LOW PAY, THE EARNINGS DISTRIBUTION AND POVERTY IN IRELAND, 1987-1994

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1. Introduction

Sharply rising inequality in the overall earnings distribution and increased returns to education and skills have been identified in a number of industrialised countries, notably the USA and the UK. Other industrialised countries have seen a much less pronounced rise in dispersion, if any, and institutional differences such as the extent of collective bargaining and wage regulation may be important influences (see OECD 1993, 1996). The links between such trends in the earnings distribution and the extent of low pay, and between low pay and household poverty, are of immediate concern for policy-makers. However, there are major gaps in our understanding of these links, and the aim of this paper is to investigate them with data for Ireland.

For Ireland, no rise in earnings inequality was evident up to 1987, but this paper is the first to have data which allows more recent developments to be examined. A detailed picture of the extent and nature of low pay in Ireland in 1987 and its relationship with household poverty, based on analysis of a large-scale household survey carried out by the ESRI, was presented in Nolan (1993). In 1994 another large-scale survey has been carried out, the first wave of the Irish element of the European Community Household Panel, obtaining *inter alia* detailed information on earnings, education and experience for about 3,500 employees. Here we use these data to compare the overall distribution of earnings, the extent and incidence of low pay, and the relationship between low pay and household poverty, in 1987 and 1994. The paper will first allow Ireland to be added to the available observations on recent trends in earnings inequality in industrialised countries. Secondly, it will point towards fruitful approaches to analysing the relationship between individual low pay and household poverty, using both monetary and non-monetary indicators of poverty and social exclusion.

Section 2 describes the data. Section 3 examines trends in the earnings distribution between 1987 and 1994. Section 4 focuses on the extent of low pay and the characteristics of those affected. Section 5 describes the extent and nature of household poverty and Section 6 deals with the relationship between low pay and household poverty. Section 7 summarises the conclusions.

2 The Data

The data employed in this paper come from two large-scale household surveys carried out by the ESRI. The first is the survey of income distribution, poverty and usage of State services carried out in 1987, which obtained responses from a sample of 3,294 households, with a response rate of 64% of valid addresses contacted. The sampling frame was the Register of Electors and the survey was designed to provide a national sample from the population resident in private households. The sample has been reweighted to correct for non-response, on the basis of four variables - number of adults in the household, urban/rural location, age and socio-economic group of household head - using external information from the much larger Labour Force Survey. The representativeness of this sample data has been validated by comparison with a variety of external information, and it has been used extensively in research on poverty and tax and social welfare policy in Ireland. (A full description of the survey is in Callan, Nolan *et al.,* 1989, and an overview of that research is in Nolan and Callan eds. 1994). Information on earnings, education, labour market experience and other characteristics of 2,700 employees in sample households was obtained. This appears to represent employees well when compared with available data from the Census of Population and the Labour Force Survey, and has served as the basis for an in-depth analysis of the extent and nature of low pay in Ireland at that date (Nolan 1993), as well as research on the determinants of individual earnings and on male-female wage differentials.[1] Comparable micro-data for earlier years are not available for analysis, but on the basis of the limited published results the 1987 figures did not appear to show a marked increase in earnings dispersion since 1979-1980.

The more recent source of data on earnings and poverty is the 1994 Living in Ireland Survey, the first wave of the Irish element of the European Community Household Panel (ECHP) being carried out for Eurostat by the ESRI. This obtained information for 4,048 households, a response rate of 62.5% of valid addresses contacted; once again the Electoral Register was the

[1] Earnings functions estimated with this dataset have been presented in Callan (1991) for married men and married women, Nolan (1993) for the entire sample, and Callan and Wren (1994) for men and women and for married versus single men and women.

sampling frame and the responses were reweighted to accord with the Labour Force Survey in terms of key household characteristics. First results from this survey on household poverty have just been published in Callan *et al* (1996), which also contains a comprehensive description of the survey itself. This paper is the first to analyse the individual earnings of employees in the 1994 sample and the relationship between low pay and household poverty. The sample contains 3,412 individual employees who responded fully to questions about their earnings and hours of work, occupation, labour market experience, and education. As in the 1987 ESRI survey, employees were asked about the gross pay they received in their last pay period, and about how long this covered (week, fortnight, month etc.) and the hours worked during that period. They were also asked whether this was the amount they usually receive, and if not what was their usual gross pay and hours usually worked. In looking at the distribution of earnings and the extent of low pay, for the 5% of respondents who stated that their last pay was not usual we use the amount usually received, and for the remaining 95% we use current weekly reported gross pay.

