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PANEL RESEARCH ON POVERTY IN  
IRELAND

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by

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## INTRODUCTION

*Objective*

This paper attempts to describe the major research project on Poverty and related issues on which we at the ESRI have been working for the past four years. This project forms part of the EC-funded Co-ordinated Research Project on Poverty which Professor Deleeck, the co-ordinator, has discussed in the previous paper. I trust that my description of the Irish experiences, both positive and negative, with this type of inquiry will help to elucidate the contribution which such studies can make to our understanding of poverty in Europe today and suggest guidelines for the conduct of such research in the future. I hope that my comments will complement those of Professor Deleeck by sketching the overall approach to the analysis of poverty adopted by one of the countries involved.

The paper begins by setting the study in context and shows that it was the first inquiry of this type ever carried out in Ireland. The theoretical perspective on poverty which informed our approach is then briefly presented. There follows a description of how the surveys were conducted: sample selection, fieldwork response rates and income measurement methods are discussed. Some of the main features of the results so far achieved are then presented, together with an outline of work in progress and future plans. The paper concludes with some reflections on the achievements of the project and the problems encountered, as well as some comments on the international aspects of the research.

*The Context of the Study*

A survey specifically addressing the questions of poverty and income change had never been attempted in Ireland before. Previous research (e.g. Roche; Rottman and Hannan etc.) had concentrated on using the Household Budget Survey to examine these issues. While the sample size and overall quality of these data are completely satisfactory, the HBS, being designed for other purposes such as weighting the Consumer Price Index, has a number of defects as a data source for measuring poverty. These include the limitation of income measures to 'point-in-time' estimates and the absence of information on many social and economic aspects of the households covered.

Given the path-breaking nature of the study in Ireland, the emphasis on the panel aspect of the study, and on the "consensual" poverty indicators, was probably less than in the other participating countries. In Ireland, the initial estimates, obtained from the first round data, of the numbers in poverty, the composition of the poor and the performance of the Social Welfare system were all of critical national significance. These results formed the basis of a number of publications the results of which are discussed in more detail below. (e.g. Callan et al. 1988 and Callan et al. 1989). In other countries, since previous studies had already established the basic dimensions of the poverty problem, more interest is likely to have centred on refinements such as the panel aspect and the use of subjective indicators.



## THEORETICAL PERSPECTIVE AND QUESTIONNAIRE DESIGN

### *Basic Approach*

It was recognised from the beginning by the research team that this study provided a unique opportunity to examine the issue of poverty, its causes and consequences and the effectiveness of the various State schemes to alleviate it. We tried to make our approach as comprehensive as possible by using a variety of methods for measuring poverty and collecting sufficient ancillary information to permit a variety of analyses of the causes and consequences of poverty. Thus the study obtained detailed information on the economic, social and psychological conditions of respondents and on the extent to which they availed of the main State schemes in the areas of income maintenance, health, training and education etc. We were conscious in designing our study that research in other countries (e.g., Bane and Ellwood 1986) had emphasised the importance of understanding the *dynamics* of poverty; of measuring not just the numbers on low incomes at a point in time but how many people move into and out of poverty and of distinguishing the persistently poor from those in transitory difficulties. This aspect of the problem was dealt with by the inclusion of the panel component in the study, by the use of retrospective questions on labour force experience and life-style and by the insertion of questions on inter-generational occupational mobility.

### *Poverty Measurement*

The main methods for measuring poverty included in our questionnaire were:

1. Conventional Poverty Line Method
2. Consensual Poverty Line Method
3. Life Style and Deprivation Indices
4. Assessment of Financial Stress

*Conventional Relative Poverty Line Method:* This is a widely used method and does not, therefore, need a detailed description. It requires that income be accurately measured (income measurement procedures are discussed further in the next section) and the computing of a poverty line based on some fixed percentage (conventionally 40, 50 or 60 per cent) of mean or median disposable income. As we describe below, a range of adult equivalence scales was utilised.

*Consensual Poverty Line Method:* This approach seeks to derive poverty lines for a particular society based on views in the population in question about minimum income needs. This does *not* involve merely classifying people on the basis of whether they consider themselves to be poor: rather, it aims to reflect a social consensus in the society about the income required to attain an acceptable living standard. Those developing this approach argue that it directly incorporates the relative nature of people's conception of poverty, and that it is democratic in allowing "the people" rather than experts to decide where the poverty line should be. Consensual income poverty lines have been developed primarily in the Netherlands and the US. Theoretical underpinnings for this approach have been built up since the 1970s, most importantly by Dutch researchers at Leyden and Tilburg (see Goedhart *et al.* 1977 van Praag *et al.*, 1980, 1982, Kapteyn, Van de Geer

and Vande Stadt, 1985, Hagenaars, 1986). In the present study, two distinct variants of the general method are applied. Both are based on sample responses to a question about the minimum income which people feel they themselves need "to make ends meet". The first method, developed by Dutch researchers, utilises all the responses in the sample to fit a relationship with actual income and derive a poverty line from this function. This is termed the Subjective Poverty Line (SPL) method. The second method, developed and applied in Belgium, concentrates on a subset of the responses, from those who say they are having difficulty currently making ends meet. This is termed the CSP method (for the Centre for Social Policy at the University of Antwerp where it has been developed).

