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MONITORING  
POVERTY TRENDS  
AND  
EXPLORING  
POVERTY  
DYNAMICS  
IN IRELAND

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# EXECUTIVE SUMMARY

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## Introduction

This study has two aims. The first is to use results from the Living in Ireland Surveys from 1994 to 1998 to describe trends in poverty and changes in the profile of those experiencing it over that period. The second, taking advantage of the panel nature of this survey, is to look for the first time at the dynamics of poverty in Ireland, at transitions into and out of poverty from one year to the next and the overall distributions of time in poverty over the five years.

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## The Data

The 1998 Living in Ireland Survey is the fifth wave of a panel survey that re-visits the same sample each year, following up those first interviewed in 1994. Significant numbers have dropped out of the sample over time, as is generally the case with such longitudinal surveys. The evidence at this point does not suggest that households with specific characteristics related to poverty and deprivation have been selectively lost from the sample. Nonetheless, the sample in the 2000 wave of interviewing has been increased with the support of the Department of Social, Community and Family Affairs.

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## Trends in Poverty

Current income on its own is a partial indicator of a household's command over resources, which will be influenced by the accumulation and erosion of assets over a long period. In addition, in a situation of very rapid growth in average incomes purely relative income lines miss an important part of what is happening over time. We therefore emphasise in this study, as in previous work, the need to complement relative income poverty lines with other approaches. The percentage of persons or households below half average income was generally higher in 1998 than in 1997, whereas there was a sharp decline in the percentage of persons falling below income lines up-rated in line with the increase in prices rather than average incomes.

This contrasting pattern reflected the fact that average household incomes rose rapidly, much faster than prices, unemployment fell sharply, and social welfare rates rose by more than prices but less rapidly than other incomes. As a consequence the numbers on social welfare fell but the remaining recipients fell further behind the average, and thus more fell below half average income. This particularly affected the relative position of the

elderly, which deteriorated markedly over the period from 1994 to 1998.

The measure of "consistent" poverty developed in previous ESRI research focuses on those both below relative income poverty lines and experiencing what was termed basic deprivation. The global poverty reduction target in the National Anti-Poverty Strategy is framed in terms of this measure of poverty. The extent of basic deprivation, which fell markedly between 1994 and 1997, continued to fall between 1997 and 1998. As a result, the percentage of households falling below 60 per cent of average income and experiencing basic deprivation also fell from 1997 to 1998, by which date it was just above 8 per cent. The NAPS target is now to bring the percentage below the 60 per cent line and experiencing basic deprivation to below 5 per cent by 2004.

The gap between consistently poor households and others in terms of deprivation levels widened considerably between 1994 and 1998. The combined income and deprivation measure continued to perform better than income on its own in identifying households who were finding it very difficult to make ends meet. The non-monetary indicators included in the basic deprivation measure were identical in 1994, 1997 and 1998, while average incomes and living standards are rising rapidly. Items such as central heating, a telephone, a car, a colour TV and being able to buy "presents for friends and families once a year" came to be perceived as necessities by a majority. However, if the basic deprivation index were broadened to include those items, the additional households who would be included among the poor were little different from non-poor in terms of level of (self-assessed) economic strain, psychological distress and fatalism. This provides some reassurance that the original set of basic items was still more successful in capturing generalised deprivation in 1998 than an expanded set would have been at that point.

### **THE PERSISTENCE OF LOW INCOME**

This study is the first to exploit the panel nature of the survey to look at the dynamics of poverty in Ireland. Many people experience poverty in some years but not in others, so the number affected by poverty at some point over the five-year period from 1994 to 1998 is a good deal higher than the numbers affected in any one year. Half the individuals in the sample fell below the 60 per cent relative income line at some stage between 1994 and 1998, compared to about one-third below that line in any given year. Two-fifths of the sample were under the 60 per cent line for two or more of the five years.

For those below that relative income threshold, the probability of rising above it is lower the more years one is in that situation. About one-fifth escape after one year, but only about 7 per cent do so after four years.

The unemployed have distinctively high levels of persistent low income, as do the unskilled manual class and those without

educational qualifications. The characteristics that predict persistently low income over time, and chances of exit from poverty, are much more strongly associated with consistent poverty than with relative income poverty at a point in time. This again suggests that the consistent poverty measure helps to capture medium to long-term processes of accumulation or erosion of resources.

Longer-term experience of low income is clearly associated with high levels of economic strain, psychological distress and fatalism. This confirms that persistent income poverty measures do much better than cross-sectional ones in identifying groups whose profiles conform to what one would expect among the poor.

### **TARGETING POVERTY**

Formulating a poverty reduction target raises different issues to measuring poverty at a point in time. In particular, target-setting needs to take into account the particular circumstances in which the anti-poverty strategy is operating, and ensure that it puts in place the structures required to eliminate poverty in the long term. In the present very unusual situation of very rapid economic growth, there is the danger that success, while real, could be transient. The key challenge in setting and monitoring poverty targets in Ireland's current situation is to capture the reality of rising living standards and falling deprivation, but also take into account the long-term consequences of lower incomes, and social security rates in particular, lagging behind the average.

We suggest that what is required is a broadening in the scope of NAPS poverty targets, to ensure not only that those on low incomes see their real incomes rise and their deprivation levels fall, but also that no-one falls too far below ordinary living standards which are themselves rising rapidly. There is every chance that the current NAPS global poverty reduction target could be reached by 2004, but that in time poverty would be "rediscovered" as a more usual growth path emerges and societal expectations converge with higher living standards. The only way to avoid this is to frame targets in a way which focuses attention on the long-term structural measures required to ensure that no-one falls too far below what will in time come to be taken for granted as ordinary living standards.

# 1. INTRODUCTION

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## 1.1 The Aims of the Study

Monitoring the evolution of poverty and assessing progress towards achieving the stated targets is of central importance to the National Anti-Poverty Strategy (NAPS). The original Strategy document, published in 1997, relied heavily for its understanding of the extent and nature of poverty in Ireland on research carried out at The Economic and Social Research Institute using the 1994 Living in Ireland Survey (notably Callan *et al.*, 1996). A later study (Callan *et al.*, 1999) employed the 1997 round of the Living in Ireland Survey to inform the monitoring and evaluation of NAPS. The present study, originally commissioned by the NAPS Inter-Departmental Policy Committee, has two main aims. First, it provides a further update using results from the 1998 round of the Living in Ireland Survey on the overall extent of poverty and the profile of those affected. Second, it makes use for the first time of the panel nature of the Living in Ireland Surveys to analyse poverty dynamics – the way people move in and out of poverty, and the persistence of poverty – between 1994 and 1998.

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## 1.2 Monitoring Poverty Trends and Measuring Poverty

In order to be able to monitor the Anti-Poverty Strategy's success in meeting its poverty reduction target and to understand how poverty is changing over time, it is essential to be able to measure the evolution of poverty from year to year on a consistent basis. This study presents a detailed picture of trends in poverty from 1994 to 1998, a period during which Ireland experienced very rapid economic growth and social change. This is achieved by employing both poverty measures based entirely on income, and measures of "consistent poverty" incorporating both low income and experience of manifest deprivation. The profile of those falling below relative income poverty lines, and those below those lines and experiencing basic deprivation is then examined in some detail. This serves to illuminate core issues about the way poverty has been evolving during Ireland's economic boom.

The global poverty reduction target incorporated in the NAPS is framed in terms of the "consistent poverty" measure, developed at the ESRI. As well as employing that measure, in this study we also reassess it in the light of recent experience and discuss issues relating to its application as living standards in society improve. The related but distinct issues to be faced in framing poverty targets are also discussed. Both the examination of poverty trends and this discussion of poverty measurement and targets are

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### 1.3 Studying Poverty Dynamics

intended to contribute to the review of the anti-poverty strategy and its targets being carried out through 2001.

Poverty is most often studied using cross-sectional data from a representative survey of households at a particular point in time, and comparing the results with a different (but also representative) cross-section for an earlier date. Panel surveys, on the other hand, return to the same individuals in each wave and gather the same information, so that one can build up a longitudinal picture of developments through time and in this way better understand the processes at work. This is very important because poverty is not a static phenomenon: many people who are poor in a particular year may not have been poor the previous year or may have escaped poverty by the following year. This implies that poverty is a relatively transitory phenomenon for some people, but also that substantially more people will be affected by poverty over a number of years than at any one point.

Recent research in the United States and other countries where panel data has been available has stressed the importance of distinguishing between exposure to poverty at a particular point in time and the experience of poverty over a period of time. Bane and Ellwood's (1986) classic article argued that the analysis of poverty persistence was fundamental both to understanding poverty itself and to the development of anti-poverty policy. As research based on panel analysis has increased, even the most cautious analysts, such as Jarvis and Jenkins (1997), conclude that from one year to the next there are significant numbers entering and escaping poverty. Others have offered the much bolder conclusion that "poverty is often no more than an episode in the course of life and is actively overcome by most of those afflicted by it" (Liebfried and Leisering, 1999). Ellwood (1998) suggests that cross-sectional analysis leads to a focus on symptoms and an emphasis on income support, while dynamic analysis gets closer to grappling with causes and focuses attention on the ways people escape from poverty. Even if these arguments can be overstated, there is little doubt that the analysis of poverty dynamics has intrinsic policy relevance.<sup>1</sup>

One implication of a dynamic perspective is that income at a point in time is likely to have serious limitations as a comprehensive indicator of living standards or poverty. It was recognition of this limitation, and of the importance of the accumulation and erosion of resources over time, that motivated the development of the "consistent poverty" measure. That measure in effect uses cross-sectional information to try to capture key dynamic influences on current living standards, but panel data

<sup>1</sup> Jenkins (1998) notes that academic findings on poverty dynamics in Britain were reported both in the *Financial Times* and the *Socialist Worker*.

now allows this to be complemented by direct measurement of the persistence of low income over time. The analysis and interpretation of poverty dynamics is a complex matter, and the results presented in this study represent only a beginning. It illustrates however that such analysis can significantly deepen our understanding of the nature and consequences of poverty processes.

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#### 1.4 Structure of the Study

The study is structured as follows. Chapter 2 describes the database on which the subsequent analysis relies, both in terms of the 1998 cross-section and the longitudinal data from 1994 to 1998. Chapter 3 then examines the overall trends in numbers falling below income poverty lines, derived in a variety of ways. Chapter 4 looks at the profile of risk and incidence when those income poverty thresholds are employed.

Chapter 5 turns to non-monetary deprivation indicators, which in combination with income help to identify those experiencing generalised deprivation due to lack of resources – or “consistent poverty”. Trends in the numbers both falling below relative income lines and experiencing basic deprivation are presented, and the types of households affected are examined. The set of indicators of basic deprivation incorporated into the consistent poverty measure has so far remained unchanged over time, and Chapter 6 looks at the critical issue of whether this set should be broadened to reflect changing living standards and expectations. It also discusses the way this and other indicators of poverty can best be used to frame poverty targets over time.

Chapter 7 begins the analysis of the dynamic and longitudinal data in the Living In Ireland Panel Survey. After discussing some methodological issues, the chapter then provides an overview of the distribution of years of poverty over the five years from 1994 to 1998, and the extent to which these years can be seen as independent of each other. The chapter formalises this dependency through the use of exit and re-entry probabilities. The final section of Chapter 7 examines the relationship between income poverty persistence and non-monetary deprivation indicators.

In Chapter 8 we extend this descriptive analysis by disaggregating the distribution of years of poverty by a number of important socio-economic dimensions. This chapter seeks to assess whether some groups experience persistent income poverty to a greater extent than others, and what this tells us about the underlying processes. In Chapter 9 we change tack to look at the association between persistent income poverty in terms of a range of outcomes such as psychological distress, economic strain and fatalism.

Finally, Chapter 10 brings together the main findings of the report, discusses their importance for the understanding of processes producing poverty, and draws out their implications for poverty targeting in the National Anti-Poverty Strategy.

## 2. THE LIVING IN IRELAND PANEL SURVEY DATA

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### 2.1 Introduction

In this chapter we describe the Living in Ireland Surveys on which this report is based. These surveys are unusual in the Irish context in being longitudinal in nature – following the same people from year to year – rather than repeated cross-sectional surveys. Here we bring out the rationale behind the design of the survey and the implications for the way the data was collected and for the nature of the sample. We begin with a brief description of the 1994 Living in Ireland Survey, the first in the series, and then describe in more detail the 1998 survey and the data available from it.

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### 2.2 The 1994 Living in Ireland Survey

The first wave of the Living in Ireland Survey (LII) carried out in 1994 has been described in detail in Callan *et al.* (1996, Chapter 3), so here we will only give a broad outline. The Living in Ireland Survey is the Irish component of the European Community Household Panel, conducted by the ESRI for Eurostat, the Statistical Office of the European Communities. The aim of the European Community Household Panel (ECHP) is to produce fully harmonised data on the social and financial situation and living standards of a panel of households in the different member states followed over a number of years. The fact that the same set of households is interviewed each year means that it is possible to study changes in their characteristics and circumstances over time. The ECHP in effect provides a harmonised cross-sectional picture for each year in which the survey is conducted, as well as longitudinal data that permits dynamic analysis of changes over time. In the present report, the Irish data are used for cross-sectional purposes only, but the dynamic potential of the data will be exploited in the next stage of this study to examine transitions into and out of poverty from one year to the next.

Eurostat has sought harmonisation of the questionnaires used in the different member states in terms of their content, structure and interpretation. The Living in Ireland Surveys are built around this core harmonised questionnaire, but with additional modules of questions. For instance, the Irish questionnaire collects full details on current income, as well as the previous-year annualised income on which Eurostat focuses.

The objective of the sample design was to obtain a representative sample of private households in Ireland. Those living in institutions such as hospitals, nursing homes, convents, monasteries and prisons, are excluded from the target population, in line with the harmonised guidelines set down by Eurostat and standard practice adopted in surveys of this kind (such as the Household Budget Survey conducted by the Central Statistics Office). Among those effectively excluded from the target population are a number of small groups known to face a high risk of poverty – such as the homeless and travellers not living in private households – as well as those living in institutions, whose poverty risk is harder to assess a priori. Doing justice to the particular circumstances of these groups would require research methodologies different from a general household survey, specially designed for the group in question. Consideration of the nature of such research, which would complement the picture of the population living in households provided by studies like the present one, is currently under way as part of a broad-ranging review of NAPS, to which the ESRI is contributing.

The sampling frame used for the Living in Ireland Survey was the Register of Electors. This provides a listing of all adults age 18 and over who are registered to vote in the Dáil, Local Government or European Parliament elections. This means that the target sample selected using the ESRI's RANSAM procedure was a sample of persons, not of households. Since the probability of selection is greater for households with a larger number of registered voters, this means that the resulting sample will tend to over-represent larger households. This was taken into account in reweighting the sample for analysis.

The organisation of the 1994 survey itself and details of the information sought were described in Callan *et al.* (1996). The total number of households successfully interviewed in 1994 was 4,048, representing 57 per cent of the valid sample. This response rate is as one would expect in an intensive and demanding survey of this nature, comparable to those achieved in for example the Household Budget Surveys. A total of 14,585 persons were members of the completed households. Of these, 10,418 were eligible for personal interview (i.e. born in 1997 or earlier), and 9,904 eligible respondents completed the full individual questionnaire (964 on a proxy basis). Summary details were collected on the household questionnaire on the 514 eligible individuals for whom no individual interview was obtained.

To ensure the representativeness of the sample, it was reweighted for analysis in terms of a number of key classificatory variables on which information was available from the Census of Population, the labour force survey, and administrative statistics on the number of recipients of different social welfare payments. The main elements in the reweighting scheme adopted for the 1994 data are described in Callan *et al.* (1996). The representativeness of the 1994 data after reweighting was assessed by comparison with independent external sources on a variety of

### 2.3 The 1998 Wave of the Living in Ireland Survey

dimensions. The results of this validation, again described in detail in Callan *et al.* (1996), have for the most part been highly satisfactory.

The sample from the Wave 1 (1994) Living in Ireland survey was followed in subsequent years and re-interviewed. The follow-up rules for the survey meant that new households might be included in each wave where a sample person from Wave 1 moved to another household. All individuals in the Wave 1 sample were to be followed in Wave 2 and household and individual interviews were to be conducted, as long as the person still lived in a private or collective<sup>2</sup> household within the EU. Table 2.1 summarises the wave-on-wave response rates, from Wave 2 to Wave 5.

As we have seen, in Wave 1 there were 4,048 completed sample households containing 14,585 individuals. Of these, 10,418 were eligible for individual interview and 9,904 (95 per cent) were interviewed individually. The total number of households eligible for inclusion in Wave 2 was 4,476, which included newly-generated households,<sup>3</sup> and of these 3,584 household interviews were completed, 794 did not respond, and 98 were non-sample households.<sup>4</sup> The household response rate (when non-sample households are excluded) was 82 per cent.

The completed households contained 12,649 persons (12,190 from Wave 1 and 459 new individuals), of whom 9,048 were

<sup>2</sup> Collective households are private households containing numerous "sub-households" and include boarding or lodging houses and army barracks. They do not include institutions such as hospitals, nursing homes, convents or prisons. If an individual moved to a collective household, they were followed and interviewed, and information on their "sub-household" was collected using the household questionnaire and the household register.

<sup>3</sup> These include households generated when someone from a Wave 1 household moves out to set up a new household, or pre-existing households that a mover from a Wave 1 household had joined by 1995.

<sup>4</sup> Non-sample households are those where all members are deceased, moved to an institution or outside the EU, or households not containing a "sample person" – someone who was in one of the original households in Wave 1.

eligible for individual interview (born in 1978 or earlier) and 8,531, or 94 per cent, were actually interviewed.

**Table 2.1: Number of Completed Households in Each Wave, Number of Sample Persons in Completed Households and Number Interviewed, Living in Ireland Surveys 1994-1998**

	1994	1995	1996	1997	1998
<b>Households</b>					
Completed Households	4,048	3,584	3,174	2,945	2,729
Non-Response	3,038	794	624	390	391
Non-Sample	166	98	125	119	96
Total Households	7,252	4,476	3,923	3,454	3,216
Household Response Rate	57%	82%	84%	88%	87%
<b>Individuals</b>					
N. in Completed Households	14,585	12,649	10,939	10,006	9,045
(% in Completed Households)		(84%)	(85%)	(89%)	(89%)
N in NR Households	n.a.	2,286	1,819	1,068	1,048
N in Non-sample Households	n.a.	117	181	169	116
Total Individuals		15,052	12,939	11,243	10,209
Eligible for Individual Interview (*)	10,418	9,048	7,902	7,255	6,620
Interviewed	9,904	8,531	7,488	6,868	6,324
Percentage Individual Interviews Completed	95%	94%	95%	95%	96%

Note: \* In completed households.

The household response rate in Wave 3 was 84 per cent. Interviews were conducted in 3,174 households containing 10,939 individuals. Of these, 7,902 were eligible for individual interview (born in 1979 or earlier) and 95 per cent, 7,488, were successfully interviewed.

By Wave 4, the household response rate had increased to 88 per cent, resulting in a completed sample of 2,945 households, containing 10,006 individuals. Of the eligible individual sample (born in 1980 or earlier) 95 per cent were interviewed, giving a completed individual sample of 6,868 persons. In 1998 the household response rate was 87 per cent, with 2,729 household interviews and 6,324 individual interviews completed (96 per cent of eligible individuals).

Despite the improving response rates, there has clearly been a sizeable attrition between Waves 1 and 5. Of the original 14,585 sample individuals, only 56 per cent (8,182) were still in completed Wave 5 households, with another 863 individuals having joined the sample at some point in the intervening years. The main reason for household non-response was refusal (ranging from 9 per cent of the eligible sample in Wave 2 to 5 per cent in Wave 5). Among the newly generated households, difficulties in obtaining forwarding addresses for those who moved also contributed to the non-response rate.

Given the relatively high sample attrition rate, it was important to carefully check for any biases that may be introduced if attrition is related to characteristics of households, such as size, location, economic status and income. These checks were conducted in the course of devising sample weights for the data in Waves 2 to 5, using information on the households and individuals from the previous wave's interviews. Appendix 1 provides the details of these results, which are in general encouraging. Although as noted earlier there is an association between non-response and changing address (which particularly affects young, single householders), the overall impact on the sample structure is slight. Apart from the loss of roughly half the households which had changed address between waves (including the newly generated households), the impact on the sample distribution of previous-wave characteristics amounted to, at most, 1 or 2 percentage points. In particular, the differences between the completed and total sample in terms of economic status of the head, numbers at work in the household, total numbers receiving the major social welfare payments, and Wave 1 poverty status of the household were very small. Overall then, although the attrition rate is relatively high, it has only a minor impact on the sample distribution of household characteristics. In particular, there is no evidence that households with specific characteristics related to the measurement of poverty and income distribution are being selectively lost from the sample.

As in previous years, a set of weights is applied to the sample actually used for analysis, to compensate for any known biases in the distribution of characteristics in the completed survey sample. Such biases can arise due to sampling error, to the nature of the sampling frame used or to differential response rates. In a cross-sectional survey, or in the first wave of a panel survey, the only way to check the distributional characteristics of the sample is to compare sample characteristics to figures from external sources. In waves following the first wave of a panel or longitudinal survey, we can also compare the characteristics of the individuals and households successfully followed to those of the individuals and households in a previous wave of the survey.

In constructing the weights for the Living in Ireland Survey in Waves 2 and subsequently, both of these methods were used. The details of the weighting process are set out in the Appendix and involved a number of steps. The first step was to derive weights to control for any bias due to sample attrition at the household level between waves of the survey. This involved adjusting the Wave 4 household weights so that the distribution of each of the characteristics for the responding Wave 5 households was equal to the distribution of these characteristics for the total sample. The next step was to apply external checks to the household weights using data from the fourth quarter of the 1998 Quarterly National Household Survey and other sources, such as the Department of Social Community and Family Affairs published statistics on numbers in receipt of various social welfare payments.

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## 2.4 The Longitudinal Sample

As discussed in the introduction to this chapter, the Living In Ireland Survey is a panel which allows to return to the same individuals in different years and examine how their circumstances may have changed between waves. In the latter part of this study we make use of this capability to examine the extent of poverty persistence and how this may be related to certain individual and household characteristics. However, as this approach requires that we follow individuals across time we have to confront some difficult issues presented by attrition in the sample that influence the types of analyses that can be performed.

As has already been discussed, through the life of the panel individuals and households have been lost to the sample, or have failed to provide an interview in particular years. Such attrition causes “censoring” problems when carrying out longitudinal analyses since if information is not gathered after a certain date we do not know the outcomes of certain processes. For example, if someone is poor in 1995 and 1996, but leaves the sample thereafter we do not know whether the poverty spell ended in 1996 or perhaps carried on through 1998. Such “right-censoring” is not difficult to take account of with the appropriate techniques and in a sense all data is censored because information stops at final interview. But, such “attrited” samples do demand complex weighting schemes to take account of the fact that certain cases may contribute more information than others simply because they stayed in the sample longer. The appropriate weighting technique in this situation is disputed (c.f. Enst, 1989; Lepkowski, 1989; Rendtel, 1991) and several different techniques are advocated. In the longitudinal chapters in this report we follow the methodology used in the British Household Panel Study (c.f. Taylor, 1996) and thus have chosen to use only those respondents who were interviewed in all waves from 1994 to 1998 and used longitudinal weights based on the 1994 weight, but which take account of attrition from the original sample over the four ensuing years. This approach cuts the sample of individuals available for analysis down from 9,904 in 1994 to 4,260. Tests show this sample to be as representative as the original sample after reweighting, although obviously not as sensitive in terms of subgroup analysis.

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## 2.5 Conclusions

This chapter has described the 1994 and 1998 Living in Ireland survey data on which the study relies. Particular attention was devoted to the representativeness of these samples, and any possible biases which could be associated with the fact that 1998 is the fifth wave in a panel survey, following up those originally interviewed in 1994. While we return to these issues later in the study, the evidence at this point does not suggest that households with specific characteristics related to the measurement of poverty and income distribution are being selectively lost from the sample. Nonetheless, given the scale of attrition and the shrinking size of the sample, the results presented have to be seen in the light of the possibility that an unmeasured bias has been introduced. For

this reason the sample in the 2000 wave of interviewing has been supplemented with a substantial set of new households (with the support of the Department of Social, Community and Family Affairs), as discussed below in our concluding chapter.

# 3. RELATIVE INCOME POVERTY IN 1998

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## 3.1 Introduction

We have emphasised in previous work the importance of acknowledging uncertainty about how best to measure poverty: no one method or set of results can provide all the answers. By applying a range of approaches, and variants of these approaches, a more rounded and comprehensive – if necessarily more complex – picture can be seen. Relative income poverty lines, which are widely employed internationally and where we start our analysis in this chapter, offer one perspective. Relative income lines have the advantages of ease of application and ready comparability over time and across countries. Within that broad approach, the application of a range of income lines allows the sensitivity of the results to the precise location of the poverty line to be assessed. However, looking at household income, and focusing on relative income thresholds, does not tell the whole story, either about poverty at a point in time or trends over time.

At a point in time, income is not a comprehensive measure of living standards and command over resources – and so does not tell us all we need to know to identify those experiencing exclusion from ordinary living standards due to lack of resources, the definition of poverty now accepted widely, and incorporated in the National Anti-Poverty Strategy. Over time, particularly in a situation of very rapid growth in average incomes, purely relative income lines may also miss an important part of the picture and give a misleading impression when taken alone. We therefore emphasise in this study, as in previous work, that relative income lines taken on their own can be misleading and need to be complemented with other approaches.

This is done here first by supplementing relative income lines with ones based on income thresholds held constant in real terms. This allows the complete picture from an income perspective to be seen in this chapter, which looks at trends between 1994 and 1998, and Chapter 4 which focuses on the types of household falling below those income lines. Second, we have demonstrated in previous work that non-monetary indicators can be usefully employed in poverty measurement, to focus more firmly than income lines on those experiencing generalised deprivation due to lack of resources. This is the subject of Chapters 5 and 6, which focus on the “consistent poverty” measure developed at the ESRI

### 3.2 Relative Income Poverty Lines

and adopted by the National Anti-Poverty Strategy in framing its global poverty reduction target.

As in previous work, we follow conventional poverty measurement practice in adopting the household as the income-sharing unit throughout this study, treating all members of a particular household as having the same standard of living. Some analysis of the situation of individuals within households has been undertaken using ESRI survey data by Callan (1994), Rottman (1994), and Cantillon and Nolan (1998, 2001), and these issues are being pursued further in a forthcoming study for the Combat Poverty Agency (Cantillon, Gannon and Nolan, forthcoming), but we do not explore them here.

A particular income level will mean a different standard of living for different households, depending on the number and ages of the people in the household. Again following previous work and conventional practice, *equivalence scales* are used to adjust household income for the differences in "needs" associated with differing size and composition. A detailed description of the particular scales we have employed in previous work is given in Callan *et al.* (1996, Chapter 4). Where the first adult in a household is given the value 1, our Scale A then gives each additional adult a value of 0.66 and each child a value of 0.33 in calculating the total number of "equivalent adults" in the household. Scale B gives each additional adult a value 0.6 and each child 0.4. Scale C gives each additional adult a value of 0.7 and each child 0.5. In each case, equivalent or equivalised household income is then calculated by dividing total income by the number of equivalent adults in the household. These scales have the advantage of covering quite a broad range, and in order to produce comparable results we use the same ones here, and continue to define children for this purpose as those aged under 14 years of age.

In constructing relative income poverty lines, a number of other choices have to be made as we have discussed in depth elsewhere, notably in Callan *et al.* (1996) Chapter 4. One is whether the mean or the median income is to be used in deriving those lines. The mean can be seen as preferable in being easily understood, but it may be highly sensitive to a small number of very high incomes, unlike the median. Here we examine trends with both mean and median income-based poverty lines to examine the possible sensitivity of the results to this choice. Mean income per equivalent adult can then be calculated either by taking the average over households, or by attributing the equivalised income of the household to each individual in it and taking the average over individuals. Once again we discuss results for both. In order to test the sensitivity of conclusions to the precise location of the poverty line we continue to use three separate cut-offs – 40, 50 and 60 per cent of mean income, 50, 60 and 70 per cent of median income.

The income concept employed throughout is disposable household income (income of all household members from all sources, after income tax and PRSI contributions are deducted). Mean disposable income per week simply averaged over all households in the 1998 Living in Ireland Survey, without equivalisation, was £395. This represents an increase of 15 per cent on the mean in the 1997 ESRI survey. Adjusting for household size and composition by equivalising household income using the three alternative equivalence scales described earlier, and averaging over households, produces the figures for average equivalent household income set out in Table 3.1. Mean equivalent disposable household income rose by about 14 per cent between 1997 and 1998. This means it has risen since 1994 by 44-45 per cent, depending on the equivalence scale used.

**Table 3.1: Average Weekly Household Equivalent Income, Living in Ireland Surveys 1994, 1997 and 1998**

Equivalence Scale	Income Per Adult Equivalent Averaged Over Households		
	1994	1997 £ per week	1998
A (1/0.66/0.33)	129.45	164.75	187.23
B (1/0.6/0.4)	131.39	167.54	190.93
C (1/0.7/0.5)	122.01	155.84	177.23

If one then constructs a relative income poverty line based on equivalent income averaged over households in 1998, the 50 per cent line for a single person household will vary between about £88 and £95, depending on the equivalence scale used. The corresponding line for a couple with two children ranges from £216 to £239, again depending on the equivalence scale employed. A relative income line for a single adult constructed as 40 per cent of mean equivalised household income in 1998 is in the range £70-76, while the 60 per cent relative income line for that household type lies in the range £106-114 per week.

