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RECONFIGURING  
THE MEASUREMENT  
OF DEPRIVATION  
AND CONSISTENT  
POVERTY IN  
IRELAND

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# EXECUTIVE SUMMARY

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## Introduction

The measure of “consistent” poverty developed in previous research at the Economic and Social Research Institute has been used extensively in measuring the extent of poverty in Ireland and trying to understand the causal processes that produce and perpetuate it. This has helped to inform the National Anti-Poverty Strategy, and has had a major impact on the way it has framed its targets. The central aim of this study is to re-assess in a fundamental way with new data how this measure is now best constructed, in the light of current living standards and expectations. It employs for this purpose data from the Central Statistics Office’s new EU-SILC survey, initiated in 2003, which is to be the key source for monitoring developments in income and living standards into the future.

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## The Need to Reconfigure the Measures

The new survey differs in some important respects from the Living in Ireland Surveys, on which poverty monitoring and research has relied up to now. This means that direct comparisons cannot meaningfully be made between the measured levels of deprivation in the last Living in Ireland Survey, for 2001, and the new EU-SILC data for 2003. However, the availability of the new data provides the basis for a full-scale re-examination of the deprivation indicators employed in capturing basic deprivation and consistent poverty.

Even without the change in data source, the expansion of the Irish economy, with living standards rising rapidly over a short period, would provide a compelling argument for reconsidering the way consistent poverty is measured and targeted in the National Anti-Poverty Strategy. The way the basic deprivation index is constructed needs to be adapted in order to capture those most exposed to risk of poverty and social exclusion in contemporary Irish society.

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## Measuring Consistent Poverty with EU-SILC

This study applies a range of statistical techniques to the new EU-SILC data, and re-assesses the measurement of different dimensions of deprivation and the items used for the construction of a basic deprivation index. Based on the patterns found, it proposes that basic deprivation be measured by 11 indicators available in the new survey. These replace the previous 8-item index, with only some of those items being retained. In particular, the previously-used item relating to being in debt to cover ordinary living expenses is now

dropped. The new set of items provides a more comprehensive coverage of exclusion from family and social life.

This measure of basic deprivation can then be combined with income thresholds set at 60 per cent and 70 per cent of median income to produce the consistent poverty measure. In doing so the analysis supports the use of a threshold level of 2 or more on the basic deprivation index, rather than the threshold of 1 or more which had been used with the original 8-item deprivation index.

This produces consistent poverty rates of 8 per cent and 10 per cent in 2003 (slightly lower than those obtained using the original 8-item deprivation index and a threshold of 1).

Using the new basic deprivation index, those identified as consistently poor are sharply differentiated from others below the relative income lines in terms of the 11 items constituting the basic deprivation index. They are also distinct in terms of their subjective assessment of the economic pressures they face, and in terms of a number of other distinct dimensions of deprivation measured in the survey.

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### **Patterns of Consistent Poverty**

Employing the new measure we find that those most at risk of consistent poverty are single adults with children, households with a large number of children, those lacking educational qualification, and the unemployed and ill/disabled. These patterns of socio-economic differentiation are consistently sharper than with the previous 8-item index. While distinctive socio-economic risk profiles are observed, some groups with intermediate or low risk levels make up significant proportions of the consistently poor, simply because they comprise sizeable parts of the population. The two most striking examples are, respectively, individuals on home duties and those at work. While those highly dependent on social transfers make up a large proportion of the consistently poor, a significant minority are not dependent on social welfare.

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### **A Multi-tiered and Multi- dimensional Approach to Poverty Targeting**

The study also considers how the revised and adapted consistent poverty measure can best be employed in framing poverty targets. When dealing with a phenomenon as complex and multi-faceted as poverty, there is a strong argument for not relying on any single measure or indicator. Instead, a set of tiered and inter-related poverty reduction targets is proposed along the following lines:

- 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.



Poverty targets framed in this fashion, with the re-configured basic deprivation and consistent poverty measures at their core, would provide a sound basis for assessing progress in tackling poverty in Ireland over the next three to five years. At that point it will be necessary to once again re-assess the adequacy of the deprivation component in capturing generalised deprivation.



# 1. INTRODUCTION

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## 1.1 Focus of the Study

Ireland for the last decade has experienced unprecedented economic growth, accompanied by profound change in standards of living, points of reference and the broader societal context. Before assessing how this has affected the extent and nature of poverty, one has to decide how poverty is best measured. Previous Irish research on poverty (Callan, Nolan and Whelan 1993; Layte *et al.*, 2001; Nolan *et al.*, 2002) has shown that low income alone does not provide a reliable measure of exclusion due to lack of resources, in that many of those falling below conventional income poverty thresholds are not among the most deprived. Measuring and understanding poverty requires a multidimensional approach, especially in such a rapidly changing socio-economic context: no one indicator has all the information required. How such an approach is implemented can have a major impact on how poverty is seen to have changed over time, and also our understanding of its socio-economic determinants (Nolan and Whelan, 1996; Whelan *et al.*, 2003).

In measuring and monitoring the evolution of poverty in Ireland over recent years, research at The Economic and Social Research Institute (ESRI) has made extensive use not only of household income but also of non-monetary indicators of deprivation, in order to obtain a more comprehensive picture of household living standards and command over resources. Particular attention has been paid to those who both fall below particular income thresholds and report certain types of deprivation, who have been identified as “consistently poor” – that is, their measured income *and* level of deprivation suggest they are in poverty. Concretely, this has highlighted those both falling below relative income thresholds – generally set at 60 per cent or 70 per cent of median household disposable income – and reporting what we have termed “basic deprivation”, as captured by a specific set of eight non-monetary indicators. This measure of “consistent” poverty has been extensively used in research aimed at measuring the extent of poverty in Ireland and understanding the causal processes that produce and perpetuate it, and also in the National Anti-Poverty Strategy, not least in the way it has framed its targets.

The precise way in which basic deprivation and consistent poverty are measured, in terms of the specific non-monetary indicators used for that purpose, was initially established using data for 1987 and then 1994, and has been re-examined in several studies since then using more up-to-date information (see for example Nolan *et al.*, 2002; Whelan *et al.*, 2003). The central aim of this study

is to re-assess in a fundamental way with new data how this measure is now best constructed, in the light of current living standards and expectations.

The new data arise because of a change in the core source of household survey data designed to capture poverty and living standards in Ireland. From 1994 up to 2001 these data came from the Living in Ireland Surveys (LIIS), which were carried out by the ESRI as the Irish component of the European Community Household Panel (ECHP) organised by Eurostat, the Statistical Office of the European Communities. The ECHP was discontinued from 2001 and is now being replaced across the Union by what is known as the EU Statistics on Income and Living Conditions (EU-SILC). In Ireland, the survey to produce the statistics required is being carried out by the Central Statistics Office, and the first such survey was carried out in the second half of 2003 – in advance of many other member states. This study is based on the first release of the EU-SILC data for 2003.

As we make clear in Chapter 2, the LIIS and the EU-SILC constitute two distinct data sources and there are important differences between them, not least in the measurement of deprivation, which mean that it is not possible to make a direct comparison between the figures for consistent poverty produced by the two sources. This provides another rationale for looking in depth at the way basic deprivation and consistent poverty are measured, to provide the most satisfactory baseline level from the new survey against which future trends can be assessed. We will in future research be using the new measures put forward here to investigate in greater depth the patterns of poverty in EU-SILC, using data for the larger sample included in the 2004 survey which will soon be available for analysis. At this stage our primary focus is on measurement issues, and specifically on how best to reconfigure the measures of basic deprivation and consistent poverty.

---

## 1.2 Structure of the Report

**I**n Chapter 2 we describe the EU-SILC survey on which the report is based, the key role EU-SILC is to play in monitoring income and living conditions in Ireland and in the EU, and how it differs from the ECHP and Living in Ireland Surveys. The way deprivation is measured and the reasons why measured levels of deprivation differ between the surveys is given particular attention.

Chapter 3 deals with the measurement of deprivation and consistent poverty. Taking advantage of the opportunities presented by the new EU-SILC data, and responding to the challenges presented by comparability problems relating to LIIS and EU-SILC, we develop a new index of basic deprivation and associated measures of consistent poverty. Detailed analysis is conducted in order to provide an in-depth understanding of the consequences of changes in the measurement procedures and to validate the new measures we propose. This validation relates in the first instance to

how the various indicators relate to one another, and how they relate to subjective views expressed by respondents about their own situations.

Chapter 4 then focuses on the socio-demographic distribution of consistent poverty. It pays particular attention to the manner in which our understanding of the factors influencing such poverty is affected by the measurement choices made. Examining the types of individual and household identified as consistently poor also provides another perspective on the validity of the measures themselves.

Finally, Chapter 5 summarises the main conclusions of the study with respect to the way consistent poverty is measured. It then goes on to re-examine the way consistent poverty is used in framing targets in the National Anti-Poverty Strategy, and proposes that in that context it should form one element in a tiered set of “headline” targets.

# 2. MEASURING DEPRIVATION IN THE 2003 STATISTICS ON INCOME AND LIVING CONDITIONS SURVEY

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## 2.1 Introduction

During the period 1994-2001 the European Community Household Panel (ECHP) survey was the key data source employed to monitor income, poverty, social exclusion and standards of living in the European Union. The ECHP was a harmonised survey, in that the same questions were asked in each country, and measures of, for example, the percentage falling below relative income poverty thresholds could be produced by Eurostat for all the participating countries in a harmonised way. The Living in Ireland Survey (LIIS) was the Irish component of the ECHP, and it also served as the key data source for monitoring and studying poverty and social exclusion in Ireland over the period (in for example Nolan *et al.*, 2002; Whelan *et al.*, 2003; Callan *et al.*, 2004; Whelan, Nolan and Maître 2005).

The ECHP has now been replaced by the EU Statistics on Income and Living Conditions (EU-SILC), which is to become the reference source of statistics on income and living conditions, and for common indicators relating to poverty and social inclusion in particular, in the European Community. The EU-SILC project was launched in 2003 on a full-scale pilot basis in six member states, including Ireland (the others being Belgium, Denmark, Greece, Luxembourg and Austria; Norway, though not an EU member, also launched SILC). A second round of EU-SILC with much wider participation was then launched in 2004 in 13 member states (all the other “old” EU members except the Netherlands, Germany, the United Kingdom, and the 10 new Member States except Estonia, as well as non-member Iceland). In 2005 EU-SILC reaches its full scale with the involvement of all 25 Member States as well as Norway and Iceland. In this chapter we outline the way EU-SILC is being organised, highlighting important differences between it and the ECHP/Living in Ireland Surveys, and look in particular at the

measurement of deprivation levels in the two surveys for Ireland and why they differ.

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## 2.2 The 2003 EU-SILC and the Living in Ireland Surveys

While the EU-SILC can be seen as the successor of the ECHP substantial differences exist between the two at EU level (see Eurostat 2005, and the discussion in Atkinson *et al.*, 2005). EU-SILC shares many of the same objectives as the ECHP, but it uses a different approach to producing data in terms of data harmonisation across countries. Unlike the ECHP, EU-SILC is organised under a framework Regulation and is thus compulsory for all Member States. The aim of the Regulation is to establish a *common framework* for the systematic production of Community statistics on income and living conditions, not a *common survey* as was the case for the ECHP. In EU-SILC, unlike the ECHP, Member States are allowed to use both survey(s) and administrative registers, provided that all the cross-sectional data (and, separately, all the longitudinal data) are “linkable” at the micro-level. They are allowed, however, to separate the cross-sectional element from the longitudinal element if they prefer, so the cross-sectional micro-dataset and the longitudinal micro-dataset may not necessarily be linked at the micro-level. So EU-SILC is an “output-co-ordinated” instrument rather than an input co-ordinated harmonised survey, as was (mostly) the case with the ECHP. Also, whereas the ECHP was designed as a pure panel survey seeking to follow all first-wave respondents throughout, for EU-SILC Eurostat recommends a rotational design in which an individual is followed for at most four years – that being the number of years required for constructing the longitudinal elements of the common set of social inclusion indicators adopted by the European Council at its Laeken meeting in 2001.

In Ireland the information required under this EU-SILC framework is being obtained via a new survey to be conducted by the Central Statistics Office (Central Statistics Office, 2005) each year. This was initiated in 2003, with interviews carried out in the period June to December 2003; the survey was then carried out throughout 2004, and again throughout 2005, with first results published in early 2005 (CSO, 2005). The EU-SILC survey is a voluntary survey of private households. From 2004 the total completed sample size is to be of the order of 5,000 to 6,000 households in each year. In 2003, however, with data collection restricted to the second half of the year, a smaller sample of 3,112 households was obtained.

A two-stage sample design was used in Ireland for EU-SILC 2003. This comprised first a sample of 2,600 blocks (or small areas) selected at country level to proportionately represent eight strata reflecting population density. Each block was selected to contain, on average 75 dwellings. The eight population density stratum groups used were as follows:

- Cities.
- Suburbs of Cities.
- Mixed urban/rural areas bordering on the suburbs of Cities.
- Towns and their environs with population of 5,000 or over (large urban).
- Mixed urban/rural areas bordering on the environs of larger towns.
- Towns and their environs with a population of 1,000 to 5,000 (other urban).
- Mixed urban/rural areas.
- Rural areas.

