios by 73 per cent. Allowing, in addition for varying risk levels increases this to 77 per cent. Thus rather than changes in the scale and pattern of welfare vulnerability and risk levels accounting for the increases in relative income poverty levels they in fact played a major role in minimising such increases.

Figure 3.2: The Contribution of Changing Size of Key Welfare Groups and Changes in Relative Risk Levels on Reducing the Trend Towards Increased Relative Income Poverty Levels



At this point we turn to a detailed consideration of relative risk rates for the 60 per cent median income line in 1994 and 2001, which are set out in Figure 3.3. In this figure we take the situation of individuals outside the specified welfare groups in 1994 as a benchmark and describe all other outcomes in relation to this group who are accorded an odds ratio value of one. Thus in 1994 the largest disparity in odds of falling below the 60 per cent line was between the benchmark group and the long-term unemployed as reflected in an odds ratio of 9.81. The value for the unemployed as a whole is slightly lower and there is then a significant gap to the ill or disabled group with an odds ratio of 4.24. For lone-parents, children and households the odds ratio ranged between 2 and 3:1. Finally for the elderly the value fell to 0.77, indicating that in 1994 the odds on falling below the 60 per cent threshold were significantly less for the elderly than for the reference group constituted by individuals outside the key vulnerable groups. As we saw earlier, taking those outside the key welfare groups as the benchmark, the odds ratio for comparable individuals rose to 1.95 in 2001. For the key welfare groups the largest disparity was observed for the ill and disabled where the odds ratio achieved a value of 23.15. They were followed by the long-term unemployed with a value of 20.26 and by the elderly with a value of 10.03. For lone-parent households the value was 8.41. At the lower end of the risk spectrum were the unemployed with a value of 5.72 and children under 18 years for whom the odds ratio was 3.01.

Figure 3.3: Changes in Odds Ratios Between 1994 to 2001 Relating to Income Poverty (60% median income line)



A comparison of trends over time at the 60 per cent line for each of the groups is provided in Figure 3.4. If we are concerned with relativities the benchmark becomes the odds ratio of 1.95, indicating the magnitude of the increased risk of poverty for those individuals outside the key welfare groups. As we can see from Figure 3.4, two of the groups have a superior performance over time, although in one case the difference is marginal. Two groups do marginally worse and two do a good deal worse. Here it is clear that the unemployed and the elderly provide the extremes. The former saw their relative risk over time almost halved as reflected in the ratio of 0.56. The later saw their relative risk level increase thirteen fold. Apart from

the elderly, the ill/disabled saw the strongest deterioration in their relative situation with the odds ratio for 2001 being over five times greater than its 1994 counterpart. For lone parents the increase was of the order of $2^{1/2}$:1 and for the long-term unemployed it was 2:1. Finally, for children there was a modest increase of $1\frac{1}{2}$:1. Thus both the starting points and the trends over time varied for the key welfare groups. At one extreme, the elderly provide an example of a group who, starting out from a favourable position, saw a sharp decline in their situation. The unemployed as a whole, on the other hand, who began the period as one of the most disadvantaged groups, experienced a significant improvement in their situation. The long-term unemployed in contrast saw their already high level of disadvantage widen over time. Of course in both cases the size of the groups declined sharply. The ill/disabled saw their initial intermediate position deteriorate to such an extent that by 2001 they were the most disadvantaged group. Lone-parent households and children who registered disparities of between 2 and 3:1 in 1994 saw these levels increase over the period, with the increase being somewhat sharper for the former. As our earlier results showed, allowing for the change in the size of the vulnerable groups, the gains made by the unemployed were not quite sufficient to compensate for the decline in the situation of the elderly and the ill/disabled. As a consequence the changing pattern of risk contributed to the overall increase in the risk of poverty.

Figure 3.4: Trend Over Time in Odds Ratios Between 1994 to 2001 Relating to Income Poverty (60% median income line)



At this point we direct our attention to the corresponding trends at 70 per cent of median income. In Figure 3.5 we show the relevant odds ratio for 1994 and 2001 with individuals outside the key vulnerable groups in 1994 once again providing the benchmark. With the exception of children, the level of relative disadvantage experienced by welfare groups in 1994 was somewhat greater at the 70 per cent line. In 1994, the long-term unemployed and the unemployed constituted the most disadvantaged groups with odds ratios of respectively 14:1 and 10:1. They were followed by the illdisabled and lone parents with odds ratio of 8:1 and 7:1. Finally, the elderly and children with odds ratios of 2:1 occupied the most favourable position among the key welfare groups. By 2001 the most disadvantaged group was the ill/disabled with an odds ratio of 14:1 followed by the long-term unemployed with one of 12:1. At this point the elderly occupied an intermediate position with a value of 8:1. The unemployed saw their relative risk level fall to close to 4:1 while lone-parents saw a more modest improvement while the situation for children changed relatively little.





As is clear from Figure 3.6, the extent of change over time was a great deal more modest than for the 60 per cent line and the pattern was a good deal more uneven across groups. The benchmark on this occasion is the odds ratio of 1.62 observed for individuals outside the vulnerable groups. Three of the vulnerable groups display lower rates of increase in their risk levels. One has an almost identical value. Only the elderly experienced a relatively sharp deterioration in their comparative situation; with the relevant ratio increasing fourfold. For no other group does this figure exceed two and in three cases it falls below one. Thus for the ill/disabled and children we observe a deterioration in their situation over time but of a modest scale. The long-term unemployed experienced little change. Lone-parent households, on the other hand, saw an improvement in their situation with a reduction of 30 per cent in the relevant odds ratio being observed. Finally, the unemployed taken as a whole experienced a sharp improvement in their relative position with the 2001 odds being approximately one-third of the corresponding 1994 value.





Overall the situation of the key welfare group tends to involve variation around the overall trend in risk levels. However, the picture of change over time varies somewhat depending on whether one focuses on 60 per cent or 70 per cent of median income. In the former case only the unemployed do significantly better than the benchmark group and the ill/disabled and the elderly do a great deal worse. At the 70 per cent line on the other hand three of the six welfare groups improve their position relative to the reference group and only the elderly experience a significant deterioration. Overall what is striking is that the major change observed is the relative position of the elderly and the unemployed rather than in the position of the key vulnerable groups as a whole *vis-à-vis* those located outside these groups.

3.3 Trends in the Impact of Welfare Group Membership on Consistent Poverty At this point we direct our attention to trends over time in consistent poverty. Earlier we have seen that our conclusions relating to change are affected by the choice of relative income poverty line. Substantially greater variability arises when we shift our attention from income lines to consistent poverty lines that incorporate both income and deprivation dimensions. As is by now well known, during the period of the economic boom we were confronted by the paradox that, while measures based purely on relative income poverty lines showed poverty to be increasing, the "consistent" poverty measures developed at the ESRI and used in the National Anti-Poverty Strategy showed a sharp decline. The indicator adopted thus crucially affects the results obtained. However, taken together they do in fact reflect a coherent set of underlying trends. The upward trend for relative income lines, as we have noted, reflects differential trends in net income increases for those in employment relative to those dependent on social welfare, reflecting both trends in gross incomes and changing taxation rates. At the same time, real increases in income and living standards have been reflected in declines in measures incorporating non-monetary deprivation indicators such as the basic deprivation indicators incorporated in the consistent poverty measure. These divergent trends represent different aspects of the complex realities associated with this unprecedented period of economic and social change. (Layte *et al.*, 2004).