### 3.3 Poverty Rates Using Relative Income Poverty Lines, 1994 and 1997

We now look in Table 3.2 at the percentage of households falling below these relative income poverty lines in 1994, 1997 and 1998.<sup>5</sup> We see that in 1998, about 10 per cent of households fall below the 40 per cent line, one-quarter are below the 50 per cent line, and one-third are below the 60 per cent income line. Compared with 1997, the percentage of households below the 40 per cent and 50 per cent relative income line had risen by 1998,

<sup>5</sup> Note that due to on-going revisions to data and weights the figures for 1997 differ from those published in Callan *et al.* (1999); there have also been slight changes to the 1994 figures presented there and in earlier publications.

whereas the percentage below the 60 per cent line was marginally lower. A similar picture is seen when 1998 is compared with 1994.

**Table 3.2: Percentage of Households Below Mean Relative Income Poverty Lines (Based on Income Averaged Across Households), Living in Ireland Surveys 1994, 1997 and 1998**

Equivalence Scale/ Poverty Line	Percentage of Households Below Line		
	1994	1997	1998
<b>Scale A (1/0.66/0.33):</b>			
40 per cent relative income line	4.8	6.3	10.5
50 per cent relative income line	18.6	22.4	24.6
60 per cent relative income line	34.1	34.3	33.4
<b>Scale B (1/0.6/0.4):</b>			
40 per cent relative income line	5.2	7.1	11.0
50 per cent relative income line	19.4	22.0	25.0
60 per cent relative income line	34.0	34.0	33.0
<b>Scale C (1/0.7/0.5):</b>			
40 per cent relative income line	7.0	7.0	10.0
50 per cent relative income line	17.9	19.8	24.2
60 per cent relative income line	32.9	34.2	33.5

While the position of households is relevant, the central underlying concern is about individuals affected by poverty. One can simply look at the percentage of persons in households below relative income lines (which we do in Appendix 2), but focusing on individuals can also have implications for the way the relative income lines are derived. Rather than averaging equivalent income over households, in focusing on persons one can attribute the equalised income of the household to each member, and then average income over individuals. (This is the practice followed in for example the UK's official *Households Below Average Income* publication.) The difference this makes in 1994 and 1997 was examined in Callan *et al.* (1996, 1999) respectively, where it was seen to produce lower poverty lines and rates than averaging across households. We now apply this approach for 1998 in Table 3.3. We see that poverty rates for persons on this basis are generally lower than the corresponding rates for households in Table 3.2, except with the 40 per cent line. In terms of trends over time, once again higher percentages fall below the 40 per cent and 50 per cent lines in 1998 than in 1997, whereas with the 60 per cent line there has been a decline.

As mentioned earlier, mean income in a sample may be quite sensitive to a small number of very high incomes reported at the top of the distribution, which can affect the way relative income lines based on the mean fluctuate over time. The median – the mid-point of the distribution – is not affected by such outliers in the same way. As in Callan *et al.* (1996, 1999) it is therefore also useful to examine poverty lines derived as proportions of median incomes. Because income distributions are skewed the median invariably lies below the mean, we construct poverty lines as 50, 60 and 70 per cent of the median among individuals (equivalising and attributing the equalised income of the household to each member). The results, presented in detail in Appendix 2, show that the poverty levels and trends are in fact quite similar to those

based as we have seen on the mean. Once again, they suggest that the percentage of persons below the lower and middle lines was higher in 1998 than 1997, but using the highest line this was not the case.

**Table 3.3: Percentage of Persons Below Mean Relative Income Poverty Lines (Based on Income Averaged Across Individuals), Living in Ireland Surveys 1994, 1997 and 1998**

Equivalence scale/ Poverty line	Percentage of Persons below line		
	1994	1997	1998
Scale A (1/0.66/0.33):			
40 per cent relative income line	5.2	6.3	9.1
50 per cent relative income line	17.4	18.1	20.0
60 per cent relative income line	30.4	30.1	28.6
Scale B (1/0.6/0.4):			
40 per cent relative income line	5.4	7.9	9.4
50 per cent relative income line	18.9	18.6	19.4
60 per cent relative income line	30.1	30.6	28.8
Scale C (1/0.7/0.5):			
40 per cent relative income line	6.8	8.1	8.8
50 per cent relative income line	18.8	18.2	19.5
60 per cent relative income line	29.4	30.7	29.1

The "head count" of households or persons falling below a given poverty line can usefully be supplemented with more sophisticated summary poverty measures based on income poverty lines, which take into account the depth of income poverty and the distribution of income among the poor. As in previous studies we again employ two widely used summary measures based on the gap between the poverty line and the incomes of those below the line, drawing on Foster *et al.* (1984). The first is the per capita income gap, which in effect combines information on the proportion of the sample falling below the poverty line and the average depth of their poverty. The second measure is sensitive not only to the depth of poverty but also to its distribution: it involves squaring the proportionate income gaps and taking the mean of that variable, which has the effect of giving most weight to those whose income gaps are greatest, i.e., those with the lowest incomes.

Results for the per capita income gap measure for 1994, 1997 and 1998 with the 40 per cent, 50 per cent and 60 per cent relative income lines (and equivalence scale A) are shown in Table 3.4.<sup>6</sup> With the 40 per cent and 50 per cent relative lines this measure rose between 1997 and 1998, having also risen consistently between 1994 and 1997, whereas with the 60 per cent line it was stable. The corresponding results for the "distribution-sensitive" measure are shown in Table 3.5. This measure is now higher in 1998 than 1997 for all three lines, reflecting the greater weight given to the largest poverty gaps which have been increasing. (As

<sup>6</sup>

We now revert to relative lines based on the mean, calculated across households.

detailed in Appendix 2, the alternative equivalence scales show the same picture.)

**Table 3.4: Per Person Income Gaps Using Relative Poverty Lines, 1994, 1997 and 1998 Living in Ireland Surveys (Equivalence Scale A)**

1994	Relative Poverty Line			1994	1997	1998	1994	1997	1998
	40 per cent	1997	1998						
.0103	.0137	.0161	.0338	.0390	.0427	.0736	.0775	.0775	

**Table 3.5: Distribution-sensitive Weighted Poverty Gap Measure Using Relative Poverty Lines, 1994, 1997 and 1998 Living in Ireland Surveys (Equivalence Scale A)**

1994	Relative Poverty Line			1994	1997	1998	1994	1997	1998
	40 per cent	1997	1998						
.0030	.0046	.0056	.0094	.0121	.0139	.0228	.0263	.0281	

### 3.4 Income Poverty Lines Held Constant in Real Terms

Over any prolonged period when general living standards are changing, perceptions and expectations as to what is acceptable will also change, and this provides the essential rationale for the relative conception of poverty, as incorporated in the NAPS and articulated in a European context by the Council of Ministers and the European Commission. However, as we have argued in previous work, it is also important to know what has been happening to real incomes, that is incomes adjusted for inflation. At a minimum, one would certainly want to be able to distinguish between a situation where the incomes of the poor are rising in real terms but lagging behind the average in society, and one where real incomes of the poor are falling while the average is stable. Thus, while we have consistently argued that a poverty standard which is fixed in real income terms will lose relevance over a lengthy period of growth, in Callan *et al.* (1996, 1999) we also looked at how household incomes evolved *vis-à-vis* such a fixed real standard over the relatively short time period since 1987.

While relative income poverty lines are widely employed in measuring poverty in industrialised countries, some also employ income poverty lines which are designed to represent a constant level of purchasing power from one year to the next. In the USA for example, which unusually has an official poverty line, this was constructed in the 1960s and indexed over time simply in line with prices. In the UK, while the main focus of attention is on *Households Below Average Incomes*, the official publication of that name also presents figures for the numbers falling below income thresholds indexed to prices since 1979. The starting-date and level of threshold selected for such an exercise is essentially arbitrary, so for convenience we have taken the 40, 50 and 60 per

cent relative income thresholds for 1987 and increased them in line with changes in the consumer price index from that date.

We saw in Callan *et al.* (1999) that the proportions of persons falling below these fixed real income standards fell sharply between 1987 and 1994, and again to 1997. We now see in Table 3.6 that there has been a further decline between 1997 and 1998 in the percentage of persons falling below these lines.<sup>7</sup> By 1998 only about 6 per cent of persons are below the 60 per cent line, compared with about 18 per cent in 1994 (and 30 per cent or more in 1987). There was also a decline with the middle line and lowest of these lines, but the numbers below them were in any case already very low by 1997.

**Table 3.6: Proportions of Persons Below 1987 Real Income Standards, 1994 and 1997 Living in Ireland Surveys (Equivalence Scale A)**

Real Income Standard 1987	Percentage of Persons Below Line:		
	1994	1997	1998
40 per cent line	1.9	1.3	0.6
50 per cent line	7.0	2.9	1.6
60 per cent line	17.7	8.0	5.7

### 3.5 Key Factors Underlying the Trends

A number of different factors lie behind the radically different trends in income poverty when assessed against thresholds indexed to average incomes versus thresholds held constant in purchasing power terms. These will become clearer when we examine the types of household affected, in the next chapter, but it is worth sketching out the key elements at this point. Real income growth was exceptionally rapid for those in employment after 1994, and the numbers in employment rose dramatically. By 1998, personal income per capita (as measured in the National Accounts) was up 40 per cent in nominal terms, and both average remuneration per employee (again as measured in the National Accounts) and numbers in employment were up 20 per cent. Unemployment had declined from 15 per cent to 7 per cent of the labour force. Average weekly gross earnings for industrial workers (as revealed by the CSO's Quarterly Industrial Inquiry) rose by one-quarter, and tax reductions meant the increase in take-home pay was larger. Those relying on social welfare for their main source of income also saw significant real increases, with payment levels rising faster than prices. The consumer price index rose by only 8 per cent over the period, while unemployment benefit and

<sup>7</sup> These results are for equivalence scale A, but Appendix 2 shows the same pattern using scales B and C.

assistance rates (for a single person) rose by over 15 per cent and pensions by 17-18 per cent.

All these factors contributed to rising real incomes and sharply falling numbers below income thresholds indexed only to prices. However, the fact that social welfare rates lagged behind incomes from other sources meant that relative income thresholds rose more rapidly; so more and more of those relying on social welfare fell below them. This is of central importance in the increase in relative income poverty with the 40 per cent and 50 per cent relative income line, and the fact that only a marginal decline was seen with the 60 per cent relative line, between 1997 and 1998 – and indeed from 1994 to 1998. We see in Table 3.7, for example, that in 1994 the basic rate paid to a single adult on Old Age Non-contributory pension was just above the 50 per cent relative income line, whereas by 1998 it was well below that line. Someone on the higher Contributory Old Age Pension in 1994 and with no other income would have been close to the 60 per cent line, whereas by 1998 they were below the 50 per cent line. A couple with two children relying on Unemployment Assistance would have been comfortably above the 40 per cent relative income threshold in 1994, but below the corresponding threshold in 1998. A lone parent with two children relying on social welfare would have been closer to the 50 per cent threshold in 1994 but below the 40 per cent line by 1998. As we shall see in the next chapter, this meant not only that the numbers below the relative lines behaved very differently to those below lines representing fixed purchasing power, but also that the profile of the households below these relative lines changed markedly.

**Table 3.7: Relationship Between Relative Income Poverty Thresholds and Social Welfare Levels, 1994-1998**

	1994 £ per week	1998 £ per week
<b>Single Adult</b>		
40 per cent relative income threshold	51.78	74.89
50 per cent relative income threshold	64.72	93.62
60 per cent relative income threshold	77.67	112.34
Unemployment Benefit	61.00	70.50
Old Age Contributory Pension <sup>a</sup>	75.80	89.00
Old Age Non-Contributory Pension <sup>a</sup>	65.80	78.50
<b>Couple with 2 Children</b>		
40 per cent relative income threshold	120.13	173.75
50 per cent relative income threshold	150.16	217.19
60 per cent relative income threshold	180.19	260.62
Unemployment Assistance <sup>b</sup>	131.31	150.82
<b>Lone Parent with 2 Children</b>		
40 per cent relative income threshold	85.95	124.32
50 per cent relative income threshold	107.44	155.40
60 per cent relative income threshold	128.93	186.48
Lone Parent Allowance <sup>b</sup>	100.81	115.72

<sup>a</sup> includes Living Alone Allowance.

<sup>b</sup> Includes Child Benefit.

### 3.6 Conclusions

Relative income poverty lines offer one perspective on poverty, and within that broad approach the application of a range of relative income lines allows the sensitivity of the results to the precise location of the poverty line to be assessed. However, particularly in a situation of very rapid growth in average incomes, purely relative income lines miss an important part of the picture and give a misleading impression when taken alone. We therefore emphasised in this chapter, as in previous work, the need to complement them with other approaches.

The application of income poverty lines to the data from the 1998 Living in Ireland Survey showed that the percentage of persons or households below half or 40 per cent of average income was higher than in 1997, whereas the proportion below 60 per cent of the mean declined. Relative income lines derived as proportions of the median rather than the mean showed a similar pattern. Distribution-sensitive summary poverty measures, taking into account not only numbers below the lines but how far their incomes are below the line, rose between 1997 and 1998 with all the relative income lines. There has however been a further decline in the percentage of persons falling below "real income" lines up-rated in line only with increases in prices since 1987.

Key factors explaining these trends were exceptionally rapid increases in numbers at work and in real income for those at work after 1994, together with social welfare payment levels rising faster than prices but lagging behind other incomes. As we shall see in the next chapter, this meant that while the numbers below the relative lines were much more stable than those below lines held fixed in terms of purchasing power, the profile of households below relative income lines changed markedly.

With about one in five persons falling below half average equivalised income (and the same number falling below 60 per cent of the median), Ireland has a high rate of relative income poverty compared with other EU member states (Nolan and Maitre 1999). This is not in our view the best way to measure poverty, particularly in our current circumstances, and we would not conclude from these figures that one-fifth of Irish people in 1998 were living in what was then regarded as generalised exclusion due to lack of resources – which is how poverty is defined in the NAPS. We would however see this high rate of relative income poverty as a serious structural problem that needs to be tackled while the resources are available to do so, for reasons we elaborate on later. First, though, we look in Chapter 4 at the profile of those falling below relative income lines, before going on in Chapter 5 to trends in poverty measured using both income and non-monetary indicators of deprivation.

# 4. THE PROFILE OF THOSE BELOW RELATIVE INCOME POVERTY LINES

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## 4.1 Introduction

We saw in the previous chapter the numbers falling below relative income poverty lines in 1998 and how this evolved since 1994. In order to understand these trends and see who is affected, we now proceed to a detailed analysis of the types of households involved. We focus first on household composition, then on the labour force status and age of the household reference person, and finally on relative income poverty for men versus women and for adults versus children. We employ the relative income thresholds based on proportions of mean equivalised household income. (To allow a comprehensive picture to be seen, corresponding results for lines based on the median rather than the mean, and focusing on persons rather than households, are given in Appendix 3).

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## 4.2 Composition of Households Below Relative Income Lines

In looking at which households fall below income poverty lines derived as proportions of mean equivalised income, we focus first on the number of adults and children they contain. Table 4.1 presents the risk for households of falling below the 50 per cent relative income line in 1994, 1997 and 1998 by household composition type (using equivalence scale A and counting those aged under 14 as children).

We see that between 1997 and 1998 the risk of being below the 50 per cent line increased sharply for households comprising one adult, also rose for households comprising two adults without children, and was unchanged for three or more adults without children. That risk remained stable for couples with 1 or 2 children, but fell sharply for couples with three or four or more children. It fell over time but remained very high for the one adult with children category, and was stable for 3 or more adults living with children.<sup>1</sup> This meant that there was a marked shift in the

<sup>1</sup> Since all those aged over 14 are counted as adults here, households with a married couple and older teenage offspring would be "3 or more adults", with or without children.

ranking of composition types by poverty risk. In particular, single adult households had by 1998 become the highest risk group, with a poverty rate almost twice that of the next-highest group.

**Table 4.1: Percentage of Households Below 50 Per Cent Relative Income Poverty Line by Household Composition Type, Living in Ireland Surveys, 1994, 1997 and 1998**

	1994	1997	1998
1 adult	22.5	40.1	50.8
2 adults	9.1	14.1	17.3
3 or more adults	9.9	12.1	12.0
2 adults, 1 child	14.0	17.0	14.8
2 adults, 2 children	12.7	12.8	13.1
2 adults, 3 children	22.5	28.2	9.8
2 adults, 4 or more children	36.7	39.5	24.9
1 adult with children	56.9	38.5	42.4
3 or more adults with children	28.6	23.7	25.9
All	18.6	22.4	24.6

A key factor producing these shifts, explored in detail below, was the improving situation of working-age households as numbers in employment and earnings levels both rose, together with a deterioration in the relative position of the elderly relying primarily on social welfare pensions which as we have seen lagged behind average earnings. The particularly sharp fall in risk for couples with three children, for example, primarily reflects a marked increase in numbers at work for this group. The increasing risk for single-adult households, on the other hand, reflects the fact that pensioners, who comprise a substantial proportion of this group, lagged behind.

Turning from risk to incidence, Table 4.2 shows the breakdown of the households below the 50 per cent poverty line by these household composition types. We see that one-adult households accounted for about 45 per cent of the households below this relative income line in 1998, up from 27 per cent in 1994. Households with two or three or more adults without children also increased in importance, balanced by a decline in the proportion comprising a couple with children. As a result, the shift in the composition of poor households away from households with children towards those without children, already

**Table 4.2: Breakdown of Households Below 50 Per Cent Relative Income Poverty Line by Household Composition Type, Living in Ireland Surveys, 1994, 1997 and 1998**

	1994	1997	1998
1 adult	27.4	40.5	45.3
2 adults	10.0	14.1	15.8
3 or more adults	9.6	10.9	10.8
2 adults, 1 child	4.0	4.8	3.4
2 adults, 2 children	5.1	4.3	3.7
2 adults, 3 children	6.0	5.3	1.5
2 adults, 4 or more children	4.5	2.2	1.5
1 adult with children	8.4	4.3	4.3
3 or more adults with children	24.9	13.6	13.6
All	100	100	100

marked between 1994 and 1997, continued apace. In 1994, households with children accounted for more than half all those below the 50 per cent relative income line. By 1998, this had fallen to only 28 per cent.

We now focus on risk and incidence with the 40 per cent relative income line. Table 4.3 shows that there was once again a sharp increase in risk for single-adult households between 1997 and 1998 with this line. The risk for couples with children generally falls (though there is an increase for those with 1 or 2 children), and there is a marked increase for one adult with children. In terms of composition, Table 4.4 shows that single-adult households again become more important among those below the 40 per cent line, though there is a less consistent shift away from households with children than with the 50 per cent line.

**Table 4.3: Percentage of Households Below 40 Per Cent Relative Income Poverty Line by Household Composition Type, Living in Ireland Surveys, 1994, 1997 and 1998**

	1994	1997	1998
1 adult	2.2	3.4	18.6
2 adults	3.3	5.4	5.2
3 or more adults	5.6	5.2	3.8
2 adults, 1 child	3.0	3.0	12.8
2 adults, 2 children	1.2	6.1	6.9
2 adults, 3 children	3.7	21.1	7.1
2 adults, 4 or more children	5.4	31.2	14.6
Others with children	11.3	8.8	17.5
1 adult with children	0.7	8.8	38.5
3 or more adults with children	13.1	8.8	13.5
All	4.8	6.3	10.5

**Table 4.4: Breakdown of Households Below 40 Per Cent Relative Income Poverty Line by Household Composition Type, Living in Ireland Surveys, 1994, 1997 and 1998**

	1994	1997	1998
1 adult	10.2	12.2	38.9
2 adults	13.7	19.1	11.1
3 or more adults	20.7	16.7	8.1
2 adults, 1 child	3.3	3.1	6.9
2 adults, 2 children	1.8	7.2	4.6
2 adults, 3 children	3.8	14.0	2.5
2 adults, 4 or more children	2.5	6.1	2.0
1 adult with children	0.4	3.5	9.2
3 or more adults with children	43.6	17.9	16.6
All	100	100	100

Focusing now on the highest, 60 per cent relative line, we see from Table 4.5 that the pattern of poverty risk across composition types is much more stable from 1997 to 1998 than it was with the two lower lines. There is still some increase in the risk for single-adult households, but a high proportion of these households were already below the 60 per cent line in 1997, reflecting the fact that basic social welfare payments to pensioners had fallen below that line. The composition of households below the 60 per cent line is

shown in Table 4.6. Once again the pattern is much more stable than with the other two relative lines. Almost two-fifths of the households below this line are single adults, and only 29 per cent contain a child.

**Table 4.5: Percentage of Households Below 60 Per Cent Relative Income Poverty Line by Household Composition Type, Living in Ireland Surveys, 1994, 1997 and 1998**

	1994	1997	1998
1 adult	50.4	51.7	56.3
2 adults	26.0	31.6	30.6
3 or more adults	18.2	23.6	20.3
2 adults, 1 child	23.5	20.9	16.6
2 adults, 2 children	17.6	15.7	18.8
2 adults, 3 children	33.2	32.4	18.5
2 adults, 4 or more children	47.8	45.7	43.9
1 adult with children	67.5	43.4	56.1
3 or more adults with children	43.1	40.2	36.2
All	34.1	34.3	33.4

**Table 4.6: Breakdown of Households Below 60 Per Cent Relative Income Poverty Line by Household Composition Type, Living in Ireland Surveys, 1994, 1997 and 1998**

	1994	1997	1998
1 adult	33.5	34.1	36.9
2 adults	15.5	20.7	20.7
3 or more adults	9.6	14.0	13.5
2 adults, 1 child	3.6	3.9	2.8
2 adults, 2 children	3.9	3.4	3.9
2 adults, 3 children	4.8	4.0	2.0
2 adults, 4 or more children	3.2	1.7	1.9
1 adult with children	5.4	3.2	4.2
3 or more adults with children	20.4	15.0	14.0
All	100	100	100

### 4.3 Labour Force Status

We now turn from household composition to examine the pattern of relative income poverty by labour force status. For this purpose we categorize households by the labour force status of the household reference person, who is defined by Eurostat for the purposes of the ECHP as the owner or tenant of the accommodation or, if a couple are jointly responsible, the older of the two. Table 4.7 shows the risk of being below the 50 per cent relative income line on this basis. We see that this risk remained very high for households where the reference person was unemployed, at about 56 per cent. For households where the reference person was ill or disabled or "in home duties", that risk rose from 1997 to 1998 to even higher levels than for the unemployed. Households headed by a retired person also saw an increase but from a much lower base, from 23 per cent to 29 per cent. For households headed by an employee the risk remained very low, at about 2 per cent.

**Table 4.7: Risk of Household Falling Below 50 Per Cent Relative Income Poverty Line by Labour Force Status of Household Reference Person, Living in Ireland Surveys 1994, 1997 and 1998**

	1994	1997	1998
Employee	2.8	4.0	2.3
Self-employed	15.1	17.1	15.8
Farmer	21.5	16.3	22.0
Unemployed	57.3	54.9	56.2
Ill/disabled	50.0	60.4	72.6
Retired	10.2	23.3	28.7
Home duties	33.2	48.6	58.4
All	18.6	22.3	24.3

The implications of this risk pattern for the incidence of relative income poverty with the 50 per cent line is shown in Table 4.8. We see that fully 39 per cent of the households below this income threshold had a reference person working full-time in the home. Only 15 per cent had an unemployed reference person, down from twice that figure in 1994, while the percentage with a retired reference person had doubled over the same period to 21 per cent.

**Table 4.8: Breakdown of Households Below 50 Per Cent Relative Income Poverty Line by Labour Force Status of Reference Person, Living in Ireland Surveys 1994, 1997 and 1998**

	1994	1997	1998
Employee	5.3	7.3	4.0
Self-employed	6.6	6.2	5.2
Farmer	8.0	5.0	6.2
Unemployed	30.3	18.9	15.4
Ill/disabled	9.6	9.1	8.8
Retired	10.1	17.9	21.2
Home duties	30.2	35.7	39.2
All	100	100	100

The pattern of risk with the 40 per cent relative line is shown in Table 4.9. There is now a sharp increase in risk for households where the reference person is unemployed, ill/disabled, retired or in home duties. This reflects the fact that this lower threshold has increasingly caught up with the safety-net levels of income support offered by the social welfare system, as the scale of increases in average incomes across all households outpace increases in social welfare rates.

**Table 4.9: Risk of Household Falling Below 40 Per Cent Relative Income Poverty Line by Labour Force Status of Household Reference Person, Living in Ireland Surveys 1994, 1997 and 1998**

	1994	1997	1998
Employee	0.5	1.0	0.4
Self-employed	8.5	8.3	12.5
Farmer	11.6	6.7	4.2
Unemployed	14.6	30.1	41.3
Ill/disabled	8.6	17.9	56.9
Retired	3.0	2.0	7.6
Home duties	5.3	7.0	19.1
All	4.9	6.2	10.4

Table 4.10 shows that this has served to increase the importance of households where the reference person is ill/disabled, retired or in home duties among those below the 40 per cent line. Households where the head is unemployed have declined in importance despite increasing risk, however, because of falling numbers unemployed.

**Table 4.10: Breakdown of Households Below 40 Per Cent Relative Income Poverty Line by Labour Force Status of Reference Person, Living in Ireland Surveys 1994, 1997 and 1998**

	1994	1997	1998
Employee	3.7	7.0	1.5
Self-employed	14.1	11.3	9.7
Farmer	16.7	7.7	2.8
Unemployed	29.5	38.9	26.6
Ill/disabled	6.3	10.1	16.2
Retired	11.2	5.7	13.2
Home duties	18.4	19.3	30.0
All	100	100	100

With the 60 per cent line, Table 4.11 shows that the pattern of risk is very much more stable between 1997 and 1998, as it was for household composition. Households where the reference person is unemployed, ill/disabled or in home duties are consistently at much higher risk of falling below this threshold than other households.

**Table 4.11: Risk of Household Falling Below 60 Per Cent Relative Income Poverty Line by Labour Force Status of Household Reference Person, Living in Ireland Surveys 1994, 1997 and 1998**

	1994	1997	1998
Employee	6.6	8.3	6.7
Self-employed	20.6	23.4	23.3
Farmer	31.5	31.6	35.1
Unemployed	75.1	71.0	72.1
Ill/disabled	75.7	79.0	80.4
Retired	37.0	45.4	42.7
Home duties	64.5	67.2	69.3
All	34.2	34.2	33.2

Table 4.12 shows that about one-third of the households below this highest relative line have a reference person engaged in home duties. About 23 per cent have a retired reference person, and the next-largest group is the 15 per cent with an unemployed reference person, down from 22 per cent in 1994.

**Table 4.12: Breakdown of Households Below 60 Per Cent Relative Income Poverty Line by Labour Force Status of Reference Person, Living in Ireland Surveys 1994, 1997 and 1998**

	1994	1997	1998
Employee	7.0	10.0	8.4
Self-employed	4.9	5.5	5.7
Farmer	6.5	6.3	7.2
Unemployed	21.7	15.9	14.5
Ill/disabled	7.9	7.7	7.1
Retired	20.0	22.6	23.1
Home duties	32.1	32.1	34.1
All	100	100	100

#### 4.4 Age and Gender

We have seen that the risk of being below the 50 per cent line increased particularly sharply between 1997 and 1998 for single person households and for those with a reference person who is retired or in home duties. Many of these are aged 65 or over, so to explore the underlying patterns further Table 4.13 shows the risk of being below the 50 per cent relative income line for households where the reference person is aged 65 or over (very few of which contain children), versus households where the reference person is under that age cut-off and there are/are not children. We see a sharp rise in the risk of being below the 50 per cent line from 1994 to 1997 and again from there to 1998 for households where the reference person is aged 65 or over, with over 42 per cent below that line by 1998. The poverty risk for the other two groups is much more stable, and by 1998 is about half the risk for the elderly. Tables 4.14 and 4.15 show the corresponding results with the 40 per cent and 60 per cent relative lines respectively. These show rather different patterns. With the 40 per cent line there is an increase in poverty risk for all three groups from 1997 to 1998. With the 60 per cent line, there is once again little change in the pattern of risk from 1997 to 1998.

**Table 4.13: Risk of Household Falling Below 50 Per Cent Relative Income Poverty Line by Presence of Children and Age of Household Reference Person, Living in Ireland Surveys 1994, 1997 and 1998**

	1994	1997	1998
Aged <65 No Children	16.1	15.5	17.3
Aged <65 with Children	25.6	22.4	20.5
Aged 65+	11.8	34.8	41.9
All	18.7	22.4	24.6

**Table 4.14: Risk of Household Falling Below 40 Per Cent Relative Income Poverty Line by Presence of Children and Age of Household Reference Person, Living in Ireland Surveys 1994, 1997 and 1998**

	1994	1997	1998
Aged < 65 No Children	3.5	5.6	10.4
Aged <65 with Children	7.0	9.6	13.4
Aged 65+	3.6	2.9	6.9
All	4.9	6.3	10.5

**Table 4.15: Risk of Household Falling Below 60 Per Cent Relative Income Poverty Line by Presence of Children and Age of Household Reference Person, Living in Ireland Surveys 1994, 1997 and 1998**

	1994	1997	1998
Aged < 65 No Children	23.7	24.5	23.4
Aged <65 with Children	36.3	30.7	28.7
Aged 65+	47.0	57.1	56.0
All	34.3	34.3	33.4

As well as looking at households, it is of interest to track the position of individuals of different ages. Table 4.16 shows the way the risk of being in a household falling below the 50 per cent relative income line has evolved for adults versus children, and among adults for those aged between 18 and 64 versus those aged 65 or more. We see that there has been an increase in risk for adults and a decline for children between 1994 and 1998, producing a very substantial narrowing in the gap between them. By 1998, the risk for children was only marginally greater than for adults. Among adults, however, there was a marked divergence between those of working age and those aged 65 or more. For the former the risk of falling below the 50 per cent threshold was static, whereas for the elderly it rose dramatically.