The second stage of sampling involved the random selection of sample and substitute households for each block. In cases where interviewers could not secure an interview from the sample household, they systematically approached up to three substitute households (in the same block as the sample household) in order to secure an interview. In this manner variations in response by region were controlled.

Sample weights were obtained by adjusting design weights (the inverse of the selection probabilities) to take into account the patterns of non-response. These weights were adjusted further to ensure the sample is representative of the population using external controls. At a household level, the weights were adjusted on the basis of household composition and region, while at an individual level the age by sex distribution of the population was taken into account.

This sampling strategy differs from that adopted in the Living in Ireland surveys, in a number of respects. First, the sampling frame adopted in carrying out the initial 1994 Living in Ireland Survey was the Register of Electors. The sample was selected using the ESRI's RANSAM system, and pre-stratified the sampling frame according to the following strata:

- Province: Four categories, Dublin; rest of Leinster; Munster; Ulster/Connaught.
- Urban/Rural: Two categories: DEDs with more than 50 per cent of their population in towns with a population of 1,500 or more, versus the rest;
- Unemployment: Two categories: DEDs with an unemployment rate of 16 per cent or more versus the rest.

Second, given the panel design of the survey subsequent waves sought to follow up all those interviewed in the original sample (and, if they formed new households, other members of those households). The samples obtained were subject to attrition, as is inevitable in panel surveys, and this meant that of the original



sample individuals who were still 'in scope' in 1999 (13,964),<sup>12</sup> only 49 per cent (6,908) were in households successfully interviewed in the sixth wave of the survey. Detailed analysis suggested that the main loss was related to difficulties in tracing households that had changed address, primarily households consisting of young single adults (see Whelan *et al.*, 2003, Appendix 1). As a consequence, the sample was then supplemented in 2000 by a new sample of just over 1,500 completed households selected using the same procedure as in the first wave of the survey, and these were also reinterviewed where possible in 2001. The reweighting scheme employed at that point then sought to compensate for any biases in the distribution of characteristics in the completed sample compared to the population of interest, whether such biases occurred because of sampling error, from the nature of the sampling frame used, differential response rates or attrition.

As described in detail in Whelan *et al.* (2003), the household weights used in 2000 and 2001 were developed in a number of steps. The first step involved adjusting the continuing sample for attrition. The household weights from the previous wave were carried forward for the continuing sample, and then adjusted for any pattern of attrition in that wave with reference to such characteristics as household size, number of persons at work, urban/rural location, whether the household moved since last wave, whether the household was in relative income poverty in the first wave, the number of males and females by age, marital status, principal economic status, socio-economic group, level of education, and the number of recipients of the main social welfare benefits. The second step involved combining the continuing and new samples and adjusting the weight so as to reflect the population distribution in terms of a number of key characteristics, similar to those listed above but available from external sources (primarily the CSO's Quarterly National Household Survey).

Given the relatively high sample attrition rate, it was important to carefully check for any biases it introduced into the structure of the sample. Detailed checks were conducted in the course of devising sample weights for the data in Waves 2 to 8, using information on the households and individuals from the previous wave's interviews. As described in Whelan *et al.* (2003), no evidence was found of serious attrition among households towards the bottom of the income distribution. If anything, these households, along with individuals receiving social welfare payments associated with old age, disability or widowhood, local authority residents and older adults were less likely to be lost through attrition than other households. Those most likely to drop out were those changing address, young

<sup>12</sup> Of the original 14,585 individuals, 339 had died and a further 282 had moved to an institution or outside the EU by 1999. A total of 400 had died by 2000, and 324 had moved to an institution or outside the EU. This left 13,861 individuals still 'in scope' by 2000.

adults and students, or those in households with a large number of adults. The overall impact on the sample structure was slight, and to the extent that available external information allowed the weighting scheme sought to compensate for that impact. Nonetheless, attrition could affect the measured levels of other characteristics, including deprivation, and as we explore in the next section could be one of the factors affecting the comparison between EU-SILC and the Living in Ireland surveys in that respect.

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### 2.3 Deprivation in EU-SILC 2003

A core aim of EU-SILC is to provide a basis for monitoring living standards, poverty and social exclusion and how such phenomena change over time. With this in view, as well as devoting considerable effort to obtaining information about household incomes the survey also includes a range of questions relating to non-monetary indicators of deprivation. The types of deprivation involved are largely drawn from what was covered in the ECHP, a narrower set than that included in the LII surveys but still quite substantial. When preliminary results from the 2003 EU-SILC were published (CSO, 2005), one of the most immediately striking features was the sharp divergence in measured deprivation levels, particularly on certain items, compared with the most recent LII survey, carried out in 2001.

If one focuses on the eight basic deprivation items originally used in measuring consistent poverty, discussed in more detail in the next chapter, measured deprivation levels are typically 3-5 percentage points higher on individual items in EU-SILC (for several items the difference is even greater). As a consequence, the percentage reporting deprivation in terms of one or more basic items was considerably higher, so consistent poverty rates were 3-7 percentage points higher (depending on the income threshold employed). (The percentages falling below the conventionally-used relative income thresholds were broadly similar in the two surveys, although there are in fact some differences in the way income is defined and measured; the investigation of these differences and their implications is left to a future study.)

It is by its nature very difficult to disentangle the many factors that could contribute to divergences between two surveys that differ significantly in, among other things, sampling design, survey implementation, and post-survey reweighting procedures. However, the available evidence suggests that two main factors contribute to the observed differences as far as deprivation is concerned. The first is that the question format employed in the EU-SILC was different from that used in the LII surveys. Computer Assisted Personal Interviewing (CAPI) was used in the EU-SILC, which facilitates a direct questioning approach. Evidence from other surveys (notably the House Conditions Survey carried out by the ESRI for the Department of the Environment) indicates that this tends to result in higher levels of deprivation being reported (Watson and Williams, 2003). This could have accounted for almost half of the overall

difference observed in measured deprivation levels between the LII and EU-SILC.

Second, as emphasised in the previous section the LII surveys interviewed the same households repeatedly whereas the 2003 EU-SILC households were interviewed for the first time. This could affect measured deprivation levels in several ways. One is that there is emerging evidence (in particular from analysis of British panel surveys) that households being re-interviewed may have different response patterns to those being interviewed for the first time, perhaps being reluctant to continue to report deprivation, especially to an interviewer they have come to know. The other is that there may have been some selective attrition serving to bias measured deprivation levels downwards. We noted in the previous section that in-depth analysis of attrition patterns over the Living in Ireland surveys did not reveal above-average attrition by those on low incomes. The same is in fact true in terms of deprivation: those reporting deprivation in one wave are not more likely than others to have dropped out of the sample by the next wave of the survey. However, comparison of the sample in 2000 which had been successfully followed since 1994 with the new supplementary sample added in that year did show somewhat higher deprivation levels (generally of the order of 1-2 percentage points higher) in the latter. This could arise if for example a deterioration in a household's circumstances such that it moved from not being deprived to being deprived from one wave to another was also associated with an increased probability of dropping out of the survey. These factors appear likely to account for much of the remaining differences in measured deprivation levels between the two surveys (CSO, 2004).

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## 2.4 Conclusions

In this chapter we have described briefly the EU-SILC framework and the new Irish survey initiated within that framework. The EU-SILC 2003 survey constitutes the data source for the chapters that follow. As we will see, there are some important differences between the Living in Ireland Surveys and the EU-SILC surveys which make meaningful comparisons of measured deprivation levels across the two surveys problematic. Thus, our focus in this study is on how best to use the new survey as a base for future monitoring and analysis of poverty and social exclusion, rather than on using results from the new survey to capture recent trends.

# 3. CONSTRUCTING CONSISTENT POVERTY MEASURES WITH EU- SILC DATA

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## 3.1 Introduction

Poverty is now widely conceptualised in terms of exclusion from the life of one's society because of a lack of resources, and so involves experiencing various forms of what that particular society would regard as serious deprivation (Townsend, 1979). A definition of poverty in these terms has been enshrined in the National Anti-Poverty Strategy. It has become increasingly clear that low income measures are limited in their ability to capture such exclusion (Perry, 2002). Those below specified relative income thresholds are often not those experiencing the highest levels of deprivation. Consequently, using income rather than deprivation to identify the most disadvantaged tends to identify groups with quite different socio-demographic profiles (Nolan and Whelan, 1996; Whelan *et al.*, 2001). This has been shown to be true in a wide range of European countries although the relationship between current income and deprivation is strongest in the poorest countries (Whelan *et al.*, 2001; Whelan and Maître, 2005). For Ireland, the very rapid growth in average incomes since 1994 means that relying on relative income lines alone could be particularly misleading about trends in poverty (Layte *et al.*, 2000).

A measure of poverty combining both low income and material deprivation was originally developed at the ESRI using data for 1987. A range of indicators was used to produce different indices of deprivation, and those below relative income poverty lines and experiencing what was termed *basic deprivation* were identified as experiencing generalised deprivation due to lack of resources (Callan *et al.*, 1993; Nolan and Whelan, 1996). This 'consistent poverty' measure was subsequently used as the basis for the global poverty reduction targets adopted for the National Anti-Poverty Strategy (NAPS).

It was clear from the outset that, as living standards rose, the specific items employed in the consistent poverty measure would need to be revised in light of changing expectations and perceptions about what was minimally adequate. The intention was never to

measure poverty in an “absolute” manner but, as Bradshaw (2001) has put it, in a “less relative way”. The choice of an amended set was investigated in the “Monitoring Poverty Trends” publications as the 2000 and 2001 Living in Ireland Survey data became available (Nolan *et al.*, 2002; Whelan. *et al.*, 2003). Analysis devoted to this issue suggested that the original set of basic items had continued to perform well in terms of criteria such as the stability of the number and type of dimensions identified, of deprivation, the behaviour of such indices over time in comparison with purely relative income poverty lines and their capacity to identify distinctively disadvantaged groups. However, concern was expressed about the extent to which the basic deprivation index was made up of items such as those relating to two pairs of strong shoes or a warm waterproof overcoat, that could increasingly be seen as perhaps more appropriate to an earlier, more frugal era. An alternative deprivation index was proposed but to date the consistent poverty target used for NAPS purposes has been framed in terms of the original set.

The shift from the Living in Ireland Survey (LIIS) to EU-SILC provides an opportunity to re-examine the way the consistent poverty measure is constructed. This would be timely, even if the differences in the measured levels of deprivation discussed in the previous chapter had not emerged. Particularly because of the way that it has been incorporated into the National Anti-Poverty Strategy’s targets, it is important that the consistent poverty measure enjoys broad legitimacy. Thus, it is important to explore the range of options offered by the EU-SILC relating to both deprivation and related consistent poverty measures. In the first place this allows us to take advantage of an up-to-date analysis of the dimensionality of deprivation, as a prelude to establishing the reliability of our indices of deprivation. A further advantage, associated with the possibility of moving away from the original consistent poverty measure, is that it could afford the opportunity to create a measure where in order to be consistently poor it is necessary to report deprivation in relation to more than one item. With the original measure it was decided that, given the extreme nature of the deprivations involved, that enforced absence relating to any one item was sufficient to fulfil the criteria for consistent poverty. However, in order to avoid having our conclusions unduly influenced by error associated with any individual variable, or with changes in a single item, it would seem preferable to require that consistent poverty measures are not unduly dependent on the responses to any single item.

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### 3.2 The Dimensionality of Deprivation in EU-SILC

The Irish component of EU-SILC includes a range of questions relating to non-monetary indicators of deprivation. Here we draw on the full set of deprivation indicators in the Irish survey; which is a good deal more comprehensive than that common across the countries participating in EU-SILC. The questions posed cover a

wide spectrum of items ranging from possession of consumer durables, quality of housing and neighbour environment, aspects of participation in social life and health status. The format of the questions posed to respondents varies across topics.

For the first set of items that we consider respondents were asked if (1) the household possessed/availed the items (2) did not possess/avail of because they could not afford it or (3) did not possess/avail for other reason. The items are:

- Paying for a week's annual holiday away from home in the last 12 months.
- Eating meat chicken or fish (or vegetarian equivalent) every second day, if you wanted to.
- Having a roast joint (or equivalent) once a week.
- Buying new, rather than second hand clothes.
- A warm waterproof overcoat for each household member.
- Two pairs of strong shoes for each household member.
- Replacing any worn-out furniture.
- Keeping your home adequately warm.
- Having friends or family for a drink or meal at least once a month.
- Buying presents for family/friends at least once a year.

A similar format was employed in relation to the set of consumer items set out below.

- Satellite dish                      Video recorder    Stereo
- CD player                              Camcorder
- Home computer
- Washing machine                      Clothes dryer    Dish washer
- Vacuum cleaner                      Fridge              Deep freeze
- Microwave                              Deep fat fryer    Liquidiser
- Food processor                      Telephone (fixed line).

A second set of items concerns the household dwelling and it was simply asked if the household possessed some specific amenities. Given the widespread availability of these items, we assume that their absence is due to inability to afford them.