At this point we seek to answer the question of how changes in the distribution of welfare groups and the impact of membership of such groups contributed to the sharp downward trend in consistent poverty observed between 1994 and 2001. In Figure 3.7 we show the trends over time, for both the 60 per cent and 70 per cent lines, in the odds ratios relating to consistent poverty as we move from the gross coefficient to the net figures as we successively control for changes in the size and impact of vulnerable groups. At the 60 per cent line we can see that overall the odds of being consistently poor was halved over time. When we allow for the changes in the size of the vulnerable groups, we find that, all other things being equal, in the absence of such change this reduction falls to just over onequarter. Finally, taking into account changes in both size and relative risk levels it falls to 20 per cent. Focusing on the 70 per cent line we find that overall the reduction in the risk level was 70 per cent. Controlling for change in the size of the vulnerable groups, suggests that in the absence of such change the level of reduction would have been close to 40 per cent. Finally, the addition of controls for changes in relative risk levels, suggests that in the absence of changes relating to both size and risk levels the level of reduction would have been just above 50 per cent.





In Figure 3.8 we show estimates of the contribution of changes in the size and relative risk levels of the key vulnerable groups to the decline over time in risk level for consistent poverty at both the 60 per cent and 70 per cent level. For the former the changing size distribution accounts for about half of the reduction over time. Taking into account the changing pattern of risk levels increases the figure to just over 60 per cent. The impact of these factors is a good deal more modest at the 70 per cent line. Here changes in size account for 13 per cent of the change and the combined effect of size and risk patterns accounts for double that figure.





At this point we focus on the changing relativities over time for the key welfare groups in relation to consistent poverty at the 60 per cent level, as set out in Figure 3.9. In 1994 the disparities for key welfare groups displayed the same broad pattern as for the 60 per cent income line. However, the scale of the disparities was somewhat greater with the odds ratio for the long-term unemployed reaching almost 17:1 and that for the short-term unemployed 16:1. A large gap existed between the level of disadvantage experienced by these groups and the nearest groups comprising lone parents and the ill or disabled who displayed odds ratio of 41/2:1. As in the case of the 60 per cent income line, children experienced modest disadvantage while the elderly enjoyed an advantage over all groups including those outside the key vulnerable groups. Over time the change in this hierarchy saw the ill/disabled emerge as the most disadvantaged group, as reflected in an odds ratio of almost 10:1. Lone-parent households and the long-term unemployed followed with odds ratios of between 7:1 and 8:1. The more favourable situation of the employed was reflected in an odds ratio of 4:1. Disadvantage levels for children and the elderly were rather modest.





In Figure 3.10 we examine trends over time in relative risk levels of consistent poverty at the 60 per cent income line. The reference point is individuals outside the key vulnerable groups where a comparison of the 2001 figure with its 1994 counterpart produces a ratio of 0.8. In comparison with changes at the 60 per cent income line the trends are modest and more variable. In three cases the trend is towards increased relative risk. This is the case for the elderly, the ill/disabled and lone-parents. The largest rate of increase observed, which occurs in the case of the elderly, involves a rate of increase three times that of the reference group. For both the unemployed as a whole, the long-term unemployed and children's relative risk rates declined. For the last two groups this involved a halving of relative risk levels while for the unemployed it involved a 75 per cent reduction. Thus for all of these groups the downward trend in consistent poverty at the 60 per cent line was sharper than for the reference group of those outside the key vulnerable groups.

Figure 3.10: Trend Over Time in Odds Ratios Between 1994 to 2001 Relating to Consistent Poverty (60% Median Income Line)



At this point we focus our attention on trends relating to changes in relative risk rates of consistent poverty at the 70 per cent income line. The figures relating to 1994 and 2001 are set out in Figure 3.11. The reference point is the figure of 0.48 showing a reduction of over 50 per cent in the risk of consistent poverty for those outside the key vulnerable groups. For the elderly, the ill/disabled and loneparent households the decline over time in the risk level is somewhat less while for children, the unemployed as a whole and the long-tem unemployed it is somewhat greater. However, what is most striking about the observed pattern of change is how little variation is observed across groups.

Figure 3.11: Trend Over Time in Odds Ratios Between 1994 to 2001 Relating to Consistent Poverty (70% Median Income Line)



3.4 Conclusions

In this section we focus on trends in relative risk rates for key welfare groups. Our analysis show that the sharp increase observed in poverty rates at both the 60 per cent and 70 per cent relative income poverty lines, but particularly the latter would have been substantially higher but for changes in the distribution of welfare groups. In the former case changing risk levels contributed to the upward trend while in the latter they acted as a countervailing force. Of these changes clearly the reduction in the number of households with an unemployed reference person was the most substantial.

At the 60 per cent line the main deviations from the general trend relating to increased risk levels involved a substantially sharper increase for the households with an ill or disabled household reference person and, more particularly for individuals aged 65 years or over. While not of the same scale the significant improvement in relative risk of poverty for the short-term unemployed was also notable. At the 70 per cent threshold deviation from the overall trend was less sharp although the elderly continue to experience a relative deterioration in their situation. The exception to this conclusion relates to the short-term unemployed for whom the

relative improvement in their situation was even more striking at this level.

For the consistent poverty lines corresponding large reductions in poverty levels are observed. At the 60 per cent line changes in the distribution of welfare groups contributes significantly to this outcome but at the higher threshold this is much less true. At the 60 per cent line considerable variation is observed in the experience of welfare groups. Thus the level of disadvantage of the elderly and households with either an ill or disabled reference person increased in comparison with the benchmark group. On the other hand a significant improvement was observed in the relative position of children and both short- and long-term unemployed. Of course taking the two conclusions together they imply an even sharper change in the relative fortunes of the two broad welfare groups. For consistent poverty at 70 per cent of median income such differentiation is less sharp. All groups experienced a significant reduction in risk of poverty. However, the balance of relativities between welfare groups observed at the lower threshold was maintained.

	Poverty 60% Median			Poverty 70% Median			
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	
2001	1.52***	2.20***	1.95***	1.14***	1.52***	1.62***	
Children under 18 years		1.98***	2.24***		1.89***	2.07***	
Adults Over 65 years Household Reference Person		2.44***	0.77*		3.10***	2.06***	
(HRP) Unemployed		8.70***	9.17***		8.42***	10.41***	
HRP Long-Term Unemployed		1.21	1.07		1.51***	1.35*	
HRP III or Disabled		6.65***	4.24***		8.37***	8.27***	
Lone Parent Household		3.22***	2.91***		4.64***	6.66***	
Children under 18*2001			0.69***			0.75***	
Adults Over 65*2001 Housebold Reference Person			6.68***			2.53***	
(HRP) Unemployed*2001			0.32***			0.22***	
Unemployed*2001			3.31***			2.36**	
HRP III or Disabled*2001			2.80***			1.03	
Lone Parent Household*2001			1.34			0.44***	
R Squared	0.01	0.18	0.207	0.01	0.194	0.21	
Model Log Likelihood Reduction	151.209	2.860.633	3.321.535	19.661	3.560.506	3.876.359	
Df	1	2,000.000	13	1	3	7	
	I	1	15	I	5	I I	
P<0.05, P<0.01, ****P<0.001.							