**Table 4.16: Risk of Falling Below 50 Per Cent Relative Income Poverty Line by Age, Individuals, Living in Ireland Surveys 1994, 1997 and 1998**

	1994 %	1997 %	1998 %
Adults	15.7	18.6	19.6
Aged 18-64	16.7	16.8	16.5
Aged 65 or more	10.1	28.9	35.9
Children (aged under 18)	30.6	26.8	23.0

Turning once again to the other two relative lines, Table 4.17 shows by contrast that the risk of falling below the 40 per cent line increased for children, elderly and non-elderly adults in roughly equal proportions so there was little change in their relative position. Table 4.18, on the other hand, shows that with the 60 per cent threshold the risk for children fell sharply while that for the elderly rose, so there was once again a marked convergence in the overall risk facing children versus adults.

**Table 4.17: Risk of Falling Below 40 Per Cent Relative Income Poverty Line by Age, Individuals, Living in Ireland Surveys 1994, 1997 and 1998**

	1994 %	1997 %	1998 %
Adults	4.8	6.0	8.0
Aged 18-64	5.1	6.6	8.4
Aged 65 or more	3.3	2.6	5.8
Children (aged under 18)	10.5	13.1	13.9

**Table 4.18: Risk of Falling Below 60 Per Cent Relative Income Poverty Line by Age, Individuals, Living in Ireland Surveys 1994, 1997 and 1998**

	1994 %	1997 %	1998 %
Adults	29.3	30.8	28.8
Aged 18-64	26.9	27.0	24.6
Aged 65 or more	41.4	52.3	51.6
Children (aged under 18)	42.4	36.6	32.9

Turning to gender, we see in Table 4.19 that in 1994 there was little gap between men and women in the risk of falling below the 50 per cent relative income threshold. By 1998, however, the risk for women was higher than men. Distinguishing between those aged 18-64 and those aged 65 or over, the table then shows that the emerging gap is predominantly among the elderly. This reflects the extent to which social welfare support rates, on which many elderly women in particular rely, lagged behind average income as detailed earlier. Table 4.20 shows that with the 40 per cent relative income threshold there is only a marginal difference between the risk for women versus men. Table 4.21 focuses on the 60 per cent threshold, where the pattern is much more like that seen with the 50 per cent threshold.

**Table 4.19: Risk of Falling Below 50 Per Cent Relative Income Poverty Line by Gender and Age Adults, Living in Ireland Surveys 1994, 1997 and 1998**

	1994 %		1997 %		1998 %	
	Men	Women	Men	Women	Men	Women
All Adults	14.5	16.7	15.5	21.6	16.8	22.2
Aged 18-64	15.6	17.9	15.3	18.3	15.3	17.6
Aged 65 or more	8.4	8.4	16.9	38.5	25.9	43.5

**Table 4.20: Risk of Falling Below 40 Per Cent Relative Income Poverty Line by Gender and Age Adults, Living in Ireland Surveys 1994, 1997 and 1998**

	1994 %		1997 %		1998 %	
	Men	Women	Men	Women	Men	Women
All Adults	4.7	5.0	5.3	6.7	7.0	9.0
Aged 18-64	4.9	5.4	5.8	7.4	7.5	9.4
Aged 65 or more	3.3	3.2	1.7	3.3	4.0	7.2

**Table 4.21: Risk of Falling Below 60 Per Cent Relative Income Poverty Line by Gender and Age Adults, Living in Ireland Surveys 1994, 1997 and 1998**

	1994		1997		1998	
	Men	Women	Men	Women	Men	Women
All adults	27.1	31.4	28.4	33.1	26.2	31.4
Aged 18-64	25.8	28.1	26.2	27.9	23.6	25.5
Aged 65 or more	35.0	35.0	42.9	59.9	42.2	58.8

## 4.5 Conclusions

This chapter has analysed who fell below relative income poverty lines in 1998, and how this had changed compared with 1997 and 1994. Focusing first on household composition, the most notable change was the continuing rapid increase in the risk for single person households of being below half average income. On the other hand that risk fell for most households with children. The result was that whereas households containing children accounted for more than half all those below the 50 per cent relative income line in 1994, by 1998 this had fallen to only 28 per cent. The risk of being below half average income for the elderly increased sharply, and the gap in risk between adults and children narrowed markedly.

Turning to labour force participation, the risk of relative income poverty remained very high for households where the reference person was unemployed, but the numbers in that situation continued to decline between 1997 and 1998. As a result, only 15 per cent of the households below this line in 1998 had an unemployed reference person, down from twice that figure in 1994. For households where the reference person was ill or disabled, "in home duties", or retired the risk of being below half average income also rose. For households headed by an employee the risk of being below this threshold remained very low. By 1998, about 60 per cent of the households below half average income had a reference person who was retired or working full-time in the home. With the 40 per cent relative line there was a sharp increase in risk between 1997 and 1998 for households where the reference person was unemployed, ill/disabled, retired or in home duties, as this lower relative income threshold caught up with the safety-net levels of income support offered by the social welfare system. The pattern of risk and incidence with the 60 per cent relative income line was much more stable.

# 5. POVERTY MEASURES INCORPORATING NON- MONETARY DEPRIVATION INDICATORS

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## 5.1 Introduction

There has been general agreement in recent years that poverty should be conceptualised in terms of exclusion from the life of society because of lack of resources, and thus the experience of what that particular society would regard as serious deprivation (Townsend, 1979). A definition of poverty in very much these terms has been enshrined in the Irish National Anti-Poverty Strategy (NAPS, 1997). It is common practice in many studies to measure such exclusion indirectly via the income of the household. However, as we have argued in previous work, income on its own has serious limitations for this purpose.

The general rationale of income poverty lines is that those falling more than a certain "distance" below the average are excluded from the minimally acceptable way of life in the society in which they live because of lack of resources. However, particularly at lower income lines, consistency between falling below an income line and experiencing relatively high levels of deprivation threshold is in fact low. As a consequence, using income versus deprivation to identify the most disadvantaged tends to identify groups with strikingly different socio-demographic profiles (Callan, *et al.*, 1993; Nolan and Whelan, 1996). These conclusions hold across a wide range of European Union countries, although the relationship between current income and deprivation is strongest in the poorer Southern European countries (Whelan *et al.*, 2000; Layte *et al.*, forthcoming).

The Irish case is even more complex, because the very rapid growth in average incomes since 1994 poses very particular problems in capturing what is generally regarded as exclusion. In such circumstances, relying on relative income lines alone could lead to particularly misleading conclusions.

Direct measures of deprivation can provide a valuable and complementary source of information in measuring poverty and assessing poverty trends. A measure of poverty combining both low income and manifest deprivation was developed initially by

ESRI researchers using the results of a large-scale household survey carried out in 1987. Callan, Nolan and Whelan (1993) and Nolan and Whelan (1996) used a range of deprivation indicators to produce different indices of deprivation, and those both below relative income poverty lines and experiencing what was termed basic deprivation were regarded as experiencing generalised deprivation due to lack of resources. The global poverty reduction target originally set out in the National Anti-Poverty Strategy in 1997, and revised in 1999, is framed in terms of this measure of poverty.

The construction of these deprivation indices is described in the first section of this chapter. We then examine the changes in deprivation levels between the 1994 wave of the Living in Ireland Survey and those observed in 1997 and 1998. In the third section we discuss how these indicators can be combined with low income into the single measure that has been termed "consistent poverty", and how overall scores and those for various sub-groups have changed between 1994 and 1998.

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## 5.2 The Deprivation Items and Indices

The 1994, 1997 and 1998 Living in Ireland Surveys obtained information on the 23 non-monetary indicators shown in Table 5.1. For all but four of these items, respondents were asked not only which items or activities they did not themselves have/avail of, but also, which of these they would like to have but had to do without because of lack of money. We then take deprivation to be "enforced" when respondents attribute doing without to being unable to afford the item or activity in question. (In all three years these questions were on the household rather than individual questionnaire and thus responses were from the person completing that questionnaire). For the last four items in the table, it is presence rather than absence that constitutes deprivation.

There are a number of different ways in which we could combine the items shown in Table 5.1 into overall measures of deprivation. We could for instance combine them into a single aggregate index running from 0 to 23, where 1 is added to the score for each item missing due to a lack of resources. However, this takes no account of the nature of the items or the relationships among them. Different items may relate to rather different aspects or dimensions of deprivation, and simply adding them in a single index without taking that into account may not be the most appropriate procedure. To investigate whether there were indeed different dimensions of deprivation, Callan, Nolan and Whelan (1993) and Nolan and Whelan (1996) used factor analysis to systematically examine the manner in which items cluster into distinct groups, in order to identify dimensions of deprivation. Analysis of data for a range of European countries provides broadly similar results. Each factor or dimension comprises those items that are more highly correlated with each other than with the other items.

**Table 5.1: Indicators of Style of Living and Deprivation in Living in Ireland Surveys**

New Not Second-hand Clothes*
A Meal with Meat, Fish or Chicken Every Second Day*
A Warm Waterproof Overcoat*
Two Pairs of Strong Shoes*
A Roast or its Equivalent Once a Week*
A Week's Annual Holiday Away From Home
To be able to Save Some of One's Income Regularly
A Daily Newspaper
Telephone
A Hobby or Leisure Activity
Central Heating
Presents For Family and Friends Once a Year
Car
Bath or Shower
Indoor Toilet
Washing Machine
Refrigerator
Colour Television
A Dry - Damp Free Dwelling
Had day in the last 2 weeks without a substantial meal*
Had to go without heating during the last year through lack of money*
Was not able to afford an afternoon or evening out in the previous 2 weeks
Experienced debt problems arising from ordinary living expenses or availed of charity*

\* "Basic" deprivation items.

This analysis identified three dimensions of deprivation:  
 basic life-style deprivation – consisting of basic items such as food and clothes;  
 secondary life-style deprivation – consisting of items such as a car, telephone and leisure activities;  
 housing deprivation – consisting of items related to housing quality and facilities.

This structuring of the dimension of deprivation remained unchanged between 1987 and the late 1990s.

The separate indices for enforced lack of basic, housing and secondary deprivation are of substantive interest in themselves, but in seeking to identify those excluded due to a lack of resources, we have concentrated on the basic deprivation index. The items in the basic deprivation index (marked with an asterisk in Table 5.1) clearly represented socially perceived necessities in the 1987 survey: "things that every household should be able to have and that nobody should have to do without". They cluster together in 1987, 1994 and 1997, they were possessed by most people, and reflect rather basic aspects of current material deprivation. This all lends support to the notion that they are useful as indicators of the underlying generalised deprivation we are trying to measure. Most of the items in the secondary dimension, on the other hand, were not overwhelmingly regarded as necessities in 1997. The third dimension, the housing and related durables, appears to be a product of very specific factors, and so – while providing valuable information about one important aspect of living standards – are not satisfactory as

indicators of current generalised exclusion (Nolan and Whelan, 1996).

Table 5.2 now shows how households scored on the 8-item index of enforced basic deprivation in 1994, 1997 and 1998. Looking first at the mean basic deprivation score in the three years, there has been a steady decline in the level of deprivation from 0.58 in 1994 to 0.24 in 1998. Confirmation that there has been a steady decline comes from the full distribution of scores, which shows a very marked decline in basic deprivation throughout the range of scores.

**Table 5.2: Distribution of Scores on 8-Item Basic Deprivation Index, 1994, 1997 and 1998 Living in Ireland Surveys**

Score	Percentage of Households		
	1994	1997	1998
0	74.6	84.1	87.2
1	13.2	8.9	7.2
2+	12.2	7.0	5.5
All	100.0	100.0	100.0
Mean	0.58	0.30	0.24

The percentage of households registering a score of one or more has fallen from 25 per cent to less than 13 per cent, while the percentage scoring two or more has fallen from 12 per cent to 6 per cent.

Have these large falls in basic deprivation occurred across all social groups, or have some groups benefited more than others have? Table 5.3 shows the proportion experiencing the enforced absence of one or more items in the basic index by household composition. We see that deprivation has fallen irrespective of household composition between 1994 and 1998 with households, although some types of households have experienced larger falls, mostly those that had lower levels of deprivation in 1994. For instance, households of 3 or more adults or those with 2 adults and a child have experienced falls of over 60 per cent. On the other hand those households with more children have seen deprivation decrease by just under 40 per cent. Categorising households by age and presence of children in Table 5.4, we find once again that deprivation has decreased across the board, although it has decreased more among those households where the reference person is over 65.

**Table 5.3: Risk of Scoring 1 or More on Basic Deprivation Index by Household Criteria Composition Type, Living in Ireland Surveys, 1994, 1997 and 1998**

	1994	1997	1998
1 adult	23.4	15.4	13.4
2 adults	16.0	11.8	10.8
3 or more adults	21.6	12.4	8.2
2 adults, 1 child	24.8	10.1	8.7
2 adults, 2 children	18.2	12.0	8.6
2 adults, 3 children	30.7	24.8	18.8
2 adults, 4 or more children	40.5	34.4	24.7
Others with children	41.4	27.3	22.3
All	25.4	15.9	12.8

**Table 5.4: Risk of Scoring 1 or More on Basic Deprivation Index by Presence of Children and Age of Household Reference Person, Living in Ireland Surveys 1994, 1997 and 1998**

	1994	1997	1998
Aged < 65 No Children	21.4	14.4	11.7
Aged <65 with Children	33.3	20.5	17.2
Aged 65+	19.7	11.5	8.7
All	25.6	15.8	12.7

Finally in Table 5.5 we examine the risk of basic deprivation by the economic status of the household reference person. Here we once again find falls among all groups between 1994 and 1998, although the decrease is not even across the period for some groups. Among the self-employed and farmers we find increasing deprivation between 1997 and 1998, although the increase is of a small magnitude. We now go on to bring out the implications of this decline for the poverty measure we have developed which takes both basic deprivation and low income into account.

**Table 5.5: Risk of Scoring 1 or More on Basic Deprivation Index by Labour Force Status of Head, Living in Ireland Surveys 1994, 1997 and 1998**

	1994	1997	1998
Employee	16.1	11.2	7.9
Self-employed	11.2	5.8	6.5
Farmer	16.7	6.9	7.5
Unemployed	62.3	43.1	38.1
Ill/disabled	50.2	37.3	31.0
Retired	18.3	10.0	8.3
Home duties	37.8	23.7	19.1
All	25.5	15.6	12.4

### 5.3 The Combined Income and Deprivation Poverty Measure

So far we have seen that a coherent set of deprivation measures emerge from the 23 items outlined in Table 5.1, and that there have been significant reductions in the "basic" index of deprivation, which is the measure we have used to identify generalised deprivation. As in our earlier work, this is now combined with the relative income poverty lines to construct a "consistent" poverty measure in which households have both a limited income and are experiencing basic deprivation. The use of a range of income lines allows us to see the consequences of varying the income criterion for the numbers and types of households identified as poor, so we again employ relative income lines derived as 40, 50 and 60 per cent of mean equivalised disposable income.

Table 5.6 shows the percentage of households deprived of one or more items on the basic index because of a lack of resources and falling below different relative income lines (using equivalence scale A). Callan *et al.* (1999) showed that there were substantial falls in this poverty measure between 1994 and 1997, from 15 per cent to under 10 per cent with the 60 per cent relative income line. We now see that there was a further fall to 8.2 per cent between 1997 and 1998. The measure also declined with the

50 per cent relative income line, although here the drop was less pronounced from 9 per cent in 1994 to 6.7 per cent in 1997 and 6.2 per cent in 1998. On the other hand, with the 40 per cent line the poverty measure rose slightly, from 2.4 per cent in 1994 to 3.1 per cent in 1997 and 3.5 per cent in 1998. This reflects the increase in numbers falling below that lowest relative income line, already discussed in Chapters 3 and 4.

**Table 5.6: Percentage of Households Below Relative Income Thresholds and Experiencing Basic Deprivation in 1994, 1997 and 1998 Living in Ireland Surveys**

Relative Income Line (Eq. Scale A)	Percentage of Households below Line and Experiencing Enforced Basic Deprivation		
	1994	1997	1998
40 per cent line	2.4	3.1	3.5
50 per cent line	9.0	6.7	6.2
60 per cent line	15.1	9.7	8.2

The non-monetary indicators included in the basic deprivation measure on which these results are based are identical in 1994, 1997 and 1998. Indeed, the same set was previously used in examining 1987. Yet the notion that expectations and perceptions of needs will change over time as general living standards rise is central to a relative conception of poverty. Against the background of the very rapid increases in average incomes and living standards that have taken place over the period, are these indicators still capturing what would now be regarded as generalised deprivation? This issue has particular salience for policy since the government chose to frame the NAPS global poverty target in terms of the combined income and basic deprivation measure. We discuss in the next chapter whether the set of items included in the measure to best capture generalised deprivation now needs to be expanded, and the distinct issue of whether this on its own is a satisfactory overall poverty reduction target in Ireland's current circumstances. In this chapter, though, we continue to use the consistent poverty measure in its current form, to see which types of household are most likely to be affected.

#### 5.4 Risk and Incidence with the Consistent Poverty Measure

Having outlined overall trends in deprivation and in the combined income/deprivation poverty measures, we now look at the pattern of poverty risk and incidence with these measures and how that has been changing for different types of household. We concentrate on the categorisation by labour force status of the household reference person, and Table 5.7 shows the percentage in each category falling below the 60 per cent relative income line and experiencing basic deprivation. Declining poverty rates over the 1994-98 period are seen for all these groups. Households where the reference person is unemployed or ill/disabled are consistently at highest risk throughout the period, and in 1998 still face poverty rates of about 30 per cent with this measure.

**Table 5.7: Risk of Household Falling Below Combined 60 Per Cent Relative Income Line/Deprivation Criteria by Labour Force Status of Reference Person, Living in Ireland Surveys 1994, 1997 and 1998**

<b>Below 60 per cent income line and experiencing basic deprivation</b>	<b>1994</b>	<b>1997</b>	<b>1998</b>
	<b>%</b>	<b>%</b>	<b>%</b>
Employee	2.3	2.6	1.4
Self-employed	4.7	3.4	2.5
Farmer	4.8	2.3	5.3
Unemployed	52.7	35.7	29.7
Ill/disabled	43.3	32.6	28.1
Retired	10.5	7.7	7.5
Home duties	29.4	17.2	15.3

In Table 5.8 we then look at the composition of the households meeting this combined poverty criterion. We see that the proportion with an unemployed reference person has fallen over the period, but only from about one-third in 1994 to about one-quarter by 1998. About one-third have their reference person engaged in home duties. The proportion where the reference person is retired has increased from 13 per cent to 17 per cent over the period.

**Table 5.8: Breakdown of Households Below Combined 60 Per Cent Relative Income/Deprivation Criteria by Labour Force Status of Reference Person, Living in Ireland Surveys 1994, 1997 and 1998**

	<b>1994</b>	<b>1997</b>	<b>1998</b>
Employee	5.5	11.8	7.4
Self-employed	2.6	2.9	2.6
Farmer	2.1	1.6	4.7
Unemployed	33.8	28.9	25.6
Ill/disabled	10.4	10.5	10.8
Retired	12.7	14.1	17.4
Home duties	32.9	30.3	31.5

It is also of interest to look at the pattern of risk when the 50 per cent relative income line is combined with basic deprivation, in Table 5.9. This shows that there have been general decreases in the risk for most groups, but the retired are an exception with their risk increasing from 3.5 per cent in 1994 to 6 per cent in 1998. We saw earlier that levels of deprivation have been decreasing faster among the elderly than among younger age groups in the period between 1994 and 1998, but the increases in relative income poverty among the elderly at the 50 per cent line – discussed in detail in Chapter 4 – are dominating this combined poverty measure.

**Table 5.9: Risk of Household Falling Below Combined 50 Per Cent Relative Income Line/Deprivation Criteria by Labour Force Status of Reference Person, Living in Ireland Surveys 1994, 1997 and 1998**

	1994	1997	1998
Employee	0.9	1.5	0.5
Self-employed	3.6	2.0	2.5
Farmer	2.7	0.6	2.8
Unemployed	40.3	28.9	23.8
Ill/disabled	25.4	30.3	26.6
Retired	3.5	3.4	5.7
Home duties	16.4	11.6	10.6

Only a small proportion of all households fall below the 40 per cent relative income line and experiencing basic deprivation, so when that group is disaggregated the sub-categories could contain only a handful of households. In 1998, the risk of being below that line and experiencing basic deprivation was particularly high for households where the reference person was unemployed or ill/disabled

## 5.5 Conclusions

We have seen in this chapter that the extent of basic deprivation, which fell markedly between 1994 and 1997, continued to fall between 1997 and 1998. As a result, the percentage of households falling below 60 per cent of average income and experiencing basic deprivation also fell from 1997 to 1998, by which date it was just above 8 per cent. The government chose to frame the NAPS global poverty target in terms of this combined income and basic deprivation measure, the target now being to bring the percentage below the 60 per cent line and experiencing basic deprivation to below 5 per cent by 2004.

The pattern of poverty risk and incidence with this measure was also examined, categorising households by the labour force status of their reference person. Declining poverty rates over the 1994-98 period were seen for all these categories, though there was little or no change between 1997 and 1998 in the risk for households where the reference person is ill/disabled or retired. Households where the reference person is unemployed or ill/disabled were consistently at highest risk throughout the period, and in 1998 still faced poverty rates of about 30 per cent with this measure. However, the proportion of all poor households with an unemployed reference person fell over the period, from about one-third in 1994 to about one-quarter by 1998, reflecting the decline in the numbers unemployed. About one-third of poor households on this measure had their reference person engaged in home duties, and for 18 per cent he or she was retired.

The decline in the numbers below the 60 per cent or 50 per cent relative lines and experiencing basic deprivation, with an unchanged set of deprivation indicators, represents an important and welcome development. However, it also gives rise to important questions about the poverty measure. Does an

unchanged set of indicators continue to adequately capture what is regarded as generalised deprivation as living standards rise? And is the consistent poverty measure the best way to frame a poverty target? These are the key questions addressed in the next chapter.

# 6. REASSESSING THE CONSISTENT POVERTY MEASURE

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## 6.1 Introduction

We have seen in the previous chapter that “consistent poverty”, measured as the percentage falling below the 60 per cent relative income line and experiencing basic deprivation, fell sharply after 1994 and had reached 8 per cent in 1998. This is based on a measure of basic deprivation using a specific set of indicators, and the key question to be addressed in this chapter is whether this set continues to adequately capture what is regarded as generalised deprivation as living standards have risen. We start by reiterating the rationale for the selection of these items in the first place, in Section 6.2. We then look in Section 6.3 at the way levels of possession of various items and views about whether they represent necessities have evolved over time. Having identified certain items as candidates for inclusion in an expanded set of indicators, we then assess in Section 6.4 whether this would be appropriate at this stage. Finally, turning from measurement to targeting, we consider in Section 6.5 the related but distinct issue of how best to frame a poverty target and whether a target framed purely in terms of the consistent poverty measure is adequate.

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## 6.2 Capturing Generalised Deprivation in Measuring Poverty

In measuring poverty, the starting point has to be how it is defined. The definition which has by now been widely adopted is that people are poor when as Townsend put it, “Their resources are so seriously below those commanded by the average individual or family that they are, in effect, excluded from ordinary living patterns, customs and activities” (1979 p.31). A definition very much in the same vein has been adopted at European Union level and in the Irish National Anti-Poverty Strategy. The problem comes with implementing this definition to measure poverty. As we have seen, the most common approach has been to set a poverty line in terms of relative income, and identify those with incomes below the line as poor.

Income-based poverty lines can be seen as focusing wholly on the “resources” element of the definition, but as highlighted in Chapter 5, they face the fundamental problem that low current income is not a reliable measure of exclusion arising from lack of

resources. Quite simply, some of those on low income do not appear to be experiencing high levels of deprivation, and some of those on the lowest incomes are experiencing less deprivation than those slightly higher up the income distribution. In a cross-sectional context, this means that income lines (whether derived as proportions of average income or otherwise) may seriously mislead as to the extent of poverty and the types of household most seriously affected. This may partly reflect the difficulties in measuring income accurately in household surveys, but more importantly it is because a household's command over resources is affected by much more than its current income. Long-term factors, relating most importantly to the way resources have been accumulated or eroded over time, play a crucial role in influencing the likelihood of current deprivation and exclusion.

When used to capture trends in poverty over time, relying on income lines framed purely in relative terms faces further serious difficulties. While it makes sense to see poverty primarily in relative terms, concentrating entirely on relative income poverty lines will miss the serious implications of periods when average incomes and real incomes for the poor actually fall – which can happen, even in rich countries. They are also particularly problematic when real incomes are rising rapidly, as they did in Ireland since 1994, so that growth in incomes may for a time run ahead of the rising expectations about what is “adequate”. While employing both relative income lines and ones held fixed in real terms can give a more rounded picture, income lines will still find it difficult to fully reflect changes in the extent and nature of exclusion arising from inadequate resources.

Callan, Nolan and Whelan (1993) and Nolan and Whelan (1996a and b) argued from this starting-point that a more valid measure of exclusion due to lack of resources can be constructed by combining income with suitable direct information on indicators of deprivation – items generally regarded as necessities, which individuals or families must do without because they “cannot afford” them. While such non-monetary indicators are increasingly used elsewhere, the approach developed using Irish data was distinctive.<sup>9</sup> Other studies either used non-monetary indicators to directly identify the poor, or to derive an income threshold for that purpose. Callan, Nolan and Whelan (1993), by contrast, implemented Ringen's (1987) proposal that both income and deprivation criteria be used to identify households excluded from society due to lack of resources.

Factor analysis of data from the 1987 ESRI survey on a range of non-monetary indicators revealed three underlying dimensions of deprivation, to which the terms basic, secondary and housing

<sup>9</sup> Townsend (1979) and Mack and Lansley (1985) pioneered the use of non-monetary indicators of deprivation in this context, and other studies in that vein include Townsend and Gordon (1989), Freyman *et al.* (1991) and Gordon *et al.* (1995) with British data; Mayer and Jencks (1987) with US data; Muffels and Vrien (1991) using Dutch data; and Hallerod (1995) with data for Sweden.

dimensions were applied. The "basic deprivation" cluster included not being able to afford heating, a substantial meal once a day, new rather than second-hand clothes, a meal with meat, chicken or fish every second day, a warm overcoat, two pairs of strong shoes, a "roast" or equivalent once a week, and falling into arrears or debt paying everyday household expenses. These items were perceived to be social necessities by respondents in the sample – that is, "things that every household should be able to have and that nobody should have to do without". They were possessed by most people, reflected rather basic aspects of current material deprivation, and clustered together. On this basis they were taken to be most suitable as indicators of the underlying generalised deprivation one is trying to measure. Most of the items in the secondary dimension, such as a car or a telephone, were not overwhelmingly regarded as necessities in 1987. The housing and related durables indicators, while generally regarded as necessities, appeared to be related to very specific factors, and so while providing valuable information about one important aspect of living standards were not regarded as satisfactory as indicators of current generalised exclusion.

Those both on relatively low incomes – below relative income poverty lines – and experiencing enforced basic deprivation were then identified as experiencing generalised deprivation or exclusion due to lack of resources – in other words, as poor. Deprivation was "enforced" in the sense that respondents stated both that they did not have the item in question and that this was because they could not afford (rather than did not want) it. Those identified as "consistently poor" were then more likely to be drawn from the working class and less likely to be self-employed or farm households than the worst-off group of the same size selected purely on the basis of income. They were also considerably more likely to report experience extreme difficulty in making ends meet and to experience psychological distress.

It must be emphasised that this combined poverty measure was never intended to be a mixture of relative income and absolute or fixed deprivation indicators. Deprivation of the basic items was seen as involving a distinctive level of deprivation, but the focus was not on the specific items making up the index. Instead, each item was acting as an imperfect measure of the underlying deprivation dimension. Thus there is no inconsistency or contradiction in the fact that some of those displaying basic deprivation had some of the other items. This is illustrated by the fact that in 1987, when the consistent poverty measure was first employed, a majority of poor households possessed a range of life-style items going beyond the basic deprivation set including a video, central heating and a telephone. The basic items are not intended to define the standard of living of the household in either a descriptive or a normative fashion. Instead, they are intended to enable us to identify a set of households whose level of deprivation is distinctive and whose experience of economic hardship is equally distinctive.

The conceptual underpinnings of the consistent poverty measure, rather than encouraging absolutist notions of poverty to be measured against a fixed standard, thus highlight the need to adapt and augment the non-monetary deprivation indicators in the light of improved living standards, changing perceptions about what constitute necessities, and potential transformations of the underlying structure of deprivation. Significant change within one of these areas could lead to the need for a revision and adaptation of the deprivation component of the poverty measure.

The need to review the measure is reinforced by the fact that incomes and living standards have increased dramatically in Ireland over the past decade. As we have seen, purely relative income poverty measures are particularly problematic in periods where living standards are falling, or are improving rapidly. In this instance, when deprivation is falling markedly many people may not regard rising numbers falling below a relative poverty line as an unambiguous increase in poverty. This may be true even if they accept that, over a lengthy period as new patterns of living standards emerge, societal expectations may indeed catch up and adjust fully to higher average incomes. Where a poverty measure incorporates a deprivation index, on the other hand, the concern may be that even if those on low incomes share in the benefits of growth and see their living standards rise significantly, it fails to capture the deterioration in their relative situation.