*Life Style and Deprivation Indices:* While income-based poverty measures are an important reflection of "command over resources" and hence of a household's standard of living, they do not tell the whole story. The most widely accepted conception of poverty emphasises that it involves exclusion from "ordinary living patterns, customs and activities" (Townsend, 1979, p. 31). It is clearly important, therefore, to supplement these income-based analyses with analyses of households' standard of living as revealed by more direct measures of households' activities and possessions. A wide range of questions on such possessions and activities were included in the survey. Among these was a 20 item scale regarding possession of various key consumer durables and other activities. For each of these items, we have information on

- (a) whether the respondent's household feels that the item/activity in question is a necessity, i.e., something that "every household (or person) should be able to have and that nobody should have to do without";
- (b) whether the household has the item in question;
- (c) if not, whether they would like to have it but must do without due to lack of money.

A number of other indicators of life style and deprivation are available from the dataset. These include housing quality, items related to the household's amenities for children, the extent of holidays, participation in various types of entertainment and membership of clubs and associations.

*Assessment of Financial Stress:* We were also anxious to try to assess poverty through its effects and for that reason included a series of questions relating to difficulties with bills, debts and whether the respondent needed to cut back on expenditure or borrow from relatives. We hoped that this information, combined with the data on deprivation levels described above would shed further light on the numbers who are poor and on the intensity of poverty.

### *The Causes and Consequences of Poverty*

As well as trying to measure poverty as comprehensively as possible, we attempted to collect data on a variety of other topics which, we hope, will help to explain how poverty occurs and what its consequences are. Among the more important of these topics are:

*Persistence of Poverty:* One of the most important questions to be answered in relation to poverty is the extent to which it is *persistent* i.e., the

extent which particular individuals or households remain poor over long periods in contrast to those who experience poverty on a transient basis. Our dataset will elucidate this issue in a number of ways. Most obviously, the panel element which it contains (i.e. repeated interviews with about one third of the respondents after an interval of two years) allows us to ascertain the amount of movement into and out of poverty within that two year period. The characteristics of the persistently poor can be determined and contrasted with those who are in poverty on a temporary basis. Taking a longer term perspective, we also enquired about respondents' educational and employment histories. This will allow us to analyse the magnitude and pattern of inter-generational occupational mobility, a critical determinant of the inter-generational transfer of poverty and bring up to date earlier work by Whelan and Whelan (1984).

*Wealth and Assets:* For the first time in Ireland, detailed information on the distribution of financial and non-financial wealth has been collected. This will be of interest both in its own right and as an input into a fuller assessment of income levels for the purposes of poverty measurement. It will also be invaluable in making overall evaluations of the tax and transfer systems with a view to reforms of these.

*State Services:* The survey measured not just the extent to which people availed of the various income maintenance schemes and recipients' attitudes to these schemes. Extensive data were also collected regarding the extent to which households availed of the health, education and housing services provided by the State. The appropriate valuation of these non-cash benefits will be very important in our overall assessment of poverty in Ireland.

*Physical and Mental Health:* The questionnaire included an assessment of the respondent's physical and mental health. The items used were based on the General Health Questionnaire developed by Goldberg 1972 which has proved very useful in a number of American studies. Some interesting preliminary results have been obtained showing that unemployment and poverty have strong effects on health.

*Employment and Labour Force Situation:* Particular attention was paid to the employment situation of respondents - their current and previous occupations, the extent to which they had experienced unemployment, job search activities, desire to take up work etc. Given the critical importance of unemployment in predisposing a household to poverty (as outlined in the results section below), these data will be very important in analysing labour market behaviour with a view to increasing employment levels. A substantial project on Womens' Labour Force participation based on the survey results has just been completed.

Other topics on which data were collected include: *the extent of social contact; attitudes to poverty and its alleviation; income sharing within households; financial stresses caused by the presence of children.*

## CONDUCT OF THE SURVEY

### *Sample Selection*

The survey was designed to provide a national sample from the population resident in private households. Those living in institutions - hospitals, hotels, prisons, etc. - thus did not form part of the target population. The sampling frame, from which a sample of names and addresses was drawn, was the Register of Electors. This is an annually revised listing of all those eligible to vote in local, national or European elections. The sampling was performed using the RANSAM programme developed at the Institute, described in detail in Whelan (1979). This implements a multi-stage random sample incorporating both stratification and clustering, and giving each individual on the Register an equal probability of being selected.

The target sample selected for the survey comprised 5,850 households, selected as 225 clusters of 26 each. Within clusters, respondents were selected on a systematic basis, giving an implicit geographical stratification. Since the initial sample of names and addresses was on the basis of *persons* on the Register, households had a probability of selection proportional to the number of electors they contained. The weighting scheme applied to the results, discussed below, was designed *inter alia* to adjust for this bias.