Appendix Table 3.1: Logistic Regression of Changing Determinants of Income Poverty Between 1994 and 2001

	Cons	Consistent Poverty 60%			Consistent Poverty 70%		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	
2001	0.47***	0.726***	0.80*	.304***	.39***	.48***	
Children under 18 years		2.15***	2.39***		1.96***	2.08***	
Adults Over 65 years Household Reference Person		0.96	0.57**		1.24*	1.2	
(HRP) Unemployed HRP Long-Term		14.07***	15.27***		11.16***	12.39***	
Unemployed		1.08	1.10		1.32**	1.34*	
HRP III or Disabled		6.82***	4.50***		8.48***	7.88***	
Lone Parent Household		5.48***	4.50*** 0.66**		6.94***	7.10***	
Children under 18years* 2001			3.14***			0.74*	
Adults Over 65 years* 2001 Household Reference Person			0.36***			1.16	
(HRP) Unemployed* 2001 HRP Long-Term			1.46			0.41***	
Unemployed* 2001			2.70***			1.07	
HRP III or Disabled* 2001			2.10**			1.21	
Lone Parent Household* 2001						1.07	
Nagelkerke R Squared	0.018	0.252	0.262	0.049	0.272	0.275	
Model Reduction in Log-Likelihood Ratio	166.814	2,432.162	2,536.526	584.029	3,422.315	3,464.26	
Df	1	7	13	1	7	13	
*P<0.05, **P<0.01, ***P<0.001.							

Appendix Table 3.2: Logistic Regressions of Changes in Determinants of Consistent Poverty Between 1994 and 2001

4. TRENDS IN ECONOMIC VULNERABILITY AND SOCIAL EXCLUSION

4.1 Introduction In this chapter we seek to extend our analysis of multidimensional change over time by applying methods that seek to distinguish between groups with radically different risk profiles. In so doing we will start by seeking to identify a group of respondents that we deem it appropriate to consider as vulnerable to or at risk of economic exclusion. We will then proceed to consider how such vulnerability or heightened risk in relation to economic exclusion is associated with wider patterns of social exclusion.

In recent years general agreement has emerged that, despite the continuing vagueness of the term 'social exclusion', its main value lies in drawing attention to issues of dynamics and multidimensionality (Berghman, 1995, Room, 1999, Sen, 2000). However, one of the difficulties in extending the notion of social exclusion to encompass multidimensional deprivation is that, as Sen (2000, p. 9) emphasises, by indiscriminate use it can be extended to describe every kind of deprivation: "...the language of exclusion is so versatile and adaptable that there may be a temptation to dress up every type of deprivation as exclusion". In providing a context for the manner in which we will use the terms 'economic vulnerability'; and 'social exclusion', it is perhaps worthwhile distinguishing between three rather distinct senses in which the latter term has been used.

As De Haan (1998, p. 14) notes, the concept of social exclusion when employed in its more restricted notion of economic lifechances comes close to the concept of relative deprivation as employed by Townsend (1979), for whom poverty involves exclusion from ordinary living patterns through lack of resources. A broader notion of social exclusion is that which refers to a wider restriction of access to a range of commodities and services necessary for full participation in the society including access to and appropriate outcomes in areas such as health, housing and neighbourhood. Employed judiciously the concept of social exclusion used in this wider sense has a good deal in common with the notion of 'level of living' in Swedish welfare research, which goes beyond economic resources to include factors such as health. The key notion is that living conditions - measured in terms of outcomes across a variety of domains - certainly matter but, if one is to understand both what produces differences in observed living conditions and what to read into these differences in terms of welfare, it is necessary to have a framework that incorporates both outcomes and resources (Erikson, 1993). From this perspective the relevance of the exclusionary perspective is conditional on facilitating an understanding of the processes that lead to deprivation. Correspondingly, one can argue that a policy focus on social inclusion requires an emphasis on the processes linking resources and multiple outcomes. In the empirical implementation of such an approach it is essential that claims relating to the importance of multiple disadvantage and the role of economic resources in generating such disadvantage are subjected to empirical test (Whelan et al., 2002). Finally, social exclusion has been understood in a manner close to "social cohesion as involving social connectedness and communal identification". This perspective is reflected as Silver (1994) notes the 'solidarity paradigm' dominant in the French literature, in which exclusion is seen as involving a rupturing of the bond between individual and society that is cultural and moral. In what follows we shall seek to develop measures and conduct analysis that relates to the first two senses of the terms but shall not seek to deal with the final usage, although we shall make some reference to the issues involved in so doing.

Focusing on the first meaning of the term, which we shall refer to as economic exclusion, we should note that, exclusion can refer to a state or situation but it places particular emphasis on the processes or mechanisms by which exclusion comes about. This concern is captured in Paugam's (1996) focus on precarity and spirals of precariousness. As De Haan (1998, p. 15) observes, perhaps closest to the concept of exclusion employed in this sense are notions of vulnerability. Following Chambers (1989), we can define vulnerability as not necessarily involving current deprivation, either in income or consumption terms, but rather insecurity and exposure to risk and shock. Vulnerability in this sense can also incorporate people's perceptions of their situation. Recently Eurostat has taken to referring to those falling below designated relative income thresholds as "at risk of income poverty". However, while this reflects awareness of the problems of sole reliance on such measures, it leaves entirely open the issue of the extent to which such risk is translated into actual poverty. Despite the emphasis in the literature on both multidimensionality and vulnerability little methodological progress has been made in identifying such vulnerability on the basis of multiple indicators. In this chapter we shall seek to develop such a measure in a manner that allows us to both compare levels of vulnerability and identify distinctive profiles of economic vulnerability.

A successful implementation of a measurement strategy would involve first being able to employ multiple indicators to fulfil the multidimensionality condition. Ideally, however, it should also incorporate a dynamic perspective. What we wish to do is not simply to document those who are experiencing a specific deprivation at a particular point in time but rather to identify those who are vulnerable to such deprivation. From a policy perspective this allows us to think in terms of options that may prevent such vulnerability being translated into actual negative outcomes. In the longer run, it allows us to study the processes involved in the differential routes that lead from vulnerable status to positive or negative outcomes. The focus is very clearly on process rather than simply point in time outcomes. In what follows we shall seek to respond to this challenge by using a statistical method known as latent class analysis to identify a class of economically vulnerable individuals. We will then ask how such vulnerability relates to social exclusion in the broader sense involving disadvantage relating to dimension such as health, housing and neighbourhood. In pursuing this strategy, we wish to take the argument for adopting a multidimensional perspective more seriously than is usually the case. In other words in both the construction of indices relating to particular dimensions and in specifying the relationship between dimensions we seek to test, rather than assume, the extent to which the same underlying processes are in operation. Thus the extent of multiple deprivation must be assessed on the basis of empirically establishing the degree of overlap between different forms of deprivation.