### 6.3 Non-Monetary Deprivation Indicators in 1987 and 1998

The question then arises as to whether the set of items originally identified as serving this purpose with data for 1987 continue to do so when measuring poverty in the late 1990s. To fill in the background, we look first at the evolution of levels of possession of the full range of deprivation indicators and views about which constitute necessities. For the twenty life-style items for which this information is available, Table 6.1 sets out first the extent to which items were "lacked" in 1987 and 1998. It then shows the percentage in each sample doing without and saying this was because they could not afford it. Finally, the percentage saying they regard the item as a necessity ("something that everyone should be able to have and no-one should have to do without due to lack of money") is shown for 1987 and 1997 rather than 1998 (because this information was not included in the 1998 survey).

It is clear that across the range of items there has been a significant reduction in the numbers lacking items and in the extent of enforced lack. There was a significant reduction in the numbers experiencing an enforced lack of items such as a warm waterproof overcoat and a meal with meat, chicken or fish every second day. There was also a dramatic movement for many of the secondary items. The number lacking central heating fell from 45 per cent to 15 per cent, and enforced absence declined from 30 per cent to 10 per cent. Similarly by 1998 only one in eight households lacked a telephone compared to one in two in 1987, while for enforced absence the corresponding figures were 31 per

cent down to 8 per cent. The changes relating to car ownership are less dramatic but even so the percentage lacking a car fell from 38 per cent to 28 per cent and enforced lack was almost halved, dropping from 22 per cent to 13 per cent. By 1998 the percentage lacking a colour television declined from 20 per cent to only 3 per cent, and percentage unable to afford one fell from 11 per cent to 1 per cent. Finally the percentage not giving presents to friends or family fell from just less than one in four to one in twelve, and the number unable to afford such presents went from 13 per cent to 5 per cent. Most of the housing-related items had already been available to the vast majority of households in 1987, but over the eleven-year period we observe a further decline in the percentage of households lacking such items.

**Table 6.1: Trends in Lack, Enforced Lack and Perceived Necessity of Life-style Items**

Item	Per Cent Lacking		Per Cent Enforced Lack		Per Cent Stating Necessity	
	1987	1998	1988	1998	1987	1997
Refrigerator	5	1	3	1	92	99
Washing machine	20	9	10	4	82	93
Telephone	48	12	31	8	45	82
Car	38	28	22	12	59	70
Colour TV	20	3	11	1	37	75
A weeks annual holiday away from home	68	41	49	29	50	62
A dry damp free dwelling	10	5	9	4	99	99
Heating for the living room when it's cold	3	5	2	4	99	99
Central heating in the house	45	15	30	10	49	81
An indoor toilet in the dwelling	7	2	6	2	98	99
Bath or shower	9	3	7	2	98	99
A meal with meat chicken or fish every second day	13	2	9	2	84	94
A warm waterproof overcoat	13	2	8	2	93	93
Two pairs of strong shoes	16	4	11	3	88	96
To be able to save	57	35	55	33	88	82
A daily newspaper	45	36	16	8	39	33
A roast meat joint or equivalent once a week	24	6	13	3	64	76
A hobby or leisure activity	33	22	12	8	73	70
New hot second hand clothes	10	6	8	5	77	86
Presents for friends or family once a year	24	8	13	5	60	73

As our earlier analysis for the period up to 1997 (Callan *et al.*, 1999) showed, normative expectations kept pace with increasing availability of items. Thus between 1987 and 1997 the numbers considering central heating and a telephone to be necessities went from under half to over eight out of ten. For car ownership the figure increased from six out of ten to seven out of ten. The corresponding figures for a colour TV were just over one in three and three out of four. Finally, for presents to families and friends the figure rose from six out of ten to three out of four. The pattern of change in expectations thus very much mirrors the increasing extent to which these items are possessed in the society. With the exception of the availability of a daily newspaper, the remaining items were already thought to be necessities.

This analysis reveals a set of five items that by the late 1980s became available to a substantial majority of households and came

to be perceived as necessities by comparable numbers. These items are central heating, a telephone, a car, a colour TV and presents for friends and families once a year. The question arises as to whether our basic deprivation index, while adequate in 1987, had by 1998 become too narrowly defined and detached from the reality of contemporary lifestyles. Should these additional five items now be incorporated in the basic deprivation index and consequently in the combined income and deprivation poverty measure?

#### **6.4 Broadening the Basic Deprivation Measure?**

The first point to keep in mind in addressing this question is that in 1987 there were already a set of items widely available and generally considered necessities but not incorporated in the basic deprivation index, namely those relating to housing deprivation. These items were not included in the basic index because factor analysis suggested that the basic and housing deprivation dimensions constituted quite distinct dimensions. Households suffering basic deprivation were more likely than others to suffer housing deprivation but the relationship between them was modest – many households experiencing one type of deprivation managed to avoid the other. Rather different socio-demographic factors could be at work, for example, a household affected by unemployment might be deprived in terms of basic food, clothing and heating but live in relatively high-quality public sector housing. Conversely, an elderly rural household might be in low-quality housing without being exposed to difficulties in relation to food, clothing or debt.

The first step in reassessing the basic deprivation measure is thus to examine if the structure of deprivation has changed. The factor analytic results for the late 1990s turn out to be remarkably similar to 1987. In particular, the additional five items on which we are focusing continue to cluster with the secondary rather than basic deprivation.<sup>10</sup> Since these results suggest that these dimensions continue to be determined by rather different factors, the logic of our earlier argument would suggest that in the combined income and deprivation poverty measure we should restrict ourselves to the original basic deprivation items.

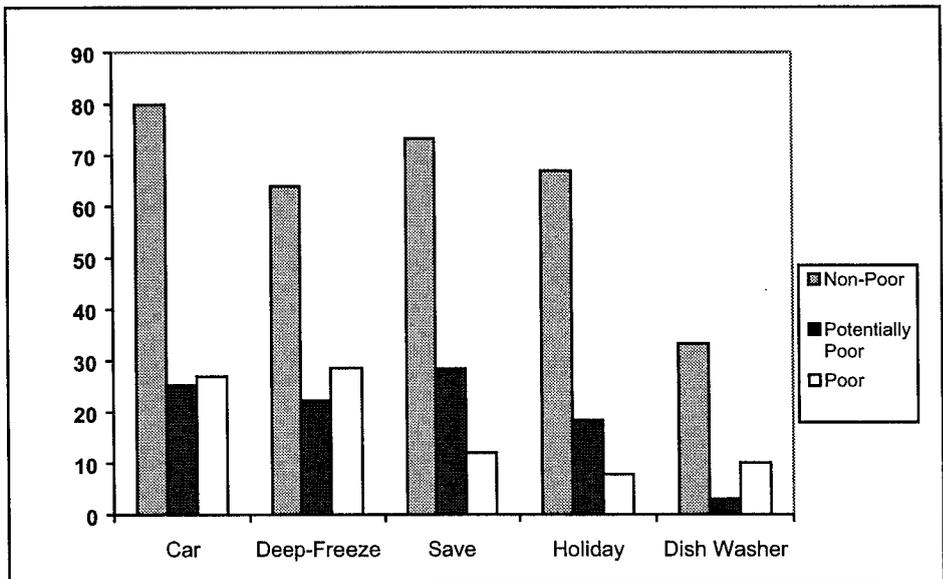
However, the concern may persist that by failing to incorporate a range of items that are now both widely available and generally perceived to be necessities, the poverty measure could be seen as increasingly restrictive and perhaps absolutist in nature. Therefore, we now explore what would happen if the basic deprivation index were indeed broadened to include these additional items in measuring poverty in 1998. For this purpose we begin by distinguishing three groups of households. The first we will refer to as the “poor”: These comprise the households who in 1998 fall below the 60 per cent relative income line and are experiencing

<sup>10</sup> See Layte, Nolan and Whelan (2000) Appendix A.

basic deprivation with an unchanged set of items. The second are households fulfilling the income criterion but not the basic deprivation one, but who are suffering enforced absence of one of the five additional items we have identified i.e. central heating, a telephone, a car, a colour television and presents for friends and family at least once a year. This group, which we label the "potentially poor", constitutes an additional 8 per cent of households. Finally, we have those households who fulfil neither criteria and whom we label the "non-poor". Having made this distinction, we then proceed to examine how these different groups of households are differentiated in terms of life-style patterns, socio-demographic composition and what one might expect to be the subjective consequences of poverty.

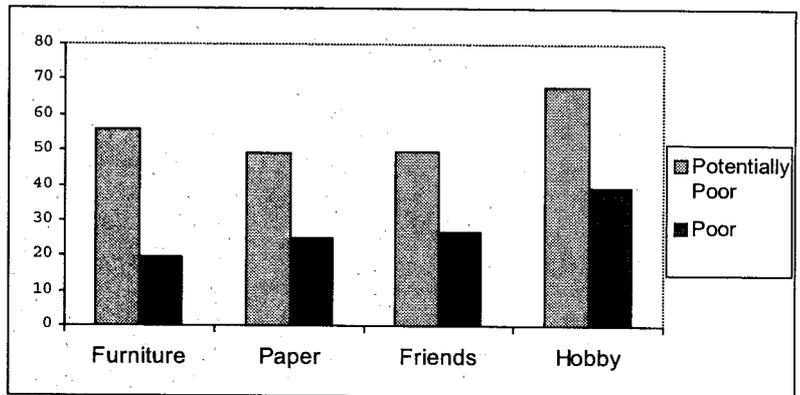
The similarities between the potentially poor and the poor in terms of life-style possessions are shown in Figure 6.1. Thus both groups are differentiated from the remaining households by significantly lower access to cars, deep-freezers, dishwashers, annual holidays and ability to save. In fact for both deep-freezers and dishwashers the potentially poor group display the lowest level of possession.

**Figure 6.1: Items Differentiating Non-Poor Households**



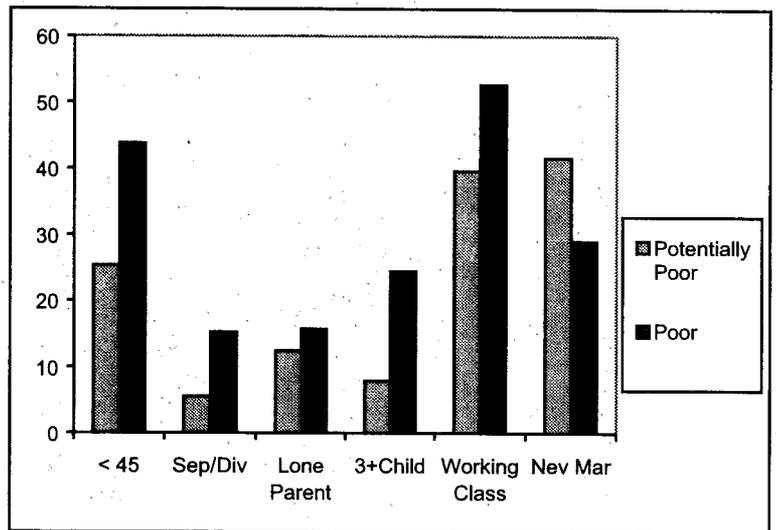
However, as shown in Figure 6.2, in addition to the basic items there are another group of items that differentiates the poor from the potentially poor. (Several of these are additional to those set out in Table 6.1 because information relating to them was not collected in the original 1987 survey.) This set includes being able to replace worn out furniture, a daily newspaper, having friends or family for a drink or meal once a month, presents for friends and family once a year and a hobby. The remaining items seem to have in common participation in broader social and communal life and in this regard the potentially poor group are considerably more favourably placed.

**Figure 6.2: Items Differentiating Poor from Potentially Poor**



Some understanding of how these groups come to have different lifestyle profiles can be reached by examining corresponding differences in socio-economic profiles as set out in Figure 6.3. Compared with the potentially poor, the poor are disproportionately comprised of those households where the reference person is aged less than forty-five, is separated or divorced, a lone parent or working class, or where there are three or more children.

**Figure 6.3: The Composition of the Poor**

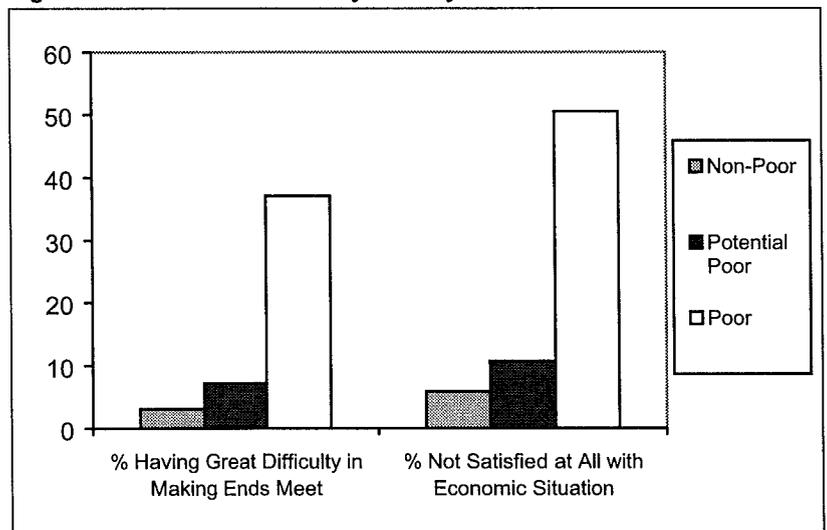


The “consistently poor” are thus differentiated from both the “non-poor” and “potentially poor” by a set of factors that are likely to reflect less success in accumulating resources over time, weaker support networks, and extra demands on those resources. How do they differ in terms of the subjective consequences we would expect to be associated with poverty? We look first at the way experience of economic strain and dissatisfaction varies across the groups. In order to do so we make use of two indicators. The first is a measure of the extent to which the household is “able to

make ends meet". Since our interest is in the consequences of poverty we distinguish between those reporting "with great difficulty" and all others. The second item relates to satisfaction with financial situation and we distinguish those "not at all satisfied" from the remainder. Figure 6.4 shows the outcomes on these variables for the three groups we have distinguished.

In relation to both difficulty in making ends meet and financial satisfaction, we find that the group defined as poor by our original definition, falling below the 60 per cent relative income line and experiencing basic deprivation, are sharply distinguished from both other groups. For the economic strain variable we find that almost 40 per cent of those conforming to our original definition of poverty report experiencing "extreme difficulty" in making ends meet. This falls 7 per cent for the group who would be added to category of poor by relaxing the deprivation criteria and declines to 3 per cent for those poor by both the original and the revised criterion.

**Figure 6.4: Economic Strain By Poverty Status**



A strikingly similar pattern of relativities emerges in relation to extreme dissatisfaction with current financial situation. Over 50 per cent of the households falling into the original poor category express such dissatisfaction compared with 11 per cent of the households that would be added under the revised definition and six of those who are consistently in the non-poor category. Thus households included in our potentially poor category are approximately twice as likely as the non-poor households to experience greater economic strain and financial dissatisfaction. They are almost five times less likely to do so than the poor to report such experiences. The "potentially poor group" is therefore much closer to the non-poor households than to the poor households.

The next outcome to which we turn our attention is psychological distress. The General Health Questionnaire (or

GHQ) is a short, self-administered survey designed to detect minor psychiatric disorders that has been adapted for use in survey questionnaires administered through interview. In the survey format, the original 60-item version is usually shortened to either a 12 item or 30-item version and it is the 12-item version which is used in the Living in Ireland Survey. Tests show that the 12-item version is as reliable as the 60-item version (although it is obviously less sensitive) as well as being appropriate for use among older people (Bowling, 1991). These 12 question items ask respondents about their *present* mental and emotional condition "over the last few weeks" in comparison to their *normal* condition. The concept of the "normal" self is a tenuous one, especially where individuals are experiencing recurrent bouts of some illness, or have acquired a chronic illness which has been with them for some time and will continue to be. Nonetheless, research has shown that respondents do still tend to see their "ill self" as not the "normal" them and thus can give a reliable account of their psychological condition in general terms (Goldberg and Williams, 1988). The questions are also relative to the person concerned as they ask about deviations from the normal self and thus do not imply an absolute standard.

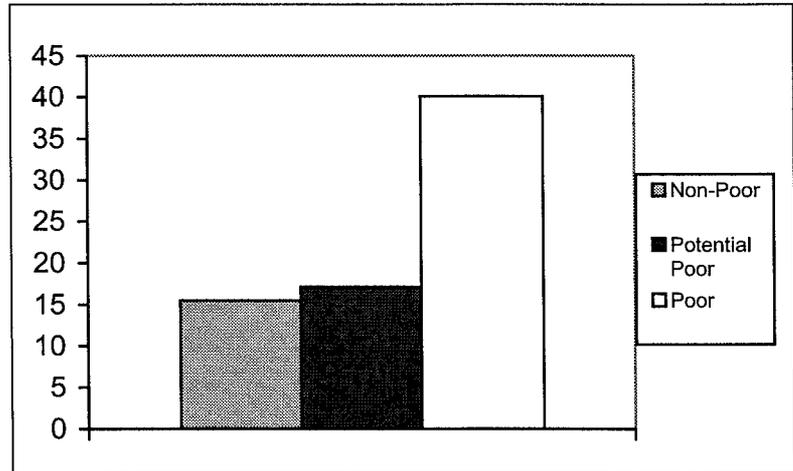
This instrument consists of a set of items that have been shown to discriminate between groups of respondents in terms of their likelihood of being assessed as non-psychotic psychiatric cases. Normally a score of two is taken as a threshold and respondents with scores higher than this are classified as suffering from psychological distress. In Figure 6.5 we show the percentage scoring above this threshold by our poverty classification. For the set of poor households we find that 40 per cent are found above the GHQ threshold. For the potentially poor the figure falls to 17 per cent, and for the non-poor to 16 per cent. Thus, even more than for economic strain and satisfaction, the set of poor households are sharply differentiated from all other households.

If we look at the individual GHQ items, approximately one-third of poor households felt constantly under strain, felt they couldn't overcome their difficulties, were unable to enjoy their day-to-day activities or felt unhappy or depressed. For the potentially poor the corresponding figures range between one in five and one in eight, and for the non-poor they range from one in six to one in eleven. Among the poor roughly one-quarter had difficulty in sleeping, in facing up to their problems, in concentrating and had lost confidence in themselves. For the "potentially poor" group the corresponding figures ranged between one in six and one in twelve. Those in consistently poor households thus display a quite distinctive profile in terms of psychological distress.

Overall the manner in which the consistently poor are differentiated from all other households can be seen as arguing against simply extending the life-style deprivation component of the poverty measure at this point. Simply adding the set of items discussed, although they are now widely regarded as necessities,

would entail adding to those currently identified as poor – a group which is quite different in terms of felt levels of stress and economic strain. Retaining the distinction between the two groups is important while these measures of strain are so different. It may be, of course, that over time levels of stress etc. converge across the two groups, as having to do without the additional items comes to be seen and felt as more and more serious relative deprivation.

**Figure 6.5: Psychological Distress and Poverty Status (Per Cent Above GHQ Threshold)**

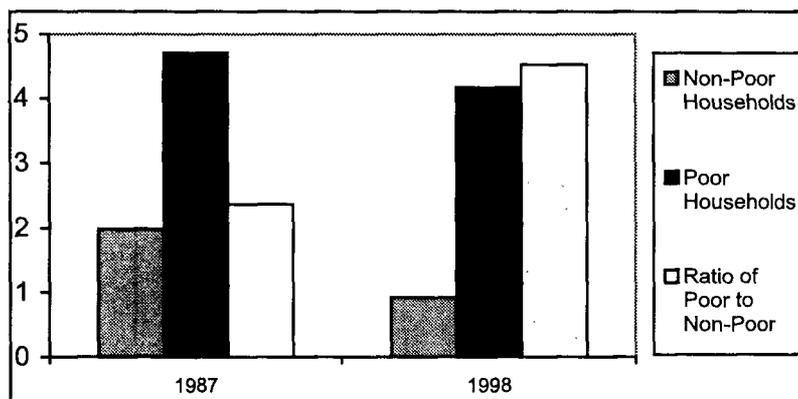


In the meantime, what we have termed the “potentially poor” is clearly a key group to monitor. There may indeed be different views about the appropriate label to apply to this group, and some may choose to regard them as poor despite the fact that their levels of stress etc. are not very much higher than those of the non-poor. Whatever one’s position on this question of labels, the evidence presented here strongly supports the argument for maintaining a distinction between the two groups for analytic purposes at this point.

In conclusion, it is worth emphasising that the fact that the basic deprivation items have remained unchanged over time does not imply that the households being identified as poor have an unchanged standard of living. In Figure 6.6 we compare the level of secondary deprivation for poor and non-poor households in 1987 and 1998. We see that over time the level of secondary deprivation did fall for poor households, from an average of 4.71 to 4.17. The 1997 figure was thus 89 per cent of the 1987 one. What is striking, however, is how modest this rate of decline is in comparison with that for the non-poor households where the 1998 figure is reduced to 46 per cent of the corresponding figure in 1987. As a consequence the disparity between poor and non-poor households increased dramatically. In 1987 the ratio of secondary deprivation between poor and non-poor households was at a level of 2.4:1 by 1998 this had risen to 4.5:1.

The most significant change between 1987 and 1998 that is concealed by focusing solely on the number of households falling below the 60 per cent income line and experiencing basic deprivation is thus not the emergence of a new group of poor households, but the widening disparity in living standards between poor and non-poor households.

**Figure 6.6: Level of Secondary Deprivation Among Poor Households**



The extent of poverty has been reduced but its depth, in the sense of exclusion of poor households from current material lifestyles, has increased. This finding is clearly consistent with the diverging trends shown by real versus relative income poverty. If the rate of increase in earnings continues to outstrip that in social welfare incomes, this polarisation is likely to be exacerbated.

## 6.5 Poverty Targets

We have argued strongly here that the combined income and deprivation approach has provided a more satisfactory approach to identifying those most at risk of exclusion due to lack of resources in Ireland and tracking the evolution of poverty in the highly unusual circumstances of the 1990s than poverty measures relying on income alone. However, the combined or consistent measure has also been employed as a poverty target in the National Anti-Poverty Strategy, and this raises some distinct issues. As outlined earlier, the global target has been to reduce "consistent" poverty "as measured by the ESRI", with the original target adopted in 1997 being revised in 1999. In concluding this chapter we consider whether this is the best way to frame a medium-poverty target.

The key point to make in this context is that measuring poverty and framing a poverty target are different exercises, to be judged against different criteria. Poverty measures must be judged in terms of criteria of reliability and construct validity. In other words there must be evidence that the components of the measure are tapping the same phenomena and that the measure is related to other variables in the manner we would expect on

theoretical grounds. Judged in these terms the consistent poverty measure performs remarkably well over time. What could not be expected of this measure, or indeed of any measure, is that it could adequately capture the complex set of changes over time that have been documented in this paper. Furthermore, while target setting can benefit from the availability of measures which allow us to monitor change, targets do not follow automatically from such knowledge but always involve policy choices. Improved measurement can, however, contribute to ensuring that such choices are made on the basis of an adequate understanding of their implications. In order for this to happen attention should not focus solely on the headline poverty numbers but seek to understand the patterns of risk and incidence that underlie poverty processes.

In our view, the consistent poverty measure does not on its own constitute a satisfactory way of framing a global poverty reduction target, in circumstances of exceptionally rapid growth such as Ireland has experienced since the mid-1990s. Very rapid economic growth has produced very welcome improvements in living standards not only in absolute terms but relative to general notions of adequacy in the society, and this has been captured by the consistent poverty measure. However in the future, when growth rates have stabilised at more normal levels for some time, expectations and views about adequacy are likely to catch up and new, higher standards will be set in the society as to what constitutes acceptable living standards and capacity to fully participate in ordinary life. In thinking about poverty targets as opposed to measuring poverty at a point in time, this has to be taken into account.

So what would be a more satisfactory way of framing poverty targets? Official targets have to be framed to try to meet the need for headline numbers, but still seek to encapsulate key elements of the complexity of the underlying reality. Poverty targeting therefore needs to encompass distinct elements. As well as a combined income/deprivation measure, one could have distinct targets for the key elements underpinning it. For some time we have argued the case for thinking in terms of a set of tiered and inter-related poverty reduction targets along the following lines (Layte, Nolan and Whelan, 2000):

- A/ Priority is given to ensuring that those on low incomes see their real incomes rise, and their deprivation levels using a fixed set of indicators decline;
- B/ Next, relative incomes and deprivation levels using a set of deprivation indicators which changes as far as possible in line with expectations should produce a decline in the combined income/deprivation measure;
- C/ Finally, the proportion of the population falling below relative income poverty lines, particularly for a sustained period, should be declining.

Each of these tiers can be regarded as encapsulating a necessary but not sufficient condition for a sustainable reduction

in poverty. A/ reflects the assumption that if real incomes of the poor are falling and their deprivation levels rising, then even if their relative positions were improving most people would see poverty as increasing. B/ reflects the assumption that the combined effect of changes in relative incomes and deprivation should be to reduce the extent of what is regarded as exclusion at a point in time. C/ reflects the assumption that in the long term, poverty can only be eradicated if no section of the community falls too far, for too long, below the level of command over resources generally available in the society. Adopting such a target does not mean one believes that all those falling below a relative income threshold at a point in time are indeed poor. However, the countries which have been particularly successful in reducing the numbers falling below such thresholds – such as Denmark, Sweden and The Netherlands – have been the most successful in bringing poverty to relatively low levels. If this indicator is steadily trending in the right direction over a sustained period, there is a good prospect that underlying structural changes required to produce a sustained reduction in poverty are indeed taking place.

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## 6.6 Conclusions

In this chapter we have reassessed the validity of the “consistent poverty” measure combining relative income and non-monetary deprivation indicators, first developed and applied to Irish data for 1987, in the light of experience since then and current debates. With living standards improving, a key question is whether this measure – with an as yet unchanged set of deprivation items – has failed to capture fundamental changes in living patterns and expectations.

We saw that expectations about which items constitute necessities did change over the period, and central heating, a telephone, a car, a colour TV, and presents for friends and family at least once a year came to be widely regarded as necessities. However, the deprivation component of the combined poverty measure is not designed to include all socially perceived necessities, but only those tapping underlying generalised deprivation. Factor analysis showed the structure of deprivation to be remarkably stable over time, supporting the argument for continuing to distinguish basic deprivation from the additional items at this point. This conclusion was supported by an examination of the additional households who would be included among the poor if the basic deprivation index was broadened to include those items. They were found to be little different from the non-poor, and quite different to the consistently poor, in terms of level of (self-assessed) economic strain, psychological distress and fatalism.

This provided some reassurance that the original set of basic items was more successful in capturing generalised deprivation than an expanded set would be at this point in time. The “potentially poor” is however clearly a key group to monitor. There may indeed be different views about the appropriate label

to apply to this group, but there is in any case a strong argument for maintaining a distinction between the two groups for analytical purposes at this point. Combining low income with basic deprivation succeeds in identifying a set of households experiencing generalised deprivation as a result of prolonged constraints in terms of command over resources. However, on its own it does not tell the whole story, nor does it represent the best way to frame a poverty target in current circumstances.

# 7. INCOME POVERTY

## PERSISTENCE IN THE LIVING

### IN IRELAND SURVEY

#### 1994-1998

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#### 7.1 Introduction

In this chapter we begin the analysis of the longitudinal poverty information in the Living in Ireland Panel Survey with a descriptive overview of the patterns of low income over time and their relationship to lifestyle deprivation. As we noted in our introduction, the consequences of poverty may be very different depending on whether it is transient or persistent. If people's experience of marginality and want is only temporary, their life-chances will probably not be seriously impaired. Persistent poverty, on the other hand, is more likely to be associated with the erosion of resources and a qualitatively different experience of deprivation.

In our initial analysis of these questions, we seek to answer four important questions: first, does relative income poverty tend to be a permanent condition or is it more transitory? Second, how is the degree of permanence affected by the type of income poverty measure used? Third, how is relative income poverty over time related to lifestyle deprivation? Finally, we will seek to establish how well the NAPS measure of consistent poverty captures income poverty persistence over time. The first question is perhaps the most important since it directs our attention to the underlying causes of poverty. It asks whether income poverty is the result of passing circumstances, or more worryingly, the result of more intransigent structural features. In this chapter we will not be trying to identify these causes, or examine their effects in detail, but simply trying to measure the degree of permanence.

It is well known that cross-sectional analyses do not give a representative picture of the lives of all those who ever experience a poverty spell. Those observed at a particular point in time will display significantly longer spells of poverty than those ever in poverty. Bane and Ellwood (1986) make the distinction between an *ever begun* sample and a *point in time* sample. The example of a hospital is frequently chosen to illustrate what is at stake. If one visits a hospital on any particular day one will encounter a high

proportion of long-term patients but such patients, while constituting a high proportion of the existing stock of patients, comprise a much smaller fraction of the flow of patients during any specific period of time, as one set of short-term patients replaces another. We do not know when those recorded as income poor in 1994, which is the first year for which we have information, entered that state. Thus that group who exited from poverty in 1994 will contain cases who have experienced longer spells of poverty than at least some of the households who did not exit. Correspondingly, we have no information on when or whether those in poverty at interview in 1998 left this state. Problems associated with such "left" and "right" hand censoring can be dealt with by changing our unit of analysis from individuals to poverty spells and applying formal statistical models that enable us to deal with these difficulties.<sup>11</sup> A formal analysis of the dynamics of poverty spells is a *sine qua non* of a comprehensive analysis of poverty processes employing panel data. While such analysis is most easily conducted on panels that have been in existence for long periods of time, it is our intention to address such issues in future work.