The sample for the second phase consisted of those households which had been recorded as falling into the bottom quartile of the distribution of equivalent household income in Phase 1, together with a random sample of 500 other households from the rest of the income distribution. The sampling method used was a stratified, proportionate sample. This gave a target sample for the second Phase of 1279 households. In accordance with the usual practice in panel surveys, we also attempted to contact and interview all households into which members of the target households had moved, provided these were still in Ireland.

### *Fieldwork*

The survey was carried out by the Institute's own Survey Unit and panel of trained interviewers. Fieldwork began with a pilot survey of about 200 households in October 1986. Having reviewed the questionnaire in the light of the results of this pilot, the main fieldwork began in February 1987. While most of the interviews were carried out in the six-month period from then to July, the final interviews were completed in September 1987. All interviews were carried out by personal visits, often entailing repeat visits to households, and interviewers were instructed to keep calling until a response or definite non-response was obtained.

### *Response*

The total sample selected was 5,850 households. Of these, a total of 615 were not successfully contacted. For the majority of these - 421 cases - this was because the household had moved and their new address could not be found. A further 114 of the addresses no longer existed, and in 80 cases the person selected was deceased. In addition, 70 of the addresses selected were found to be institutions, and therefore did not form part of the private household population.

Excluding these cases left a total of 5,165 households. To use the term applied by the CSO in the context of the Household Budget Surveys, these



constituted the "effective sample". Of these, 3,321 households, 64.3 per cent of the effective sample, responded to the survey. The refusal rate was 24.1 per cent - 1,246 households refused to participate. A further 486 or 9.4 per cent were never available when the interviewer called despite repeat visits. For 112 cases, 2.2 per cent, they were too ill or senile to take part.

Of the responding households, 27 were excluded from the sample for analysis due to completely or substantially missing information in key areas, notably income. This left a sample for analysis of 3,294 households. This constitutes 63.8 per cent of the effective sample and 56.3 per cent of the overall sample originally selected.

The refusal rate was somewhat higher than that found in most other Institute surveys, presumably due to the sensitivity of the subjects covered in this survey and the complexity of the questionnaires involved. Comparison with the response rate achieved in the Household Budget Surveys, the principal data source hitherto on household incomes in Ireland, is relevant. The two national Household Budget Surveys, carried out in 1973 and 1980, had response rates of 57 per cent and 56 per cent of the effective sample. (The HBS is particularly onerous for respondents since a two-week expenditure diary must be completed by household members.)

It will be recalled that the Phase 2 target sample consisted of 1279 households from Phase 1 (the complete bottom quartile together with a random sample of the other households). Attempts were also made to interview all those households into which former members of the target households had moved. We termed these latter 'generated households'. The responses of these two types of household were as follows:

Response Attained	Original Households		Generated Households	
	No.	Per cent	No.	Per cent
Interview Obtained	926	72.4	50	25.1
Could not locate	12	0.9	19	9.5
Moved, no forwarding address	22	1.7	4	2.0
Deceased	13	1.0	-	-
Never available	87	6.8	13	6.5
Refused	192	15.0	20	10.0
Ill/senile	15	1.2	-	-
Emigrated abroad	12	0.9	77	38.7
Gone into institution	-	-	16	8.0
Total	1279	100.0	199	100.0

The very high level of emigration among the generated households is to be noted. This reflects a strong tendency for young Irish people to go abroad to seek work.

#### *Reweighting and Representativeness*

Non-response only introduces bias into the resulting sample if it is non-random, i.e., if certain groups are under-represented and others over-represented. The importance of such bias depends on the extent to which the groups differ from each other in a manner which affects the analysis in question. Where the extent of under-representation can be accurately measured, it is possible to "reweight" the sample to correct for such biases by giving a higher weight in the analysis to under-represented groups, and a lower weight to overweighted groups. Such a reweighting procedure is applied

to the HBS by the CSO, and has also been applied to the ESRI survey.

A reweighting scheme was developed to correct for these identified biases, based on the 1986 Labour Force Survey results. The reweighting was implemented on the basis of four key variables: (i) household location (urban versus rural); (ii) number of adults in the household; (iii) occupation of the household head; and (iv) age of the household head.

Having carried out the reweighting, the representativeness of the sample may be assessed by reference to data from a number of external sources. As one independent check, further data from the 1986 Labour Force Survey were obtained from the CSO, showing the breakdown of households by the number of members in paid work. Table A.1 shows the percentages in the reweighted sample and in the Labour Force Survey having 1, 2, or 3 or more such members. The two are very similar, the sample when reweighted reflects very closely the pattern shown by the Labour Force Survey in terms of this variable - which is a particularly important influence on household income. The same is true of the distribution of households by number of persons unemployed, another key variable in the context of the analysis of poverty.

A number of other sources of information may be used to assess the representativeness of the sample. The demographic composition of the sample may be compared with the population figures from the 1986 Census. Table A.2 shows the breakdown of the persons in each by age and sex. The sample reflects the population pattern well. Where there are differences, the sample has a higher proportion of children (up to 14 years of age) and a lower proportion of those aged between 15-25, 35-44 and 75 and over than the Census. These differences are not substantial, though, and in the case of the elderly would be largely attributable to the fact that the sample refers only to those in private households while the Census of course refers to the entire population. Since a relatively high proportion of the elderly are in institutions, the private household population has a significantly lower proportion of this age group than does the population as a whole. (Those aged 65 and over make up one-third of the institutional population compared with only 10 per cent of these in private households as shown by the 1986 Census.)