4.2 Identifying Economic Vulnerability

In what follows we wish to identify underlying economic vulnerability on the basis of multidimensional measurement. We will do so by following recent contributions by Breen and Moisio (2004) and Moisio (2004) in applying latent class models in order to identify such groups. In order to make appropriate use of such methods it is necessary to provide a theoretical justification of the indicators employed. Our initial focus will be restricted to a small number of dimensions but ones whose interrelationships we consider to be crucial to understanding such vulnerability.

The notion of social exclusion is not an entirely new one. Thus Townsend (1979) in his seminal work considered poverty to involve *exclusion* through lack of *resources*. The European Union has conceived poverty in a similar manner defining poverty as exclusion from the minimally acceptable way of life of the Member state in which one is resident as a consequence of inadequate resources (Atkinson *et al.*, 2002). This provides a rationale for relative income approaches to measuring poverty on the basis that such thresholds are intended to identify those falling more than a certain 'distance'; below the average and are as a consequence excluded from the minimally acceptable way of life.

The major problem with this approach is that low income turns out to be quite unreliable in identifying households experiencing distinctive levels of deprivation (Ringen, 1987). However, to focus solely on deprivation would mean abandoning concern with the resources component of Townsend's definition and would seriously restrict our capacity to understand how deprivation is generated. In

recent years it has been possible to further our understanding of the, apparently paradoxical, weakness of the relationship between income and deprivation. This involves trying to take into account factors such as short-term variability in income and deprivation, unreported income, savings, and other assets, availability of support from family, friends and neighbours, non-cash income and differential needs (Perry, 2002, Whelan et al., 2004). Despite such efforts, the conclusion to be drawn from a substantial portion of the literature on multi-dimensional analysis of social exclusion is that, not only do different methods lead to different conclusions regarding levels of exclusion, but quite different groups are identified as excluded depending on the indicator on which one focuses.6 As Nolan and Whelan (1996) argue, until we successfully grapple with the issue of the limited overlap between income and deprivation, efforts to develop a multi-dimensional approach seem unlikely to be fruitful.

Here we intend to focus on three key indicators - relative income poverty at 70 per cent of median equivalised household income, basic life-style deprivation as incorporated in the national consistent poverty target and finally a measure of subjective economic strain (Whelan et al., 2001). Our objective is to identify groups who are vulnerable to economic exclusion in the sense of being distinctive in their risk of falling below a critical resource level, being exposed to life-style deprivation and experiencing subjective economic strain. As our earlier discussion has stressed, low income is not necessarily associated with high levels of deprivation or vice versa. Similarly, one can imagine situations where either economic mismanagement or exceptional demands on a household relating, for example to illness of a household member or the need to support elderly relatives, could lead to a situation of subjective economic strain without this situation being reflected in household income or measures of household deprivation. However, while there is no necessary relationship between these measures, at any point in time, our expectation is that individually they will serve as valid but imperfect indicators of economic exclusion. By analysing the relationships between these variables we seek to establish whether we can distinguish underlying groups who have distinctive multidimensional profiles with regard to the patterning of their risk levels.

We have deliberately focused on the form of deprivation that earlier research has shown to be most closely related to low income (Whelan *et al.*, 2001). In our later analysis we will examine how economic exclusion is related to other forms of deprivation. We have also consciously chosen not to include variables such as unemployment and other forms of exclusion from the labour market as indicators of economic exclusion. Instead we think it is more useful to consider such factors, together with variables such as low education, as determinants of economic exclusion.

⁶ See Hallerőd (1998), Kangas and Ritakallio (1998), Muffels and Dirvin (1998), Nolan and Whelan (1996).

Recently Eurostat has taken to referring to those falling below designated relative income thresholds as "at risk of poverty". However, while this reflects awareness of the problems of sole reliance on such measures it leaves entirely open the issue of the extent to which such risk is translated into actual poverty. With latent class analysis on the other hand, as we shall see, it is possible to clearly operationalise the distinction between vulnerability to economic exclusion, in the sense of having heightened risks of particular forms of disadvantage, and the actual experience of particular forms of deprivation, including exposure to multiple deprivation. The method of analysis is thus entirely consistent with the notion that members of a particular socio-economic or sociodemographic category may be exposed to a distinctively high level of risk of exposure to a range of undesirable outcomes; but not all of them experience such outcomes at the same point in time, nor do they necessarily have to cope with simultaneous exposure to the spectrum of disadvantages. A range of factors such as specific lifecycle events, labour market experience and a variety of other vicissitudes mediate between risk-levels and outcomes. Thus while our analysis is conducted at a cross-sectional level the perspective involved is entirely consistent with the body of accumulating evidence that a great deal of poverty takes a transient form. Thus in any particular period of poverty only a minority of those observed to be income poor or deprived at the beginning of the period are persistently poor throughout the period. The corollary of this is that a great deal more experience transient poverty or deprivation than is suggested by cross-sectional rates.

The basic idea of latent class analysis is long established and very simple (Lazarsfeld, 1950, Lazarsfeld and Henry, 1968). The associations between a set of categorical variables, regarded as indicators of an unobserved typology, are accounted for by membership of a small number of latent classes. Latent class analysis assumes that each individual is a member of one and only one of N latent classes and that, conditional on latent class membership, the manifest variables are mutually independent of each others. This notion of conditional independence is just a version of the familiar idea that the correlation between two variables may be a result of their common dependence on a third variable. The logic is identical but the explanatory variable is unobserved and must be identified statistically.7 The number of classes of hypothesis depends on the particular problem one is seeking to address. In what follows we have specified two underlying classes in order to distinguish the economically excluded from others.

The key notion guiding our analysis is that the population can be divided into a number of underlying or latent groups and that if we were in a position to identify such groups then understanding the relationships between the outcomes that we observe would be

⁷ For a recent discussion of applications of latent class models see McCutcheon and Mills (1998).
greatly facilitated. In our analysis the assumption is that there are two such groups; those who are vulnerable to economic exclusion and those who are largely insulated from such exclusion. A second and not intuitively obvious assumption is that if we are successful in identifying such underlying groups that the relationship we observe between income, deprivation and economic strain indicators will be fully accounted for; in the sense that within these groups the underlying correlations between the indicators will be zero. This is a particular instance of the general hypothesis in latent class analysis that the observed correlations between a set of manifest indicators is due to their common association with some underlying factor.

Latent class analysis can thus be thought of as a categorical analogue of factor analysis. Although a crucial difference in our current use is that we are seeking to identify groups of individuals rather than clusters of variables. The key underlying notion is that the correlation between two variables may be a result of their common dependence on a third variable. One very familiar example of this notion arises in the case of spurious correlation. For example, if we observe a correlation between the number of fire engines sent to a fire and the damaged caused we assume that this is due to common variation in the size of the fire. The relationship is not spurious in any absolute sense. The point is rather that drawing the appropriate causal conclusion requires reference to a third factor. In estimating latent class models the logic is identical but the explanatory variable, membership of the underlying groups, is unobserved and must be identified statistically.