Here, rather than moving directly to the analysis of spells which requires a degree of abstraction from the experience of individuals, we document the annualised counts of years in income poverty within a five year window. Thus, for the period 1994-1998 we document the number of years an individual has been poor irrespective of whether this involved one continuous spell or a number of spells. Analysis of poverty spells and the experiences of individuals involves different, but complementary perspectives. Thus, as Rodgers and Rodgers (1993) note, spell analysis regards chronic poverty as a state in which one falls below a predefined threshold during a long and continuous period of time. However, as they argue, chronic poverty could equally be conceptualised as the experience of poverty in a large proportion of time periods. Because an individual may contribute a number of spells of poverty a conclusion that x per cent of poverty spells end within one year could mean that x per cent of poor people had one brief poverty spell or that a much smaller number of poor individuals had many short spells. Thus analysis of individuals is an essential complement to spell analysis.

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## 7.2 Poverty Frequency 1994-1998

In calculating frequency of the experience of poverty over the five years, we use income poverty averaged over households, but refer to the proportion of individuals in poverty. We use this combination because individuals can move between households during the period and thus it makes sense to follow the person rather than the household. To keep the presentation of the

<sup>11</sup> See Jarvis & Jenkins (1995); Jarvis & Jenkins (1997); Jenkins (1998); Stevens (1994), (1995).

findings manageable we will present findings for equivalence scale A alone. Tests show that the use of different equivalence scales does not dramatically affect the results and thus it makes sense in practical terms to present figures from one scale alone.

We can now turn to the first two of the questions outlined above concerned with the longitudinal distribution of poverty: what does the frequency of spells at the individual level across the period tell us about the extent of permanency in poverty and does the degree of permanency differ by income poverty line?

**Table 7.1: Number of Years Poor by Mean Relative Income Poverty Line: A Comparison of Observed Rates with those Expected on the Basis of Independence**

N Years Poor	40 Per Cent		50 Per Cent		60 Per Cent	
	Obs	Exp	Obs	Exp	Obs	Exp
0	80.9	56.7	62.0	30.2	50.4	13.5
1	10.4	34.1	12.8	40.9	10.2	33.2
2	4.9	8.2	7.7	22.1	8.6	32.8
3	2.4	1.0	6.7	6.0	8.0	16.1
4	0.9	0.0	5.3	0.8	8.2	4.0
5	0.6	0.0	5.6	0.0	14.6	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 7.1 shows the proportions experiencing different numbers of years under varying mean income poverty lines over the period. Poverty is clearly not a permanent condition. Many people experience poverty in some years but not in others. The flip side of such poverty dynamics is that for each poverty line the percentage experiencing poverty at some point during the five-year period is substantially higher than the figure observed at any particular point in time. Thus while one in ten people fell below the 40 per cent line in 1998 almost one in five found themselves below this line at some point during the period 1994-1998. Similarly, whereas one in five individuals were poor at the 50 per cent line in 1998 almost two in five fell below this threshold at some point during the five-year period. Finally, while three out of ten individuals were found below the 60 per cent line in 1998, one in two fell below this threshold on at least one occasion between 1994 and 1998. The obverse of this wider distribution of poverty risk is that the numbers who remained "trapped in poverty" are substantially below those observed in poverty when we take a snap-shot of the poor at a point in time. Less than one per cent of individuals are found below the 40 per cent threshold in all five years while the corresponding figures for the 50 per cent and 60 per cent lines respectively are less than 6 per cent and 15 per cent respectively. The more extreme the experience of income poverty the more likely it is that it will be temporary. Over half those who fell below the 40 per cent poverty line between 1994-1998 did so for only one year. At the 50 per cent line the corresponding figure was one third and by the 60 per cent line it is down to one-fifth. The pattern reflects the fact that a significant proportion of movements out of poverty involve movement over a relatively short range.

In order to decide whether poverty persistence is lower or higher than we would expect we have to take some point of reference, calculate the expected outcomes and compare our expectations to the observed outcomes. In Table 7.1 we achieve this by comparing the distribution of poverty with that which we would expect if the average poverty rate from 1994 to 1998 is taken and we assume that the risk of poverty for an individual in any one year is independent of their risk in any other year. The discrepancy between the two figures provides an indication of the degree of departure from independence. At the 40 per cent line, while the independence assumption suggests that 57 per cent of individuals will not experience poverty during this period, the actual figure is much higher at 81 per cent. Similarly, while the independence hypothesis suggests that only 1 per cent of individuals should fall below the 40 per cent line in three or more years, the actual figure is 4 per cent. On the other hand, while the independence model predicts that 42 per cent of individuals will experience one or two years of poverty, the observed figure is 15 per cent. Thus the actual pattern is a great deal more polarised than if the experience of poverty in any one year provided no useful information about the risk of poverty in any other year. This pattern of greater polarisation in the actual distribution compared to that when independence is assumed is repeated at the 50 per cent and 60 per cent lines. While the independence model would lead one to expect that less than 7 per cent of individuals would be found below the 50 per cent line in three or more years, the actual figure is almost 18 per cent. Similarly, it suggests that no one will experience persistent poverty over the whole period but the actual figure is just less than 6 per cent. Finally, at the 60 per cent line, while the independence model leads us to expect that just over one in five will be poor in three or more years the actual figure is over three in ten. However, the departure from expectations is greatest in relation to persistent poverty over the whole period. Here, the independence model leads to expect that less than 1 per cent will be poor in all five years, but the actual figure is closer to 15 per cent. Thus poverty is consistently more concentrated among certain groups of individuals than we would expect on the basis of the assumption of independence. Furthermore, if one compares the odds of avoiding poverty entirely with the odds of being poor in one or more years, then the gap between the expected and actual value increases as the poverty line is defined more generously. Thus the relevant odds ratio increases from 3.2 to 3.7 as one goes from the 40 per cent to the 50 per cent line and to 6.5 as one moves to the 60 per cent line.

This tendency for certain individuals to experience a disproportionate share of income poverty, and accentuation of this tendency as we move from lower to higher income lines, comes out very clearly in Table 7.2. Here we examine the proportion of the aggregate number of years spent in poverty by individuals taken as a whole that are made up by different combinations of

years. As we move from the 40 per cent to the 60 per cent lines it is clear that the higher multiples of years in poverty contribute more to the overall "burden" of income poverty. At the 40 per cent line less than 10 per cent of the total number of years in poverty are accounted for by those who have been persistently poor across the five-year period. For the 50 per cent line this rises to almost 30 per cent and at the 60 per cent line to almost 50 per cent. Thus at the 60 per cent line almost half of all years in poverty are experienced by around one in seven individuals.<sup>12</sup>

**Table 7.2: Proportion Poor for N years as a Fraction of All Years in Poverty by Income Poverty Line**

N Years Poor	40 Per Cent	50 Per Cent	60 Per Cent
1	30.6	13.1	6.5
2	28.8	15.8	10.9
3	21.2	20.6	15.3
4	10.6	21.7	20.9
5	8.8	28.7	46.4
Total	100.0	100.0	100.0

### 7.3 Exit Probabilities from Poverty

The analyses so far have shown that income poverty persistence tends to increase the more generously the poverty line is defined. While the experience of poverty is much more widely distributed than we would anticipate on the basis of cross-sectional estimates, the degree of persistence is substantially greater than if poverty in one year was independent of poverty in other years. We can give a more formal description of this tendency to immobility if we use probabilities to describe the chance of exit from poverty after experiencing N years, or the chance of re-entering poverty after not being in that position for N years. The probability is calculated as the proportion of those poor after N years who leave poverty in the next year, or who re-enter poverty in the next year after having exited poverty N years previously. For example, we will be examining the probability of leaving poverty in 1995 given that one was poor in 1994, then the probability that one was still poor in 1996 given that one had been in poverty in 1994 and 1995 and so on. In analysing these probabilities, however, it should be borne in mind that the exit rate in 1995, relates to those poor in 1994 for whom we lack evidence regarding when they became poor. As a consequence, our exit rate for 1995 is almost certain to be lower than that which would have been observed if we could identify those who entered poverty in 1994. Our exit rate analysis focuses on those who having been poor in 1994 exited from

<sup>12</sup> In Appendix 2 we show the results of the same analyses but substituting median for mean income poverty lines. Although not identical the results are substantively the same.

poverty in 1995. We then ask what the probability is that they re-enter poverty in each of the subsequent three years. The analyses in Chapter 3 of this report have shown that the 40 per cent income poverty line is a problematic measure because of the small numbers of cases below the line and the characteristics of those who find themselves under it. As such, in this and later chapters we use only the 50 and 60 per cent income poverty lines, except in particular circumstances.

**Table 7.3: Exit and Re-entry Probabilities from 50 Per Cent Mean Income Poverty<sup>13</sup>**

Exit Date for those Continuously Poor from 1994	Exit Probabilities	Year of Re-entry for Those Poor in 1994 who Exited in 1995	Re-entry Probabilities
1995	0.325	-	-
1996	0.252	1996	0.274
1997	0.196	1997	0.168
1998	0.147	1998	0.082

Table 7.3 shows that at the 50 per cent line the probability of exiting more than halves over a four-year period from 32.5 per cent to 14.7 per cent. Moreover, the decline in the probability over the years is gradual and suggests very regular processes. On the other hand, if a person escapes from poverty, the longer they are not poor the smaller the chance that they will subsequently fall back into poverty. In the first year the probability of re-entry is just above one in four. By the second year it falls to one in six, and by the third year it has fallen to one in twelve. Thus in each year the probability of re-entry is almost halved.

**Table 7.4: Exit and Re-entry Probabilities from 60 Per Cent Mean Income Poverty**

Exit Date for those Continuously Poor from 1994	Exit Probabilities	Year of Re-entry for Those Poor in 1994 who Exited in 1995	Re-entry Probabilities
1995	0.210	-	-
1996	0.162	1996	0.405
1997	0.170	1997	0.157
1998	0.074	1998	0.115

Table 7.4 provides a very similar picture using the 60 per cent income poverty line, except that, in relative terms, the contrast between first to fourth years is even sharper. The exit probability falls by almost two-thirds from 21 per cent in year one to 7.4 per cent in the fourth year. The trend in re-entry probabilities is also sharper, although less gradual. The probability of re-entry in the first year is relatively high with over four out of ten falling below the 60 per cent threshold. It then declines sharply in the second year to less than one in six before showing a more modest reduction to one in nine in the final year.

<sup>13</sup>The lowest N on which the probabilities in Tables 7.2 and 7.3 are based is 279.

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#### 7.4 Income Poverty and Lifestyle Deprivation

Having examined the frequency and distribution of income poverty across the 1994-98 period, we now analyse the relationship between income poverty and lifestyle deprivation. The last decade has seen a huge increase in the amount of research on direct indicators of poverty and in the Irish context such measures have been adopted within the National Anti-Poverty Strategy measure of poverty. However, research also suggests that there is a substantial mismatch between those found under income poverty lines and those deprived using direct measures of deprivation. Though the degree of mismatch varies according to the measures used, even those measures which differentiate between a number of different dimensions of deprivation still find that these measures identify a minority of those found to be poor using an income poverty measure. Why should this be so? There could be a number of reasons, but the most important may be that the impact of low income on living standards depends on the length of time low income persists, and the availability of other resources (such as savings and assets) to supplement current income. Thus, although a person may be income poor this year, they can maintain their lifestyle by accessing savings they may have accumulated in more affluent times or perhaps draw on the resources of friends and family. However, the longer the spell persists, the greater the likelihood that such resources and contacts will be exhausted and lifestyle will be affected. This means that although the proportion of the income poor found to be deprived might be quite low for those poor for a single year, as the number of years increases the extent of overlap should increase.

Previous work by researchers at the ESRI (Callan, Nolan, Whelan 1993; Layte, Nolan, Whelan, 2000) has shown that there are a number of different dimensions of deprivation that can be identified, which in the Irish context have been labelled as "basic", "secondary" and "housing" deprivation. The three dimensions tap rather different aspects of deprivation with the basic, as its name implies, identifying the absence because of a lack of resources of fundamental items such as a second pair of shoes, enough warmth and a cooked meal. The secondary on the other hand identifies the absence of more varied standard of living items such as a car and leisure activities. Lastly, the housing index measures aspects of housing quality and facilities.

According to the logic just outlined, we should see an increasing prevalence of deprivation as the period of income poverty increases. That said however, the indices may also be differentially related to income poverty since factors such as housing may be influenced by the supply of public sector housing which is aimed in large part at those at the bottom of the income distribution. Here, for illustrative purposes, we take those experiencing the absence of one or more of the items in the scale as signifying deprivation. Although crude, this distinction should

nonetheless differentiate different groups if our theory about the influence of income poverty on deprivation is correct.

We first focus on the basic index and show in Table 7.5 how it varies with poverty persistence across all three poverty lines. With one exception, we find that in every case increased poverty persistence is associated with higher deprivation. The exception involves those who are below the 40 per cent income line in all five years. It must be borne in mind though that that group constitute less than 1 per cent of all respondents. Otherwise for the 40 per cent line we observe a continuous but not linear increase in deprivation as exposure to poverty increases. It rises sharply from less than one in ten to over one in four as one goes from zero to one year in poverty. It then rises gradually to just less than four in ten for those poor in two years and then to just above one in three for those poor in three years before finally peaking at just over two-thirds for those poor in four years. However, the pattern becomes clearer when we move to the 50 and 60 per cent lines. Here we see an increase in the risk of basic deprivation with each increase in the number of years poor such that whereas around 7 per cent of those who have not experienced poverty between 1994 and 1998 are deprived, almost half of those poor for all five years are deprived. A similar pattern is observed at the 60 per cent income line with the percentage reporting deprivation rising from 6 per cent to 33 per cent.

**Table 7.5: Proportion Experiencing Basic Deprivation (1+ Items) by Years Poor at Different Mean Income Poverty Lines**

N Years Poor	40 Per Cent	50 Per Cent	60 Per Cent
0	9.2	7.3	6.2
1	27.1	10.6	8.5
2	34.6	17.3	9.3
3	38.0	29.6	21.1
4	67.6	31.1	28.0
5	20.8	48.3	32.6
Total	13.5	13.5	13.5

Do we observe the same patterns using the secondary deprivation index? Table 7.6 reports the risk of experiencing secondary deprivation by years poor. Here, as we would expect, since we are dealing with items that are more expensive to purchase (e.g. a car or weeks annual holiday) or seen as "optional" lifestyle items (e.g. a hobby or leisure activity), the overall risk of experiencing deprivation is substantially higher.

**Table 7.6: Proportion Experiencing Secondary Deprivation (1+ Items) by Years Poor at Different Mean Income Poverty Lines**

N Years Poor	40 Per Cent	50 Per Cent	60 Per Cent
0	41.0	33.6	28.6
1	69.7	57.3	47.3
2	71.4	61.2	48.6
3	84.2	79.9	70.2
4	100.0	77.0	71.9
5	66.7	87.2	83.2
Total	47.1	47.1	47.1

Yet, the same overall pattern of relationship is still apparent in Table 7.6 as was found in Table 7.5. Thus, there is a clear relationship at the 40 per cent income line between number of years in poverty and exposure to secondary deprivation. The percentage lacking one item rises from a low of less than 41 per cent for those with zero years of poverty to a peak of 100 per cent at four years, before falling back for the small number poor in all years. For the 50 per cent line there is a gradual progression from less than 34 per cent to 87 per cent with increasing years in poverty, although there is little difference between those three and four years poor. At the 60 per cent line a similar pattern emerges as the numbers reporting deprivation rises from just less than 30 per cent to just over 80 per cent.

Turning to the pattern of housing deprivation by income poverty in Table 7.7, we see a very similar pattern to that observed in the previous two tables. However, here the relationship at the lowest of the income poverty lines becomes even noisier and the overall risk of housing deprivation is lower than that found for the basic deprivation index. It remains true though that with the exception of the 40 per cent line those, persistently poor in all five years display levels of deprivation that are distinctively high on all three dimensions.

**Table 7.7: Proportion Experiencing Housing Deprivation (1+ Items) by Years Poor at Different Mean Income Poverty Lines**

N Years Poor	40 Per Cent	50 Per Cent	60 Per Cent
0	5.5	3.8	3.2
1	14.9	6.0	4.8
2	7.6	7.3	4.4
3	12.0	14.8	7.3
4	29.7	15.2	13.4
5	26.1	28.6	19.7
Total	7.0	7.1	7.0

## 7.5 Poverty Persistence and the NAPS Measure

The foregoing represents a relatively crude, although informative, examination of the relationship between life-style deprivation and persistent income poverty. In this section we pursue this relationship in a somewhat different fashion by asking whether and to what extent the NAPS poor are differentiated from other groups in terms of their experience of persistent poverty. The previous chapter ended with an analysis of whether the basic deprivation measure should be broadened to take account of changes in the perception of certain items as necessities in the period between 1994 and 1998. The results there suggested that the population that would be included as poor, if new items<sup>14</sup> were added to the basic deprivation measure- the "potentially poor"- were very different on a number of different outcome

<sup>14</sup> These "new" items were a car, telephone, presents for friends and family once a year, central heating and colour television.

measures including economic strain, financial satisfaction, psychological stress and levels of fatalism.

The development of the NAPS "consistent poverty" measure was motivated by our understanding of the limitations of point in time income measures and our desire to develop a measure which was more sensitive to the accumulation and erosion of resources over time. If this has been successful then we would expect that the NAPS poor should be differentiated, in terms of experience of persistent poverty, not only from those we have defined as unambiguously "non-poor", but also from the group characterised as "potentially poor". To test whether this is so, in this section we first examine the distribution of years poor using 60 per cent income poverty lines for those defined as not poor, poor and potentially poor at the 60 per cent line in the 1998 wave of the Living in Ireland Survey. Our hypothesis is that the consistent poverty measure should be more in line with persistent poverty patterns than cross-sectional income poverty measures because the deprivation component helps to identify a population which not only has limited resources, but whose longer term experience has been of limited or inadequate resources. As such the pattern of persistent poverty associated with the current consistent poverty measure should be further from the non-poor population than that found for the potentially poor group. Is this so?

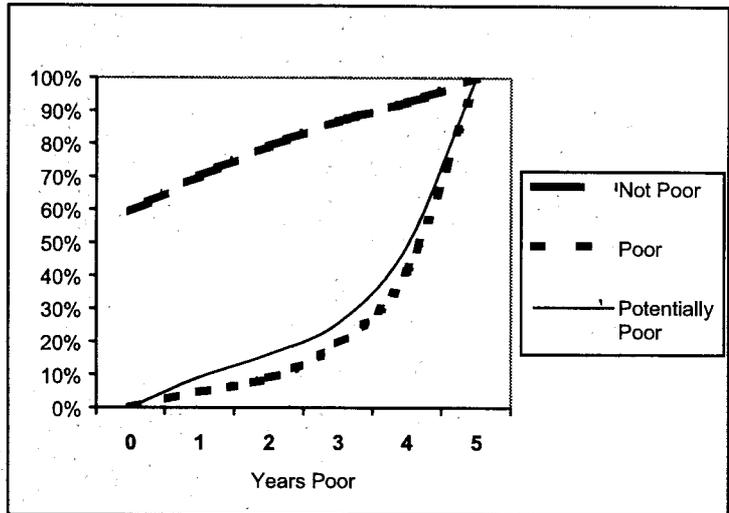
From Figure 7.1 we see that the non-poor are sharply differentiated from the potentially poor and consistently poor groups in 1998. By definition none of the latter groups had managed to entirely avoid poverty at the 60 per cent line whereas 60 per cent of the non-poor had done so. It is also that the poor are more likely than the potentially poor to have spent more years in poverty. Thus while one in five of the former had spent less than four years below the 60 per cent income line this was true of one in four of the latter. It must be admitted that this difference is extremely modest. In order to see what really differentiates the groups, in terms of persistent poverty, we must turn our attention to the 50 per cent in income line. In Figure 7.2, we again use the distinction between consistently poor, potentially poor and non-poor at the 60 per cent line as an independent variable and take the degree of poverty persistence at the 50 per cent income line as the dependent variable. Once again the non-poor are very different from the other groups with over 70 per cent succeeding in avoiding poverty throughout the whole period compared to just over 10 per cent of the remaining respondents. However, on this occasion there is a much sharper contrast between the consistently poor and the potentially poor as shown by the shallowness of the "poor" line. One in three of the consistently poor have been on poverty throughout the period a figure, which is twice that for the potentially poor.

Thus, the consistently poor do have a distinctive persistent poverty profile. This finding complements the evidence presented in Chapter 6 that the present consistent poverty measure is quite successful in identifying a group who have experienced what

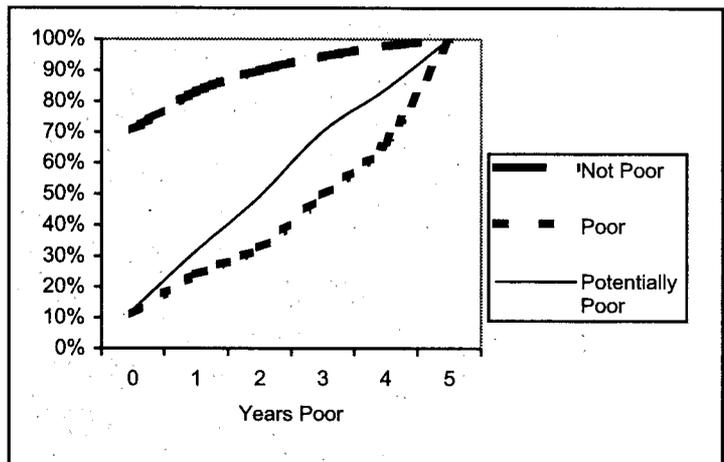
would be seen as serious deprivation as a consequence of a persistent shortage of income.

This is interesting since it suggests that what makes the potentially poor different from the consistently poor is slightly higher incomes just at a point in the income distribution that tends to be affected most by social welfare benefits. If we refer back to the last chapter and Figure 6.4; we can see that the potentially poor tended to have a higher proportion never married, they were older and had fewer numbers of large families. Taken together

**Figure 7.1: Cumulative Proportion Experiencing N Years Poor by NAPS Poverty Status at 60 Per Cent Line in 1998 (60 Per Cent Income Poverty Line)**



**Figure 7.2: Cumulative Proportion Experiencing N Years Poor by NAPS Poverty Status at the 60 Per Cent Line in 1998 (50 Per Cent Income Poverty Line)**



these findings suggest that the potentially poor group are distinguished from the consistently poor by slightly lower household needs relative to income over the medium to long term. In a subsequent report we will be using multi-variate models and poverty spells to investigate entry and exit from income poverty and will be in a much better position to test such hypotheses.

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## 7.6 Conclusions

In this chapter we have begun the important task of following the individual and household experience of income poverty over time. Cross-sectional analysis of low income is important since it allows us to examine the overall success of social and economic policy in reducing income poverty levels or changing the composition, but it does not easily give us access to the processes that underpin the patterns that emerge.

Here we have begun the task of studying poverty processes by giving a descriptive overview of the distribution of income poverty over time and how this is related to lifestyle deprivation. We asked four questions: first, does income poverty tend to be a permanent condition or is it more transitory? Second, how is the degree of permanence affected by the type of income poverty measure used? Third, how is income poverty related to lifestyle deprivation? Fourth, does the consistent poverty measure succeed in identifying those who are exposed to persistent income poverty?

In relation to the first question, we see clearly that a considerable degree of income poverty mobility exists and as a consequence the "ever poor" figure for the five-year period is substantially higher than point in time estimates. Notwithstanding such mobility, there is evidence of a substantial departure from year-to-year independence in risk of exposure to poverty which is manifested in the existence of both substantially higher numbers than would be expected of those who avoid poverty entirely and of correspondingly high numbers who experience poverty more often than would be anticipated.

The likelihood of avoiding poverty completely declines substantially as the poverty line becomes more generous and the probability of experiencing poverty in two or more years increases sharply. This trend is reflected in the fact that, at the 60 per cent line, one in seven persons fell below the poverty line in all five years. In assessing the significance of this figure we should keep in mind the fact for many of these households the duration of their spell in poverty may already have gone beyond five years and has an unknown point of termination.

The chapter also showed, in answer to the third question, that income poverty is related to different aspects of lifestyle deprivation in a regular and interpretable fashion. Our theory was that income poverty in individual years may not necessarily be strongly related to lifestyle deprivation because individuals and households would seek to buffer their standard of living using

savings and other resources. However, if the income poverty spell were to continue over a number of years we could expect that the relationship between income poverty and deprivation would increase as resources were eroded. The final part of the chapter showed that this did indeed seem to be true. However, as in the analysis of the distribution of income poverty years, the pattern of increase in deprivation was least clear (but still discernible) using the 40 per cent income poverty line. Once again this suggests that the group being identified here is being affected by different, perhaps more short run processes, than those captured by more generous income poverty lines. Finally, we have shown that the consistently poor group are distinguished from all others by the degree of poverty persistence they experience providing further support for the argument that it succeeds in identifying a group who experience serious levels of deprivation arising from erosion of resources.

# 8. DISAGGREGATING INCOME POVERTY DYNAMICS

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## 8.1 Introduction

We saw in the last chapter that the distribution of income poverty is not even across the population. Those that experienced any year in poverty were more likely to experience several years, particularly when measured using more generous income poverty lines. Yet the chapter did not attempt to examine the composition of those experiencing poverty and particularly persistent poverty. In this chapter we rectify this omission by examining the distribution of years in income poverty by a number of important characteristics of the household and household reference person. Initially we start with the structure of the household in terms of the number of adults and children. We have already seen in this document that some household types are more prone to income poverty such as single, particularly elderly adults and households with larger numbers of children, but are these types of households also more likely to experience persistent income poverty? The type of household one lives in could be seen as an indicator of one's needs, but we also need to examine the flip side of need – that of the resources available to the household. To do this we examine the distribution of persistent poverty across social class, educational and employment status categories.

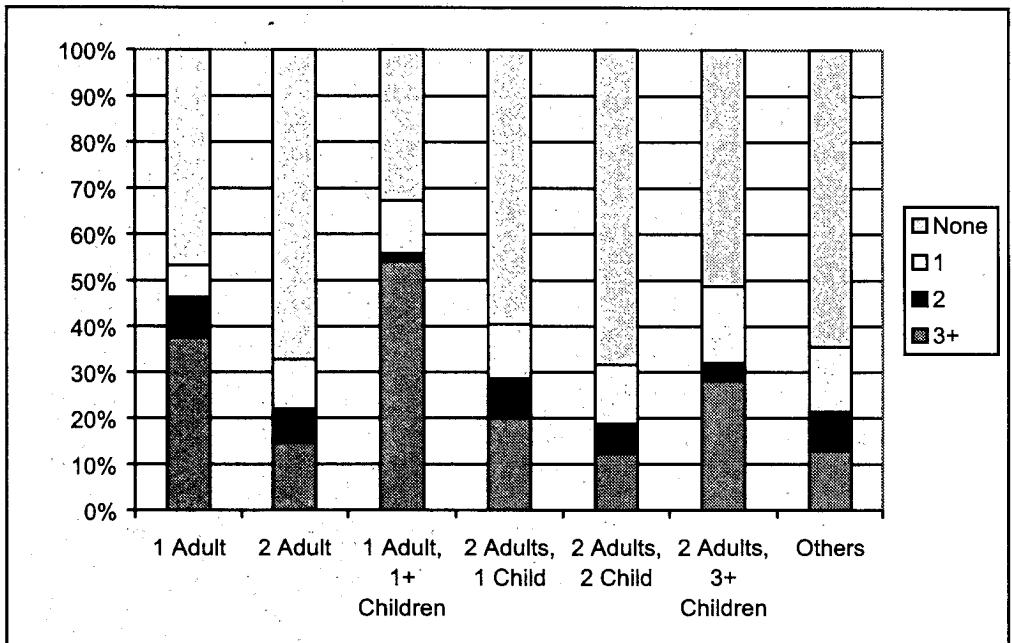
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## 8.2 Household Composition

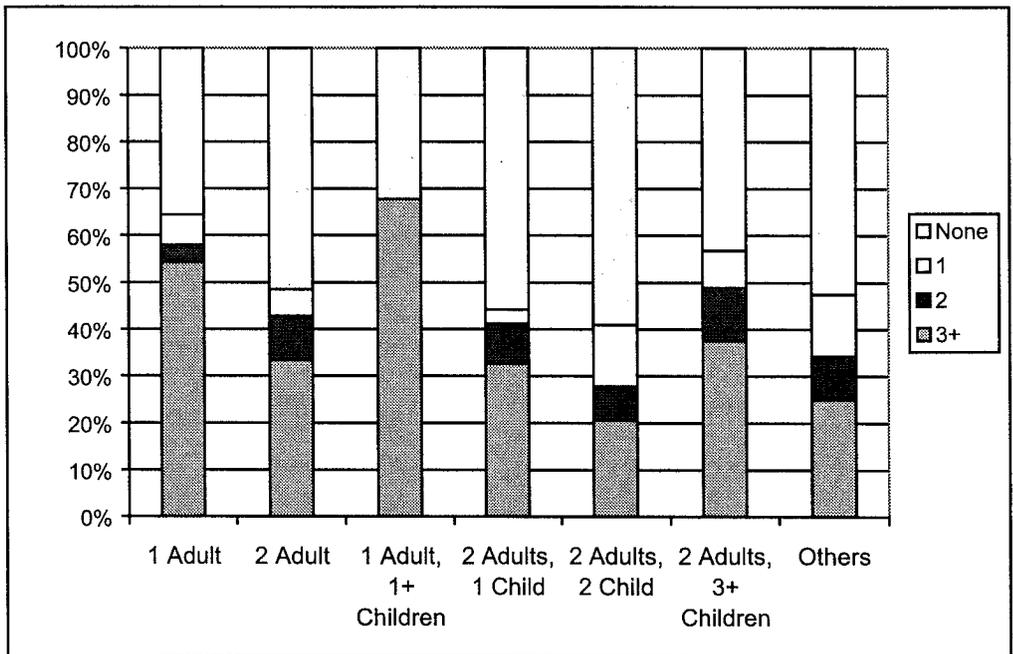
As in Chapter 4 of this report, here we concentrate on the numbers of children and adults in a household when defining composition, but unlike there, here we use slightly different categories that includes a category for single parents. Throughout this chapter we will be using mean income poverty as the main measure and showing how the number of years poor across the five-year period varies by particular characteristics. Figure 8.1 begins this process by giving the grouped years poor for different household types in 1994 using the 50 per cent mean income poverty line. In the analyses in the last chapter we found that there was considerably less systematic variation in the distribution of poverty years using the 40 per cent income line, thus here we make use only of the 50 and 60 per cent income lines. Figure 8.1 gives the distribution of years of poverty for the 50 per cent mean

income line. Taking the two extremes, households with two adults and no children have about a 32 per cent risk of experiencing a poverty spell over the period whereas this jumps to almost 70 per cent for single parents. In the middle between these two extremes are single people and parents with three or more children. However, the risk of having three or more years in poverty is far larger for some groups than for others. For instance, the proportion of households with two adults who have experienced poverty, who have done so for three or more years is 45 per cent whereas the figure for single parents is 81 per cent. This suggests that the two groups are experiencing very different conditions. Thus, whereas these findings confirm our observation in the previous chapter that poverty years tend to come in groups and have a certain inertia, here we can see that this affects some groups far more than others.