- Bath or shower
- Internal toilet
- Central heating
- Hot water

A third set of items relate to the quality and the environment of the dwelling. Respondents were asked if their dwelling suffered any of the problems listed below:

- Leaking roof, damp walls/ceilings/floors/foundations, rot in doors, window frames.
- Rooms too dark, light problems.
- Noise from neighbours or from the street.
- Pollution, grime or other environmental problems.

- Crime, violence or vandalism in the area.

The questions relating to the items described to this point concern households and household members. The questions for the final set of items we consider were related to individuals. For this set of items, the absence and affordability elements were incorporated in one question (and two part questions for the last two items). The items are as follows:

- Going without heating during the last 12 months through lack of money.
- Having a morning, afternoon or evening out in the last fortnight for entertainment.
- A car.

The analysis reported here refers to all persons in the EU-SILC. Where household characteristics are involved these have been allocated to each individual. Where more than one person answered a question, the response of the household reference person (HRP) has been allocated to each individual in the household. The HRP is the one responsible for the household accommodation. Where this responsibility was shared the oldest person was chosen. In the analysis that follows we make use of thirty-nine indicators of life-style deprivation from EU-SILC. There are a number of different ways in which we could combine these items into measures of deprivation. We could for instance combine them into a single aggregate index running from 0 to 39, where 1 is added to the score for each item lacking. However, such an approach takes no account of the distinctive nature of the items and the relationships between them. Different items may relate to rather distinct dimensions of deprivation. Our first step in the investigation of the dimensionality of deprivation for the EU-SILC set of items involves conducting an exploratory factor analysis of the thirty-nine items. The particular form of factor analysis we employ involves an oblique rotation of the factors that permits the factors to be associated. On the basis of earlier work by Whelan *et al.* (2003), who identified five deprivation dimensions in the LIIS, and taking account of the somewhat different set of items available in the EU-SILC, we hypothesised the existence of four related but relatively distinct life-style deprivation dimensions. These comprise:

1. Basic deprivation – consisting of items relating to food, clothing, furniture, debt and minimal participation in social life.
2. Secondary deprivation – comprising mainly a range of consumer durables including a phone, PC, Video, CD, dishwasher etc.
3. Housing facilities – comprising basic facilities such as bath, toilet etc.
4. Neighbourhood environment – encompassing pollution, crime/vandalism, noise. This dimension also incorporates a couple of items relating to deteriorating housing conditions

that in our earlier work comprised part of a set that was identified as a separate dimension.

If we can show that the various items are separable into these distinct dimensions this implies that some specific deprivation items cluster together and are not necessarily associated with other aspects of deprivation.

Our intention is to use the results of the factor analysis as an aid to the development of appropriate indices rather than allowing them to be the sole determining factor and we do not make use of factor loadings or weights. However, as can be seen from Table 3.1, our analysis does allow us to identify four distinct dimensions of deprivation. For ease of interpretation, with one exception, we show the loadings only for the dimension on which the highest loading is observed. The item for which we make an exception is that relating to being able to afford a holiday away from home at least once a year. This item has its highest loading of 0.389 on the dimension that we label "basic deprivation". However, it has the lowest loading of the twelve items that do load highest on this dimension. In addition, it has an almost equally high loading of 0.320 on what we label the secondary dimension. In arriving at a decision as to which dimension we should allocate the holiday item, it was also necessary to take into account the role that basic deprivation plays in the calculation of consistent poverty levels. Over one in four respondents say they cannot afford an annual holiday. This is almost twice the level of deprivation reported on any of the other items. Our analysis confirms that its inclusion in the basic deprivation index would mean that, even with a threshold of two or more items, we could not fulfil the requirement that no one item should unduly influence the calculation of consistent poverty levels.

In light of this fact and the manner in which the loading for the item is spread across the basic and secondary dimensions, we have allocated the item relating to being able to afford an annual holiday to the secondary deprivation index. The basic deprivation index then comprises 11 items. The items include those relating to food, clothes, adequate heat, new furniture, being able to afford an afternoon or evening out, being able to entertain family and friends. These items, we argue capture types of deprivation whose enforced experience involves exclusion from a minimally acceptable way of life. The loading of the items on this factor are relatively homogeneous with the highest loading of 0.74 being for a warm waterproof overcoat and the lowest of 0.46 for going without heating. Eight of the eleven items are in the range running from 0.51 to 0.70.

The second dimension relating to secondary deprivation comprises eighteen items that refer to a range of consumer durables such as a telephone, CD player, dish-washer and PC. Deprivation of these items taken on their own is considered to constitute a significantly less serious form of exclusion than that implied in the case of the set of basic items. However, possession of any one of



these items is not inconsistent with the experience of deprivation or, indeed, consistent poverty as we shall define it. The loading of the items on this dimension is once again relatively heterogeneous. The full range runs from 0.23 to 0.68 but fourteen of the eighteen items are found in the range 0.52 to 0.68.

The third dimension comprises four items relating to rather basic housing facilities. A bath or shower and an indoor toilet and hot water figure particularly strongly on this dimension with loadings of between 0.75 and 0.86. Central heating and a washing machine load a good deal less strongly.

**Table 3.1: Factor Analysis Oblique Rotation Solution for EU-SILC Life-style Deprivation Items**

Deprivation Dimensions	Basic	Secondary	Housing Facilities	Neighbourhood Environment
Going without heating	0.464			
Able to afford afternoon or evening out	0.482			
Shoes	0.699			
Roast joint or equivalent	0.635			
Meals with meat, fish or chicken	0.618			
New rather than second-clothes	0.612			
Warm waterproof overcoat	0.743			
Household adequately warm	0.612			
New not second hand furniture	0.505			
Family or friends for drink or meal	0.674			
Presents for family/friends	0.568			
Holiday away from home		0.320		
Telephone		0.440		
PC		0.614		
Satellite dish		0.613		
Video		0.518		
Stereo		0.593		
CD		0.603		
Camcorder		0.644		
Clothes dryer		0.664		
Dishwasher		0.666		
Vacuum cleaner		0.394		
Fridge with separate freezer		0.536		
Freezer		0.585		
Microwave		0.573		
Deep fat fryer		0.662		
Liquidiser		0.684		
Food processor		0.667		
Car		0.225		
Bath or shower			0.857	
Toilet			0.772	
Central heating			0.478	
Hot water			0.745	
Washing machine			0.344	
Leaking roof & damp				0.468
Rooms too dark				0.465
Pollution				0.632
Crime, violence, vandalism				0.589
Noise				0.696

The final dimension relates to the quality of the neighbourhood environment. Here the strongest loading item at 0.70 relates to noise with pollution and crime, violence and vandalism loading slightly lower. Rather weaker weightings are found for housing defects such as leaking roof and damp and the rooms being too dark. We anticipate that an increase in the number of indicators relating to the neighbourhood and housing quality would lead to the emergence of distinct housing deterioration and neighbourhood environment dimensions, as was the case in the LIIS analysis. The former has previously been found to be distinguishable from the housing facilities aspects captured in the previous dimension.

It would be possible to consider indices based on the factor weightings. However, such measures do not have the intuitive meaning that simple counts of items possess. It is thus difficult to go from such scores to the development of transparent social indicators. The approach we adopt is to demonstrate that we can be confident that the component items are tapping the same underlying construct and that this is true for different sub-groups of the population. This involves establishing the reliability of the indices that we construct.

Given the relative homogeneity of the item weightings on the words we want to confirm the extent to which the index is reliable. An index of such reliability is provided by Cronbach's alpha, which is based on the average inter-item correlation between the component items. In Table 3.2 we report the value of this coefficient for two different versions of the basic deprivation index. The first relates to the set of eight items that constitute the deprivation measure incorporated in the National Anti-Poverty Strategy consistent poverty measure. The second relates to the 11-items identified on the basic deprivation dimension in the factor analysis reported earlier. The reliability levels for these indices are respectively 0.73 and 0.84 (where a value of 1.0 indicates perfect reliability).

In Table 3.2 we also seek to gain a sense of how the individual items contribute to the respective indices by examining the correlation of each item with the sum of the remaining items. For the original set we can see that, with the exception of the item relating to a substantial meal, which has a correlation of 0.27, the remaining levels of association vary between 0.38 and 0.53. Given the more diverse set of indicators involved it is notable that a similar degree of homogeneity in levels of association is observed in relation to the 11-item EU-SILC basic deprivation index. Ten of the eleven items have item-total correlations between 0.49 and 0.68. The remaining item relating to going without heating has an item-total correlation of 0.37. Thus for both indices the component items serve as relatively homogenous indicators of the underlying dimension. Removing any one of the twelve items would reduce the overall level of reliability. Reliability levels show very modest variation across such factors age groups and urban rural location,

giving us considerable confidence that a common index is appropriate to all groups.

**Table 3.2: A Comparison Of Reliability Indices for Alternative Basic Deprivation Scales**

	LIIS 8-Item Measure	EU-SILC 11-Item Measure
Alpha Level	0.728	0.840
<b>Correlation of each item with the total of the remaining items</b>		
Substantial meal	0.274	
Going without heating	0.426	0.374
Debt problems	0.383	
Shoes	0.529	0.576
Roast joint or equivalent	0.477	0.523
Meals with meat, fish or chicken	0.469	0.511
New rather than second-hand clothes	0.447	0.532
Warm waterproof overcoat	0.516	0.547
Household adequately warm		0.505
New not second-hand furniture		0.597
Family or friends for drink or meal		0.677
Able to afford afternoon or evening out		0.492
Presents for family/friends		0.521

In Table 3.3 we display the reliability levels for the remaining deprivation indices that we will employ in our analysis as part of the process of validating our measure of deprivation of basic deprivation and consistent poverty. The eighteen-item consumption index has a particularly high level of reliability with an alpha coefficient of 0.89. Given the much smaller number of indicators the reliability coefficients for the housing and neighbourhood environment are significantly lower at 0.57.

**Table 3.3: Reliability Levels for Deprivation Dimensions Other than Basic Deprivation**

Secondary Deprivation – 18-Item scale	0.890
Housing – 5-Item scale	0.565
Neighbourhood Environment – 5-Item scale	0.568

In Table 3.4 we set out the pattern of correlations between the deprivation indices. Each of the basic deprivation measures correlates substantially with the secondary deprivation index with the strength of the association ranging from 0.52 for the LIIS 8-item index to 0.64 for the 11-item EU-SILC index. The correlations with the housing and neighbourhood environment dimensions are a good deal weaker with an average value of 0.22.

**Table 3.4: Correlations Between Deprivation Dimensions**

	LIIS 8 Basic	Irish SILC 11 Basic	Secondary	Housing Facilities	Neighbourhood Environment
LIIS 8 Basic					
Irish SILC 11 Basic		0.854	0.517	0.192	0.218
Consumption			0.639	0.231	0.256
Housing Facilities				0.277	0.210
Neighbourhood Environment					0.145

### 3.3 An Assessment of the LIIS 8 and EU-SILC 11 Basic Deprivation Indices

In this section we wish to explore the properties of the original basic deprivation index developed using the LIIS Survey and the new 11-item index developed using EU-SILC. In deciding, how well our decisions on inclusion and exclusion of items have worked the crucial evidence will come from comparison of the groups who are respectively included and excluded. These comparisons will relate not only to the broader deprivation profiles of such groups and their experience of economic pressure but also to their socio-demographic profiles.

The eleven items now included in the basic dimension in EU-SILC are set out in Table 3.5. These include six items from the original basic set in the LIIS – shown in the first part of the table – these relate to deprivation in relation to food, clothing and heat. Five further items which now also cluster with the basic dimension are shown in the second part of the table; these focus on adequate participation in family and social life. They include being able to afford to entertain family and friends; buy presents for family or friends once a year, have an afternoon or evening out; have an annual holiday away from home; keep the house warm and buy new furniture.

These additional items, one can argue, constitute either socially perceived necessities or conversely experiences that everyone should be able to avoid, and can serve as indicators of the kind of generalised deprivation that can be incorporated in a measure of poverty. The statistical evidence is that these eleven items serve as good, and relatively equal, indicators of such generalised deprivation. We concentrate on basic deprivation in constructing the consistent poverty measure because in our judgement it best captures the type of exclusion from customary standards of living in the society that has been central to definitions of poverty. Below, we validate this judgement by exploring how consistent poverty is related both to the other dimensions of deprivation and the subjective experience of respondents. Two items included in the original basic set are now dropped, as shown in the final part of Table 3.5. The item relating to “being unable to afford a substantial meal because of a lack of money” is omitted because the factor analysis shows that its relationship to the underlying dimension we are trying to tap is a good deal weaker than for the other items. Furthermore, a change in format in this item in EU-SILC 2004 may make it difficult to make comparisons over time. We have chose to omit the item relating to “Going into debt to meet ordinary living expenses” because it is rather general and unspecific and open to different interpretations as to what constitutes “ordinary living expenses”. With substantially more items now appearing in the basic set it can be omitted and

used instead to help validate the consistent poverty measure.<sup>13</sup> (We show below that this makes little difference to the measured level of consistent poverty itself.)