A couple of examples may illustrate the logic. Although we cannot observe religious commitment as such, we are likely to believe that association between behaviours we can observe such as church attendance, regular prayer and the expression of particular beliefs can be explained by such commitment. The religiously committed group are more likely to engage in all three types of behaviour and as a consequence the indicators will be correlated. However, not all individuals in the religiously committed group will engage in all three behaviours and some of those in the noncommitted group will engage in each of these behaviours. The hypothesis underlying the latent class approach is that once we have identified which underlying group an individual belongs to, information about one type of behaviour will be no help in predicting another. Thus, among the religiously committed, knowing whether someone attends church will not help us predict whether they pray regularly or not. Within the religiously committed group random factors are hypothesised to determine whether an individual engages in any specific behaviour because the underlying causal influence that led to the indicators being associated has been removed. However, for every behavioural item the probability of the members of the religiously committed group engaging in it is higher. It is this pattern of probabilities that produces the distinctive profiles that differentiate the groups.

Personality measurement in psychology provides another example. Thus, if we observe a set of associations between a number

of indicators of personality, we might hypothesise that these manifest correlations are a consequence of the fact that what they have in common is that they distinguish between underlying categories of introverts and extroverts. The hypothesis of conditional independence that underlies the latent class approach posits that, conditional on identifying the underlying personality types, the manifest indicators are independent of each other. Thus, taking our present example, within the classes of introverts and extroverts random factors are hypothesised to determine whether one rather than another "symptom" of the underlying state is exhibited. Thus an overall cross-tabulation demonstrating a clear association between two personality indicators may be broken down into two separate tables for introverts and extroverts in neither of which is any significant association observed because we have controlled for the underlying causal factor.

As Moisio (2005) notes, implicit in the notion of multidimensional measurement of economic or social exclusion is the assumption that there is no one 'true' indicator of the underlying concept. Instead we have a sample of indicators that tap different aspects of a complex phenomenon. If we are to move beyond the accumulation of a mass of descriptive detail we need to develop a measurement model that enables us to understand the manner in which our indicators are related to the latent concept. In this chapter we make use of latent class modelling to achieve this objective.

4.3 Applying Latent Class Analysis

Our analysis will proceed as follows. We will first seek to identify an economically vulnerable group defined in terms of not only relative income poverty but also the enforced absence of at least one basic deprivation item and experience of economic strain, in the sense that the household is reported as having difficulty or great difficulty in making ends meet. Having identified an economically vulnerable group in both 1994 and 2001 we will then proceed to examine how such membership is associated with broader patterns of social exclusion. Finally, we will consider the manner in which economic vulnerability, as we have measured it, is related to membership of key welfare groups.

In applying latent class analysis, each of our indicators is taken as an imperfect measure of social exclusion. In order to provide us with sufficient degrees of freedom our income poverty variable has four categories distinguishing between those below 50 per cent median income, between 50-60 per cent, between 60 per cent to 70 per cent and above 70 per cent. Our results will be reported in terms of the conditional probabilities of being below 70 per cent of median income.⁸ Our deprivation outcome reports the conditional probability of lacking at least one basic deprivation item. The

⁸ Details are available from the authors of the numbers below the 50 per cent and 60 per cent income lines.

economic strain variable distinguishes those households that have difficulty in making ends meet from all others.

Given three dichotomous variables the latent class for variables A, B, C is

$$\pi_{ijkt}^{ABCX} = \pi_t^X \pi_{it}^{\overline{A}X} \pi_{jt}^{\overline{B}X} \pi_{kt}^{\overline{C}X}$$

where π_t^X denotes the probability of being in latent class t=1...T of latent variable X; π_{it}^{AX} denotes the conditional probability of obtaining the ith response to item A, from members of class t, I=1...I; and π_{jt}^{BX} , π_{kt}^{CX} denote the corresponding probabilities for items B and C respectively.

A latent class model contains a number of assumptions relating to the number of underlying classes and the relationships between the observed indicators conditional on membership of such classes. In order to decide how plausible these hypotheses are we compare the observed frequencies, in the table formed by cross-tabulating our indicators, with the expected frequencies generated by the model. Our models are estimated using the LEM programme (Vermunt, 1993).

4.4 Vulnerability to Economic Exclusion A simple way of illustrating how well our model fits the data is to compare the expected frequencies generated by the model with the observed frequencies and calculate the proportion of cases misclassified when we rely on the former. For 1994 the figure is less than 2 per cent and for 2001 it is below 1 per cent. More formal measures also confirm that in both cases the model provides a good fit to the data.⁹ Thus the evidence strongly supports the hypothesis that the relationship between our three indicators arises because of the division of the population into two latent classes.

In Figure 4.1 we focus on the size of what we have termed the economically vulnerable class we find that in 1994, 31.2 per cent of individuals fell into this category but by 2001 this had fallen to 11.1 per cent. Thus overall there was an almost threefold reduction in the size of the economically vulnerable class. How are individuals located in the vulnerable class distinguished from each other and does this change over time? In order to answer these questions we direct our attention to the conditional probabilities of the outcomes for each of our indicators. These are the probabilities after we have specified to which class an individual belongs. The profiles relating to these outcomes are set out in Figure 4.1. In the case of income we find that at the 70 per cent line 55 per cent of the economic vulnerable are found below the threshold compared to 13 per cent. of the non-vulnerable. There is therefore a strikingly clear pattern of differentiation between the underlying classes in terms of their risks

⁹ The G² goodness of fit statistic was 151.2 in 1994 and 19.3 in 2001 with 4 degrees of freedom in each case.

of income poverty. However, even this degree of differentiation is modest in comparison with what we observe in relation to basic deprivation. Thus 80 per cent of the economically excluded report the enforced absence of such an item compared to 6 per cent of remaining respondents. Differentiation in terms of economic strain is almost but not quite as sharp with 77 per cent of the excluded reporting such strain compare to 10 per cent of others. Overall then the two groups display sharply differentiated profiles across the three indicators of a scale that amply justifies referring to the more disadvantaged class as economically excluded.

Figure 4.1: Vulnerability to Economic Exclusion



Given that the size of the vulnerable class changed dramatically over time, did the profiles of the latent groups change significantly? From Figure 4.1 we can see that while the income profiles for both groups changed significantly over time the contrast between them remained extremely sharp. By 2001, 40 per cent of the vulnerable group were below the 50 per cent line compared to the 9 per cent of the remaining individuals. This involved a substantial increase for both groups over the 1994 figures but the differential between them stayed much the same at approximately five to one. For the 60 per cent lines the respective figures are 52 per cent and 17 per cent, again involving an absolute increase but maintaining the differential of three to one. For the 70 per cent line the relevant figures are 63 per cent and 24 per cent involving a significant reduction in each case but maintaining a differential of two to one. With regard to basic deprivation, the level for the vulnerable group declines by one quarter to 60 per cent and for the remainder it declines even more sharply in proportionate terms from 6 per cent to 3 per cent. The contrast between the groups remains quite striking. A similar pattern

emerges for economic strain where the respective 2001 levels are 64 per cent and 3 per cent.