Administrative statistics on the numbers in receipt of social welfare payments of different types provide a further external source against which the representativeness of the sample can be assessed. The numbers in the sample in receipt of payments from the various schemes, grossed-up to implied population totals, are compared in Table A.3 with the number of individual recipients (not including dependants) shown by the administrative records at end-1986 and end-1987. (Most households in the survey were interviewed between January - August 1987). This shows quite a close correspondence between the sample and administrative figures for the major schemes.

The grossed-up sample figures for Unemployment Benefit and Unemployment Assistance are very close to the totals shown in the administrative records. The sample figure for Old Age Pensions (Contributory and Non-contributory), at about 94 per cent of the administrative totals, is in fact higher than might be expected, since only 91 per cent of the population in the relevant age group live in private households. However, it appears likely that there has been some misclassification as a result of confusion by respondents who in fact are receiving widow's pension, which would help to explain why the numbers in the sample in receipt of the latter are considerably below the expected figure. The grossed-up sample totals for the sickness and disability-related schemes are below the administrative figures, and the same is true for the relatively small schemes for deserted wives and unmarried mothers and Family Income Supplement. The sample figure for

Supplementary Welfare Allowance is close to the expected total.

### *Farm Income Estimation*

It was necessary to take special account of the problems in obtaining reliable measures of farm income because of the relatively high proportion of the Irish labour force engaged in farming activity. Most respondents were not likely to have detailed farm accounts. Various methods of overcoming these problems were explored. After consulting An Foras Taluntais (AFT) - now Teagasc - and the Central Statistics Office, it was decided to develop an additional farm questionnaire to collect data on the major elements of output and costs.

The general approach adopted was to collect as much information on output and costs directly from the farmer or farm operator as was possible. The farms were classified into a number of "cells" according to the farm size, soil type and farm system; this enables the information supplied by AFT for the average figures on similar farms in their National Farm Survey to be used to estimate those elements of output and cost on which information could not be directly collected.

The concept of income used is family farm income as defined by the AFT National Farm Survey, i.e., gross output plus grants less total direct and overhead costs. This represents the total return to the family labour, management and capital input in the farm business in a similar way to the net profit used in the case of other self-employed persons.

### *Unit of Analysis*

As indicated above, the survey gathers information at individual and household level. The household unit itself is defined as a person or a group of persons who all live regularly together (at the address selected) and for whom food is provided (at least one meal per day) by the same person or rota of persons.

Ideally one would like to have full information on the income sharing arrangements within households, in order to analyse issues related to poverty and income distribution. It is difficult to collect direct evidence on this but some data on this topic were collected in the Phase 2 interviews. The most common response to the lack of information on the internal distribution of resources within the household in previous work on Irish data - and elsewhere - has been to conduct the analysis at the level of the household. This implicitly treats the household as if there was complete income sharing within it.

An alternative approach is to conduct the analysis on the basis of a narrower family group, usually defined as an adult or couple, together with their dependent children, the term "tax unit" it is generally termed. If most income sharing takes place within tax units, and very little between them, analysis at that level provides a more accurate picture of incomes on which to base poverty analysis. If, on the other hand, there is extensive income sharing between the units in multiple tax unit households, then household based analysis will be more accurate. A complete picture is thus only possible using both concepts, ideally with further information about the actual extent of income sharing. Analysis at both household or the tax unit is possible with our data..

### *The Income Concept*

Detailed information on the income of respondents from various income sources has been gathered in the survey. This covers income from employment or self-employment (where the latter term is broadly defined to include employers), rent, interest and dividends, private sick pay and pensions, social welfare payments, and other regular receipts such as transfers from other households.

For most income sources, information is gathered first of all on the amount *currently* received: for employment income, private pensions, sick pay, and social welfare receipts, that is in general the amount received last week (or fortnight/month, etc., if paid on that basis). For certain income sources which are variable by nature, the survey followed the Household Budget Survey and most other such surveys in looking for receipts over a longer period, in order to obtain a more reliable estimate of the usual level of income than the receipts in the particular week before the survey would give. Thus for rent, interest, and dividend income, the amounts received over the past year are asked. For non-farm self-employment income the most recent twelve-month period for which respondents have information is asked. The information on which farm incomes are estimated, as described above, refers to the calendar year 1986. Current income is then estimated as the weekly equivalent of these amounts received over a longer period.

In the present study, we follow the standard practice, of the HBS and the UK Family Expenditure Survey, in focusing on *current weekly* income - estimated on the basis of current receipts with the exceptions already noted. It may also be important, though, to look at income over a longer period, particularly in assessing the impact of poverty and the social security system on different household types. For this reason further information was gathered in the survey which will allow income over the previous twelve months to be estimated. This includes data on annual salary and on the number of weeks spent in work and in receipt of the various social welfare payments in the past year. This long-term income concept will be used in further research to supplement our analysis based on current income, in order to determine how many families move in or out of poverty due to short-term income changes, and how many are in poverty on a long-term as well as short-term measure of income.