**Table 3.5: EU-SILC Basic Deprivation Items**

<b>Items Retained from Original Basic Set</b>
Two pairs of strong shoes
A warm waterproof coat
Buy new rather than second-hand clothes
Eat meals with meat, chicken, fish (or vegetarian equivalent) every second day
Have a roast joint (or its equivalent) once a week
Go without heating during the last 12 months through lack of money
<b>Items Now Added to Basic Set</b>
Keep the home adequately warm
Buy presents for family or friends at least once a year
Replace any worn out furniture
Have family or friends for a drink or meal once a month
Have a morning, afternoon or evening out in the last fortnight, for entertainment
<b>Items Now Dropped from Original Basic Set</b>
Going without a substantial meal due to lack of money
Going into debt to meet ordinary living expenses

In Table 3.6 we show the distribution in the 2003 EU-SILC of scores on the original 8-item basic deprivation index (which we refer to for convenience as the LIIS index) and the new 11-item version (which we refer to as the EU-SILC measure). We see that on the original set 24 per cent of persons experienced deprivation in relation to at least one item, 11 per cent scored more than one, and 6 per cent more than two. On the new EU-SILC index we find that 26 per cent lack at least one item, 15 per cent score two or more, and 12 per cent three or more. Thus the main differences between the distributions are in the number recording two or more, and more particularly three or more, deprivations. With the original measure, given the extreme nature of the deprivations involved and the limited number of items comprising the basic deprivation index, we argued that deprivation in relation to any one item, combined with low income, was sufficient to constitute consistent poverty. However, ideally, the consistent poverty measure (at both individual and aggregate levels) should not be dependent on the responses to any single item. To make it more robust and reliable, we therefore feel that with the new more extensive set of basic deprivation items it would be desirable to adopt a threshold of two or more items in constructing the consistent poverty measure. Evidence reinforcing this conclusion is presented below. Table 3.6 shows that the number at or above 2 on the 11-item basic is 16 per cent while for the LIIS 8 the figure is somewhat higher at 24 per cent. However, what is

<sup>13</sup> We adopt the same view of three further items relating to debt available in the dataset, namely being in arrears, finding housing costs to be a great burden and being unable to cope with a significant unexpected expense.

crucial for our present purposes is the relative discriminatory power of the indices both individually and, more particularly, when they are combined with information relating to income poverty in order to construct consistent poverty measures.

**Table 3.6: Distribution of Deprivation on Alternative Basic Deprivation Scales**

<b>Number of items lacked</b>	<b>LIIS 8 Item Index %</b>	<b>EU-SILC 11 Item Index %</b>
0	75.8	74.0
1	13.4	11.4
2	5.1	4.1
3+	5.7	11.5
Above Suggested Threshold	24.2	15.6

We now provide an examination of the relationship between the alternative indices of basic deprivation and individuals' reports of their subjective experience of levels of economic pressure. A number of such indicators are available. The first, which we refer to as 'economic strain', is based on a question about the extent to which a household has difficulty "making ends meet". Table 3.7 shows that for the LIIS index the percentage reporting such difficulty rises sharply as deprivation increases from 13 per cent at zero deprivation to 96 per cent for those with scores of four or more. However, there is little difference between those scoring one and two (41 per cent versus 39 per cent). Focusing on the 11-item EU-SILC measure, we see a steady rise in economic strain levels from 12 per cent in the case of scores of zero to 84 per cent for those with scores of four or more. There is now also a significant difference between those scoring one and two with the percentage experiencing economic strain rising from 32 per cent to 45 per cent. The pattern is again confirmed when we focus on housing expenses. For the LIIS 8-item measure the respective figures indicating the extent to which housing costs are thought to be a "heavy burden" for those scoring one and two are 32 per cent and 36 per cent, while for the EU-SILC 11-item index the corresponding figures are 33 per cent and 41 per cent. Somewhat more striking differences are observed in relation to inability to deal with unexpected expenses. Thus for the LIIS 8-item index the figure rise from 9 per cent to 35 per cent as the score moves from zero to one but then increase only slightly to 38 per cent as the score rises to two. For the EU-SILC 11 indicator we observe an increase from 5 per cent to 28 per cent as one moves from zero to one deprivation but then there is a further dramatic increase in the number reporting such problems from 28 per cent to 71 per cent as the score increases from one to two.

**Table 3.7: Subjective Economic Pressures Measures by Alternative Deprivation Measures**

Deprivation Score	0	1	2	3	4+
<b>% Having Difficulty Making Ends Meet</b>					
<b>Inability to Cope with Unexpected Expenses</b>					
LIIS 8-Item index	8.9	35.0	38.4	88.5	94.1
EU-SILC 11-item index	5.4	27.8	70.5	81.8	83.1
<b>Housing Expenses A Heavy Burden</b>					
LIIS 8-Item index	15.0	31.9	35.5	53.0	72.8
EU-SILC 11-item index	12.5	33.2	41.0	52.9	64.5

Overall then we find a consistent pattern of differentiation whereby the contrast between those scoring one and two on the LIIS 8 scale is modest whereas for the EU-SILC 11-item index a sharp difference is observed in every case. Thus the overall relationships between the alternative deprivation indices and the range of measures of economic pressure that we have considered would seem to support the choice of a threshold of 1+ for the LIIS basic deprivation index and one of 2+ for its EU-SILC counterpart. We believe that the argument for a threshold of 3+ is even less sustainable than for one of 1+.

In Table 3.8 we explore further the validity of the threshold choice for the EU-SILC 11-item measure. We do so by focusing on those who are poor in relative income terms (i.e. who are below the critical relative income thresholds) and by examining how effectively the basic deprivation indicator discriminates within that group between those who feel differing degrees of subjective economic pressure. If the income poor who are also at or above the EU-SILC basic deprivation threshold of two items feel substantially more pressurised than those who are not, then that further supports the threshold of 2+. Over seven in ten of those who are income poor and above the deprivation threshold report that their household is experiencing difficulty in making ends meet while this falls to approximately one in four for those on low income but below the deprivation threshold. Even more striking is the fact that among those below the 60 per cent and 70 per cent median income lines those above the basic deprivation threshold are eleven times more likely to report an inability to cope with unexpected expenses. The respective figures for both poverty lines are 77 per cent and 7 per cent. Finally, in relation to the likelihood of housing expenses being experienced as a great burden a differential of two and a half to one is observed. Well over half of those who are income poor and above the deprivation threshold report such pressures in comparison with one in seven of their counterparts below the deprivation threshold.

**Table 3.8: Economic Pressure by Income Poverty Lines and the EU SILC 11-Item Measure**

EU SILC 11-Item Index	Income Poverty	
	Below 60% Median Income Line	Below 70% Median Income Line
	<b>% Experiencing Great Difficulty or Difficulty Making Ends Meet</b>	
Below Deprivation Threshold	26.8	23.8
Above Deprivation Threshold	71.5	72.5
	<b>% Inability to Cope with Unexpected Expenses</b>	
Below Deprivation Threshold	7.3	7.1
Above Deprivation Threshold	76.8	77.8
	<b>% Housing Expenses a Great Burden</b>	
Below Deprivation Threshold	23.6	22.6
Above Deprivation Threshold	58.2	56.3

### 3.4 Consistent Poverty

We now turn to the implications for measured levels of consistent poverty of the choice of basic deprivation indicators and thresholds. In Table 3.9 we set out the consistent poverty rates for the LIIS basic deprivation measure with a threshold of at least one item,<sup>14</sup> and for the EU-SILC measure with a threshold of two or more, with both 60 per cent and 70 per cent of median household equivalent disposable income lines. The LIIS measure with a deprivation threshold of one or more items gives consistent poverty rates of 9 per cent at the 60 per cent and 10.9 per cent at the 70 per cent line. The EU-SILC 11-item measure, with a threshold of two, gives slightly lower figures of 8 per cent and 10 per cent respectively. While our earlier analysis strongly suggests that the appropriate threshold for the EU-SILC 11-item index is 2+, for comparative purposes we also report results with a threshold of 1. At the 60 per cent income line this provides an estimate of 11 per cent in consistent poverty, and at the 70 per cent line one of 14 per cent. Finally, we look at the impact of our decision to exclude two of the items from the original basic deprivation index from the new measure. These relate to debt arising from ordinary living expenses and inability to afford a substantial meal. In fact, Table 3.9 makes clear that including both these items in the EU-SILC index (while retaining a threshold of two) would have a rather modest effect on the consistent poverty rate, leading to an increase of about half a percentage point at the 60 per cent line and just less than 1 per cent at the 70 per cent line.

<sup>14</sup> We have rounded these figures to the nearest whole number because the precise results from the dataset we have available for analysis differ marginally from the revised 2003 figures published by the CSO in December 2005 due to some very minor revisions in the latter. Note, however, that the revised weighting scheme employed by the CSO in producing those figures – which differ substantially from the preliminary ones published by the CSO in January 2005 – have been employed throughout this study.



**Table 3.9: Consistent Poverty Rates for Persons Employing Alternative Basic Deprivation Indices, EU-SILC 2003**

	<b>% Consistently Poor (60% median line)</b>	<b>% Consistently Poor (70% median line)</b>
LIIS 8-Item (Threshold 1+)	9	11
EU-SILC 11-Item (Threshold 2+)	8	10
EU-SILC 11-Item (Threshold 1+)	11	14
EU-SILC 13-Item (Threshold of 2+ including debt and substantial meal)	9	10

It may seem paradoxical, that having enlarged our set of basic deprivation items to better reflect current living standards and customs, we have identified fewer people as being below the consistent poverty lines. The first solution to this puzzle comes from the fact that the threshold now relates to an enforced lack of two or more items rather than one or more. The second part of the explanation relates to individuals who are no longer defined as consistently poor because we have excluded the item relating to incurring debts in connection with routine expenses. The debt item tended to act as something of a catchall item in the case of LIIS 8-item index and consistent poverty levels are a good deal lower when it is removed. We have deliberately avoided items that on their own unduly influence the consistent poverty rate. The quality of the decisions that we have made must be judged in relation to the analysis we present below on the characteristics of those individuals counted as consistently poor or non-poor.

Table 3.10 presents each of the items and illustrates how sharp is the degree of differentiation between the consistently poor and non-poor. The extent of the differentiation is in fact strikingly similar for the 60 per cent and 70 per cent. At the 60 per cent line deprivation levels for the non-poor are below 3 per cent for seven of the eleven items. For the corresponding items the deprivation levels for the consistently poor range between approximately one in five and one in three. For three of the remaining items the levels of deprivation for the non-poor range between 5 to 7 per cent while for the consistently poor they go from 33 per cent to 72 per cent. Finally for the new furniture item the respective figures are 8 per cent and 77 per cent. The consistent poverty measure therefore identifies two groups who are extraordinarily different in terms of their basic deprivation.

This is just as true at the 60 per cent line as at the 70 per cent line. The implication is that there is little difference in the basic deprivation profiles of the consistently poor who are located between the 60 per cent and 70 per cent median income lines and those below the 60 per cent line.

**Table 3.10: Percentage Experiencing Enforced Absence on Basic Deprivation Items by Alternative Consistent Poverty Measures**

	Consistent Poverty EU-SILC 11 60% Line		Consistent Poverty with EU-SILC 11 70% Line	
	Not Poor	Consistently Poor	Not Poor	Consistently Poor
	%	%	%	%
Going without heating	5.2	33.0	4.7	33.2
Shoes	2.0	34.5	1.4	35.0
Roast joint or equivalent	2.2	23.4	1.8	33.2
Meals with meat, fish or chicken	1.3	23.7	1.0	23.5
New second-clothes	2.3	35.7	1.8	35.5
Warm overcoat	1.6	21.8	1.0	19.6
House adequately warm	1.3	23.2	1.1	22.4
New furniture	8.5	76.7	7.3	77.5
Family or friends for drink or meal	6.5	72.3	5.5	71.9
Afternoon or evening out	6.8	50.6	5.9	52.0
Presents for family/friends	1.9	37.0	1.5	35.8

The evidence thus clearly supports the argument that a poverty index cannot be judged solely on the basis of the items included in an index. Any such index, even where it appears narrowly defined, may still be successful in identifying a group exposed to multifaceted deprivation and exclusion. In relation to the range of items included in the EU-SILC deprivation index, both of the consistent poverty measures we have considered are highly successful in this regard, with the pattern of deprivation being slightly sharper in the case of the EU-SILC 11-item measure. This latter measure of course has the advantage that, since the additional five items are explicitly included in the index, differences relating to these elements are entirely transparent and do not need to be inferred. This is likely to add considerably to its perceived legitimacy. Furthermore, given both its wider range of items and the patterns of distribution on these items, the EU-SILC 11-item index is likely to be a good deal more robust going forward than the LIIS 8-item index. There are also additional advantages associated with the former index that will be revealed by our further analysis.

The point we have been making about the ability of a poverty index to capture a range of phenomena beyond the items that constitute the measure clearly has wider applicability. In Table 3.11 we show the relationship between subjective economic strain and variants of the consistent poverty measure. Outcomes are reported in relation to both 60 per cent and 70 per cent of median income for the LIIS 8-item deprivation index with a threshold of 1 measure, our preferred EU-SILC 11-item measure with a threshold of 2, the same deprivation index with a threshold of 1, and a 13-item EU-SILC measure incorporating the debt and substantial meal items from the original index. This range of analyses allows us, not only to establish the extent to which our preferred measure succeeds in discriminating between those experiencing subjective economic strain and all others, but also to assess the degree to which capacity to discriminate is affected by our choice of deprivation items, the threshold imposed and the income level on which we focus.