Thus in relation to relative income poverty we observe a deterioration for both vulnerable and non-vulnerable groups. For basic deprivation and economic strain, on the other hand, we see significant reductions in levels of deficit. In terms of relativities, income poverty differentials between the vulnerable and non-vulnerable remain pretty well constant over time while for deprivation and economic strain the gaps widen. Thus by 2001 we observe an economically vulnerable class that is almost one-third of the size of that found in 1994. The absolute level of disadvantage of this class has also been substantially reduced. However, the degree of differentiation between the multidimensional exclusion profile of economically excluded group and the remainder of society has become even sharper.

The process by which people come to be exposed to multiple deprivation has been a central concern of the social exclusion literature. In the analysis that follows we shall document the extent to which respondents are currently exposed to such deprivation in the sense that they are simultaneously below 70 per cent of median income, above the basic deprivation threshold and experiencing subjective economic strain. This definition is somewhat more circumscribed than many that have figured in the literature, which frequently make reference to factors such as housing, health and social isolation. However, we shall return to this wider conception in the following section.

In order to calculate levels of multiple deprivation involving income poverty, basic deprivation and economic strain we take advantage of condition of local independence whereby these indicators are independent of each other within categories of the latent class. As a consequence all that is required in calculating a level of model deprivation is to multiply the conditional probabilities for each of the individual indicators by each other. Because of extremely low conditional probabilities for deprivation in the nonvulnerable class, calculation of social exclusion levels reduces to calculating them within the vulnerable latent class as the level for the remaining individuals approaches zero. In Figure 4.2 we display the levels of multiple deprivation in the sense that we have defined it. In 1994 just over one in three of the economically vulnerable class fulfilled all these conditions and this translated into just over one in ten of the population. By 2001 the level for the vulnerable class had fallen to one in four and, given the decline in the size of the class, this translated into just less than 3 per cent of the population.



Figure 4.2: Trend in Percentage Experiencing Multiple Deprivation in Relation to Indicators of Economic Exclusion

4.5 Risk and Composition of Economic Vulnerability by Key Welfare Group

 ${
m W}$ ho are the economically vulnerable and how has their profile changed over time? In order to address this question, at this point we look at the composition of the economically vulnerable in terms of the key welfare groups and variation in risk levels across these groups. The composition figures for 1994 and 2001 are set out in Figure 4.3. In considering these figures we should keep in mind that since our vulnerable groups have been defined in a manner that is not mutually exclusive the composition figures sum to over 100 per cent. A substantial decline over time was observed in the extent to which the economically vulnerable group was made up of individuals in households where the reference person was unemployed. In 1994 they made up 27 per cent of the economically vulnerable but by 2001 the relevant figure had dropped to one-third of this level. The figure for the long-term unemployed displayed a similar trend in declining 7 per cent to 3 per cent. Similarly while children made up two-fifths of the vulnerable in 1994 this figure had fallen to one-third by 2001. For lone parent households the figure remained almost constant over time at approximately one in ten. For the disabled, on the other hand the relevant figure went from 6 per cent to 10 per cent. Finally, a somewhat more modest increase was observed for the elderly as the figure went from 7 per cent to 12 per cent. The consequence of this set of changes was that the extent to which the economically vulnerable were drawn from outside the key welfare groups increased over time. In 1994 they made up just less than one-third of the group but by 2001 this had increased to over two-fifths. Thus over time there was both a reduction in the extent to which the economically excluded were drawn from the key welfare groups and a shifting balance between such groups.



Figure 4.3: Welfare Groups Composition of Economically Vulnerable Class in 1994 and 2001

The restructuring of the composition of the economically vulnerable was a consequence of both the changing size of key welfare groups and shifting risk patterns. In Figure 4.4 we concentrate on the latter. Here we observed that in every case there has been a substantial reduction over time in the risk of vulnerability for all welfare groups. The sharpest absolute declines are observed for the unemployed and lone parent households where the risk level went from 70 per cent to 30 per cent. A similar reduction was observed for the long-term unemployed. The largest relative reduction was observed for children where the risk level went from just less than one in two to less than one in eight. For the ill/disabled the figure decline from six out of ten to half that level. By far the most modest decline was observed for the elderly where the figure went from just above one-fifth to one in eight.

Figure 4.4: Risk of Economic Vulnerability by Welfare Class in 1994 and 2001



In order to look more systematically at the changing pattern of relativities, in Figure 4.5 we set out the results relating to logistic regressions for 1994 and 2001 showing the relationship between economic vulnerability and welfare group membership. The results are presented separately for each year but we have also conducted an analysis that pools the data across time and thus enables us to formally test for the significance of changes over time. It should be kept in mind that the performance of the welfare groups is now being compared with the benchmark group of individuals located outside all of these groups. What we are documenting is the relative decline in their risk level compared to the reference groups. This is captured in the odds ratios described in Figure 4.5. It is clear that there are two major differences between 1994 and 2001. The most substantial involves a significant reduction in the relative disadvantage associated with short-term unemployment where the odds ratio falls from just above eight to less than five. The second change involves an increase in the comparative risk to which those aged 65 years or over are exposed from just above parity to slightly less than two to one to one. A reduction in the odds ratio for lone parent households from 6.4 to 4.9 is observed. For the remaining groups no significant change over time is observed.

Figure 4.5: Odds Ratios of Relative Risk of Economic Vulnerability by Welfare Group in 1994 and 2001



4.6 The Relationship Between Economic Exclusion and Wider Social Exclusion Thus far we have focused our attention on what we have labelled "economic exclusion". One of the main virtues of the social exclusion perspective is in drawing attention to issues of multidimensionality. However, as Whelan and Whelan (1995, p.29) argue, while no one would wish to deny that social exclusion arises from a variety of processes or that it is experienced as involving a good deal more than an income deficit, an uncritical operationalisation of multidimensionality could paradoxically have the effect of obscuring the processes involved in generating social exclusion. Here, having given theoretical priority to economic exclusion. We now seek to establish how such vulnerability is associated with other dimensions of social exclusion. These additional elements include the dimensions other than basic deprivation revealed in our earlier analyses of life-style deprivation. These comprise secondary deprivation, housing deterioration and neighbourhood environment and psychological distress.

We have excluded items relating to social isolation, including talking to neighbours, meeting people and being a member of an organisation because, with the exception of a weak correlation in the case of this final item, they displayed almost zero association with economic vulnerability. Discussions of social exclusion frequently make reference to factors such as social isolation and a progressive rupturing of social relations involving what has been described as a "spiral of precariousness" (Paugam, 1996). However, the evidence for any significant degree of social isolation and for its relationship to economic exclusion is extremely weak. ¹⁰ Our findings are entirely consistent with earlier results. Thus only a minuscule number of respondents indicate that they experience social isolation in relation to contact with friends or neighbours or meeting people more generally. While economic exclusion is modestly associated with organisational membership it is necessary to keep in mind that significantly less than half the population report such membership. Our general assessment is that social isolation has been overemphasised as an aspect of social exclusion and there is no evidence that either its absolute levels or association with economic exclusion has increased over time.