## OVERVIEW OF RESULTS

*The Extent of Poverty*

The purely relative poverty line method was applied to the ESRI sample, with a set of thresholds defined in terms of proportions of the average income of the households in the sample. These poverty lines - and the average income on which they are based - take into account differences in needs between households of differing size and composition, using three different sets of equivalence scales.

Three purely relative poverty lines were applied - 40 per cent, 50 per cent and 60 per cent of average disposable equivalent household income. The results highlight the sensitivity of the number found below the poverty line to the exact location of that line. Between 8 and 13 per cent of persons in the ESRI sample were below the 40 per cent line, between 20-23 per cent were below the 50 per cent line, and 31-33<sup>1</sup>/<sub>2</sub> per cent were below the 60 per cent line, with the precise figure within these ranges depending on the equivalence scale used.

This substantial variation in the extent of measured poverty is produced by a relatively narrow range of income poverty lines. The 40 per cent relative line for a single person was about £32-34 per week, similar to the amount payable under the Supplementary Welfare Allowance scheme at the time of the survey. The 50 per cent line for a single adult was about £40-43 per week, similar to the flat-rate Unemployment Benefit payable. The corresponding 60 per cent line was £48-52 per week, between the rate of means-tested and non-contributory Old Age Pension payable at the time to a single person. While the gap in income terms between the three lines is wider for larger households, it still represents quite a limited range: households are heavily concentrated in this part of the income distribution.

The range of relative poverty lines was particularly useful in assessing trends over time, applying the same methodology to the 1973 and 1980 Household Budget Survey results. This showed a substantial increase between 1973 and 1980 in the percentage of persons falling below each of the relative income cut-offs (irrespective of the equivalence scale used). Between 1980 and 1987, such an increase was registered consistently for the 50 per cent and 60 per cent lines, while the trend with the 40 per cent line depended on the equivalence scale adopted. (See Table 1)

Table 1: *50 Per Cent Relative Poverty Line Applied to ESRI Sample 1987 and HBS 1973 and 1980.*

	<i>Equivalence Scale</i>		
	<i>A</i>	<i>B</i>	<i>C</i>
<i>HOH=</i>	1.0	1.0	1.0
<i>Additional Adult=</i>	0.7	0.6	0.66
<i>Child (under 14)</i>	0.5	0.4	0.33
 <i>Percentage of households:</i>			
1987 ESRI	18.9	18.5	17.5
1980 HBS	17.2	17.6	16.8
1973 HBS	18.2	17.9	17.7
 <i>Percentage of persons:</i>			
1987 ESRI	22.9	21.2	19.8
1980 HBS	19.2	17.4	16.2
1973 HBS	17.8	15.9	14.8

The limitations of concentrating simply on the numbers below a poverty line as a measure of poverty have been emphasised by Foster et al. (1984 and Foster and Shorrocks (1988). They point out that the simple "headcount" measure takes no account of the depth of poverty for those below the line in question. They suggest a number of aggregate poverty measures to reflect not only the numbers below the line but also the extent of their income shortfalls. These were calculated for the ESRI sample, and for the 1973 and 1980 HBS samples, and showed a consistent increase between 1973-1980 and 1980-87 irrespective of the relative poverty line or equivalence scale used.

In comparing the 1973-80 and 1980-87 periods, it was emphasised that real incomes rose on average in the earlier period but were static or falling between 1980-87. This must have major implications for the impact of the rise in relative poverty in the 1980s on living standards. Taking the relative poverty lines in 1980, holding them fixed in real terms, and applying them to 1987 shows an increase in the numbers below these lines - which would not be the case when 1973 real lines are applied to 1980. This illustrates the importance, over such a period, of taking into account the background against which changes in relative poverty are taking place.

#### *Comparisons with Other Countries*

A detailed comparison between Ireland and Britain using purely relative poverty lines revealed that a higher proportion of the Irish population was below a range of relative lines. ( See Table 2.)

Table 2: *Percentage of Persons Below Relative Income Cut-offs, Great Britain and Ireland*

income cut-off % of mean equivalent disposable income	Ireland 1987	Great Britain 1985
	% of persons	% of persons
50%	17.4	9.2
60%	28.5	20.1
70%	39.6	32.0
80%	48.9	43.1
90%	57.1	52.1
100%	63.8	60.7

Source: Great Britain: DHSS 1988 Table C1  
Ireland: analysis of ESRI survey

The British figures are for 1985, the most recent year currently available, and it should be emphasised that they refer not to the UK but to Britain - Northern Ireland is not included. The table shows the percentage of persons falling below relative income thresholds ranging from 50 per cent to 100 per cent of average equivalent disposable income. A higher proportion of persons is below each of these lines in Ireland than in Britain. This is particularly pronounced for the lower cut-offs: almost twice as high a proportion were below the 50 per cent relative line in Ireland.