Focusing first on the consistent poverty measure with the original LIIS 8-item index, we find that with either income line about seven out of ten of the income poor are experiencing economic strain, compared to one-sixth of the non-poor. We then see that the figures with our preferred 11-item EU-SILC measure and a threshold of 2 are remarkably similar, although marginally higher. Were we to employ a threshold of 1 with the EU-SILC 11-item index, however, that differential would be narrower. Expanding the set of items to incorporate the debt and substantial meal items gives results that are almost identical to those with our preferred option. The choice of income lines also has little effect on the observed pattern of differentiation.

**Table 3.11: Economic Strain by Consistent Poverty Measures**

Deprivation Thresholds	60% Median Income		70% Median Income	
	Not Poor	Poor	Not Poor	Poor
LIIS 8-Item (Threshold 1 +)	17.6	69.1	16.4	69.9
EU-SILC 11-Item (Threshold 2 +)	18.0	71.5	17.0	72.5
EU-SILC 11-Item (Threshold 1 +)	17.4	62.6	16.0	62.3
EU-SILC 13-Item (Threshold of 2+ and including debt and substantial meal)	17.6	71.3	16.3	72.6

Since the broad pattern of results is relatively similar across the poverty lines for the outcomes considered in Table 3.1, we restrict our attention to the EU-SILC 11-item index, in the next tables. This analysis seeks to further illustrate the manner in which multifaceted disadvantage can be captured by an apparently more narrowly focused poverty index, we restrict our attention to the EU-SILC 11-item index. In Table 3.12 we look at the impact of consistent poverty at both the 60 per cent and 70 per cent of median for the remaining dimension of life-style deprivation. At the 60 per cent line the average level of secondary deprivation rises from 1.20 for the non-poor to 6.92 for the poor. For the housing index the respective figures 0.10 and 0.41 and for neighbourhood environment deprivation they are 0.54 and 1.10. Thus consistent with our earlier analysis, employing the basic deprivation measure as the independent variable we observe an extremely sharp contrast between the poor and non-poor in relation to secondary deprivation with the observed differential being of the order of six to one. For the remaining dimensions the differentials are somewhat more modest reaching levels of four to one for housing deprivation and two to one for neighbourhood deprivation. The patterns are rather similar for both the 60 per cent and 70 per cent lines, indicating that the consistently poor who are located between these income lines

are not significantly different with regard to such patterns of deprivation.

**Table 3.12: Average Levels of Deprivation on Specific Dimensions by Consistent Poverty with the EU SILC 11-item Index (Threshold 2+) and 60 Per Cent and 70 Per Cent of Median Income**

	Consistently Poor: EU-SILC 11 & Below 60 % Median Income Line Non-Poor	Consistently Poor: EU SILC 11 & Below 70 % Median Income Line		
		Poor	Non-Poor	Poor
Secondary (Max=18)	1.20	6.92	1.14	5.96
Housing (Max=5)	0.10	0.41	0.10	0.44
Neighbourhood Environment (Max=5)	0.54	1.10	0.54	1.03

In Table 3.13 we examine differentiation on the remaining indicators of economic pressure. Focusing on consistent poverty at the 60 per cent threshold we find that in relation to arrears almost 50 per cent of the poor report such difficulties compared to 8 per cent of the non-poor. The corresponding figures relating to finding housing costs a heavy burden are 58 per cent for the consistently poor and 18 per cent for the non-poor. Finally, the widest disparity is observed in relation to inability to cope with unexpected expenses. On this occasion we find that the consistently poor persons are almost seven times more likely to be in households where such difficulties are reported than are the non-poor with four out of five of the former reporting such problems compared to one in eight. Very similar patterns are observed at the 70 per cent line.

**Table 3.13: Economic Pressure by Consistent Poverty with the EU SILC11-item Index (Threshold 2+) and 60 Per Cent and 70 Per Cent of Median Income**

	Consistently Poor: EU-SILC11 & Below 60% Median Income		Consistently Poor: EU SILC11 & Below 70% Median Income	
	Non-Poor	Poor	Non-Poor	Poor
Arrears	7.6	47.6	7.1	46.3
Inability to cope with unexpected expenses	13.1	81.9	12.1	81.2
Housing expenses a great burden	17.9	58.2	17.4	56.3

In this section we have demonstrated the manner in which consistent poverty rates vary depending on the choice of basic deprivation index, the threshold adopted and income line on which we focus. We have also illustrated the extent to which such measures differentiate between the poor and the non-poor not only in terms of the items making up the deprivation index but also in relation to a range of other life-style deprivation dimensions and a number of indicators of subjective economic pressure.

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### 3.5 A Reconsideration of the Composition of the Basic Deprivation Index

As we have shown above, a poverty indicator can not be assessed solely in relation to the items comprising it. However, it remains true that both the scientific validity and the wider acceptability of any such index is affected by our ability to defend decisions relating to the use of some rather than other items. Since we wish to make the case for the superiority of the EU-SILC 11-item basic deprivation index, at this point we will extend our analysis to address such issues. We have already shown that exploratory factor analysis identifies a dimension of deprivation on which these 11-items have their highest loading and variation in item loadings is relatively modest. Furthermore, the EU-SILC 11-item index displays a very high level of statistical reliability. In addition each of the 11-items correlates substantially with the corrected total-item score for the 11-item index excluding that particular item. These attributes together with the ability of the index, and the consistent poverty measure incorporating it, to discriminate across a range of dimensions of deprivation and indicators of economic pressure constitute a strong case for using the 11-item EU-SILC consistent poverty measure. However, in order to test further the properties of the measure, in what follows we explore the consequences for the measurement of consistent poverty of including and excluding specific items.

We start by considering the consequences of excluding the items relating to going without a substantial meal and having debt problems in relation to routine expenses. In order to do so, at each income poverty line, we construct a typology with the following four categories:

- Non-poor on both the LIIS 8 and the EU-SILC 11 consistent poverty measures.
- Poor on the LIIS 8-item measure but not the EU-SILC 11-item index.
- Poor on the EU-SILC 11-item index but not the LIIS 8-item measure.
- Poor according to both indices.

In Table 3.14 we look at the relationship between position with regard to this typology and mean deprivation level on the life-style deprivation dimensions other than basic deprivation. From Table 3.14 it is evident that, for both income poverty lines, there is a clear continuum relating to secondary deprivation running from consistently non-poor on both indices to poor on the LIIS 8-item measure, followed by poor on the EU-SILC 11-item index only to poor on both measures. Those poor on the LIIS 8-item measure have deprivation levels almost three times those of non-poor on both measures. This ratio rises to over five to one for those poor on the EU-SILC 11-item index only and finally to over six to one for those poor irrespective of the measure employed. In other words deprivation levels for the EU-SILC 11 poor only are almost twice those for LIIS 8 poor only. The former are located much nearer to those non-poor across both measures while the latter come much

closer to the consistently non-poor. As with our other comparison it makes little difference here whether we focus on the typology relating to 60 per cent or 70 per cent of median income. The levels of deprivation tend to be higher at the 60 per cent line: but the pattern of variation across groups remain constant.

**Table 3.14: Dimensions of Deprivation by Consistent Poverty Typology**

	Neither	Poverty Typology		Both
		LIIS 8 Only	EU SILC 11 Only	
		<b>Mean Deprivation</b>		
		<b>60% Median Income</b>		
Secondary deprivation (Max=18)	1.16	3.15	5.81	7.09
Housing Facilities(Max=5)	0.10	0.26	0.32	0.46
Neighbourhood Environment (Max=5)	0.05	0.68	0.95	1.12
		<b>70% Median Income</b>		
Secondary (Max=18)	1.07	3.10	5.56	6.84
Housing Facilities (Max=5)	0.09	0.23	0.38	0.45
Neighbourhood Environment (Max=5)	0.05	0.59	1.04	1.16

A similar, though somewhat less sharply differentiated, profile emerges in relating to housing facilities. The deprivation level for those poor on the LIIS 8-item measure only is over twice for those non-poor on both measures. This rises to over four to one for those poor only on the EU-SILC 11-item index and to five to one for poor on both measures. Thus, the housing deprivation level is one and a half times higher for those captured exclusively by EU-SILC 11-item index than for those identified solely by the LIIS 8-item measure. The trend continues with the neighbourhood environment dimension. The level for the LIIS 8 only group is little different from the LIIS 8 poor only group than for the group non-poor on both measures. This rises to almost two to one for the EU-SILC 11 only group; a figure that is only marginally less than that for those poor on both measures. The evidence relating to lifestyle deprivation points to a consistent continuum running from those non-poor on both measures to those poor on both. In every case those poor on the EU-SILC 11-item index are substantially more deprived than their counterparts on the LIIS 8-item measure. The evidence thus consistently points to the superiority of the EU SILC 11-item consistent poverty measure.

We can gain further insight into the contrast between those poor on the EU-SILC 11-item measure versus those exhibiting that status on the LIIS 8-item measure only by examining the relationship between the consistent poverty typology and a number of our indicators of economic pressure. In Table 3.15 we set out the results relating to “difficulty in making ends meet”, housing costs constituting a “great burden” and inability to cope with unexpected expenses. We avoid using the item relating to arrears because since by definition those poor on the EU-SILC 11-item index will have

responded negatively to the debt item. Focusing on the item relating to difficulty in making ends meet we can see from Table 3.15 that the two groups poor on only one measure have almost identical rates of stress with over one in two reporting difficulty or great difficulty in making ends meet; a level that is three times that of those poor on neither measure and two-thirds of the figure for those consistently poor on both indices. The outcomes in relation to housing costs are also similar with one-third of the EU-SILC 11 only group reporting that such costs are a great burden compared to just over four out of ten for the LIIS 8 only group. The latter rate is just over two and a half times that for those non-poor on either measure and two-thirds that for those poor on both. Finally, on the item relating to inability to cope with unexpected expenses a somewhat greater differentiation is observed between the groups with just over three out of ten of the LIIS 8 only group reporting such difficulties compared to over half those poor on the EU-SILC 11-item index. The former figure is three times that for the group poor on neither measure, but only three-eighths of that for those poor on both.

**Table 3.15: Indicators of Economic Pressure by Consistent Poverty Typology**

	Poverty Typology			
	Neither	LIIS 8 Only	EU-SILC 11 Only	Both
	<b>% Experiencing Economic Pressure</b>			
	<b>60% Median Income</b>			
Difficulty or great difficulty in making ends meet	17.2	51.3	54.7	74.0
Housing costs a great burden	17.4	40.8	29.8	62.2
Unexpected expenses	12.5	36.5	56.0	85.9
	<b>70% Median Income</b>			
Difficulty or great difficulty in making ends meet	15.6	53.2	55.0	75.0
Housing costs a great burden	16.3	43.2	34.2	59.3
Unexpected expenses	11.4	33.0	53.9	85.3

The LIIS 8 only group are much closer to the EU-SILC 11 group, and indeed the group poor on both indices, with regard to subjective economic pressure than in relation to objective life-style deprivation. Clearly this is connected to the inclusion of the debt item in the LIIS 8-item index. Undoubtedly, this item picks up many people that we would want to define as consistently poor. However, it also seems to capture a number of people who while having difficulty in coping economically are enjoying standards of living that are substantially superior to those identified by the EU-SILC 11 consistent poverty measure. This contrast can be vividly illustrated by showing, as we do in Table 3.16, the relationships between a number of the items in the EU 11-item index that focus specifically on social exclusion and the consistent poverty typology. The contrast could hardly be more striking. The contrast on the remaining items, relating to entertaining family or friends, being able to afford an afternoon or evening out and being able to afford

presents for family and friends at least once a year, are even more striking. While, those consistently poor on the LIIS 8 only are twice as likely to report being unable to afford an afternoon or evening out than those consistently non-poor they are actually less likely to report that they cannot afford presents once a year. This group clearly experience no consistent relative disadvantage in relation to this set of items. Indeed their absolute levels of exclusion are extremely low. In contrast such levels are extremely high for those poor on the EU-SILC 11-item index. Six out of ten report that they cannot afford to meet family or friends for a meal or a drink compared to just less than three-quarters of the consistently poor. Similarly, six out of ten indicate that they cannot afford an afternoon or evening out a figure that is higher than for the consistently poor where one in two indicate that this is so. Finally, just over one in four indicate that they cannot afford presents for families and friends once a year compared to just over one in three for the consistently poor. Those poor on the EU-SILC 11-item measure only are sharply differentiated from both the LIIS8 poor only and the consistently non-poor in terms of these forms of exclusion. Thus, the evidence again suggests the EU-SILC 11-item measure is substantially more successful in identifying individuals exposed to the kind of generalised deprivation due to lack of resources that we sought to capture in developing a consistent poverty measure.