In Figure 4.6 we set out the relationship between the remaining wider aspects of social exclusion and economic exclusion.¹¹ Focusing first on secondary deprivation we see that there is a clear differentiation between the economically vulnerable and others, which is, however, still a good deal less sharp than in the case of basic deprivation. In 1994, 65 per cent of the vulnerable were experiencing secondary deprivation compared to 22 per cent of others. By 2001 the corresponding figures were 38 per cent and 8 per cent.

Turning to the other dimensions, we find that the economically vulnerable respondents display significantly higher levels of deprivation on the housing deterioration dimension. In 1994 the figures for the non-vulnerable and the vulnerable groups were respectively 12 per cent and 32 per cent. The corresponding figures in 2001 were 7 per cent and 23 per cent. Economic vulnerability is also associated with experience of neighbourhood and environment problems. In 1994, 56 per cent of the vulnerable group reported

¹⁰ See Paugam et al. (2000, p. 69), Gallie et al. (2003), Tsakloglou and Papadopoulous (2002), Whelan et al. (2003).

¹¹ In estimating these relationships we use the LEM programme inactive covariate procedure.

such difficulties compared to 32 per cent of all other respondents. The corresponding figures for 2001 were 43 per cent and 20 per cent. Focusing on psychological health we find that in 1994 the figure above the psychological distress threshold as measured by the GHQ threshold was 37 per cent for the economically vulnerable compared to 17 per cent of the rest of the population. In 2001 the corresponding figures were 27 per cent and 13 per cent.





Above we have focused on the absolute differences in deprivation including a range of dimensions and the manner in which these changed over time. At this point we shift our attention to the issue of the relativities between the vulnerable and nonvulnerable and the manner in which these changed over time. The relevant odds ratios are set out in Figure 4.7. Looking first across dimensions we see that by far the highest degree of inequality relates to secondary deprivation where the odds ratio is approximately seven to one. In the remaining cases it ranged between two to three to one. Considering the trends in inequality, it is striking that the association between each of the outcomes and economic exclusion is remarkably stable over time and with the exception of secondary deprivation across dimension. Thus in every case economic exclusion signals higher levels of social exclusion but the degree of association is in each instance a good deal more modest than those relating to income poverty, basic deprivation and economic strain.



Figure 4.7: Inequalities in Social Exclusion Risks: Odds Ratios for 1994 and 2001

What are the consequences of these associations for the scale of multiple deprivation in the wider sense that goes beyond the elements that comprise economic exclusion? If we focus first on the non-vulnerable group we find that the risk of being deprived on more than one of the four social exclusion items on which we have focused is minuscule and is effectively zero. As a consequence the question that we seek to answer relates not to the levels of multiple deprivation in the population as a whole but rather within the vulnerable class. In considering these figures it is necessary to bear in mind that, given the levels for the non-vulnerable class are effectively zero, the percentage reported must be multiplied by the size of the vulnerable class to get an estimate for the population as a whole.

Taken together with the relatively modest number of individuals experiencing a number of the deprivations, this has the consequence that the numbers exposed to a wider range of multiple deprivation encompassing any broader set of such elements will be extremely low. With this in mind we proceed as follows. Starting with the vulnerable class we estimate the percentage within this group experiencing:

- Secondary deprivation
- + Housing deterioration
- + Neighbourhood environment problems
- + Psychological distress.

The results are set out in Figure 4.8. In 1994, two-thirds of the economically vulnerable experienced secondary deprivation and onequarter of the vulnerable experienced both secondary deprivation and problems with housing. Just less then one-fifth also experienced problems with their neighbourhood environment. Finally, only 4 per cent also came above the psychological distress threshold. By 2001 these figures were half of their 1994 values. Thus, in 1994 a significant minority of the vulnerable class experienced multiple deprivation in the broader sense than we are now defining it. At the intermediate ranges of multiple deprivation – excluding psychological distress, this amounted to between one-quarter and one-fifth of the vulnerable class and 6 to 8 per cent of the population. By 2001 these figures had been halved and, given the much smaller size of the vulnerable class, the percentage exposed to multiple deprivation is reduced to between 2 to 3 per cent of the total population.

Figure 4.8: Risk of Multiple Deprivation for the Economic Vulnerable for 1994 and 2001



Vulnerability to economic exclusion involves distinctive levels of risk in relation to income poverty, basic deprivation and economic strain. It also involves relatively high exposure to secondary deprivation. However, when we extend our notion of multiple deprivation to incorporate housing and neighbourhood environment dimensions such deprivation is characteristic of only a modest proportion of the vulnerable class even in 1994. Furthermore by 2001 such exposure had been halved within the economically vulnerable class and affected only a small percentage of the population as a whole.

4.7 Conclusions

In this chapter we have distinguished between uses of the term social exclusion that relate respectively to what we have labelled economic exclusion, multiple deprivation and social cohesion. In examining these phenomena we have argued the need for a more explicit treatment of theoretical and measurement issues relating to the conceptualisation of economic and social exclusion as multidimensional. In initially addressing these issues, rather than seeking to deal with a wide range of dimensions, we have focused on a smaller number that we consider to be important on theoretical grounds and to be crucial building blocks in efforts to construct a reliable and valid index of economic exclusion. We also concentrated on dimensions where sufficient previous work exists to provide us with adequate confidence in the individual indicators and a body of knowledge concerning the observed relationships between them. From this starting point we have treated our measures as imperfect indicators of vulnerability to economic exclusion. Consistent with an understanding of exclusion as a process rather than a set of outcomes we distinguished between vulnerability to economic exclusion in terms of a heightened risk profile, experience of a particular disadvantage at a particular point in time and risk of exposure to multiple deprivation.

Applying latent class analysis to the LII data for 1994 and 2001 we were successful in both cases in identifying an economically vulnerable class with a distinctive multi-dimensional profile. The size of this class declined substantially over time but the pattern of differentiation became somewhat sharper. Our analysis thus confirms the value of a latent class approach to multidimensionality. Implicit in this approach is a dynamic perspective on social exclusion in which vulnerability is translated into the specific experiences of exclusion and in a sub-set of cases into multiple deprivation involving simultaneous experience of a range of deficits. While at each point in time basic deprivation was the most important factor distinguishing members of the economically vulnerable class from all others, our findings are entirely consistent with a perspective that requires that exclusion must be understood as the outcome of a process in which the accumulation and erosion of resources over time interacts with variability in the demands with which households must cope (Nolan and Whelan, 1996).

Between 1994 and 2001 there was a significant reduction in the degree to which welfare groups made up the economically excluded class and a shifting balance between welfare groups in the extent to which they were represented in this class. While the former change was of a modest nature the latter involved substantial change as the role of the unemployed declined significantly and that of the elderly and the ill/disabled increased. A clear downward trend in risk of economic exclusion was observed for all welfare groups as reductions ranging from one half to one-third were observed. Focusing on changing relativities between welfare groups we observed a substantial improvement in the situation of the short-term unemployed and relative deterioration in the situation of the elderly.