**Figure 8.1: Years Poor Using 50 Per Cent Mean Income Poverty by Household Type**



If we move to the 60 per cent line in Figure 8.2 we see a similar picture, except this time the change in distributions is even starker. Using this higher line, those experiencing income poverty are far more likely to experience it over a succession of years such that the groups having one or two years in income poverty are in a small minority. Almost 70 per cent of single parents experience a year in poverty over the period and all that do experience it for three or more years.

**Figure 8.2: Years Poor Using 60 Per Cent Mean Income Poverty by Household Type**

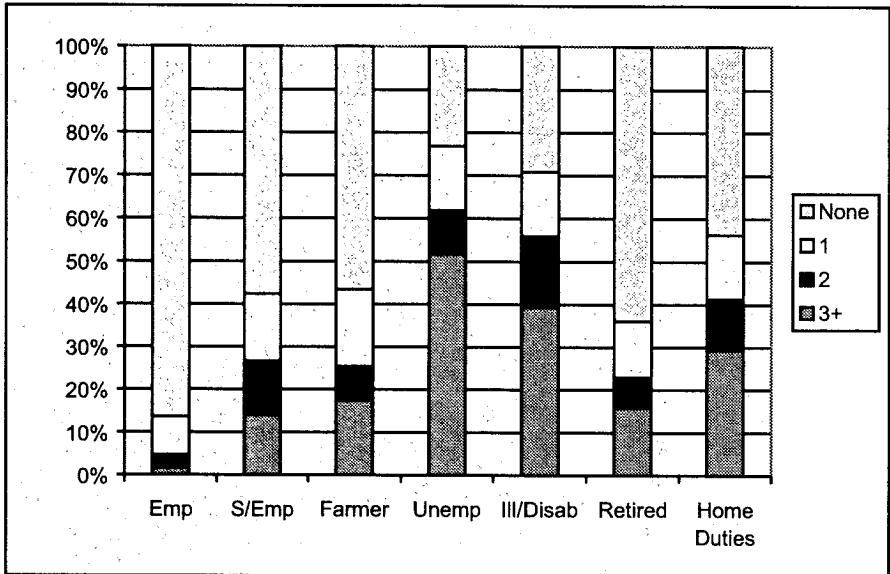
### 8.3 Labour Force Status

The last section showed that household composition did seem to be related to the risk of experiencing income poverty and moreover, persistent income poverty with single parent households and those with larger numbers of children having a heightened risk. In part the risk for single parents can be attributed to the difficulties they face in participating fully in the labour market and their consequent reliance on social welfare benefit. In this section we examine this directly by looking at the distribution of persistent poverty by labour force status.

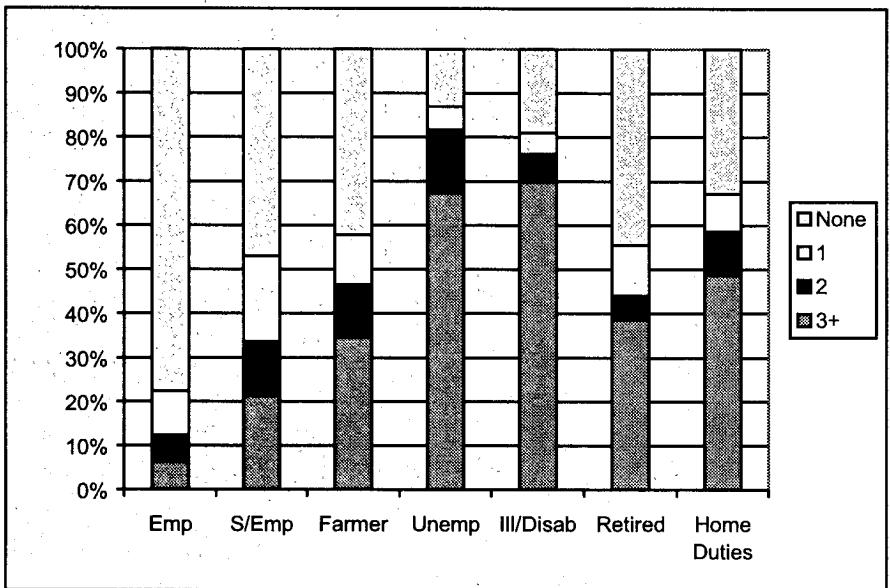
Figure 8.3 starts the analysis of labour market status by displaying the distribution of years in income poverty using the 50 per cent mean income line. First there are wide differences in the risk of experiencing income poverty at some point in the five year period, with the employed having less than a 14 per cent risk whereas the risk for the unemployed is over 75 per cent and for the ill/disabled over 70 per cent.

What is even more striking however, is variation in the distribution of longer periods in poverty as signified by the fact that the over 50 per cent of the unemployed are found in 3 years plus category. The figure for the ill/disabled is 40 per cent and for those households where the reference person is engaged in "home duties" it is just below 30 per cent. At this poverty line all groups except the employed and self-employed are more likely to experience three or more years in poverty rather than a single year.

**Figure 8.3: Years Poor Using 50 Per Cent Mean Income Line by Labour Force Status of Reference Person**



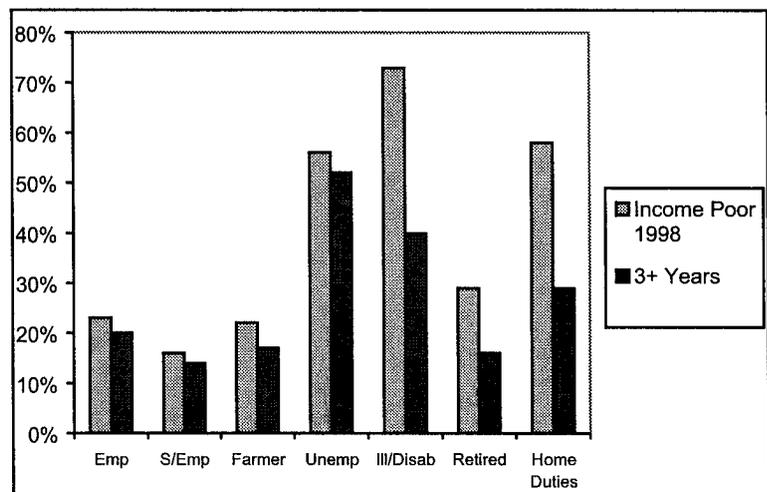
**Figure 8.4: Years Poor Using 60 Per Cent Mean Income Line by Labour Force Status of Reference Person**



This pattern of longer periods in poverty is exacerbated if we move in Figure 8.4 to the 60 per cent income poverty line. Using this line those households with an unemployed reference person in 1994 now have almost a 90 per cent risk of income poverty and a 67 per cent risk of experiencing three or more years in poverty. The figure for the ill-disabled is just as high. For those in home

duties the risk is less than one in two and greater than one in three for those in home duties. With the exception of the retired, who appear in a more favourable position when one considers persistent poverty rather than current income poverty, the pattern of risk at the 60 per cent line is very similar with the two approaches. However, as we can see from Figure 8.5 the same is not true at the 50 per cent level. With this line the unemployed emerge as a distinctively disadvantaged group. Over one in two have been poor three or more years, which is almost as many as are below the 50 per cent line in 1998. For the ill and disabled the number persistently poor is 40 per cent, a substantial reduction on the cross-sectional figure. For those in home duties and retired the numbers poor in three or more years are respectively 29 per cent and 16 per cent. In each case this involves a halving of the point-in-time figure.

**Figure 8.5: Percentage 3+ Years Poor Using 50 Per Cent Mean Income Line Compared to those Poor in 1998 by Labour Force Status of Reference Person**



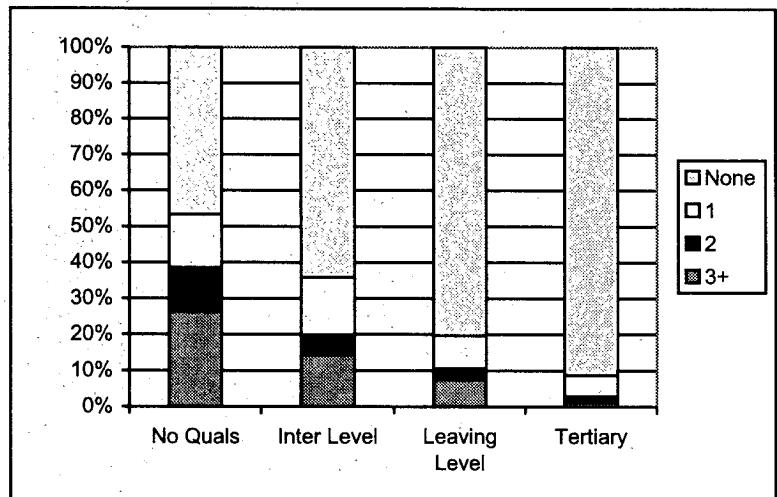
## 8.4 Educational Qualifications

Labour force status is clearly important as a determinant of risk of poverty and persistent poverty, but there are several other influences. One of the most important is educational qualifications. Level of qualifications can act as a determinant of both whether one is employed and if so, at what level. These factors will have a strong influence on subsequent risk of income poverty. In this section we use the same procedure as previously to examine the distribution of years in poverty by educational qualifications divided in this instance between those with no qualifications, those with an Intermediate Certificate, those with a Leaving Certificate and those who have a third level qualification.

Figure 8.6 shows the proportions experiencing different years in poverty by qualification using the 50 per cent income poverty line and shows step-wise differences in the level of risk associated with different qualifications. Whereas those with tertiary

qualifications have a less than 10 per cent risk of poverty, the risk for those with no qualifications is over one in two. Between these extremes those with an Intermediate Certificate have a risk of just over one in three, whereas those with a Leaving Certificate have a one in five chance of being exposed to poverty. These graduated differences in risk testify to an extremely structured relationship between credentials and the labour market. This high degree of structure also extends to the frequency with which poverty at this level is experienced. We observe stepwise decreases in the risk of experiencing three or more years from one in four for those with no qualifications to close to zero for those with third level qualifications. Figure 8.7 shows that the move to the 60 per cent mean income line does little to affect the patterns observed using the 50 per cent line, except that the level of persistent poverty increases in importance. For those with no qualifications it reaches a level of just less than one in two and even for those at Intermediate level it reaches one in four.

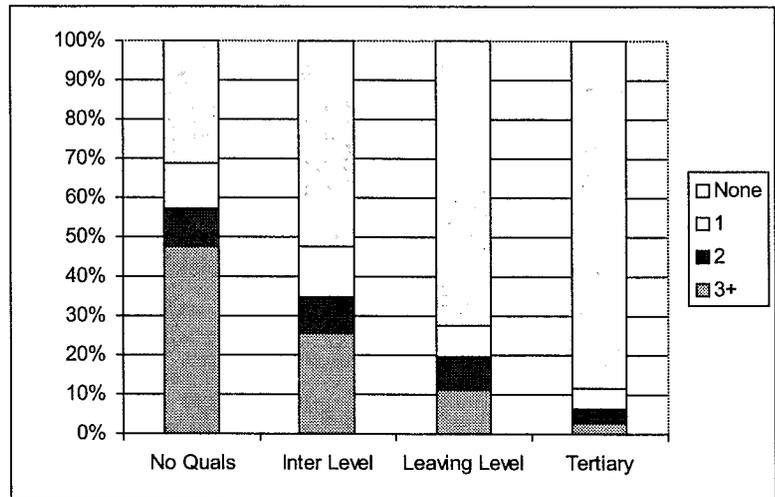
**Figure 8.6: Years in Poverty Using 50 Per Cent Mean Income Line by Reference Person's Education**



## 8.5 Social Class

Lastly in this chapter, we examine the structuring of poverty years by social class grouping. Social class can be seen as a general measure of labour market advantage or disadvantage associated with the employment relations which people experience in their present or past occupations. Since we can use previous occupations, we can allocate almost all people to a class, even if presently unemployed or inactive. As already used in this chapter, however, here we use the social class of the reference person in the household. The social class that we use here – the Erikson and Goldthorpe (EG) classification, is a useful measure in this context because it captures a number of important dimensions that will influence the experience of income poverty. For instance, the difference between employment and self-employment is a

**Figure 8.7: Years in Poverty Using 60 Per Cent Mean Income Line by Reference Person's Education**



crucial factor in differentiating different classes and we may well see differences in the volatility of incomes for the self-employed. However such differences may also depend upon whether the self-employed person works as an “own-account” worker (e.g. the self-employed tradesman) or employs others. The EG measure also differentiates employees along what is termed the “labour-service” contract spectrum. Thus, professional, higher managerial and administrative employees would be found at the “service” end of the spectrum since they have long-term career structures and rare skills whilst unskilled manual workers would be at the “labour” end because their recompense is based on their physical labour power, rather than their skills.

These simple differentiations are associated with significant differences in life chances and the risk of poverty and disadvantage. This can be seen very clearly if we look at Figure 8.8 which shows the risk of poverty and persistent poverty for different class groupings using the 50 per cent income poverty line. The differences between the social classes in Figure 8.8 are striking. Whereas the professional and managerial class have around a 10 per cent risk of poverty in total over the five years and around a 6 per cent risk of poverty for more than 1 year, those at the labour contract end of the spectrum such as the unskilled manual employees have over a 60 per cent risk of the former and a 50 per cent risk of the latter. Interestingly however, a household where the reference person is self-employed without employees also faces a high risk of experiencing poverty at almost 60 per cent.

This figure is significantly higher than those for the self-employed with employees, though the latter group still have a risk profile greater than that of the skilled manual employees and farmers.

**Figure 8.8: Years In Poverty Using 50 Per Cent Mean Income Line by Social Class of Reference Person**

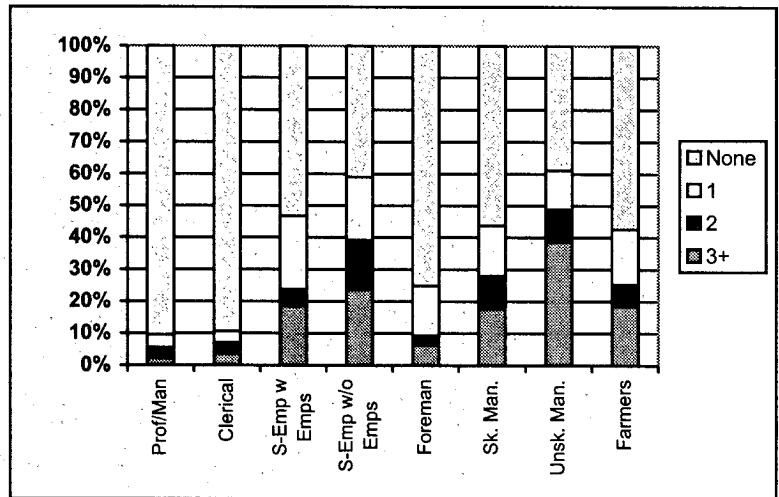
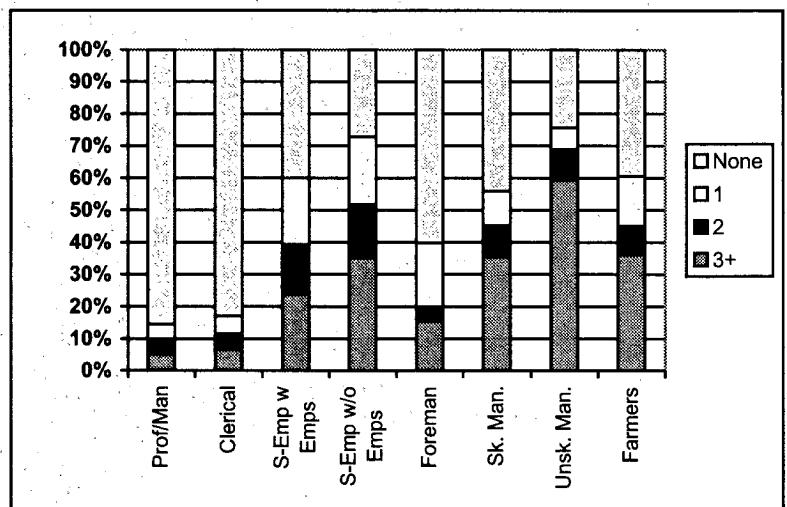


Figure 8.8 also shows that the risk of multiple years of income poverty is dominant, but only for those classes at the labour contract end of the spectrum and the self-employed without employees. For unskilled manual employees the risk of experiencing three or more years of poverty is almost 40 per cent while for own account self-employed workers the risk is just under 25 per cent. On the other hand, reference persons who are the supervisors of manual workers (foremen), have a lower risk of persistent poverty than all groups except white-collar workers because of their different employment relationship.

**Figure 8.9: Years In Poverty Using 60 Per Cent Mean Income Line by Social Class of Reference Person**



When we move to the 60 per cent line this pattern is made sharper with multiple years of poverty becoming the majority experience for those experiencing any poverty, but with the pattern of class differentials remaining relatively constant, apart from a slight deterioration in the position of skilled manual workers with all manual and self-employed groups being differentiated from the non-manual classes. For the unskilled manual group the risk of poverty in three or more years rises to almost 60 per cent while for no other group does it exceed 40 per cent.

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## 8.6 Exit Probabilities by Household Characteristics

As in the previous chapter we can view the distribution of income poverty persistence as a set of probabilities and get a better idea of why some groups tend to have a greater overall risk of persistent poverty. Thus, rather than looking at the distribution of single or multiple spells of poverty we can examine the probability of someone with a particular set of characteristics leaving poverty after N years compared to another person with a different set of characteristics. Though this analysis is very useful it is also quite demanding of the data since we are splitting the cases into groups both by number of years in poverty and some other characteristic such as class or education. This means that it makes sense to collapse categories and focus on the 60 per cent line rather than end up with cells that contain small numbers of cases from which we can draw few conclusions.

In Table 8.1 we examine the probability of exit from poverty using the 60 per cent income poverty line by the education of the household reference person. Since our major interest here is in seeing the effect of having any qualifications compared to having none, we collapse the four educational categories previously used into two: one of reference persons with qualification and one without. This shows that the overall probability of exit from under this poverty line is substantially lower for those with no qualifications. In the first year their chance of exiting is only just above one in six compared to three out of ten for those with qualifications. Starting from this lower exit, there is a gradual reduction in the chances of exit in years two and three followed by a sharp reduction in year four, with the consequence that escape from poverty becomes a rare event with only 6 per cent succeeding in rising above the threshold. For those with qualifications that pattern is quite erratic. A sharp fall in year two is followed by a corresponding increase in year three and a subsequent substantial decline in year four. It is thus very difficult to reach any confident conclusion about change over time for this group.

**Table 8.1: Probability of Exit from Poverty at 60 Per Cent Mean Income Line by HRP Education in 1994**

Year	Have Qualifications	No Qualifications
	Prob.	Prob.
1	0.306	0.175
2	0.163	0.166
3	0.311	0.128
4	0.144	0.059

In Table 8.2 we show the probabilities of exit from poverty for those in the unskilled manual class compared to all others. The patterns in Table 8.2 show that for the manual class there is a sharp fall in the second year from an already low probability of about one in seven to less than one in ten and by the fourth year the chances of exit are less than one in twenty. This compares unfavourably to the group of "other classes" whose probability of exit is initially higher, with almost one in four managing to exit in the first year, and does not change significantly until around the fourth year when it drops substantially to one in ten.

**Table 8.2: Probability of Exit from Poverty at 60 per cent Mean Income Line by HRP Class in 1994**

Year	All Other Classes	Unskilled Manual
	Prob.	Prob.
1	0.235	0.148
2	0.201	0.087
3	0.229	0.085
4	0.103	0.049

In Table 8.3 we return to the difference in poverty risk for the employed versus the unemployed, except this time we view their probabilities of exiting poverty rather than their risk of experiencing persistent poverty. The initial exit rate for the employed of over one in three is far higher than that for the unemployed of less than one in four. Following the now familiar pattern, the exit rate for both declines over time and by the final year they display very similar rates. However, since in the intermediate years there is no tendency towards a declining exit rate among those in employment comparable to that for the unemployed, the exit rates for the former are substantially higher than those of the latter in the intermediate years. In year two over 30 per cent of the employed exit compared to 13 per cent of the unemployed and in year three the respective figures are over 40 per cent and less than 10 per cent.

**Table 8.3: Probability of Exit from Poverty at 60 Per Cent Mean Income Line by LFS of HRP**

Year	Employed	Unemployed
	Prob.	Prob.
1	0.366	0.242
2	0.310	0.125
3	0.425	0.097
4	0.149	0.127

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## 8.7 Transitions Into and Out of Poverty

In the last three chapters we have begun the task of examining poverty persistence and how this is structured by particular characteristics. By using the characteristics of the household, or household reference person we have been able to develop a picture of which characteristics are associated with higher numbers of years in poverty. However, as made clear in Chapter 7, these characteristics do not necessarily remain stable over the period and may well change. Moreover, the total number of years poor through the period may not reflect contiguous years, but could, for instance, represent two years separated by three in the case of a household that has experienced two years in poverty out of five. Similarly, though we examined exit and re-entry rates in Chapter 7, we did this using characteristics that were unchanging and measured in 1994, the first year of the Living In Ireland Panel Survey. For these reasons, in this section we examine transitions into and out of poverty across the period and how the changing characteristics of households may contribute to this tendency.

We do this by moving from an emphasis on households to one of “transitions”, that is whether a household moved from being non-poor to being poor and vice versa between one year and the next. By selecting those households that were either poor or not poor in the first year of the pair and examining the changing characteristics of the household we can see whether the risk of a transition increases with changing characteristics.

To guide the analysis we divide the types of characteristics that could change into two broad types – those that influence the level of “needs” in the household and those that influence the level of “resources”. An example of the former is the number of children in the household. As we have already seen in earlier chapters, households with larger numbers of children are more likely to be found in poverty at a cross sectional level and to experience more years in poverty. “Resources” on the other hand refer to the income of the household, but also covers the characteristics which affect the household’s ability to generate income such as being unemployed rather than employed. Using these broad categories, we would expect that the balance of needs and resources would dictate whether the household experiences poverty and thus a change in this balance should lead to an increased probability of transition either into or from poverty.

In this analysis we will concentrate on fairly general changes in characteristics, but it should be borne in mind that such umbrella categories may well group together a range of other processes. For example, transitions into poverty may be made more likely if the number of people employed in the household falls. But this could occur in a number of ways. The most obvious reason is unemployment, but the same state of affairs could also arise after marital separation or divorce. This complexity means that it is difficult to predict outcomes from one particular change in isolation from a number of other factors.

A further complication that arises is that in the absence of any change in household characteristics, or even an increase in income, the relative nature of the poverty line means that a household could become poor. As we know from earlier chapters, average household incomes have increased strongly across the period and all income deciles have seen growth. But this increase has occurred most strongly in the mid to upper reaches of the distribution, increasing the proportion of those lower down the scale in poverty.

Having put forward these caveats, we can now move on to examine some of the patterns that we find in the Living in Ireland Panel Survey from 1994 to 1998. The tables that we present here characterise poverty transitions as a household either moving under the 50 per cent income poverty line, or moving above the same line in pairs of years from 1994 to 1998.<sup>15</sup> Given the descriptive analyses performed here where we are not controlling for a number of other characteristics, we examine transitions at the household level and use the characteristics of the household reference person. This is consistent with the analyses performed in earlier chapters and follows the logic that the reference person is responsible for the accommodation and is more likely to be the main earner in the household, and thus more likely to set the standard of living of the household. This also means that change in the characteristics of the head of household are thus more likely to lead to poverty transitions than is change experienced by other members of the household.

Before we examine the transition probabilities associated with certain characteristics, it is first useful to examine the overall probability of entering or leaving poverty that households ran during the period of the panel survey. As we know from Chapter 3, the proportion of households in poverty at the 50 per cent mean income line increased between 1994 and 1998, but this is an aggregate risk figure and does not mean that the actual risk to those households who were not already in poverty increased. Given the general increase in household incomes across the period, it is difficult a priori to predict the actual transition probabilities.

In fact, as Table 8.4 shows, for those households who were not already in poverty, the risk of entering poverty in the next year actually decreased between 1995 and 1997, only increasing at the end of the period. Similarly, the probability of exit from poverty (for those in poverty) increased across the period, but declined abruptly between 1997 and 1998. It should be remembered when interpreting these tables that the proportions presented are of those who are either not poor or poor in year  $t$  (for example 1994) and who subsequently moved either into or out of poverty.

<sup>15</sup> The poverty lines used are relative income lines for each year and are not adjusted, other than for household equivalence (e.g. are not adjusted for price inflation).

**Table 8.4: Risk of Transition by Year**

Year	Per Cent Entering Poverty	Per Cent Leaving Poverty
1995	33.2	19.2
1996	22.9	29.6
1997	16.3	30.1
1998	27.5	21.1

The increase in the final year may be due to the large increase between 1997 and 1998 in average incomes relative to other years (almost 14 per cent compared to less than 10 per cent 1994 to 1997) that occurred in the middle and top of the income distribution.

In the balance between “needs” and “resources”, are moves into and from poverty more associated with one more strongly than the other? Table 8.5 shows the composition of those moving into or from poverty by the proportionate change in household income. This shows as we would expect that entries into poverty are associated with decreases in income and vice versa, but interestingly, whereas the largest group of those entering poverty have relatively small drops in income, the majority of those leaving poverty have increases of 50 per cent plus. This is due to the fact that in the bottom half of the income distribution, small changes in income can be a large proportionate increase or decrease.

**Table 8.5: Level of Income Change for Poverty Moves**

Proportionate Income Difference Year 1 – Year 2	Per Cent Entering Poverty	Per Cent Leaving Poverty
-50 or more	15.7	0.0
-50 to -40	6.5	0.0
-40 to -30	12.5	0.0
-30 to -20	11.5	0.0
-20 to -10	14.4	0.0
-10 to +10	38.6	2.3
10-20	0.7	9.8
20-30	0.0	9.8
30-40	0.0	9.3
40-50	0.0	7.4
50 or more	0.0	61.4

Table 8.6 shows the other side of this general picture, the role of changes in the level of needs. Here the picture is much less distinct with the vast majority of transitions associated with no change in the number of “equivalised” individuals.<sup>16</sup> In fact, households with decreasing needs make up a larger proportion of those falling into poverty than those with increasing needs, the opposite of expectations. This opposite effect holds true for moves from poverty with the proportion experiencing an increase

<sup>16</sup> The scale used here is the same as used in the preceding chapters, i.e. 1/66/33. Tests showed that using other equivalence scales did not significantly alter the impact of changing needs.

in needs being larger than the group experiencing a decrease. This suggests that the decrease in needs may often be associated with the loss of an individual who is generating income and vice versa. This would confound the general effect and need to be controlled for in a multivariate model.

**Table 8.6: Level of "Needs" Change for Poverty Transitions**

Change in Equivalised Persons Between Years 1 and 2	Per Cent Entering Poverty	Per Cent Leaving Poverty
Decreased	16.5	7.5
Stayed Same	71.9	81.3
Increased	11.6	11.1
Total	100	100

Moving on from the general risk, we now examine the probability of transition associated with the changing employment status of the household reference person. Table 8.8 shows the proportion of households with different employment experiences entering or leaving poverty across the period. A priori we would expect that moves into unemployment and inactivity would increase the probability of entry into poverty and this does indeed seem to be so. Whereas 11 per cent of those staying in the same status and just 6 per cent of those entering employment entered poverty, over 37 per cent of those becoming unemployed moved under the poverty line. Similarly, when the process is reversed, 69 per cent of those entering employment from unemployment or inactivity move from poverty. Interestingly, moves into inactivity (this is a broad group including retirement, full-time carers and those in education as well as the ill and disabled) seem to be less prone to poverty. For example, in Table 8.7, 31 per cent of moves from employment to inactivity result in a move above the poverty line, the second largest risk factor for improvement in the household's situation.