**Table 3.16: Indicators of Social Exclusion by Consistent Poverty Typology**

	Neither	Poverty Typology		Both
		LIIS 8 Only	EU-SILC11 Only	
% Experiencing Social Exclusion 60% Median Income				
Family or friends for meal or drink	6.5	3.8	61.0	73.9
Afternoon or evening out for entertainment	6.6	14.7	67.3	48.0
Presents for family and friends at least once a year	2.0	0.0	25.4	39.0
% Experiencing Social Exclusion 70% Median Income				
Family or friends for meal or drink	5.5	2.9	60.5	73.6
Afternoon or evening out for entertainment	5.7	11.1	66.1	49.9
Presents for family and friends at least once a year	1.5	0.0	27.7	37.1

At this point we shift our focus to a consideration of the items that constitute the EU- SILC 11-item index and the manner in which the inclusion of specific items may affect our conclusions. In Table 3.17 we show the consequences for estimation of the consistent poverty rate at both 60 per cent and 70 per cent of median income. The overall consistent poverty rate at 60 per cent of median income is 8.1 per cent.



**Table 3.17: Consistent Poverty Rates for Persons with Alternative Measures at 60 Per Cent and 70 Per Cent of Median Income Line**

	<b>60% Median</b>	<b>70% Median</b>
All 11 Items	8.1	9.6
<b>Item excluded</b>		
Heating	7.8	9.2
Shoes	7.8	9.3
Roast	7.9	9.4
Meal with meat, fish, chicken	8.0	9.5
New clothes	7.8	9.2
Coat	8.1	9.6
Adequate warmth	8.0	9.5
New furniture	7.0	8.3
Family or friends for meal or drink	7.3	8.7
Afternoon, evening out	7.6	8.9
Presents for family one a year	8.0	9.4

For each of the items the consistent poverty rate at the 60 per cent line recalculated on the basis of the index comprising the remaining ten items ranges between 7.0 and 8.1. At the 70 per cent line the overall rate is 9.6 per cent and the range of estimates of consistent poverty for full set of ten-item scales goes from 8.3 to 9.6. Thus, our estimates of consistent poverty are largely unaffected by the exclusion of any one of eleven of the items making up the basic deprivation index. In other words, our conclusions are not dependent on the inclusion of any particular item.

## 3.6 Conclusions

In this chapter we have sought to use the newly available EU-SILC database to develop measures that maintain some continuity with those used in setting NAPS targets but also overcome some of the difficulties associated with these original measures. Our analysis, based on a wide range of indicators included in the survey, identified four distinct dimensions of deprivation. In particular, we identified an 11-item index to serve as the basic deprivation component of revised measures of consistent poverty. The set of items covered a broader range than the original basic set. These provide a more comprehensive coverage of exclusion from family and social life. As we have argued, it is important that a national social indicator should enjoy broad legitimacy and the revised set of items seems more appropriate today than the earlier basic set, which seemed to reflect an earlier more frugal era.

Given the range and type of items included in the new basic deprivation index, we propose that a threshold level of two – together with low income – is appropriate to capturing consistent poverty. The analysis that we have reported confirms this view. The new deprivation index displays a high level of internal consistency and an individual's overall score is not highly dependent on any one item. This quality and the fact that deprivation must be reported on more than one item helps to ensure that poverty levels are also not unduly influenced by any single item.

Levels of consistent poverty observed employing these new definitions are marginally lower than those found with the original indices. As far as the income threshold is concerned, those above the basic deprivation threshold and between the 60 per cent and 70 per cent lines report levels of deprivation across a range of measures comparable to those experienced by individuals below the 60 per cent line. This provides a clear rationale for focusing on the 70 per cent line if a choice must be made. However, the choice of relative income threshold has considerably less importance in the case of consistent poverty measures than in the case of at-risk-of poverty indicators.

Retaining the items relating to a substantial meal and experience of debt in connection with day-to-day expenses would lead to a modest increase in poverty levels. However, by constructing consistent poverty typologies at the 70 per cent income level, which ranged from those defined as consistently non-poor on both indices to poor on one but not the other and finally poor on both, we were able to develop a strong argument for excluding the debt and substantial meal items. This latter group differ more from the consistently non-poor in terms of experience of subjective economic pressures than in terms of indicators of objective deprivation or exclusion.

The choice of items may significantly affect the acceptability of an index and the technical properties of a measure are crucially influenced by its constituent items. Furthermore, the sharply contrasting profiles in relation to each of the basic deprivation items observed for the consistently poor and all others provides considerable reassurance that our procedure allows us to capture the type of group which we wish to designate as poor. However, it is equally important to stress that measuring poverty in a unidimensional manner in relation to deprivation does not require that we characterise the poor in such terms or that we respond to poverty in such terms. As we have amply demonstrated those defined as consistently poor differ from others not only in terms of income and their basic deprivation profile but also in terms of exposure to a range of life-style deprivations and subjective economic pressures. This is true whether one focuses on the old or new measures of consistent poverty. However, the latter, in addition to explicitly incorporating a wider range of basic deprivation items and being less dependent on any single indicator, also provides a sharper contrast between the consistently poor and all others on a wide range of outcomes. The accumulated evidence presented in this chapter strongly supports the view that the consistent poverty measures incorporating the EU-SILC 11 basic deprivation index with a threshold of two successfully identifies those exposed to generalised deprivation arising from lack of resources in a manner consistent with the theoretical formulation outlined at the beginning of this chapter.

# 4. THE PROFILE OF THOSE CONSISTENTLY POOR IN 2003

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## 4.1 Introduction

In order to understand the full implications of the results presented in the previous chapter, we also need to know what types of households fall below consistent poverty lines and how this varies depending on our choice of basic deprivation index. This chapter presents such an analysis focusing on household composition, age group, education, labour force status, labour market precarity, urban-rural location and extent of dependence on social welfare transfers.

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## 4.2 Risk, Incidence and Household Composition

In looking first at who falls below consistent poverty lines, we focus first on households broken down by composition. For the purpose of this categorisation children are defined as aged less than eighteen years. Tables 4.1 and 4.2 present the risk of being consistently poor at 60 per cent and 70 per cent of median income using the LIIS 8 and EU-SILC 11 basic deprivation index. We can see that the variation in risk patterns is remarkably similar across both income poverty lines and choice of basic deprivation index. Although, in a pattern that emerges consistently across our analysis, the differential between the most and least favoured categories are somewhat greater in the case of those lines based on the EU-SILC 11-item index. However, such variation involves deviations around a core pattern of similarity. Thus, in each case the group most exposed to consistent poverty is the one adult with children households. Irrespective of the poverty line on which we focus, close to four out of ten of such households are recorded as consistently poor. They are followed by two adult households with four or more children, where approximately one in five are consistently poor. One adult households are next in line with marginally lower rates. There is then something of a gap to two adult households with three children with a risk level of approximately one in ten. The groups with the lowest consistent poverty rates are two adults with less than three children. For these households rates vary from a low of 3 per cent to a high of 7 per cent. At the 70 per cent line the differential between the least and most favoured group is 7.6:1 in the case of the LIIS 8-item measure and 9.2:1 for the EU-SILC 11-item index.

**Table 4.1: LIIS 8 Consistent Poverty Risk by Household Type**

Household Type	60% Of Median Income	70% of Median Income
	% Poor	% Poor
1 Adult	14.9	18.8
2 Adults	6.6	8.0
3 + Adults	4.6	6.8
2 Adults & 1 child	6.1	6.9
2 Adults & 2 children	4.3	5.5
2 Adults & 3 children	9.8	11.3
2 Adults & 4 children	19.0	22.3
1 Adult & children	38.7	41.6
3 Adults & children	10.0	12.7

**Table 4.2: EU-SILC 11 Consistent Poverty Risk by Household Type**

Household Type	60% Of Median Income	70% of Median Income
	% Poor	% Poor
1 Adult	14.1	17.3
2 Adults	5.7	7.4
3 + Adults	3.1	4.8
2 Adults & 1 child	5.2	5.6
2 Adults & 2 children	2.9	4.1
2 Adults & 3 children	10.2	11.4
2 Adults & 4 children	18.4	21.3
1 Adult & children	36.5	37.9
3 Adults & children	10.0	10.9

In order to understand patterns of poverty, it is necessary to take into account not only differential risk levels but also the size of the groups to which these varying risks apply. The composition figures set out in Table 4.3 take both factors into account. Given the similarity of the patterns observed across deprivation indices, we have presented results for the EU-SILC 11-item index only. Despite their exceptionally high risk rates, one adult households with children constitute only one-eighth to one-ninth of those consistently poor at either the 60 per cent or 70 per cent lines. Similarly, despite their relatively high risk level, two adults and four children households make up only one in eight of the consistently poor households. The largest groups are the two adults households and the three adults with children households who in each case make up one-seventh and close to one-fifth respectively of the consistently poor. One adult households make up one-ninth of the poor and three plus adults less than one-tenth. Taken together households with two adults and between one to three children comprise just over one-fifth of the consistently poor. Households with three children make up half this group. Composition rates thus vary much less sharply than risk rates and consistent poverty is therefore a phenomenon that is relatively evenly distributed across household types in terms of the number of people it affects.

**Table 4.3: EU-SILC 11 Consistent Poverty Composition by Household Type**

Household Type	60% Of Median Income	70% of Median Income
	% Poor	% Poor
1 Adult	11.5	11.9
2 Adults	14.1	15.4
3 + Adults	6.6	8.5
2 Adults & 1 child	4.8	4.4
2 Adults & 2 children	5.4	6.5
2 Adults & 3 children	11.4	10.7
2 Adults & 4 children	12.7	12.4
1 Adult & children	13.5	11.8
3 Adults & children	20.1	18.4
Total	100.0	100.0

### 4.3 Age Group

Tables 4.4 and 4.5 show consistent poverty rates by age group for the range of consistent poverty lines. In both cases children less than eighteen years are disadvantaged and the elderly are advantaged. However, differentials are a good deal more modest at the 70 per cent line; although children continue to have the highest rates. Thus at the former line the rates for the elderly are almost half those for children at the 70 per cent line they are closer to 80 per cent.

**Table 4.4: LIIS 8 Consistent Poverty Risk by Age Group**

Age Group	60% Of Median Income	70% of Median Income
	% Poor	% Poor
Children < 18 years	11.8	13.8
Adults 18-64 years	8.2	9.8
Adults 65+ years	6.2	10.2

**Table 4.5: EU-SILC 11 Consistent Poverty Risk by Age Group**

Age Group	60% Of Median Income	70% of Median Income
	% Poor	% Poor
Children < 18 years	11.2	12.6
Adults 18-64 years	7.0	8.2
Adults 65+ years	6.5	10.1

In Table 4.6 we show the composition figures for the EU-SILC indices for both the 60 per cent and 70 per cent median lines. The main difference between those figures and those based on the LIIS measures is that the former attribute more importance to the sixty-five or over age group. In general children less than eighteen years constitute one-third of the consistently poor and those aged between eighteen to sixty-five years make up over half. For the LIIS 8-item measures the elderly comprise one in eleven and one in nine respectively at the 60 per cent and 70 per cent lines. For the EU-SILC 11-item measures these figures rise to one in ten and one in eight.

**Table 4.6: EU-SILC 11 Consistent Poverty Composition by Age Group**

Age Group	60% Of Median Income	70% of Median Income
	% Poor	% Poor
Children < 18 years	37.1	35.0
Adults 18-64 years	54.0	53.3
Adults 65+ years	8.9	11.7
Total	100.0	100.0

#### 4.4 Educational Qualifications

In Tables 4.7 and 4.8 we show the distribution of risk of consistent poverty by individuals' highest educational qualifications for both the LIIS 8 and EU-SILC 11 indicators. In each case there is a sharp decline in risk of poverty as educational qualifications increase and particular disadvantages are conferred by the absence of qualifications. Those for whom we lack information display levels of poverty very similar to those with no qualifications. For the EU-SILC measures almost one in five of the latter are consistently poor at 70 per cent of median income. This is a rate over six times higher than for those with third level qualifications. In comparison the corresponding ratio for the LIIS 8-item measure is just above four and a half to one. At the 60 per cent line over one in seven of those with no qualifications are consistently poor compared to one in five for both measures but the poverty rates for those with qualifications is consistently lower for the better educated. When we take into account that the income component is in both cases identical and that there is an overlap of five items in the basic deprivation components, it is clear that the choice of the remaining deprivation indicators significantly influences our conclusions regarding the impact of educational qualifications on risk of consistent poverty.

**Table 4.7: LIIS 8 Consistent Poverty Risk by Highest Educational Qualification**

Highest Educational Qualification	60% Of Median Income	70% of Median Income
	% Poor	% Poor
No qualifications	15.4	19.3
Intermediate level	7.4	9.7
Leaving Certificate	5.1	6.3
Third level	3.8	4.2
Other	16.2	19.6

**Table 4.8: EU-SILC 11 Consistent Poverty Risk by Highest Educational Qualification**

Highest Educational Qualification	60% Of Median Income	70% of Median Income
	% Poor	% Poor
No qualifications	15.0	19.0
Intermediate level	6.8	8.1
Leaving Certificate	3.6	4.1
Third level	2.7	3.1
Other	17.5	20.9

In Table 4.9 we show the composition of the consistently poor in terms of educational qualifications for the EU-SILC 11 indicators. In comparison with the LIIS measure is an increase in the percentage with no educational qualifications. In both cases those with no educational qualifications make up more than one in two of the poor. Those with Intermediate qualifications make up approximately one in five of the poor, those with a Leaving Certificate between one in six and one in seven, and those with a Third Level Qualification between one in twelve and one in thirteen.