Taking a broader perspective on social exclusion, we found that economic exclusion was associated with a variety of dimensions of exclusion including secondary deprivation, housing deterioration, neighbourhood environment and psychological distress. However, both the absolute levels of exclusion and the degree of association with economic exclusion were in every case modest when compared to the situation for the set of indicators comprising the measure of economic vulnerability. The one exception to the former conclusion was secondary deprivation which occupies a position intermediate to the elements making up economic exclusion and the other aspects of social exclusion. However, while absolute levels of deprivation declined sharply in every case, the magnitude of association with economic exclusion was remarkably uniform across dimension and time. As a consequence of these outcomes even by 1994 the numbers fulfilling the conditions relating to any wider notion of multiple deprivation were modest even within the vulnerable class, and by 2001 the numbers had been halved. Despite the emphasis on such phenomena in the literature, no significant association was found between economic exclusion and indicators of social isolation.

Our evidence clearly shows that economic exclusion is a highly structured multidimensional phenomenon that can be captured by appropriate statistical techniques. Both our manner of conceptualising and measuring such exclusion focuses on vulnerability and the translation of such vulnerability into negative outcomes. Economic exclusion is also highly structured in the sense of being predictably associated with membership of key welfare groups. However, while economic exclusion is associated with other forms of social exclusion it is a mistake to assume that the processes that underlie different forms of exclusion are identical or even that they overlap significantly. This view is confirmed by our findings in relation to the scale of multiple deprivation. Thus an appropriate understanding of processes of social exclusion must accommodate the fact that such exclusion is to a significant degree predictable but that processes of social exclusion operate through a variety of causal paths that are not necessarily overlapping.

5. CONCLUSIONS

5.1 General Trends Over the Period

The general picture to emerge from this study is of a society where life-chances were improving significantly over the period under review. The striking exception was in relation to numbers below relative income poverty lines. As has been shown before, in an era of substantial real increases in income, welfare payments did not keep pace with increases in average household disposable income. As a consequence relative income indicators suggested radically different conclusions about societal trends from those based on living standards or levels of deprivation. The general improvement observed was directly related to declining unemployment and reduced levels of welfare dependence in a period of economic prosperity. However, the relationship between welfare support levels and average income remained of central importance for the kind of vulnerable groups on whom we focus in this study.

From a situation where they experienced particularly acute disadvantages, children saw a substantial improvement in their situation which was closely connected with a dramatic decline in welfare dependency. A substantial increase in parental working underpinned the significant improvement in the situation of children. The absence of a parent at work was also a key factor in identifying children who remained disadvantaged at the later date. By the end of the period children experienced about average risks of poverty and deprivation.

The situation of children provided a considerable contrast with that of older persons, who saw their relative income poverty rates rise substantially. However, across the broader set of indicators of living conditions this group saw a marked improvement in their situation. With the exception of specific problems relating to housing conditions, even older persons living alone had consistent poverty rates close to the average by the end of the period. Those living alone and those relying on state old age pensions at that point had higher consistent poverty rates than other older people.

For the unemployed, deprivation, economic strain and psychological distress levels all remained well above average, and over the period the gaps between them and others widened. However, the size of this group fell dramatically, and their housing and neighbourhood environment situation improved at an above average pace as their level of concentration in rented accommodation increased. Their level of welfare dependency also fell considerably, although a substantial proportion remained dependent. Among the unemployed, both the duration of unemployment and whether anyone else in the household was in paid work were key factors in predicting the extent of disadvantage reported. While the proportion of the unemployed who were in that position long-term fell substantially, that small group were increasingly marginalised.

The ill and disabled fared relatively poorly as their income poverty rates rose sharply and their rate of improvement in other areas were typically below average. A high proportion was in households in rented accommodation. On average this group was more disadvantaged than the unemployed. While having a household member at work was once again a significant buffering factor, unlike the situation for the unemployed no marked decline was observed over the period in the proportion who were in workless households.

Finally we focused on lone parents and their children as a group, and the sub-set living in lone-parent households – where the lone parent is the only adult. What were initially high levels of deprivation and consistent poverty fell rather more slowly over the period for them than for the unemployed. A high proportion of lone parent households in particular lived in rented accommodation, and in 1994 also had particularly high levels of welfare dependence. However the extent of dependence on welfare fell sharply to 2001, by which time their levels of welfare dependence were much lower than for the unemployed. Where the lone parent was in work levels of poverty risk and consistent poverty were low, but high levels of consistent poverty, basic and secondary deprivation and difficulties making ends meet were faced by lone parent households where that parent was not in work.

5.2 Trends in Relative Risks of Poverty

Focusing explicitly on relativities, in Chapter 3 we found the observed upward trends in relative poverty risk would have been a good deal sharper but for the change in the distribution of welfare groups. Of particular importance here was the rapid decline in the numbers of unemployed. The main deviation from the strength of the general trend towards increased income poverty rates involved a substantially sharper increase for the ill/disabled and the elderly. While of a somewhat more modest scale a significant improvement was observed in the relative risk level of the short-term unemployed.

For the consistent poverty lines, changes in the distribution contributed significantly to the downward trend at the 60 per cent line but for the 70 per cent line this was much less true. At the 60 per cent line significant change was observed in the relative position of the key welfare groups with a substantial relative improvement in the situation of children and the short and long-term unemployed and a significant deterioration in that of the ill/disabled and the elderly. The combined trends resulted in a particularly sharp reversal in the relative positions of the vulnerable groups. At the 70 per cent line a more stable situation was observed in relation to relativities between welfare groups. For the modified consistent poverty line both the downward trend and the consequences of the changing distribution of welfare groups were similar to those for the 60 per cent consistent poverty line. A consistent finding across poverty lines concerned the positive impact of both the reduction in the numbers of the unemployed and the improved relative situation of this smaller group at the end of the period.

5.3 Trends in Economic Vulnerability and Social Exclusion In Chapter 4 we introduced the notion of economic exclusion in order to address the issue of multidimensional change over time. Our objective was to identify an underlying group with a heightened risk profile in relation to income poverty, basic deprivation and economic strain. This group also experienced distinctively high levels of multiple disadvantage. The size of the vulnerable group showed a sharp downward trend over time from just over three out of ten to one in nine. At the same time the profile of the vulnerable class changed in a manner which involved even sharper differentiation between them and the rest of the population. At each point in time basic deprivation was the factor which best distinguished members of the economically vulnerable class from all others.

Economic exclusion was associated with a variety of dimensions of exclusion including housing, neighbourhood environment, health and organisational membership. However, in the case of factors such as housing, health and neighbourhood environment both the absolute levels of exclusion and the degree of association with economic exclusion were in every case modest when compared with differentiation in terms of being at risk of income poverty, basic deprivation and economic strain. While levels of deprivation relating to the wider set of social exclusion dimensions declined significantly over time the association between such forms of exclusion remained remarkably stable over time. Thus, while absolute levels fell for both the economically vulnerable groups and others, the relative disadvantage experienced by the former remained undiminished.

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