Similar comparisons with countries other than Britain on the basis of closely matched data sources and methodology are not yet possible (though harmonisation with the LIS data set offers the prospect of such comparisons over a range of developed countries). However, it would appear from the available information that Ireland also has a higher proportion of the population below half mean income than most of our more developed EC partners, though less than Portugal and Greece. On the basis of published results for other non-EC countries using the relative poverty line approach but based on median rather than mean income, Ireland also appears to have a higher proportion below half median income than Sweden, Norway or Switzerland, but less than the USA.

In assessing the implications of these findings, a number of tricky conceptual issues arise. The purely relative approach obviously ignores differences in absolute standards of living across countries (as well as in the extent to which non-cash benefits are provided). However, such a thoroughgoing relativistic approach may not provide all the information we would wish to take into account in making a comparison of poverty in different countries. For example, even if a rich country is found to have more relative poverty than a much poorer one, the poor in the latter may still be regarded rather differently. If the average standard of living in the countries differ greatly, then what poverty *means* may also be quite different, and this may also be relevant to assessing the implications of poverty.

In discussing these issues, Nolan and Callan (1989b) suggest that the general approach recommended by Atkinson (e.g. 1985, 1987) to making comparisons of poverty and inequality between distributions may usefully be applied in this context. Atkinson emphasises the value of seeking strong and widely acceptable, if necessarily sometimes partial, rankings of distributions, accepting that a complete ranking on a precise measurement of

the *difference* between two distributions may not be attainable on this basis. In making cross-country poverty comparisons, this could mean that ranking country A, with higher mean income and less poverty measured in purely relative terms than country B, as having less poverty than B should be generally acceptable. However, if country A has a higher mean income but also *higher* poverty measured in purely relative terms, then the ranking may have to be acknowledged as problematic. In either case, measuring the "distance" between the two distributions, rather than just ranking them, will require judgement about the weight to be given the relative versus the absolute standard of living of the poor in each country, on which there are legitimate differences in views.

Considering the comparison between Ireland and other countries in this light, many of the countries which apparently have a smaller proportion of the population below relative poverty lines also have a higher mean income than Ireland. This is the case for Britain, for most of the richer EC countries, and for Sweden, Norway and Switzerland. Subject to the limitations of a comparison simply on the basis of the headcount with one relative poverty line, it may then be generally acceptable to conclude that these countries have less poverty than Ireland. Likewise, Portugal and Greece, which appear to have a higher proportion of their populations below relative lines, have lower mean incomes than Ireland, and may be viewed as having more poverty. This approach can therefore achieve a great deal in terms of ranking countries. This is, however, partial, some cases cannot be unambiguously ranked - for example, it appears that the USA may have a higher proportion under relative poverty lines (though this requires confirmation in a more detailed comparison) but also has a much higher mean income level than Ireland. Further, if we are trying to measure the "distance" between Ireland and a richer country with less relative poverty - such as Britain - the difference in purely relative terms may not be all we wish to take into account. We may also wish to give some weight to the fact that living standards are lower in Ireland - the poor are in some sense "poorer".

### *Persistence of Poverty*

One of the major objectives of the project is to determine the extent to which households and individuals experience long-run poverty. The panel aspect of the study is particularly designed with this in focus. Unfortunately, the complete results for the Phase 2 data are not yet completely available, due mainly to the complexities in estimating farm incomes. However, we have calculated the percentages of non-farm households who have remained below the relative poverty lines, adjusted to reflect the increase in average incomes, in the second phase. The results of this exercise are:

Poverty Line	Of those below the line in 1987, percentage who were also below in 1989
40% of Mean Equivalent Income	25.4%
50% of mean Equivalent Income	59.3%
60% of Mean Equivalent Income	61.4%

These results emphasise the volatile nature of the group which falls below the lowest poverty line while the higher lines exhibit substantially more persistence. Of course, those who have moved above the 40 per cent line may not have experienced a substantial increase in income and may indeed be



still below the 50 or 60 per cent line. Likewise, even those who have moved beyond the 60 per cent line may not have moved very far. To analyse this situation more fully, a complete specification of a model of income change is required.

### *Consensual Income Poverty Lines*

Each of the two variants of the consensual method which we implemented - the CSP and SPL methods - gave poverty estimates of about 31-32 per cent of households in the sample. However, there were very substantial differences between the two variants in terms of the structure of the standards and therefore the composition of those below them. The CSP standard in particular incorporated implausible relativities between different household composition types. The SPL standard was relatively high for a single adult household, but had very substantial economies of scale as household size increased.

These results led us to question the extent to which the standards produced by these methods could be meaningfully interpreted as reflecting a consensus in the society on a poverty line as it would be commonly understood. The relationship between the subjective responses about the household's own minimum needs and views on poverty is unclear. The standards are not based on a consensus or majority view in the sample as a whole, but on the views of those in some sense "near" the poverty line - neither well above nor well below it. There is no constraint on the responses in terms of willingness to pay, and there are also serious issues about the way the method is operationalised.

The information about subjective views on adequacy and the household's own situation do offer a valuable opportunity to analyse the factors influencing people's perceptions of their own situation and their expectations. Their potential in this respect will be exploited in future work.