**Table 8.7: Risk of Transition by Employment Status of Household Reference Person**

Employment Status Year 1 and 2	Percentage Entering Poverty	Percentage Leaving Poverty
Stayed Same	10.5	21.4
Employed to Unemployed	37.3	10.8
Employed to Inactive	16.4	31.1
Inactive to Unemployed or Vice Versa	20.9	25.9
Inactive or Unemployed to Employed	5.8	69.1

Of course, the employment status of others in the household may also have an impact on poverty status. This seemed to be the reason why the effect of the "needs" variable detailed in Table 8.6 went against expectations, thus do we see the expected relationship if we look at this directly? Table 8.8 shows the risk of poverty transition associated with changes in the number working 15 or more hours per week in the household between years. This shows a clear relationship between the changing number of working people in the household and poverty outcome with 22 per cent of those experiencing a decrease moving into poverty

**Table 8.8: Risk of Transition by Changing Number Working 15+ Hours Per Week in Household**

Change in Persons Working Between Years 1 and 2	% Entering Poverty	% Leaving Poverty
Decreased	21.7	19.8
Stayed Same	10.6	17.3
Increased	3.2	67.2

compared to 3 per cent of households having an increase. Interestingly, the addition of extra workers has a dramatic effect on the probability of leaving poverty with Table 8.8 showing that 67 per cent of those experiencing an increase moving above the poverty line.

**Table 8.9: Risk of Transition by "Reliance" on Social Welfare (Reliance is 66 Per Cent + of Total Household Income)**

	Percentage Entering Poverty	Percentage Leaving Poverty
Not Reliant in Both Years	5.0	50.6
Reliant in Both Years	33.0	8.2
Became Reliant	59.1	11.6
No Longer Reliant	11.9	64.0

Employment is not the only source of income that households receive however. Government transfers in the form of pensions, unemployment benefits and subsidies such as child benefit have a huge impact on the living standards of recipients and the risk of exposure to poverty. Some idea of this influence can be gleaned from Table 8.9 which gives the risk of transition associated with either becoming "reliant" on, or finding another source of income other than welfare payments. Whereas just 5 per cent of those who are not reliant upon government transfers move into poverty, 59 per cent of those who become reliant do so. In an opposite fashion, over 63 per cent of those moving away from reliance on this source of income move out of poverty compared to just 8 per cent of those who remain reliant.

## 8.8 Conclusions

In this chapter we have extended the poverty dynamics analysis in the last chapter by disaggregating the way in which years of poverty are distributed over the population using a range of different socio-economic and demographic characteristics. Once again we have seen that as we move to more generous income poverty lines we see, as in the last chapter, an increasing risk of persistent poverty. However, this increase is far from being distributed evenly across the population.

When we looked at the effect of household structure it was clear that single parent households, single person households and those with three or more children were at a higher overall risk of income poverty. However, these households also ran a higher risk of experiencing multiple years under the poverty line and

particularly three or more years. The concentration of years of poverty among some groups rather more than others was repeated in the case of labour force status. Earlier we had found strikingly high poverty rates for the ill/disabled, those in home duties, the retired and the unemployed. When we turned our attention to persistent poverty we found that all of these groups continued to suffer significant disadvantage compare to those in employment. However, there was a shift in the pattern of relativities within this cluster. The unemployed are exposed to persistent poverty at a rate that is higher than for any of the other groups. The tendency for less advantaged groups to experience not only higher current poverty rates but also a substantially higher exposure to persistent poverty was also illustrated for those in the unskilled manual class and those without educational qualifications. As one moves from the less to more generous poverty lines not only does the incidence of poverty increase but also the proportion that is made up of multiple years in poverty. Since the pattern of socio-economic differentials remains fairly constant being poor for three or four years during the five year period at the 60 per cent level was something that was experienced by a majority of our most disadvantaged groups.

In order to enhance our understanding of poverty dynamics and the socio-economic inequalities associated with them, we extended our analysis to look at some of the factors affecting entry and exit rates. It was clear from these analyses that the unskilled manual working class, those with poor qualifications and the unemployed involved, suffer (not only higher rates of poverty at a particular point in time) but a decline in the probability of exiting poverty over time that is substantially steeper than for more advantaged groups. Why these exit probabilities deteriorate so sharply is not an easy question to answer and requires more analytical methods than we have been in a position to apply here? However, on examination of the results from the probability tables that those who are not exposed to the most extreme forms of disadvantage are somehow protected from a significant deterioration in their chances of exiting from poverty for roughly the first three years and it is only after this period that we see any substantial fall in the exit rate. For unskilled manual workers, the unemployed and those with little education, on the other hand, the fall in the rate of exit occurs from the first year and declines in a fashion that suggests some kind of quite regular and predictable processes. Although we cannot say here what these processes are, these descriptive insights do provide the groundwork from which we can investigate the mechanisms more precisely in future studies.

By focusing on the characteristics of the household or household reference person, the foregoing analysis enabled us to develop a picture of the characteristics associated with high numbers of years in poverty. However, these characteristics do not necessarily remain stable over time. Furthermore, the total number of years in poverty may not reflect continuous spells. For these

reasons we extended our analysis by focusing on the influence of resources and needs on transitions. The results showed no clear patterns associated with the changing level of needs suggesting that we need to extend our analysis to take into account the relationship between the number of equivalised persons and number of individuals contributing to household income. However, the probability of entering and exiting poverty did vary systematically with changes in employment status. Most strikingly 70 per cent of those households where the household reference person moved from being inactive or unemployed in one year to being employed in the next exited from poverty. Similarly, two-thirds of those households where the number working 15+ increased left poverty. Finally, there was a very close relationship between becoming reliant or terminating reliance on social welfare and entry and exit to poverty. Thus, even the relative simple analysis of the relationship between changes in household circumstances and dynamics of poverty reveals striking effects. A full exploration of the potential of panel data to enhance our understanding of poverty dynamics will require that we extend our efforts to incorporate a multivariate analysis employing formal models of event histories.

# 9. SUBJECTIVE WELL-BEING AND INCOME POVERTY PERSISTENCE

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## 9.1 Introduction

In the previous two chapters we have analysed the distribution of income poverty persistence both across the Irish population as a whole and among sub-groups of different socio-economic characteristics. Using basic descriptive methods we found that years in poverty tended to come in groups rather than being distributed evenly across the population. This tendency increased the more generous the income poverty line used, thus at the 50 and 60 per cent mean income lines the risk of experiencing five years below the poverty line was actually higher than the risk of experiencing a single year. The last chapter identified a number of characteristics that were associated with this increased poverty persistence. Household composition was an important factor with single parents and households with three or more children being particularly at risk of experiencing multiple years of poverty. Similarly, households where the reference person was unemployed or ill/disabled also had a higher risk of experiencing poverty over a number of years. In this chapter we change our focus from describing the risk profile to examining the extent to which income poverty persistence is associated with a number of salient dimensions measured in 1998.

If the patterns of poverty we find in the data are valid reflections of reality then we would expect that we should also observe certain correlates in the poor population. Therefore, if we find a distinct relationship between particular measures that we would a priori assume would be the result of persistent poverty we get some confirmation that our measures of poverty and patterns are good reflections of important underlying poverty structures and processes.

In the next three sections we examine four different outcome measures that we expect to be related to income poverty and particularly poverty persistence at the end of our period of observation in 1998. The first two are the degree of economic strain that individuals are experiencing and their satisfaction with their financial situation. We can be reasonably confident that these follow from rather than cause persistent poverty. By definition income poverty reflects a shortage of resources relative to the

general population, thus we would expect that this should be closely related to economic strain and financial satisfaction. Moreover, if individuals and households remain in income poverty over an extended period we would expect that both the degree of economic strain and financial dissatisfaction would increase.

## 9.2 Poverty Persistence and Economic Strain and Satisfaction

Table 9.1 shows the proportion of individuals experiencing "great difficulty" in making ends meet by number of years poor using the 50 per cent mean income line. As discussed in Chapter 7, experience has shown that the 40 per cent income poverty line does not produce very meaningful results and thus in this chapter we confine ourselves to analyses of the 50 and 60 per cent income poverty lines. Table 8.1 shows a graduated increase in economic strain with each additional year of poverty.

**Table 9.1: Proportion Experiencing Extreme Economic Strain by Years Poor Using the 50 Per Cent Mean Income Line**

N Years Poor	Proportion Experiencing Extreme Economic Strain	N
0	1.2	2,511
1	5.5	524
2	8.4	321
3	13.7	277
4	22.5	218
5	28.4	236
All	5.9	4,089

Whereas, only 1.2 per cent of those who have not experienced any years in poverty in 1998 are having difficulty making ends meet, at five years this proportion has increased to over 28 per cent. Such a clear pattern is quite startling given that we are not necessarily looking at continuous spells of poverty here, but the sum poverty experience over the five-year period. The regularity with which the economic strain and years of poverty are related suggests the presence of important structuring processes.

If we move onto the 60 per cent line the pattern becomes slightly less clear, although there is still a strong relationship between poverty experienced and economic strain. Thus, although the peak level of strain occurs after experiencing five years of poverty with over one in five reporting such a level of strain, the risk for those with two years is lower than for those with one, although the proportion jumps up again at three years. Given that the numbers involved in Table 9.2 are quite large, these findings would tend to suggest that there may be other processes at work in shaping economic strain other than just the length of time poor. For instance, it may be that households tend to acclimatise, or adjust their lifestyle to low incomes after two or three years duration and this moderates the experience of economic strain.

**Table 9.2: Proportion Experiencing Economic Strain by Years Poor Using the 60 Per Cent Mean Income Line**

N Years Poor	Proportion Experiencing Economic Strain	N
0	0.7	2,036
1	5.6	429
2	3.8	341
3	7.5	333
4	9.9	335
5	21.1	615
All	5.9	4,089

Next we move to the relationship between income poverty persistence and another subjective measure of one's economic position – that of the individual's satisfaction with their financial situation. Here we use the choice of the most dissatisfied category when the respondent was asked about their satisfaction with their financial situation (where satisfaction was measured on a scale from 1 to 6) to make a dichotomous measure of dissatisfaction.

Table 9.3 gives the proportions choosing the most dissatisfied category by number of years income poor when using the 50 per cent income poverty line. It shows a clear relationship between dissatisfaction and the number of years poor with the proportion increasing steadily with the experience of poverty. Dissatisfaction increases steadily with each year of poverty from under 5 per cent with no experience of poverty to 41 per cent at five years. Interestingly, the proportion increases dramatically at five years duration (from 17 to 41 per cent).

Using the 60 per cent line the even pattern is maintained, but as we would expect, the proportions dissatisfied decrease relative to the lower poverty line (i.e. the income levels involved are higher). Thus, whereas the proportion dissatisfied at no years poor is almost identical to that using the 50 per cent line, at five years duration the proportion is only 23 per cent compared to 41 per cent for the 50 per cent line.

**Table 9.3: Proportion Dissatisfied with Financial Situation by Years Poor Using the 50 Per Cent Mean Income Line**

N Years Poor	Proportion Dissatisfied with Economic Situation	N
0	4.8	2,127
1	8.8	452
2	9.3	257
3	15.3	215
4	16.5	194
5	41.0	212
All	9.2	3,455

**Table 9.4: Proportion Dissatisfied with Financial Situation by Years Poor Using the 60 Per Cent Mean Income Line**

N Years Poor	Proportion Dissatisfied with Economic Situation	N
0	4.9	1,718
1	6.0	348
2	6.4	299
3	13.8	268
4	11.7	298
5	23.1	524
All	9.2	3,455

### 9.3 Poverty Persistence and Psychological Distress

The results from this chapter so far seem to suggest that there is a relationship between an individual's experience of poverty over time and their subjective evaluation of their position. This is encouraging and points to structured processes behind both the extent of poverty and the experience of it. As shown in Chapter 6, current poverty status is strongly associated with level of psychological distress. We are not attempting here to provide a full-scale dynamic analysis of the relationship between changes in poverty status and changing levels of psychological distress which would allow for the fact that psychological distress might contribute to poverty persistence. Instead we simply wish to establish whether our measure of poverty persistence behaves as we would hope that such a measure would. Here we investigate this relationship further using data from the Living in Ireland Survey across the period from 1994 to 1998. If income poverty is itself associated with increased psychological distress we would expect that income poverty persistence would exacerbate this situation. As such in the following three tables we examine whether the risk of reaching the clinical threshold on the GHQ survey increases with the number of years income poor using different income poverty lines.

Table 9.5 reports the results using the 50 per cent income poverty line. The results are quite graduated, but have a curvilinear rather than linear structure. Thus the proportion over the GHQ threshold increases up to 3 years to 22 per cent before falling thereafter to 20 per cent after five years. This pattern suggests a process of gradual accommodation but may be related

**Table 9.5: Proportion Over the GHQ Threshold by Years Poor Using the 50 Per Cent Mean Income Line**

N Years Poor	Proportion Over the GHQ Threshold	N
0	14.2	2,128
1	19.9	453
2	16.5	255
3	22.1	217
4	21.8	193
5	20.3	212
All	16.4	3,458

to the fact that the GHQ may miss chronic disorders because it asks respondents for an assessment of symptoms in terms of categories such as "same as usual". This seems to occur less than one might expect because people cling rather stubbornly to the concept of their "usual self". It seems likely though that those who are exposed to persistent poverty may have increasing difficulty in so doing. This may mean that if poverty is experienced over a long period the person may stop comparing their present situation less favourably to their past. If this scenario is even partially correct then we should see a similar pattern using the 60 per cent income poverty line in Table 9.6. If anything the curvilinear relationship is stronger in Table 9.6 than in the previous two tables with the proportion above the GHQ threshold rising from 13 per cent with zero years poor to a peak of 25 per cent at three years in poverty out of five. Thereafter the proportion falls, though only to 21 per cent at five years duration.

**Table 9.6: Proportion Over the GHQ Threshold by Years Poor Using the 60 Per Cent Mean Income Line**

N Years Poor	Proportion Over the GHQ Threshold	N
0	13.3	2,277
1	13.8	431
2	14.7	267
3	24.7	201
4	23.2	142
5	21.4	140
All	16.4	3,458

Overall then, it seems that there is a clear relationship between the number of years the individual has spent poor and the risk of experiencing psychological distress but this involves a kind of plateau effect not observed for the earlier variables.

#### 9.4 Poverty Persistence and Fatalism

The last outcome measure that we use in this chapter is that of a "fatalism" scale. This measures the degree of control which respondents believe they have over their lives and has been shown in previous research to be closely correlated with measures of disadvantage such as social class, income poverty and deprivation (Whelan, 1992). What we expect to find is that as the period of income poverty increases we should see increasing fatalism, which here is represented by a lower score (low score indicating low perceived control). Unlike in previous tables, in this section we use the mean fatalism score.

Table 9.7 presents the scores for those experiencing different number of years poor using the 50 per cent income poverty line. The pattern in Table 9.7 is fairly straightforward with higher levels of fatalism being associated with increased exposure to poverty, although the score at five years is marginally higher than at four. Overall though, there is a decrease in the level of perceived

control as people experience a greater number of years poor from 20.2 at zero years to 17.8 at five.

**Table 9.7: Mean Level of Fatalism by Years Poor Using the 50 Per Cent Mean Income Line**

N Years Poor	Mean Fatalism Score (Low Score=Higher Fatalism)	N
0	20.22	2,099
1	19.28	445
2	18.79	254
3	18.30	212
4	17.52	190
5	17.79	209
All	19.57	3,408

This tendency toward a clearer relationship with the use of the 60 per cent line is continued with Table 9.8 where the level of fatalism increase gradually as the number of years in poverty increases.

**Table 9.8: Mean Level of Fatalism by Years Poor Using the 60 Per Cent Mean Income Line**

N Years Poor	Mean Fatalism Score (Low Score=Higher Fatalism)	N
0	20.57	1,694
1	19.57	342
2	19.69	297
3	18.71	265
4	18.17	290
5	17.47	519
All	19.57	3,408

## 9.5 Conclusions

After describing the general distribution of income poverty and persistent income poverty in the last two chapters, this chapter set out to examine the relationship between persistent poverty and subjective well-being. Using several different outcome measures our hypothesis was that as the period of poverty increased we should see increasingly severe consequences. The first two measures we used were the degree of economic strain and dissatisfaction with the financial situation and these did indeed seem to be related to income poverty persistence in a structured and predictable manner.

A slightly more complicated relationship emerged between poverty persistence and psychological distress. Distress follows a curvilinear course, first rising then evening out and even declining, falling after three years duration had been reached. It is not entirely clear the extent to which this relationship emerges as a consequence of a process of adaptation or as an artefact of the question format.

Finally, we examined the relationship between poverty persistence and fatalism. Here once again we found a clear relationship with the sense of control over one's life decreasing as

the period of income poverty increased. Such findings match our prior expectations well. Overall analysis of the four measures presented suggests that the persistent poverty measures have considerable value in terms of their ability to allow us to differentiate between respondents in terms of their subjective-well-being.

# 10. CONCLUSIONS AND IMPLICATIONS

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## 10.1 Introduction

In 1999, the ESRI carried out a study for the NAPS Inter-Departmental Policy Committee based on results from the 1997 round of the Living in Ireland household survey (Callan *et al.*, 1999). The present study has provided an updated picture using results from the 1998 round of that survey to re-assess the overall extent of poverty and the profile of those in poverty. In addition, we have taken advantage of the panel nature of the Living in Ireland Survey data to look for the first time with Irish data at poverty dynamics, transitions into and out of poverty from one year to the next, over the whole period from 1994 to 1998. In this concluding chapter we summarise the main findings and discuss their implications.

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## 10.2 The Data

The 1998 Living in Ireland Survey, on which this study relies, is the fifth wave of a panel survey which re-visits the same sample each year, following up those first interviewed in 1994. Significant numbers have dropped out of the sample over time, as is generally the case with such longitudinal surveys. Despite improving response rates from year to year, there has been sizeable attrition between Waves 1 and 5. Of the original 14,585 sample individuals, only 56 per cent completed Wave 5 (with another 863 individuals having joined the sample at some point in the intervening years). The evidence at this point does not suggest that households with specific characteristics related to poverty and deprivation have been selectively lost from the sample. Nonetheless, given the scale of the attrition that has occurred and the shrinking size of the sample from year to year, the results presented have to be seen in the light of the possibility that an unmeasured bias has been introduced.

For this reason steps were taken to supplement the sample in the 2000 wave of interviewing. With the support of the Department of Social, Community and Family Affairs, the Living in Ireland Survey for that year not only sought to follow and re-interview those in the 1999 survey, it also interviewed for the first time a randomly-selected supplementary sample sufficient to bring the achieved total of respondents back up towards the level in the original 1994 survey. This will greatly assist in allowing a reliable

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### 10.3 Relative Income Poverty Lines

picture of the situation in 2000 to be captured, which would have been problematic in the absence of such supplementation.

We have emphasised in previous work the importance of acknowledging uncertainty about how best to measure poverty: no one method or set of results can provide all the answers. By applying a range of approaches, and variants of these approaches, a more rounded and comprehensive – if necessarily more complex – picture can be seen.

Relative income poverty lines offer one perspective on poverty, and within that broad approach the application of a range of relative income lines allows the sensitivity of the results to the precise location of the poverty line to be assessed. However, current income on its own is a partial indicator of a household's command over resources, which will be influenced by the accumulation and erosion of assets over a long period. In addition, in a situation of very rapid growth in average incomes purely relative income lines miss an important part of the picture and give a misleading impression when taken alone. We therefore emphasise in this study, as in previous work, the need to complement them with other approaches.

The application of income poverty lines to the data from the 1998 Living in Ireland Survey showed that the percentage of persons or households below half average income was generally higher than in 1997. The proportion below a lower line, set at 40 per cent of mean income, also rose whereas with a line set at 60 per cent of mean income a decline was generally seen. Relative income lines derived as proportions of the median rather than the mean showed a generally similar pattern. Distribution-sensitive summary poverty measures, taking into account not only numbers below the lines but how far their incomes are below the line, rose between 1997 and 1998 with all the relative income lines. There has, however, been a further sharp decline in the percentage of persons falling below a "real income" line, set at 60 per cent of average equivalent income in 1987 and up-rated in line only with increases in prices since that date.

Looking at the types of household falling below relative income poverty lines in 1998, the most notable change was the continuing rapid increase in the risk of being below half average income for single person households. On the other hand that risk fell for most households with children. The result was that whereas households containing children accounted for more than half all those below the 50 per cent relative income line in 1994, by 1998 this had fallen to only 28 per cent. The risk of being below half average income for the elderly increased, as it had between 1994 and 1997, whereas that risk declined significantly for children.

In terms of labour force participation, the risk of relative income poverty remained very high for households where the reference person was unemployed but the numbers in that

situation continued to decline between 1997 and 1998. For households where the reference person was ill or disabled or "in home duties", the risk of being below half average income rose from 1997 to 1998 to very high levels. Households headed by a retired person also saw an increase but from a much lower base. For households headed by an employee the risk of being below this threshold remained very low, at about 3 per cent. By 1998, fully 40 per cent of the households below half average income threshold had a reference person working full-time in the home. Only 30 per cent had an unemployed reference person, down from twice that figure in 1994, while the percentage with a retired reference person had doubled over the same period to 20 per cent.

The contrasting pattern of change in relative and real income lines outlined above arose from the following set of interrelated trends.

- Average household incomes rose rapidly.
- Prices rose slowly.
- Social welfare rates rose by more than prices but less rapidly than other incomes.
- Unemployment fell sharply.
- As a consequence the numbers on social welfare fell but the remaining recipients fell further behind the average.

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#### **10.4 Poverty Measures Incorporating Non-Monetary Deprivation Indicators**

**P**overty is defined in the NAPS in terms of exclusion from the life of a society because of a lack of resources, and income on its own has limitations when used to capture this concept. This is particularly the case in trying to capture trends in poverty in a situation of very rapid growth in average incomes. Direct measures of deprivation provide a valuable and complementary source of information in measuring poverty and assessing poverty trends. A measure of poverty developed in previous ESRI research focuses on those both below relative income poverty lines and experiencing what was termed basic deprivation: these were taken to be experiencing generalised deprivation due to lack of resources. The global poverty reduction target originally set out in the National Anti-Poverty Strategy in 1997, and revised in 1999, is framed in terms of this measure of poverty. Here we found that the extent of basic deprivation, which fell markedly between 1994 and 1997, continued to fall between 1997 and 1998. As a result, the percentage of households falling below 60 per cent of average income and experiencing basic deprivation also fell from 1997 to 1998, by which date it was just above 8 per cent. The NAPS target is now to bring the percentage below the 60 per cent line and experiencing basic deprivation to below 5 per cent by 2004.

The pattern of poverty risk and incidence with this measure was also examined, categorising households by the labour force status of their reference person. Declining poverty rates over the 1994-98 period were seen for all these categories, though there was little or no change between 1997 and 1998 in the risk for

households where the reference person is ill/disabled or retired. Households where the reference person is unemployed or ill/disabled were consistently at highest risk throughout the period, and in 1998 still faced poverty rates of about 30 per cent with this measure. However, the proportion of all poor households with an unemployed reference person fell over the period, from about one-third in 1994 to about one-quarter by 1998, reflecting the decline in the numbers unemployed. About one-third of poor households on this measure had their reference person engaged in home duties, and in about one-fifth he or she was retired.

The overall trend in the consistent poverty measure lay in between those displayed by different income-based measures, with poverty decreasing much more than with relative income lines but much less than with income lines held fixed in purchasing power terms. However, it also showed that the deprivation gap between poor households and others widened considerably. The consistent measure also offers a somewhat different profile of the poor than the relative income line, with higher risks incurred by the unemployed, lone parent, younger heads of households, and unskilled manual workers, while at the same time suggesting lower rates for the self-employed, farmers, the retired. In a cross-sectional context, the combined income and deprivation measure performed better than income on its own in identifying a group of households displaying the type of attributes one would expect to be associated with poverty, in terms of for example their own assessments of how difficult it is to make ends meet.

The issue remained though whether, given the extent of growth in average incomes and living standards, the way the consistent measure is constructed required modification by 1998. The non-monetary indicators included in the basic deprivation measure on which these results are based were identical in 1994, 1997 and 1998, while average incomes and living standards are rising rapidly. Based on 1997 data, Callan *et al.* (1999) showed that items such as central heating, a telephone, a car, a colour TV and being able to buy "presents for friends and families once a year" had by then come to be perceived as necessities by a majority of the sample. However, there was a striking consistency over time in the relationships between the different deprivation indicators, with distinct basic, secondary and housing dimensions remaining. Further, the additional households who would be included among the poor if the basic deprivation index were broadened to include those items – the "potentially poor" – were found to be little different from non-poor in terms of level of (self-assessed) economic strain, psychological distress and fatalism. This provided some reassurance that the original set of basic items was more successful in capturing generalised deprivation than an expanded set would be at that point.

Overall the manner in which the consistently poor are differentiated from all other households argues against simply

extending the set of items incorporated in the consistent poverty measure. However, the issue of when and how to expand the set of items included in the measure to best capture what is regarded in the society as basic deprivation is still a critical one. What we have called the "potentially poor" is clearly a key group to monitor. There may indeed be different views about the appropriate label to apply to this group, but there is in any case a strong argument for maintaining a distinction between the two groups for analytical purposes at this point.

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### 10.5 Income Poverty Persistence

As well as presenting important cross-sectional figures on the extent of poverty using various measures for 1998, this study has also included the first research into the dynamics of poverty in the Irish context. This is an important development because it will allow us to get closer to the processes and mechanisms behind the cross-sectional figures on poverty incidence. The increasing availability of longitudinal information in the form of panel surveys in a number of countries, but particularly in the US, Germany and Great Britain, has meant that there has been a reorientation in social policy research over the last fifteen years. This research has shown that from one year to the next considerable numbers entering and leaving poverty, even when the overall poverty rate remains quite stable. This leads one toward analysis of the factors producing these poverty transitions and the length of spells in poverty. Thus authors such as Bane and Elwood (1986) have argued that the analysis of poverty persistence is fundamental both to understanding poverty itself and to the development of anti-poverty policy.

In this study we have used relatively simple techniques to examine the distribution of income poverty persistence from 1994 to 1998, and the extent to which individual years in poverty can be viewed as independent events. Our findings show that many people experience poverty in some years but not in others. The other side of this coin is that the number affected by poverty at some point over the five-year period is a good deal higher than the numbers affected in any one year. The degree of persistence increases the more generously the poverty line is defined. Thus, half the individuals in the sample fell below the 60 per cent relative income line at some stage between 1994 and 1998, compared to about one-third below that line in any given year. Moreover two-fifths of respondents experienced two or more years under the 60 per cent line during that period. This suggests that there is a certain "inertia", in that being poor one year can influence one's probability of leaving poverty in the next year. Using simple probability statistics we saw that the probability of exit from poverty declined by almost two-thirds from 21 per cent after one year to around 7 per cent after four years (using the 60 per cent line).

The risk of experiencing multiple years of poverty is unevenly distributed across groups. The unemployed are exposed to

distinctively high levels of persistent poverty, as are the unskilled manual class and those without educational qualifications. Being poor for at least three out of five years was a fate that was experienced by a majority of these disadvantaged groups. The results of this analysis again suggest that by focusing on persistent rather than cross-sectional income poverty we are led to focus on causal factors very similar to those suggested by our use of the consistent poverty measure.

Some insight into the manner in which these longer-term disadvantages emerge was given by our analysis of the impact of various characteristics on the chance of exiting and risk of entry into poverty. We found that for disadvantaged groups such as the unemployed, the unskilled manual class and those without educational qualifications the probability of exit from poverty declined over time. More advantaged groups seem to be protected from such deterioration in their chances of escape for the first three years. The development of the "consistent" poverty measure was motivated by our understanding of the limitations of cross-sectional income poverty lines. It is therefore consistent with our theoretical expectations that the characteristics that are most predictive of persistently low income over time, and chances of exit from poverty, are ones that are much more strongly associated with consistent poverty than with income poverty at a point in time. Such results suggest that the consistent poverty measure does capture the impact of medium to long-term processes of accumulation or erosion of resources on the standard of living of households.

Our final analysis relating to poverty dynamics involved a preliminary attempt to connect the changing characteristics of households over time to changes in poverty status. Clear evidence was found for the impact of changes in employment status of household members, in the numbers working fifteen hours or more and in welfare dependency on the risk of falling below relative income thresholds. In future work we will provide a more comprehensive and formal treatment of the manner in which changing household circumstances influence entry and exit from poverty over time.

Our focus of attention then shifted to the types of outcomes associated with persistent poverty. Our analysis showed that longer-term experience of low income was associated with experience of economic strain, financial dissatisfaction, psychological distress and fatalism. The emergence of this set of relationships provides confirmation that persistent income poverty measures do much better than cross-sectional ones in identifying groups whose psychological profiles conform closely to what one would expect among the poor.

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## 10.6 Targeting Poverty

**I**n formulating a medium-term poverty reduction target one faces issues that encompass but are broader than those involved in measuring poverty at a point in time. The government, by setting

a target, acknowledges its responsibility for reducing the overall extent of poverty and sets out an overall standard against which success or failure of the national effort to combat poverty can be assessed. However, the way this is done needs to take into account the particular circumstances in which the strategy is operating, and the need to ensure that the strategy does in fact succeed in putting in place the structures required to eliminate poverty in the long term. In the present very unusual situation of very rapid economic growth, there is the danger that success, while real, could be transient.

As we have seen, the NAPS global poverty reduction target is currently framed in terms of the measure of poverty incorporating both low income and deprivation. The strategy did not set out an explicit justification for this choice of poverty reduction target. Under the Programme for Prosperity and Fairness, both the global target and the sub-targets included in the NAPS are to be reviewed. Here we conclude by pointing to some relevant issues in considering the current target, and reiterate what we believe would be a more effective approach.