3. The Distribution of Earnings

In looking at the distribution of earnings across individuals, it is customary to focus on either hourly earnings, or on weekly earnings for full-time employees only. In the Irish case 18 hours per week is the statutory cut-off for social insurance purposes, and about 7% of employees in 1994 worked less than this, up from 4% in 1987. We therefore look at both the distribution of hourly earnings among all the employees in our samples, and at the distribution of weekly earnings among those working 18 hours or more per week. Table 1 shows the distribution of gross hourly and weekly earnings in Ireland in 1987 and 1994 on this basis, as measured by the bottom decile, bottom quartile, top quartile and top decile as percentages of the median. We see that from 1987 to 1994 there was a consistent widening in dispersion for both weekly and hourly earnings, particularly at the top of the distribution. In the case of weekly earnings the top decile rose from 184% to 198% of the median, and for hourly earnings the increase was from 196% to 226%.

Table 1: Distribution of Earnings, Ireland 1987 and 1994

as % of median	1987	1994
all employees, hourly earnings:		
bottom decile	47.1	46.5
bottom quartile	72.7	67.1
top quartile	136.6	149.6
top decile	196.1	225.9
full-time employees, weekly earnings:		
bottom decile	45.2	42.5
bottom quartile	72.3	68.3
top quartile	138.6	144.0
top decile	184.3	197.6

This widening in dispersion is not attributable simply to changing numbers of male versus female or "young" versus adult employees. Table 2 shows that a sharp widening took place between 1987 and 1994 in the distribution of hourly earnings among men only, and also among full-time adult (21 years or over) men. Indeed, the fall in the bottom decile as a percentage of the median is considerably larger when one concentrates on men only than it was for the distribution as a whole.

Table 2: Distribution of Hourly Earnings Among Men, Ireland 1987 and 1994

as % of median	1987	1994
hourly earnings: all male employees		
bottom decile	53.0	44.9
bottom quartile	75.7	69.8
top quartile	135.1	147.6
top decile	186.5	222.6
hourly earnings: full-time adult male employees		
bottom decile	62.2	51.3
bottom quartile	77.4	75.5
top quartile	134.4	147.3
top decile	184.3	217.0

4. Low Pay in Ireland 1987 and 1994

A variety of approaches can be used to define and measure low pay, and these will not be reviewed here (see for example CERC 1991, OECD 1996; Nolan 1993 discusses approaches previously applied to Irish data). The method which appears most likely to permit cross-country comparisons is to adopt the low pay cut-off employed by the OECD in its recent study, of two-thirds of median earnings, and in addition to apply the more stringent criterion of half median earnings to allow the sensitivity of the results to the choice of cut-off to be seen. The OECD study defined low-paid workers as full-time workers who earn less than two-thirds of the median weekly earnings for full-time workers. (This was not always the basis on which the country results it presents were produced, however, as discussed below). Here we also apply the half median weekly earnings criterion to full-time workers, and in addition apply both two-thirds and half the median for hourly earnings for all employees. Table 3 shows the results for 1987 and 1994.

Table 3: Extent of Low Pay in Ireland, 1987 and 1994

% below:	1987	1994
full-time employees		
50% of median weekly earnings	12.1	14.1
66% of median weekly earnings	20.7	23.9
all employees		
50% of median hourly earnings	11.0	12.0
66% of median hourly earnings	19.9	23.5

We see that in 1987 21% of full-time employees had weekly gross earnings below the OECD's two-thirds of the median low pay cut-off. Using half the median as cut-off would identify about one in eight as low paid in weekly terms in 1987. The corresponding hourly cut-offs for all employees identify a slightly lower percentage as low paid in each case. By 1994, the percentage low paid has risen across all the measures, with the percentage of full-time employees with weekly earnings below the two-thirds cut-off up from 21% to 24%.