### *The Risk and Incidence of Poverty*

The analysis of the composition of those below the relative poverty lines in the ESRI sample, and a comparison with corresponding results derived from the 1973 and 1980 Household Budget Surveys, revealed substantial changes over the period since 1973. A central trend was the increase in the importance of households headed by an unemployed person among those below the relative poverty lines. Such households formed one-third of all households below half mean equivalent income in 1987, compared with only 10 per cent in 1973. The relative position of the elderly, on the other hand, improved significantly over the period.

The demographic consequences of these trends were a sharp increase in the risk of poverty for households with children, particularly for large families. The risk for 1- and 2-adult households, on the other hand, fell dramatically. At an aggregate level there was little difference in the risk of poverty facing female-headed households compared with those with a male head. This remained the case when the narrower tax unit was used as the income recipient unit instead. Female-headed households at relatively high risk were those where the head was young - under 35 years of age.

While a substantial proportion of the households below the relative poverty lines were found to be farm households, this is based on estimated farm incomes in 1986, a particularly poor year. The years 1987 and 1988 saw

increases of 34 per cent and 27 per cent per annum in average family farm incomes, which must have significantly reduced the overall risk of poverty for farm households.

Over the 1973-87 period, social welfare rates increased in real terms and relative to other incomes, and the coverage of the system also broadened. This played a major role in the improvement in the position of the elderly, and also ensured that the *risk* of being in poverty for a household headed by an unemployed person actually declined. The dramatic increase in the importance of the unemployed among households below the poverty lines is thus entirely due to the increased numbers of unemployed in the population as a whole.

### *Indicators of Style of Living and Deprivation*

As was shown above, considerable range of information on the patterns of living of the respondents was gathered in the survey. This allowed a set of deprivation indicators to be developed, incorporating possessions or activities which a majority of the sample had or pursued, and felt to be necessities. These indicators of deprivation were then related to the characteristics of the individuals and households, including income and stage in the life-cycle.

The relationship between current income and style of living/deprivation, as measured by these indicators, is not a simple one. Many factors other than current income influence current possessions and activities, including the past history and future expectations of household members, life cycle stage, and differences in tastes.

From a range of 20 indicators of standard or style of living, summary indices were built up of (i) 14 items regarded as a necessity, and actually possessed, by a majority of the sample, and (ii) a narrower index of the 10 items regarded as a necessity and possessed by over three-quarters of the sample. Analysis of these indices showed a broadly similar pattern to that revealed by recent research in the UK and the US on this topic. Those at lower levels of current income did have relatively high deprivation scores on average, but there was considerable variation in the scores at any given income level. This remained the case when an attempt was made to control for differences in tastes by concentrating on those items/activities which people specifically stated they had to do without due to lack of resources. (See Table 3.)

Table 3: *Mean Scores on 14-Item Deprivation Index by Equivalent Income Decile*

<i>Decile</i>	<i>Lack</i>	<i>Enforced Lack</i>
Bottom	3.3	2.2
2nd	3.7	2.7
3rd	3.5	2.2
4th	2.9	1.6
5th	2.6	1.4
6th	1.8	0.9
7th	1.3	0.8
8th	1.5	0.7
9th	0.9	0.4
Top Decile	0.8	0.3

While current disposable income already has a significant effect on current living patterns, other factors are also important. Income over a longer period, stage in the life-cycle and assets accumulated could affect the relationship between current income and deprivation score. These different aspects will be the subject of future research, which will also take into account the possibility that poverty and deprivation cannot in fact be adequately measured along a single dimension.

### *Conclusion*

The primary objective of our project is to establish, on the basis of a new and specially-designed database, some key robust findings about poverty in Ireland and the way the social welfare system operates in alleviating it. These findings are intended to inform policy formulation, and should provide a significantly improved basis on which to design responses to the problem.

This is most obviously the case in the emphasis in the study on pinpointing groups which are most at risk of being in poverty, and/or form a substantial part of the low-income population. The groups involved - notably households headed by an unemployed person - will clearly be a major determinant of the appropriate policy response. The rise in measured poverty during the 1980s was shown to be closely associated with the rise in unemployment, and in particular with the increase in long-term unemployment. This was a major factor in the observed substantial rise in the risk of poverty for families with children, especially larger families.

It is worth reiterating that the risk of being in poverty for households with an unemployed head did *not* rise over the period - rather, there were simply far more of them in 1987 than in 1980. The level of social welfare payments to the unemployed, and to other groups, in general more than kept

pace with other incomes between these two years. Indeed, increases in the level of social welfare old age pensions, both in real terms and relative to other incomes, over the period from the early 1970s played a major part in the substantial reduction in the risk of poverty facing the elderly.

Although much of our work up to now has concentrated on the role of the social welfare system, this does not reflect a belief that the best or only way to make progress in alleviating poverty is through cash transfers. Indeed, the changing composition of low-income groups over the 1970s and 1980s militates against such an approach. Improved cash transfers - together with improved and more widely available occupational pension schemes - have been effective in improving the position of the elderly. Improvements in the scope and coverage of the social welfare system over that period also helped groups such as widows, deserted wives and single parents. The low-income population is now dominated, however, by those who are much more closely connected to the labour force - whether they are unemployed, temporarily out of work due to illness, small farmers, or low-paid and/or part-time employees.