The deprivation element of the combined income and deprivation poverty measure is intended to adapt over time as living patterns alter. An element of judgement is necessarily involved in making such adjustments, which may affect the precise level of the poverty measure at a particular point in time. While less serious in a measure aiming to capture broad directions and trends in poverty, this may be seen as a problem in a poverty target. It would also be undesirable in the latter context for changes in the key poverty number to be perceived as emerging from a "black box", given the importance of public acceptance of and identification with the poverty target. The fact that basic deprivation is measured in terms of items with which people can readily identify – such as not being able to heat one's house or have adequate clothing – we regard as a key argument for using deprivation indicators in the first place. In the same vein it is essential to ensure maximum transparency in the process of adapting the items over time as that becomes necessary, which it undoubtedly will at some point.

The more serious difficulty with the combined income and deprivation measure as the sole poverty target is specific to Ireland's current situation. When average incomes are growing exceptionally rapidly, when those on low incomes share in that growth and see their real living standards rise significantly, but when they lag somewhat behind the mean, deprivation levels can be falling while relative income poverty is stable or even rising. Even augmenting the set of deprivation measures to take into account changing expectations may not then be enough to alter this picture, since expectations themselves probably lag behind such rapid income growth.

This is not simply a problem with the measure: the measure is indeed capturing an important aspect of what is actually happening, which a purely relative income poverty standard such

as half-average income misses. However, over a lengthy period when living standards stabilise, societal expectations may indeed catch up and adjust fully to higher average incomes. Higher real incomes and lower deprivation levels, however welcome, would not then mean that everyone was able to participate fully in society: they would not represent a sustained reduction in poverty. The key challenge in setting and monitoring poverty targets is to capture the reality of rising living standards and falling deprivation, but also take into account the long-term consequences of lower incomes, and social security rates in particular, lagging behind the average.

We have suggested that what is required is a broadening in the scope of NAPS poverty targets (see Nolan 1999, 2000, Callan *et al.*, 1999). As well as the combined income/deprivation measure, there could be distinct targets for the key elements underpinning it. Such a set of tiered and inter-related poverty reduction targets would be to ensure that:

A/ Priority is given to ensuring that those on low incomes see their real incomes rise, and their deprivation levels using a fixed set of indicators decline;

B/ Next, relative incomes and deprivation levels using a set of deprivation indicators which changes as far as possible in line with expectations should produce a decline in the combined income/deprivation measure;

C/ Finally, the proportion of the population falling below relative income poverty lines should be declining.

Each of these tiers can be regarded as encapsulating a necessary but not sufficient condition for a sustainable reduction in poverty:

A/ reflects the assumption that if real incomes of the poor are falling and their deprivation levels rising, then even if their relative positions were improving most people would see poverty as increasing.

B/ reflects the assumption that the combined effect of changes in relative incomes and deprivation should be to reduce the extent of what is regarded as exclusion at a point in time.

C/ reflects the assumption that in the long term, people will not be able to participate in what comes to be regarded as ordinary living standards if their incomes fall too far below the average: a sustained reduction in poverty can then be achieved only by bringing them closer to average incomes.

There is a real dilemma here, as highlighted in Callan *et al.* (1999). From an analytical point of view, and in order to inform both the policy-makers and the public as fully as possible, it makes sense to look at a range of information and avoid focusing attention on a single number. From a political perspective, however, a key element in the exercise is to have a national commitment to attaining a clearly-articulated target, with regular monitoring of performance crucial to the credibility of that commitment and of the government's anti-poverty strategy. This means that there has to be a very limited set of numbers, against

which success or failure will be judged. There is every chance however that the current global poverty reduction target could be reached by 2004, but that in time poverty would be "rediscovered" as a more usual growth path emerges and societal expectations converge with higher living standards. The only way to avoid this is to frame targets – across the range of dimensions encompassed by NAPS – in a way which focuses attention on the long-term structural measures required to ensure that no-one falls too far below what will in time come to be taken for granted as ordinary living standards.

# APPENDIX 1. ATTRITION AND THE CHARACTERISTICS OF SAMPLE HOUSEHOLDS IN THE LIVING IN IRELAND SURVEY

It was noted in Chapter 2 that, particularly in the light of the relatively high sample attrition rate, it was important to carefully check for any biases in the Living in Ireland Survey samples that may be introduced if attrition is related to characteristics of households, such as size, location, economic status and income. These checks were conducted in the course of devising sample weights for the data in Waves 2 to 5, using information on the households and individuals from the previous wave's interviews. Appendix Table A1.1 provides the details of these results, which were discussed in Chapter 2. The data are weighted by carrying forward the household weight from the previous wave.<sup>17</sup> The table also shows the average weight that would be needed in each cell to correct for attrition.

<sup>17</sup> Note that these weights do not provide an accurate match to the population, so the distributions should only be used to compare the characteristics of responding and non-responding households. Newly generated households, for this purpose, get the same household weight as the household from which they were generated. For weighting purposes, non-sample households which had moved abroad outside the EU or where the members had died between waves are included in "All households".

**Appendix Table A1.1: Previous Wave Characteristics of All Households and Responding Households in Waves 2-5 and Average Attrition Weight Needed in Each Cell**

Characteristics of Individuals		Wave 2			Wave 3			Wave 4			Wave 5		
		All %	Res %	Wgt									
Females	Under 15	14	14	0.95	12	13	0.97	12	13	0.94	12	12	0.98
By age	16-19	4	4	1.10	4	4	1.07	4	4	0.99	4	4	1.02
(% individuals)	20-24	4	4	1.15	5	4	1.14	5	4	1.13	5	4	1.12
	25-34	7	7	1.01	7	7	1.00	8	7	1.07	7	7	0.99
	35-44	6	7	0.96	7	7	0.96	7	7	0.95	7	7	0.95
	45-54	6	5	1.06	6	6	1.05	6	6	1.04	7	6	1.03
	55-59	2	2	1.02	2	2	0.99	2	2	0.99	2	2	1.02
	60-64	2	2	1.04	2	2	0.97	2	2	0.94	2	2	0.95
	65-69	2	2	0.93	2	2	0.92	2	2	0.99	2	2	0.93
	70-74	2	2	0.95	2	2	0.96	1	2	0.89	1	2	0.92
	75+	2	2	1.00	2	2	1.00	2	2	1.06	2	3	0.92
Males	Under 15	14	15	0.95	13	14	0.97	13	13	0.96	12	13	0.96
By age	16-19	4	4	1.04	4	4	1.00	4	4	1.08	4	4	1.01
(% individuals)	20-24	4	4	1.09	5	4	1.08	5	4	1.13	5	4	1.24
	25-34	7	7	1.03	7	7	1.05	7	7	1.05	7	7	1.06
	35-44	6	6	0.94	6	7	0.97	7	7	0.95	6	7	0.95
	45-54	5	5	1.03	6	6	1.00	6	6	1.01	7	6	1.05
	55-59	2	2	1.03	2	2	1.07	2	2	0.97	2	2	0.96
	60-64	2	2	1.05	2	2	1.01	2	2	1.00	2	2	0.95
	65-69	2	2	1.01	2	2	0.92	2	2	0.96	2	2	0.99
	70-74	1	1	0.95	1	1	0.92	1	1	0.93	1	1	0.95
	75+	2	2	0.95	2	2	0.94	2	2	0.95	2	2	0.94
Females 15+ by education (% age 15+)	No exams	18	18	0.99	17	17	0.98	15	16	0.97	15	16	0.96
	Jnr. Cycle	12	12	1.00	12	12	0.99	14	14	0.99	13	13	1.00
	Snr. Cycle	15	15	1.01	15	15	1.00	15	15	1.02	15	15	1.01
	Third Level	6	5	1.05	7	6	1.09	7	7	1.06	8	9	0.99
Males 15+ by education (% age 15+)	No exams	18	17	1.01	16	17	0.97	16	17	0.96	15	15	0.97
	Jnr. Cycle	14	14	0.98	15	14	1.02	15	15	1.04	14	14	0.98
	Snr. Cycle	11	11	0.98	11	11	1.00	11	11	1.03	12	11	1.07
	Third Level	6	6	1.02	7	7	1.02	7	7	1.00	9	8	1.06
Social Welfare Recipients (% age 15+)	U.A. etc.	8	8	1.05	8	8	1.02	7	7	0.99	6	6	1.00
	U.B.	2	2	1.02	2	2	1.02	2	2	0.97	2	2	1.02
	OAP_C/ Ret. Pen.	4	4	0.95	5	5	0.94	5	5	0.94	5	5	0.94
	OAPNC	4	5	0.94	4	4	0.91	3	4	0.95	3	4	0.94
	WID_C	2	3	0.95	3	4	0.93	3	3	0.97	3	4	0.93
	WID_NC	1	1	1.04	1	1	1.32	1	1	0.91	1	1	0.86
	LPA	2	2	1.05	2	2	0.93	2	2	0.99	2	2	0.97
	D.B.	1	1	0.89	2	2	1.00	2	2	1.01	2	2	1.01
	Inv.P.	1	1	0.95	2	1	1.09	2	2	1.00	2	2	0.94

Appendix Table A1.1 (continued)

Characteristics of Households		Wave 2			Wave 3			Wave 4			Wave 5		
		All %	Res %	Wgt									
	DPMA	1	1	1.00	1	1	0.93	1	2	0.88	2	2	0.99
Head-Sex	Male	76	76	0.99	78	78	1.00	78	79	0.99	78	77	1.01
(Households)	Female	24	24	1.02	22	22	1.00	22	21	1.03	22	23	0.95
Head-Age	Under 25	2	2	1.08	2	1	1.31	1	1	1.30	2	1	1.46
Group	25-34	16	16	1.00	18	18	1.01	19	18	1.05	18	18	1.01
(Households)	35-44	21	22	0.95	22	22	0.98	22	23	0.96	21	21	0.96
	45-54	20	19	1.04	22	22	1.02	22	21	1.02	23	21	1.06
	55-64	16	16	1.05	14	14	1.03	15	15	0.97	14	15	0.98
	65+	24	25	0.98	22	23	0.95	22	22	0.99	23	24	0.96
Hsd. Size	One	21	21	0.99	21	21	1.01	21	21	1.00	21	23	0.93
(Households)	2	21	21	0.98	22	23	0.97	23	24	0.96	23	24	0.98
	3	15	14	1.03	16	17	0.97	17	16	1.06	16	16	1.03
	4	16	17	0.98	18	17	1.03	17	17	1.01	17	17	0.99
	5	14	14	1.00	12	12	1.03	13	13	0.97	13	12	1.07
	6+	13	13	1.03	11	11	1.01	10	9	1.03	10	9	1.09
N at Work	0	35	36	0.98	32	33	0.97	30	32	0.95	30	32	0.95
(Households)	1	36	37	0.98	36	36	0.99	35	36	0.99	35	35	1.00
	2	21	21	1.01	27	26	1.01	29	28	1.04	28	27	1.04
	3+	8	7	1.16	6	5	1.24	6	5	1.25	6	6	1.11
Head	Employee	39	38	1.02	43	42	1.03	43	43	1.01	44	43	1.02
Economic	Self-emp.	9	9	0.99	8	8	1.03	9	8	1.10	9	9	1.00
Status	Farming	8	8	0.97	9	9	0.96	8	8	0.98	7	7	0.98
(Households)	Unemployed	9	9	1.00	8	8	0.96	8	9	0.97	7	7	1.03
	Disabled	3	3	1.00	3	3	1.07	3	3	0.90	3	3	0.99
	Retired	18	18	0.97	16	17	0.97	17	17	0.97	17	17	0.97
	Home Duties	14	13	1.02	13	13	0.95	11	11	1.01	12	13	0.95
Urban/Rural	Dublin	30	29	1.02	31	31	1.00	30	30	1.03	31	31	1.03
(Households)	Other Urban	18	18	1.03	20	19	1.04	19	18	1.05	20	19	1.02
	Rural	52	53	0.98	49	50	0.99	51	52	0.97	49	50	0.97
Hsd Moved?	Same Address	88	94	0.93	87	94	0.93	89	95	0.93	89	95	0.94
(Households)	New Address	12	6	2.24	13	6	2.17	11	5	2.25	11	5	2.19
Hsd Split?	Original Hsd	93	97	0.96	94	98	0.96	94	98	0.96	94	98	0.95
(Households)	Split Hsd	7	3	2.41	6	2	2.67	6	2	3.16	6	2	3.70
Poverty W1	Not Poor	83	82	1.01	85	84	1.01	85	85	1.01	83	83	1.00
(Households)	Poor	17	18	0.96	15	16	0.96	15	15	0.96	17	17	1.00
Equiv Inc.	1	11	12	0.96	10	10	1.01	9	9	0.99	9	9	1.06
Decile W1	2	14	14	1.00	13	14	0.92	13	13	0.99	9	10	0.94
(Households)	3	10	10	1.03	10	9	1.01	10	10	0.94	9	9	0.98
	4	10	11	0.98	10	10	1.04	10	10	1.00	10	10	0.97
	5	9	9	0.99	9	9	0.99	8	8	0.98	8	9	0.97
	6	8	8	1.00	9	9	1.00	9	9	0.98	11	11	1.04
	7	9	9	1.02	9	10	0.98	10	10	1.01	11	12	1.00

**Appendix Table A1.1 (continued)**

8	9	9	0.99	9	9	1.00	10	9	1.09	11	11	1.04
9	9	9	1.00	10	9	1.05	10	10	1.01	10	10	0.96
10	10	9	1.03	12	11	1.03	12	12	1.01	12	11	1.04

# APPENDIX 2.

## SUPPLEMENTARY RESULTS

### ON RELATIVE INCOME

### POVERTY

In Chapter 3, a range of results on the percentages falling below relative income poverty lines were presented, and others were discussed but the detailed results were not given for ease of presentation. This appendix gives the results which underlie that discussion. First, the percentage of individuals living in households falling below relative income lines are shown in Table A2.1. We see that in 1994, the percentage of persons in households below the lines was consistently higher than the percentage of households below the corresponding line, reflecting the fact that these households were larger than average. By 1998, by contrast, more often than not the opposite is found, with lower poverty rates for persons than households. As a result the increase in poverty rates between 1997 and 1998 with the 40 per cent and 50 per cent lines is more muted for persons than it was for households – indeed with Scale A there is a decrease with the 50 per cent line. Similarly, with the 60 per cent line the percentage of persons in households below the line falls more than the percentage of households itself.

**Table A2.1: Percentage of Persons in Households Below Mean Relative Income Poverty Lines (Based on Income Averaged Across Households), Living in Ireland Surveys 1994, 1997 and 1998)**

Equivalence scale/ Poverty line	Percentage of Persons below line		
	1994	1997	1998
Scale A (1/0.66/0.33):			
40 per cent relative income line	6.7	8.1	9.6
50 per cent relative income line	20.6	21.0	20.5
60 per cent relative income line	33.7	32.6	30.0
Scale B (1/0.6/0.4):			
40 per cent relative income line	7.5	8.9	9.8
50 per cent relative income line	21.5	20.6	21.1
60 per cent relative income line	33.6	32.0	29.7
Scale C (1/0.7/0.5):			
40 per cent relative income line	10.7	9.7	10.7
50 per cent relative income line	22.7	21.1	21.5
60 per cent relative income line	34.7	33.6	31.3

Relative income poverty rates using thresholds derived as proportions of the median (rather than the mean) were discussed in Chapter 3, and Table A2.2 shows the figures underlying that discussion.

**Table A2.2: Percentage of Persons Below Median Relative Income Poverty Lines (Based on Income Averaged Across Individuals), Living in Ireland Surveys 1994, 1997 and 1998**

Equivalence scale/ Poverty line	Percentage of Persons below line		
	1994	1997	1998
Scale A (1/0.66/0.33):			
50 per cent relative income line	6.0	8.6	10.4
60 per cent relative income line	15.6	18.2	20.0
70 per cent relative income line	26.7	29.0	27.4
Scale B (1/0.6/0.4):			
50 per cent relative income line	6.3	9.6	11.5
60 per cent relative income line	17.1	19.0	21.0
70 per cent relative income line	26.9	28.9	27.9
Scale C (1/0.7/0.5):			
50 per cent relative income line	7.0	8.9	11.0
60 per cent relative income line	17.0	17.7	19.9
70 per cent relative income line	25.4	27.8	28.1

As well as headcounts of the numbers falling below relative income lines, summary measures aimed at capturing the depth and distribution of income poverty were also presented. Tables A2.3 and A2.4 show the results for the three sets of equivalence scales.

**Table A2.3: Per Person Income Gaps Using Relative Poverty Lines and Different Equivalence Scales, 1994, 1997 and 1998 Living in Ireland Surveys**

Equivalence Scale	Relative Poverty Line								
	40 Per Cent			50 Per Cent			60 Per Cent		
	1994	1997	1998	1994	1997	1998	1994	1997	1998
A	.0103	.0137	.0161	.0338	.0390	.0427	.0736	.0775	.0775
B	.0109	.0159	.0181	.0384	.0417	.0445	.0778	.0791	.0793
C	.0151	.0193	.0203	.0457	.0462	.0472	.0859	.0852	.0838

**Table A2.4: Distribution-sensitive Weighted Poverty Gap Measure Using Relative Poverty Lines and Different Equivalence Scales, 1994, 1997 and 1998 Living in Ireland Surveys**

Equivalence Scale	Relative Poverty Line								
	40 Per Cent			50 Per Cent			60 Per Cent		
	1994	1997	1998	1994	1997	1998	1994	1997	1998
A	.0030	.0046	.0056	.0094	.0121	.0139	.0228	.0263	.0281
B	.0032	.0050	.0062	.0106	.0133	.0150	.0251	.0278	.0294
C	.0042	.0071	.0073	.0135	.0155	.0164	.0295	.0308	.0315

Finally, the percentages falling below income thresholds held fixed in purchasing power terms from 1987 were also discussed, and Table A2.5 presents the figures for a range of these income lines.

**Table A2.5: Proportions of Persons Below 1987 Real Income Standards, 1994 and 1997  
Living in Ireland Surveys**

Real Income Standard 1987	Percentage of persons below line: Equivalence Scale								
	A			B			C		
	1994	1997	1998	1994	1997	1998	1994	1997	1998
40 per cent line	1.9	1.3	0.6	1.8	1.0	0.6	3.3	1.7	0.7
50 per cent line	7.0	2.9	1.6	7.1	3.1	1.7	14.0	6.6	4.1
60 per cent line	17.7	8.0	5.7	18.3	8.4	6.1	23.9	11.9	8.3

# APPENDIX 3. PROFILE OF THOSE BELOW MEDIAN- BASED RELATIVE INCOME POVERTY LINES

Chapter 4 examined the risk and incidence of relative income poverty for households, using lines derived as proportions of mean equivalised income. An alternative procedure for deriving such relative lines is to take proportions of the median, the income level which splits the distribution in two. A further choice discussed there was whether one focuses on households or on persons – having attributed the equivalised income of the household to each person in it. To provide a comprehensive picture of the pattern of risk and incidence, this appendix presents a profile of persons falling below median-based relative income lines. The median-based lines with the proportions chosen – 50 per cent, 60 per cent and 70 per cent – turn out to be at similar levels in 1997 and 1998 to the lower proportions of the mean conventionally used – namely 40 per cent, 50 per cent and 60 per cent respectively. The main differences to the pattern described in Chapter 4 thus arise from the shift in focus from households to persons.

## **HOUSEHOLD COMPOSITION**

Table A3.1 shows the risk of falling below 60 per cent of median equivalised income, categorising persons by the size and composition of the household in which they live. The pattern is very similar to the risk for households of falling below half average income, shown in Table 4.1.

**Table A3.1: Percentage of Persons Below 60 Per Cent Median Income Poverty Line by Household Composition Type, Living in Ireland Surveys, 1994, 1997 and 1998**

	1994	1997	1998
1 adult	7.3	35.7	50.4
2 adults	7.1	11.1	16.3
3 or more adults	7.7	11.2	12.0
2 adults, 1 child	12.9	15.7	13.1
2 adults, 2 children	10.1	12.4	13.1
2 adults, 3 children	20.8	24.1	9.8
2 adults, 4 or more children	33.9	41.1	25.0
Others with children	24.3	23.4	28.3
All	15.6	18.2	20.3

When we come to the composition of those falling below 60 per cent of the median, however, we see from Table A3.2 that the focus on persons rather than households does now make a difference. Compared with Table 4.2, the 1-adult household type is now much less important and the "others with children" type much more important. We now see that only 31 per cent of persons below 60 per cent of the median are in households comprising one or two adult, whereas Table 4.2 showed that these household types accounted for 61 per cent of all households below half the mean. This arises simply because these households have only one or two persons living in them, whereas the average size of "others with children" is much larger. So the focus on persons provides a valuable complement to the comparison of the situation of different household types. In terms of trends over time, though, we see a rather similar picture, with an increase over time in the importance of the household types without children.

**Table A3.2: Breakdown of Persons Below 60 Per Cent Median Income Poverty Line by Household Composition Type, Living in Ireland Surveys, 1994, 1997 and 1998**

	1994	1997	1998
1 adult	3.3	14.6	18.3
2 adults	5.8	9.1	12.2
3 or more adults	10.7	16.1	16.9
2 adults, 1 child	4.1	5.4	3.7
2 adults, 2 children	6.0	6.8	6.1
2 adults, 3 children	10.3	9.2	3.0
2 adults, 4 or more children	9.8	5.9	3.7
Others with children	50.0	33.0	36.1
All	100.0	100.0	100.0

Tables A3.3 and A3.4 show the pattern of risk and then incidence in terms of persons falling below 50 per cent of the median. A comparison with the pattern for households below 40 per cent of the mean in Tables 4.3 and 4.4 brings out very much the same contrast: the risk pattern is very similar, but the concentration in small households without children is very much less. Thus, whereas we saw in Table 4.4 that almost half the households below 40 per cent of the mean were 1 or 2 adults

only, we see from Table A3.4 that only 23 per cent of the persons below 50 per cent of the median live in such households.

**Table A3.3: Percentage of Persons Below 50 Per Cent Median Income Poverty Line by Household Composition Type, Living in Ireland Surveys, 1994, 1997 and 1998**

	1994	1997	1998
1 adult	1.7	3.6	21.1
2 adults	3.1	5.5	6.1
3 or more adults	4.7	5.8	4.3
2 adults, 1 child	3.0	3.0	12.8
2 adults, 2 children	0.9	6.1	8.9
2 adults, 3 children	3.7	21.1	7.4
2 adults, 4 or more children	6.0	33.7	16.4
Others with children	11.5	11.1	16.7
All	6.0	8.6	10.4

**Table A3.4: Breakdown of Persons Below 50 Per Cent Median Income Poverty Line by Household Composition Type, Living in Ireland Surveys, 1994, 1997 and 1998**

	1994	1997	1998
1 adult	2.0	3.2	14.7
2 adults	6.5	9.5	8.6
3 or more adults	17.0	17.5	11.7
2 adults, 1 child	2.4	2.2	6.9
2 adults, 2 children	1.5	7.0	7.9
2 adults, 3 children	4.7	17.1	4.3
2 adults, 4 or more children	4.4	10.2	4.7
Others with children	61.4	33.3	40.9
All	100.0	100.0	100.0

Tables A3.5 and A3.6 show the pattern of risk and incidence for persons when the poverty line is derived as 70 per cent of the median. The risk pattern is again similar to that for households with 60 per cent of the mean, shown in Table 4.5. Once again, though, the focus on persons means that the larger household types – 3 or more adults without children, and “others with children” – are a good deal more important in Table A3.6 than they were when the focus was on households in Table 4.6.

**Table A3.5: Percentage of Persons Below 70 Per Cent Median Income Poverty Line by Household Composition Type, Living in Ireland Surveys, 1994, 1997 and 1998**

	1994	1997	1998
1 adult	40.0	49.5	54.8
2 adults	13.6	29.3	26.9
3 or more adults	14.1	19.3	19.3
2 adults, 1 child	20.2	20.3	16.5
2 adults, 2 children	14.9	14.7	17.0
2 adults, 3 children	28.2	30.4	14.4
2 adults, 4 or more children	43.5	45.9	42.9
Others with children	39.1	38.1	36.2
All	26.7	29.0	27.4

**Table A3.6: Breakdown of Persons Below 70 Per Cent Median Income Poverty Line by Household Composition Type, Living in Ireland Surveys, 1994, 1997 and 1998**

	1994	1997	1998
1 adult	10.6	12.8	14.6
2 adults	6.5	15.1	14.7
3 or more adults	11.6	17.5	19.9
2 adults, 1 child	3.7	4.4	3.4
2 adults, 2 children	5.2	5.0	5.7
2 adults, 3 children	8.1	7.3	3.2
2 adults, 4 or more children	7.3	4.1	4.7
Others with children	47.0	33.8	33.8
All	100.0	100.0	100.0

### LABOUR FORCE STATUS

Still focusing on persons below median-based relative income lines, we now look at risk and incidence when they are categorised by the labour force status of the reference person for the household in which they live. Tables A3.7 and A3.8 show the pattern of risk and incidence when the poverty line is derived as 60 per cent of the median. Once again the variation in risk across these categories is generally similar to that seen for households with half the average income threshold, with those living in households where the reference person is unemployed, ill/disabled or in home duties facing a substantially higher risk than others.

**Table A3.7: Risk of Person Falling Below 60 Per Cent Median Income Poverty Line by Labour Force Status of Household Reference Person, Living in Ireland Surveys 1994, 1997 and 1998**

	1994	1997	1998
Employee	3.1	4.7	2.8
Self-employed	16.2	14.8	17.2
Farmer	18.7	16.9	24.4
Unemployed	49.9	55.0	57.3
Ill/disabled	29.5	52.5	54.5
Retired	8.1	13.3	18.7
Home duties	20.2	31.7	44.5
All	15.6	18.0	19.6

Table A3.8 shows the types of household in which persons below this median-based line were living. While the differences are less pronounced than in the case of household composition, there are still some noteworthy changes compared with the profile of households below half the mean, seen in Table 4.8. Because there are differences across the categories in household size, we see that households where the reference person is retired or in home duties are now somewhat less important, and those where he or she is unemployed or in work are more important, than in Table 4.8.

**Table A3.8: Breakdown of Persons Below 60 Per Cent Median Income Poverty Line by Labour Force Status of Reference Person, Living in Ireland Surveys 1994, 1997 and 1998**

	1994	1997	1998
Employee	7.9	11.5	6.5
Self-employed	10.1	7.8	8.5
Farmer	9.7	8.0	10.4
Unemployed	41.8	29.6	22.7
Ill/disabled	6.2	10.4	9.0
Retired	6.3	9.1	12.5
Home duties	18.0	23.6	30.3
All	100.0	100.0	100.0

Tables A3.9 and A3.10 show the pattern of risk and incidence for persons when the poverty line is derived as 50 per cent of the median. Once again the variation in risk is similar to that seen for households with 40 per cent of the mean, but in terms of composition households where the reference person is unemployed become more important and those where he or she is retired become somewhat less important.

**Table A3.9: Risk of Person Falling Below 50 Per Cent Median Income Poverty Line by Labour Force Status of Household Reference Person, Living in Ireland Surveys 1994, 1997 and 1998**

	1994	1997	1998
Employee	0.6	1.2	0.5
Self-employed	10.1	11.2	13.9
Farmer	11.1	6.2	6.3
Unemployed	18.2	38.0	40.6
Ill/disabled	10.1	27.5	43.6
Retired	3.8	2.3	6.0
Home duties	5.4	8.6	21.8
All	6.0	8.4	10.4

**Table A3.10: Breakdown of Persons Below 50 Per Cent Median Income Poverty Line by Labour Force Status of Reference Person, Living in Ireland Surveys 1994, 1997 and 1998**

	1994	1997	1998
Employee	3.8	6.4	2.1
Self-employed	16.2	13.0	13.0
Farmer	15.0	6.4	5.1
Unemployed	39.5	44.8	30.5
Ill/disabled	5.5	12.0	13.7
Retired	7.6	3.4	7.6
Home duties	12.5	14.1	28.1
All	100.0	100.0	100.0

Finally, Tables A3.11 and A3.12 show the pattern of risk and incidence for persons when the poverty line is derived as 70 per cent of the median. Once again the variation in risk is similar to that seen for households with 60 per cent of the mean. The composition results in Table A3.12 show, however, that households where the reference person is unemployed are more important and those where he or she is retired or in home duties

less important than in the corresponding results for households below 60 per cent of the mean in Table 4.12.

**Table A3.11: Risk of Person Falling Below 70 Per Cent Median Income Poverty Line by Labour Force Status of Household Reference Person, Living in Ireland Surveys 1994, 1997 and 1998**

	1994	1997	1998
Employee	6.8	9.7	6.8
Self-employed	20.1	21.7	23.4
Farmer	28.5	25.1	33.1
Unemployed	69.1	68.8	66.7
Ill/disabled	60.9	67.0	65.2
Retired	17.1	31.5	30.1
Home duties	47.1	55.6	57.6
All	26.7	28.7	27.0

**Table A3.12: Breakdown of Persons Below 70 Per Cent Median Income Poverty Line by Labour Force Status of Reference Person, Living in Ireland Surveys 1994, 1997 and 1998**

	1994	1997	1998
Employee	10.1	14.8	11.2
Self-employed	7.3	7.1	8.4
Farmer	8.7	7.4	10.2
Unemployed	34.0	23.1	19.2
Ill/disabled	7.4	8.3	7.8
Retired	7.8	13.5	14.6
Home duties	24.6	25.8	28.5
All	100.0	100.0	100.0

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