International comparisons of the extent of low pay are problematic because of differences in methods, coverage, definitions etc. Here we simply reproduce the results for a range of other OECD countries in 1993-1995 presented in OECD (1996), which in principle refer to the percentage of full-time workers below two-thirds of median weekly earnings. In fact, the results for some countries refer to annual earnings or to hourly earnings, some cover only year-round full-time workers, some cover only certain sectors, and some are net rather than gross earnings (see Annex 3A, OECD 1996 for detailed definitions for each country). While highlighting the limitations of what is possible with currently available data, it is none the less useful to employ these figures to provide some comparative context for the Irish results. We see that on this basis Ireland in 1994 has

Table 4: Extent of Low Pay in Ireland 1994 Compared with Other OECD Countries

% full-time employees below 66% of median weekly earnings:	Around 1994[a]
Ireland	23.9
Australia	13.8
Austria	13.2
Belgium	7.2
Canada	23.7
Finland	5.9
France	13.3
Germany	13.3
Italy	12.5
Japan	15.7
Netherlands	11.9
New Zealand	16.9
Sweden	5.2
Switzerland	13.0
United Kingdom	19.6
United States	25.0

[a] Results for Ireland are for 1994, and for other countries are 1993, 1994 or 1995 - source OECD (1996) Table 3.2 p. 72.

one of the highest levels of low pay of the OECD countries covered. The only country with more than Ireland's 24% below the OECD benchmark is the USA with 25%, while Canada has a figure very close to Ireland's and the UK is at 20%. Most of the other countries shown are below 15%.

The variation in the risk of low pay in Ireland by age, sex and occupation, and the composition of the low paid in those terms, may be briefly examined. The results presented are for full-time workers below two-thirds of the median, but a similar pattern of variation is seen with the alternative weekly or hourly thresholds. Table 5 shows that the probability of being low paid for women is about twice that for men overall, but that most of this differential is among those aged 25 or over. The percentage low paid is very much higher among those aged under 25 than among older workers. In terms of composition, about 55% of the low paid are aged under 25, 30% are women aged 25 or over, and 15% are men aged 25 or over.

Table 5: Low Pay by Age and Sex, Ireland 1994:

% below 2/3 median:	Risk			Composition		
Age	male	female	all	male	female	all
under 25	59.4	62.4	60.8	28.6	26.8	55.4
25-35	11.5	23.7	16.7	8.2	12.9	21.0
35-45	4.4	26.2	11.5	3.1	8.7	11.8
45-55	3.9	30.5	11.8	1.9	6.4	8.3
55 +	7.3	24.5	12.3	1.4	2.0	3.4
All	16.7	35.6	23.9	43.3	56.7	100.0

Note: Full-time employees only, weekly earnings.

Table 6 shows enormous variation in the percentage low paid across broad occupational groups (using broad groupings employed by the Irish Central Statistics Office in the annual Labour Force Survey). The risk of being low paid reaches almost two-thirds for employees in agriculture, is also relatively high for labourers and those working in commercial and service occupations, and is very low for those in professional or technical and administrative/managerial occupations.

Table 6: Low Pay by Occupational Group, Ireland 1994:

% below 2/3 median:	Risk	Composition
Occupational Group:		
agricultural workers	64.8	7.0
producers, makers and repairers	21.8	19.8
labourers and unskilled workers (not elsewhere specified)	35.5	6.7
transport, communications and storage workers	17.2	5.3
clerical workers	20.6	13.6
commerce, insurance and finance	48.0	20.2
service workers	43.2	20.2
professional and technical workers	8.0	6.4
others (administrative, executive and managerial workers)	2.7	0.9
All	23.9	100.0

5. Household Poverty and Earnings

To examine the relationship between low pay and poverty, we must first specify how "the poor" are to be defined and measured. The definition of poverty which appears to be widely, though by no means universally, accepted in industrialised countries refers to exclusion from the ordinary life of the community due to lack of resources. Even among those adopting this definition, there is no consensus about how best to measure poverty. We follow the general approach advocated by Atkinson (1985, 1987) and Foster and Shorrocks (1988), acknowledging the diversity of possible judgements about the specification of the poverty line and choice of poverty measure and taking this into account in the measurement procedures adopted. We begin by deriving a set of relative income poverty lines, of the type employed *inter alia* in recent studies for the European Commission, Eurostat and the OECD (O'Higgins and Jenkins 1990, ISSAS 1990, Hagenaars *et al*

1994, Forster 1994), and in cross-country comparisons based on the Luxembourg Income Study data such as Buhman *et al.* (1988).[2] (This approach is compared with other methods of deriving poverty lines in Callan and Nolan, 1991). These lines are simply calculated as a proportion of mean or median income: unlike the low pay literature the mean is used more often than the median though there are arguments in favour of each. Here we follow the most common practice of using 50% and 60% of mean household equivalent income in the sample as the relative income thresholds.