This means that the behavioural responses of these groups, in terms of labour supply, are likely to be of greater significance than was the case with, for example, the elderly. Irish evidence on the quantitative importance of such incentive effects is quite limited, and the detailed data on individual labour supply behaviour gathered in the ESRI survey will be extremely useful in addressing this crucial issue. It is clear, though, that the scale and changing nature of the poverty problem mean that reliance on the social welfare system - certainly as it is currently structured - will not be an adequate response.

Unemployment is the single most important cause of poverty in Ireland, as our results clearly demonstrate. To the extent that unemployment can be reduced, not only is there a significant direct impact in relieving poverty but resources are also released which could be devoted to improving the situation of other groups. It is therefore the case that, even if poverty were measured exclusively on a purely relative basis, growth does indeed matter. While growth in the economy does not in itself ensure that "all boats are lifted" - and certainly not lifted to the same extent - the experience of the 1980-1987 period in Ireland illustrates all too clearly the consequences of stagnation for poverty.

Poverty cannot therefore be seen as simply a problem for the social welfare system. Rather, it is a deep-seated structural feature of the economy and society. Not only the social welfare and taxation systems, but also the education system, manpower and training policies, and industrial policy, have crucial roles to play in bringing about the structural changes required to have any major impact on poverty.

## THE VALUE OF HOUSEHOLD SURVEYS FOR POVERTY ANALYSIS

As I hope the above results have shown, the Irish experience illustrates the enormous value of household-based data for the analysis of poverty. So far, the Project has provided many new insights into the magnitude and nature of poverty in Ireland. Its results received widespread publicity when first presented and have already influenced policy. The very rich database will be further exploited in the future and we are enthusiastic about the possibilities it offers, particularly in exploring more fully the panel aspects of the data.

Of course, surveys incorporating as broad and ambitious an approach as ours face difficulties which should not be under-estimated. The design aspects are of critical importance since these surveys place unusually heavy burdens on both respondents and interviewers. The costs associated with interviewing each adult in the household are particularly onerous, but it is our experience that this is the only way to achieve accurate data on the total household income. Nor should the analytic complexities of using this type of data be under-estimated. It is unfortunately the case that extensive and expensive datasets are sometimes assembled but their full potential is never exploited, because they do not receive the in-depth research effort required.

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## Appendix Tables A.1 - A.3

Table A.1: *Distribution of Households by Number of Members Engaged in Paid Work*

<i>Number of Members in Paid Work</i>	<i>Percentage of Households Labour Force Survey 1986</i>	<i>Percentage of Households ESRI Survey 1987</i>
None	30.8	31.1
1	43.5	41.2
2	18.6	20.3
3 or more	<u>7.1</u>	<u>7.4</u>
	100.0	100.0

*Sources:* CSO Labour Force Survey special tabulations;  
ESRI Survey.

Table A.2: *Persons in 1986 Census and ESRI Sample by Age and Sex*

<i>Age Group</i>	<i>Males</i>		<i>Females</i>	
	<i>Census</i>	<i>ESRI</i>	<i>Census</i>	<i>ESRI</i>
0-4	9.4	10.4	8.9	10.7
5-14	20.3	21.9	19.3	19.9
15-24	17.7	15.8	17.1	15.4
25-34	14.2	15.4	14.1	15.4
35-44	12.1	10.6	11.7	10.6
45-54	8.9	8.8	8.5	9.0
55-64	7.8	8.4	8.2	8.0
65-74	6.3	6.1	7.3	7.0
75 and over	<u>3.2</u>	<u>2.7</u>	<u>4.9</u>	<u>3.9</u>
	100.0	100.0	100.0	100.0
As percentage of all persons	50.0	50.1	50.0	49.9

*Sources:* 1986 Census, Summary Population Report, Tables  
4B and 4C;  
ESRI Survey.



Table A.3: *Number of Recipients of Major Social Welfare Schemes, Population and (Grossed Up) ESRI Sample.*

	<i>Recipients in Population end-1986 end-1987</i>		<i>Recipients in grossed-up ESRI sample</i>
Old Age and Retirement Pension *	236,722	239,633	223,300
Unemployment Benefit	87,676	84,605	82,000
Unemployment Assistance	146,016	153,591	145,600
Disability Benefit, Invalidity Pension, Injury and Disablement Benefit	114,750	98,572	86,900
Widow's Pension*	97,146	99,204	62,800
Unmarried Mothers Allowance	12,039	13,930	6,900
Deserted Wife's Benefit Allowance	10,610	12,172	7,850
Supplementary Welfare Allowance	<sup>b</sup>	11,774	10,200
Family Income Supplement	4,947	5,532	3,100

\* contributory and non-contributory

<sup>b</sup> not available

Source: Statistical Information on Social Welfare Services, 1986, Table 4 and 1987, Table 5.