**Table 4.9: EU-SILC 11 Consistent Poverty Composition by Highest Educational Qualification**

Highest Educational Qualification	60% Of Median Income % Poor	70% of Median Income % Poor
No qualifications	52.6	54.9
Intermediate level	21.3	20.8
Leaving Certificate	16.0	14.7
Third level	8.3	7.7
Other	1.8	1.8
Total	100.0	100.0

#### 4.5 Principal Economic Status

In Tables 4.10 and 4.11 we display the distribution of poverty risk for adults by the principal economic status of the individual. We should stress that in this case, as with all measures relating to individual rather than household characteristics, it is the status of the individual on which we focus rather than that of the 'household head' or the 'household reference person'. At a later date we will conduct analysis at these other levels. In general we would expect relationships between poverty outcomes to be somewhat weaker where we focus on individual, as opposed to household head or reference person, characteristics. However, for each indicator there is a clear rank order in terms of highest risk of poverty running from the unemployed to the ill/disabled, to home duties, students, the retired and finally those at work. For the EU-SILC 11 indices one in three of the unemployed are consistently poor at both income lines. In contrast the respective figure for those at work is 2 per cent in both cases. The differentials at 60 per cent and 70 per cent lines are respectively fourteen and thirteen to one while the corresponding figures for the LIIS 8-item index are eleven and ten to one.

**Table 4.10: LIIS 8 Consistent Poverty Risk by CSO Principal Economic Status (PES)**

PES	60% Of Median Income % Poor	70% of Median Income % Poor
At work	2.6	3.7
Unemployed	28.9	35.5
Student	11.0	12.3
On home duties	12.6	15.5
Retired	6.3	9.5
Ill/Disabled	25.1	28.0
Other	15.0	17.6

**Table 4.11: EU-SILC 11 Consistent Poverty Risk by CSO Principal Economic Status (PES)**

PES	60% Of Median Income % Poor	70% of Median Income % Poor
At work	2.3	2.2
Unemployed	32.4	32.8
Student	11.9	9.4
On home duties	14.8	14.3
Retired	7.8	8.8
Ill/Disabled	29.3	28.7
Other	18.9	16.2

Thus once again the socio-economic differentiation is slightly sharper when we employ the EU-SILC 11-item measures. Rates of consistent poverty for the ill/disabled are only slightly lower than those for the unemployed. As in the case of the unemployed, consistent poverty rates are somewhat higher for the ill/disabled at the 60 per cent line where we focus on the EU-SILC measures with the relevant percentages being 29 per cent and 25 per cent. There is a sharp gap between these two groups and students who display the next highest risk levels; with approximately one in nine to one in ten being consistently poor. For those in home duties the figure is one in approximately one in seven. For the retired there is a reasonably sharp rise from a risk level of one in twelve at the 60 per cent line to one in eight at the 70 per cent threshold. For the retired and those in home duties the contrasts between those at work are slightly sharper for the EU-SILC indicators than the LIIS 8-item measures particularly at the 60 per cent line. Thus for those in home duties the disparity with those at work is 4.8 for the LIIS measure and 6.4 for the EU-SILC indicator.

In Table 4.12 we set out the results for the EU-SILC 11-item measures relating to the composition of the consistently poor in terms of Principal Economic Status. In comparison with the results for the LIIS measures they show a slightly lower proportion at work and marginally higher proportions in home duties, retired and ill/disabled. The largest constituent group at both income poverty lines is those in home duties who in each case make up 20 per cent of the poor. Despite their sharply contrasting risk levels, the unemployed and those at work make up reasonably similar proportions of the consistently poor. At both lines the former make up one in eight of the poor and the latter one in ten. The ill/disabled group constitute a group that is marginally smaller than the unemployed. Students make up approximately one-fourteenth of the consistently poor while the retired account for one in twenty.



**Table 4.12: EU-SILC 11 Consistent Poverty Composition by CSO Principal Economic Status (PES)**

PES	60% Of Median Income % Poor	70% of Median Income % Poor
At work	9.1	10.2
Unemployed	12.2	12.3
Student	7.4	6.7
On Home Duties	20.4	20.7
Retired	4.8	5.9
Ill/Disabled	11.3	11.0
Other	1.8	1.8
Total	100.0	100.0

## 4.6 Employment Precarity

In Table 4.13 and 4.14 we look at the distribution of risk of being consistently poor by what we label employment ‘precarity’. What we are attempting to take into account is that an individual’s risk of being exposed to such poverty is affected not only by their current employment status but also by their previous experience in the labour market. By distinguishing whether respondents currently at work had experienced unemployment and whether, among those who had, if they have been unemployed for six months or less in the past year we managed to distinguish five categories of precarity. Once again the disparities between the extreme categories are greatest for the EU-SILC 11-item measures. Thus for these indicators at the 60 per cent line the disparity in risk level between the unemployed and those at work with no experience of unemployment in the past twelve months is over twenty-three to one for the EU-SILC 11-item measure and fifteen to one for the LIIS 8-item measure. The corresponding figures at 70 per cent of median income are nineteen to one and twelve to one. For all of the measures there is a graduated increase in risk of consistent poverty as the level of employment precarity increases. Thus, for the EU-SILC 11-item measure at the 70 per cent income level, the number poor rises from less than 2 per cent for those in the least precarious group to 9 per cent for those at work but unemployed for less than six months in the past year before almost doubling to 16 per cent

**Table 4.13: LIIS 8 Consistent Poverty Risk by Labour Market Precarity**

Labour Market Precarity	60% Of Median Income % Poor	70% of Median Income % Poor
At work: no experience of unemployment	1.9	2.9
At work: unemployed < 6 months in past 12 months	8.8	9.8
At work: unemployed > 6 months in past 12 months	17.3	20.7
Inactive	12.5	15.1
Unemployed	28.9	35.5

for the comparable group who have been unemployed for six months or more before finally doubling again to 33 per cent for the currently unemployed. The inactive group exhibit levels of poverty close to the ‘at work but unemployed for more than six months in the previous year’ group.

**Table 4.14: EU-SILC 11 Consistent Poverty Risk by Labour Market Precarity**

	60% Of Median Income % Poor	70% of Median Income % Poor
<b>Labour Market Precarity</b>		
At work: no experience of unemployment	1.2	1.7
At work: unemployed < 6 months in past 12 months	7.3	8.6
At work: unemployed > 6 months in past 12 months	12.0	15.5
Inactive	11.5	13.8
Unemployed	27.0	32.8

In Table 4.15 we look at the composition of the consistently poor in terms of labour precarity for the EU-SILC 11 indicators. The main difference relating to these profiles between the EU-SILC measures and the LIIS 8-item ones is that the former show lower proportions in the at work and never unemployed group and higher numbers for the inactive who make up two-thirds of the consistently poor. It is again important to note that despite extremely low risk levels the former group constitute one in twelve of the consistently poor at the 60 per cent line and one in ten at the 70 per cent threshold.

**Table 4.15: EU-SILC 11 Consistent Poverty Composition by Labour Market Precarity**

	60% Of Median Income % Poor	70% of Median Income % Poor
<b>Labour Market Precarity</b>		
At Work: No Experience of Unemployment	8.4	9.9
At Work: Unemployed < 6 Months in Past 12 Months	3.4	3.3
At Work: Unemployed > 6 Months in Past 12 Months	1.9	2.0
Inactive	18.2	17.9
Unemployed	68.2	67.2
	100.0	100.0

## 4.7 Urban-Rural Location

In Tables 4.16 and 4.17 we examine the distribution of consistent poverty risk levels by urban-rural location. ‘Urban’ is defined as towns or cities with a population of one thousand or more and 62 per cent of population are defined as ‘urban’ and 38 per cent as rural. In every case urban poverty rates are higher than their rural counterparts. However, the gap is somewhat less in the case of the EU-SILC indicators. Thus for the LIIS 8-item measures urban

consistent poverty rates are 1.5 times higher at the 60 per cent line and 1.7 times greater at the 70 per cent threshold. The corresponding figures for the EU-SILC measures are 1.4 and 1.5.

**Table 4.16: LIIS 8 Consistent Poverty Risk by Urban-Rural Location**

	60% Of Median Income	70% of Median Income
	% Poor	% Poor
Urban	10.3	12.9
Rural	6.8	7.6

**Table 4.17: EU-SILC 11 Consistent Poverty Risk by Urban-Rural Location**

	60% Of Median Income	70% of Median Income
	% Poor	% Poor
Urban	9.1	11.0
Rural	6.5	7.3

In Table 4.18 we show the composition of the consistently poor by urban-rural breakdown for the EU-SILC measures. At both the 60 per cent and 70 per cent lines the urban-rural split is 70:30. In the latter case the EU-SILC composition is more rural than is the case with the LIIS measure where the split is 75:25.

**Table 4.18: EU-SILC 11 Consistent Poverty Composition by Urban-Rural Location**

	60% Of Median Income	70% of Median Income
	% Poor	% Poor
Urban	69.5	71.2
Rural	30.5	28.8
Total	100.0	100.0

## 4.8 Dependence on Social Transfers

In this section we examine the extent to which the consistently poor are dependent on social transfers. At this point our focus is entirely on composition, since we are rather less interested in the question of the impact of social welfare dependence on risk of poverty. Tables 4.19 and 4.20 show the relevant breakdowns for both the LIIS 8 and EU-SILC 11-item measures. Not surprisingly a rather large proportion of the consistently poor are drawn from those categories most dependent on social welfare. However, the extent of differentiation is significantly greater when one focuses on the EU-SILC 11-item measures rather than their LIIS counterparts. Thus, at the 60 per cent line, the consistently poor employing the LIIS index measure are six times more likely to be drawn from the group receiving 75 per cent or more of their disposable income from social transfers than from those receiving less than 25 per cent of their net income in this form. The corresponding figure for the EU-SILC 11-item index is thirteen to one. For the 70 per cent line the respective figures are four to one and nine to one. Thus, in terms of extent of dependence on social transfers, the individuals we identify as consistently poor are somewhat different depending on the items

that we choose to constitute our basic deprivation index. At the 60 per cent line using the EU-SILC measures six out of ten of the consistently poor are receiving 75 per cent or more of their income from social transfers while only one in twenty are receiving less than 25 per cent of their income from this source. At the 70 per cent line the comparable figures are six out of ten and one in fourteen. In each case the intermediate categories make up one-third of the consistently poor. It is particularly noteworthy that those receiving between one-quarter and one half of their income from social transfers constitute over one-sixth of the consistently poor at each income threshold, indicating that such poverty is not entirely a question of welfare dependence.

**Table 4.19: LIIS 8 Consistent Poverty Composition by Percentage of Income from Social Transfers**

% of Income from Social Transfers	60% Of Median Income	70% of Median Income
	% Poor	% Poor
< 25%	9.1	12.6
25% to 49%	18.7	17.8
50% to 74%	15.2	15.0
75% to 100%	57.0	54.6
Total	100.0	100.0

**Table 4.20: EU-SILC 11 Consistent Poverty Composition by Percentage of Income from Social Transfers**

% of Income from Social Transfers	60% Of Median Income	70% of Median Income
	% Poor	% Poor
< 25%	4.8	6.7
25% to 49%	17.6	18.1
50% to 74%	14.6	14.5
75% to 100%	63.0	60.7
Total	100.0	100.0

#### 4.9 Socio- Demographic Composition by Alternative Consistent Poverty Measures

A focus on composition can also help us to understand the consequences of opting for one rather than another consistent poverty index. In Table 4.21 we make use of the consistent poverty typology we employed in the previous chapter. Our focus is on a number of key variables that have been consistently associated with poverty and deprivation. These include being inactive in the labour market, the absence of educational qualifications and being a member of a household that receives three-quarters or more of its income from social transfers. Not surprisingly, as can be seen from Table 4.21, there is a sharp contrast on each of these indicators between those consistently poor on neither, the LII 8 nor EU-SILC 11 indices and those consistently poor on both. In describing these results we focus on the 70 per cent line but the patterns are remarkable similar at the 60 per cent line. The former are almost

twice as likely to be inactive, over twice as likely to have no educational qualifications, five times more likely to be in a household that receives more than three-quarters of its income from social transfers and eight times more likely to be local authority tenants.

Of somewhat more interest though, for our present purposes, is the comparison between those consistently poor on the LIIS measure only and those who are classified as such on the EU-SILC 11 indicator only. In every case we can see that the latter are closer to the group who are consistently poor on both indicators than those who are poor on neither. For those poor on the LIIS 8 indicator only the reverse is true although in each case they occupy an intermediate position between those consistently poor on neither measure and those who have this status on the EU-SILC 11-item measure only. Directly comparing the two groups we find that while almost three-quarters of the EU-SILC 11-item only group are inactive this falls to just less than six out of ten for the LIIS 8 only group. In relation to absence of educational qualifications the corresponding figures are over one in two and three out of ten. The EU-SILC poor only are almost twice as likely to be drawn from the over sixty-five year group. Finally, three out of four of the EU-SILC only group are in households that receive 75 per cent or more of their income from social transfers compared to less than one in two of the LIIS 8-item poor only group. Thus in every case the profile of the group who are consistently poor on the EU-SILC 11-item index only conforms more closely to the expected profile than does that of their LIIS 8-item counterparts.

**Table 4.21: Socio-Demographic Composition by Consistent Poverty Typology**

	Poverty Typology			
	Neither	LIIS 8 Only	EU-SILC 11 Only	Both
		<b>60% Median Income</b>		
Inactive	39.1	59.8	75.2	66.9
No educational qualifications	22.3	35.4	57.7	51.8
Income from social transfers > 75%	13.1	48.2	84.6	59.5
Aged 65 years or more	11.3	12.1	24.2	6.6
Rural	38.8	38.8	58.9	26.2
Local authority tenant	5.4	17.0	15.7	40.5
		<b>70% Median Income</b>		
Inactive	38.7	57.2	76.9	65.5
No educational qualifications	21.5	32.7	63.1	53.6
Income from social transfers > 75%	12.4	44.5	79.9	57.7
Aged 65 years or more	11.0	13.4	26.7	9.5
Rural	39.2	33.6	58.4	24.4
Local Authority Tenant	5.1	14.8	17.5	40.5

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## 4.10 Conclusions

In this chapter we have sought to document socio-economic variations in consistent poverty rates for the LIIS and EU-SILC 11-item measures at both 60 per cent and 70 per cent of median household income. We have also documented the composition of the consistently poor in terms of the same range of factors. Our findings have shown that there are considerable similarities in the socio-demographic distribution of the consistently poor irrespective of the income line or deprivation measure on which we focus. There is a relatively weak tendency for socio-economic disparities to be wider at the higher rather than the lower income line. However, the choice of basic deprivation index turns out to be a good deal more crucial. Across the whole range of variables we have considered, patterns of socio-economic differentiation are consistently sharper in relation to the EU-SILC 11-item measures than the LIIS 8 indices. Such differentiation incorporates strikingly high consistent poverty rates suffered by single adults with children households, by households with large numbers of children, by individuals who lack educational qualifications and by the unemployed and the ill/disabled. At the same time we noted that our picture of the composition of the poor is also shaped by our choice of indicators. In every case the socio-economically disadvantaged groups make up a larger part of the consistently poor when our focus is on the EU-SILC 11-item measures. However, while the pattern of socio-economic differentiation is striking, it still remains true that some groups with intermediate or low risk levels make up significant proportions of the consistently poor because of the scale of the groups. The two most striking examples are, respectively, individuals on home duties and those at work. While those highly dependent on social transfers make up a large part of the consistently poor a significant minority of that group are not so dependent. Finally, support for preferring the EU-SILC 11-item index is provided by the fact that across the range of relevant criteria the composition of the group consistently poor on the EU-SILC 11-item index conforms a good deal more closely to our expectations relating to the profile of a deprived group than does that of the LIIS 8 only group.

# 5. CONCLUSIONS AND POVERTY TARGETS

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## 5.1 Conclusions

This has been the first Irish study to be based on micro-data from the CSO's new EU-SILC survey, initiated in 2003, which is to be the key source for monitoring developments in income and living standards into the future. It has focused on how best to use this source to measure consistent poverty, as a key element in assessing progress in tackling poverty and social exclusion going forward.

The study brought out first that the new survey differs in some important respects from the Living in Ireland Surveys, on which poverty monitoring and research has relied up to now. This means that direct comparisons cannot meaningfully be made between the measured levels of deprivation in the last Living in Ireland Survey, for 2001, and the new EU-SILC data for 2003. However, the availability of the new data did allow us to undertake a full-scale re-examination of the life-style deprivation indices employed in capturing basic deprivation and consistent poverty. This provides the basis for the approach we have developed and proposed in this study to reconfiguring those measures; this can be implemented, using 2003 as a baseline, in monitoring future progress.

Even without the change in data source, the expansion of the Irish economy, with living standards rising rapidly over a short period, would provide a compelling argument for reconsidering the way consistent poverty is measured and targeted in the National Anti-Poverty Strategy. Indeed, in previous studies we had already highlighted and responded to the need to reassess the way the basic deprivation index was constructed, in order to adapt it to new standards of living and to better capture those exposed to risk of poverty and social exclusion in contemporary Irish society.

In this study we have used the new EU-SILC data and factor analysis techniques to re-assess the measurement of different dimensions of deprivation and the selection of the items used for the construction of a basic deprivation index. The basic deprivation dimension, now made up of 11-items, forms a key component of our newly-defined measures of consistent poverty. The new set of items was deliberately chosen to provide a more comprehensive coverage of exclusion from family and social life.

Our analysis also supported the use of a threshold level of 2 or more with the new index in measuring consistent poverty, rather

than the 1 or more threshold which had been used with the original deprivation index.

Combining this measure of basic deprivation with income thresholds set at 60 per cent and 70 per cent of median income respectively produced consistent poverty rates of 8 per cent and 10 per cent in 2003. These figures are slightly lower than those obtained using the original 8-item deprivation index. The apparent paradox that a larger and more broadly based deprivation index produces lower consistent poverty rates is accounted for both by the higher threshold and the fact that the debt item in the original set acted as a catch-all item and contributed disproportionately to the consistent poverty rate.

Using the new basic deprivation index, those identified as consistently poor are sharply differentiated from others below the income lines in terms of the 11-items constituting the basic deprivation index. They are similarly distinct in terms of their subjective assessment of the economic pressures they face. Substantial differences are also observed in their secondary deprivation levels, and significant though less striking differences are found in relation to housing facilities and neighbourhood environment.

These findings amply demonstrate that a poverty measure cannot be judged solely on the basis of the items comprising the index. Any such index, even where it appears narrowly defined, may still be successful in identifying a group exposed to multifaceted deprivation and exclusion. This could in principle be true of relative income measures on their own, but the problem is that they in fact fail that empirical test: some of those on low incomes are not experiencing high levels of deprivation or exclusion.

The newly defined consistent poverty measures, on the other hand, succeed admirably in the task and provide sharper contrasts in relation to a range of phenomena. The new indices have the advantage that the additional five items make the procedure a good deal more transparent and, hopefully, add to the legitimacy of the measure.

Ultimately in determining whether the construction of the new deprivation index leads to an improved identification of the consistently poor, it is necessary to compare those individuals who are defined as consistently poor by the new measure but not by the old, and *vice versa*. Our analysis shows that the former are experiencing consistently higher levels of objective deprivation and social exclusion. They are also more likely to be poorly educated, inactive in the labour market, rural and over sixty-five years of age. However, differences in terms of the subjective experience of economic pressures are modest.

It appears that the debt item in the original basic deprivation set captured a sub-set of respondents who are subject to financial strain, including the pressure of housing expenses, but who have general standards of living which go well beyond those enjoyed by those



that we have identified as consistently poor. On the other hand, the additional five items incorporated in the new index capture a group of individuals also experiencing high levels of deprivation in other respects.

Our findings relating to the socio-economic determinants of consistent poverty, as set out in Chapter 4, show that those most at risk are single adults with children, households with a large number of children, those lacking educational qualification, and the unemployed and ill/disabled. The set of analyses presented in this chapter showed that the patterns of socio-economic differentiation are consistently sharper for the proposed new EU-SILC 11-item measure rather than the LIIS 8-item index. While the pattern of socio-economic differentiation is striking, it still remains true that some groups with intermediate or low risk levels make up significant proportions of the consistently poor because they are sizeable groups in the population. The two most striking examples are respectively individuals on home duties and those at work. Finally, while those highly dependent on social transfers make up a large part of the consistently poor a significant minority of that group are not so dependent. Support for preferring the EU-SILC 11-item index is provided by the fact that across the range of relevant criteria the composition of the group consistently poor on the EU-SILC 11-item index conforms a good deal more closely to our expectations relating to the profile of a deprived group than does that of the LIIS 8 only group.

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## 5.2 A Multi-tiered and Multi- dimensional Approach to Poverty Targeting

As well as playing a key role in poverty monitoring and research, the consistent poverty measure has been central to the poverty reduction targets adopted in the National Anti-Poverty Strategy. While we have concentrated in this study on the re-configuration of the consistent poverty measure, in concluding it is also worth considering how this revised and adapted measure can best be employed in framing poverty targets. When dealing with a phenomenon as complex and multi-faceted as poverty, there is a strong argument for not relying on any single measure or indicator, but instead adopting a multi-tiered and multidimensional approach. This implies that poverty targets should encompass a number of distinct elements, as we have suggested in previous work (Layte *et al.*, 2001; Nolan *et al.*, 2001; Whelan *et al.*, 2003). We have proposed a set of tiered and inter-related poverty reduction targets along the following lines:

- 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.

Our judgement is that poverty targets framed in this fashion, with the re-configured basic deprivation and consistent poverty measures at their core, would provide a sound basis for assessing progress in tackling poverty in Ireland over the next three to five years. At that point it will be necessary to once again re-assess the adequacy of the deprivation component in capturing generalised deprivation. The approach and analysis presented here serve both to produce what we believe are the most satisfactory measures based on the new EU-SILC survey, and to show how such a re-assessment can be carried out again in the future.

## REFERENCES

- ATKINSON, A.B., B. CANTILLON, E. MARLIER, and B. NOLAN, 2005. *Taking Forward the EU Social Inclusion Process*, Report for High-Level Conference organised by the Luxembourg Presidency of the EU, Luxembourg [available at [www.fm.etat.lu](http://www.fm.etat.lu), and [www.ceps.lu/eu2005\\_lu/inclusion](http://www.ceps.lu/eu2005_lu/inclusion)].
- BRADSHAW, J., 2001. "Methodologies to Measure Poverty: More than One is Best," International Symposium on Poverty, Mexico City.
- CALLAN, T., B. NOLAN and C.T. WHELAN, 1993. "Resources, Deprivation and the Measurement of Poverty," *Journal of Social Policy*, Vol. 22, No. 2, pp. 141-172.
- CALLAN, T., B. NOLAN, B.J. WHELAN, C.T. WHELAN, and J. WILLIAMS, 1996. *Poverty in the 90s: Evidence from the 1994 Living in Ireland Survey*, Dublin: Oak Tree Press in association with The Economic and Social Research Institute.
- CALLAN, T., M. KEENEY, B. NOLAN and B. MAITRE, 2004. *Why Is Relative Income Poverty So High in Ireland?* Policy Research Series, Paper No. 53, Dublin: The Economic and Social Research Institute.
- CENTRAL STATISTICS OFFICE, 2005. *EU Survey on Income and Living Conditions (EU-SILC): First Results 2003*, Statistical Release, 24 January, Dublin/Cork: CSO.
- EUROSTAT, 2005. *The Continuity of Indicators during the Transition between ECHP and EU-SILC*, Luxembourg: Office for Official Publications of the European Commission.
- LAYTE, R., B. MAITRE, B. NOLAN and C.T. WHELAN, 2000. "Targeting Poverty: Lessons from Monitoring Ireland's National Anti-Poverty Strategy", *Journal of Social Policy*, Vol. 29, No. 4, pp. 553-75.
- LAYTE, R., B. MAITRE, B., NOLAN, D. WATSON, C.T. WHELAN, J. WILLIAMS, and B. CASEY, 2001. *Monitoring Poverty Trends and Exploring Poverty Dynamics in Ireland*, Policy Research Series, Paper No. 41, Dublin: The Economic and Social Research Institute.
- NOLAN, B. and C.T. WHELAN, 1996. *Resources, Deprivation and Poverty*, Books and Monographs No. 103, Oxford: Clarendon Press.
- NOLAN, B., B. GANNON, R. LAYTE, D. WATSON, C.T. WHELAN and J. WILLIAMS, 2002. *Monitoring Poverty Trends in Ireland: Results from the 2000 Living In Ireland Survey*, Policy Research Series, Paper No. 45, Dublin: The Economic and Social Research Institute.
- PERRY, B., 2002. "The Mismatch Between Income Measures and Direct Outcome Measures of Poverty", *Social Policy Journal of New Zealand*, Vol. 19, pp. 101-127.
- TOWNSEND, P., 1979. *Poverty in the United Kingdom*, Harmondsworth: Penguin.
- WATSON, D. and J. WILLIAMS, 2003. *Irish National Survey of Housing Quality 2001-2002*, Books and Monographs No. 173. Dublin: The Economic and Social Research Institute in association with the Department of Environment, Heritage and Local Government.
- WHELAN, C.T., R. LAYTE, B. MAITRE, and B. NOLAN, 2001. "Income, Deprivation and Economic Strain: An Analysis of the European Community Household Panel", *European Sociological Review*, Vol. 17, No. 4, pp. 357-372.
- WHELAN, C.T., R. LAYTE and B. MAITRE, 2002. "Persistent income poverty and deprivation in the European Union: an analysis of the first three waves of the European Community Household Panel", *Journal of Social Policy*, Vol. 32, No. 1.
- WHELAN, C.T., R. LAYTE, B. MAITRE, B. GANNON, B. NOLAN, D. WATSON and J. WILLIAMS, 2003. *Monitoring Poverty Trends in Ireland: Results from the 2001 Living in Ireland Survey*, Policy Research Series, Paper No. 51, Dublin: The Economic and Social Research Institute.
- WHELAN, C.T., B. NOLAN and B. MAITRE, 2005. *Trends in Welfare for Vulnerable Groups, Ireland 1994-2001*, Policy Research Series, Paper No. 56, Dublin: The Economic and Social Research Institute.