The equivalence scales employed may have a significant impact on the size and composition of the group falling below the poverty line (Buhman *et al* 1988, Coulter, Cowell and Jenkins 1992), and no method of deriving such scales commands general support. (Varying the scale will alter not only the relative position of households of different size and composition but also the level of average equivalent income across all households, and thus the level of the poverty lines themselves). The set of scales employed here is based on those implicit in the Irish social welfare system's rates of support in 1987: where the household head is 1, each extra adult is 0.66 and each child is 0.33. Alternative scales have also been employed with the 1987 sample and produced similar results in terms of the extent of income poverty and the overlap between low pay and poverty (see Callan and Nolan 1992, Nolan 1993).

In measuring poverty the income concept used is disposable income, that is gross income minus income tax and social security contributions. Total income from all sources must now be taken into account, and the period over which these are measured is important. Here employee earnings, private pensions and social security transfers are measured for the previous week (or month for monthly paid employees or pensioners), while the more variable self-employment and investment income are measured over a longer period, usually a year. The recipient unit used in measuring poverty is generally either the household or the narrower nuclear family/tax unit of single person or couple together with dependent children. As with the choice of equivalence scale, there is little basis on which to say that one is preferable to the other - this may depend on the

[2] Such relative income cut-offs also constitute one element of the official UK series on Households Below Average Income produced by the DSS (e.g. DSS 1996).

degree of income sharing within the units and the particular problem to be analysed - and yet the results obtained may differ. Here we adopt the more common approach of using the household; results for 1987 reported in Nolan (1993) show that the overlap between low pay and poverty in the Irish case is not in fact affected significantly by the choice of unit. Using the household or family as recipient unit involves the conventional assumption, explicit or implicit, that resources are shared within the household/family so as to equalise living standards. this assumption has been questioned, but the intra-household distribution is not an issue which we address here (though see Cantillon and Nolan 1997 for an analysis based on non-monetary deprivation indicators).

Table 7 shows the percentage of households falling below these relative income poverty lines in 1987 and 1994, using the household as recipient unit and the 1/0.66/0.33 equivalence scale. The choice of relative income cut-off clearly makes a great difference to the percentage of households in poverty, which ranges from 18% to 35% in 1994. An increase in the percentage of households below each of the relative income lines between 1987 and 1994 is seen (though the extent to which the income of these households falls below the lines has in fact fallen sharply, as analysed in detail in Callan *et al* 1996).

Table 7: Households in Poverty, Ireland 1987 and 1994

% of households below:	1987	1994
50% of mean equivalent income	16.3	18.5
60% of mean equivalent income	28.5	34.6

How many of these low-income households rely on earnings as their main income source? Table 8 shows the households below these relative lines classified by the labour force status of the household head. In 1987, 8% of the households below half mean income, and 13% of those below the 60% line, were headed by an employee. Those below the relative lines were dominated by two groups: households headed by an unemployed person and those headed by by a farmer, accounting for about 60% of all households below half mean income. By 1994, households headed by a farmer comprised a much smaller proportion of those below the relative lines, but had been "replaced" by households headed by someone who is retired or "in home duties" - working full-time in the home. Households headed by an employee still only accounted for 6-8% of those below the relative income lines. This comes about because, although households headed by an employee account for 38% of the sample, they face a very low risk of being in poverty: in 1994, only 3% of such households are below half mean income and 8% are below the 60% line, marginally down from 1987 and much lower than the risk facing households not headed by an employee.

Table 8: Households Below Relative Income Lines by Labour Force Status of Head, Ireland 1987 and 1994

Labour Force Status of Head	1987		1994	
Labour force status	below 50% income line	below 60% income line	below 50% income line	below 60% income line
Employee	8.2	13.4	6.2	8.0
Self-employed	4.8	4.4	6.7	4.7
Farmer	23.7	17.5	8.9	7.7
Unemployed	37.4	26.6	32.6	23.7
Ill/Disabled	11.1	13.1	9.5	7.0
Retired	8.1	9.4	10.5	20.6
Home Duties	6.7	15.6	25.5	28.2
All	100.0	100.0	100.0	100.0

Focusing simply on the household head could understate the importance of earnings since households below the relative lines could still contain other members who are employees. In fact, in 1994 only about 12% of households below half mean income and 15% of those below the 60% line contain an employee (whether the head or not).[3] Using the family rather than the household as

[3] The corresponding figures for 1987 were slightly higher, at 14% and 20% respectively.

recipient unit once again does not significantly increase the importance of earnings from employment for those below relative income lines.

The low income population in Ireland is thus currently dominated by households relying primarily on social security transfers, and to a much more limited extent self-employment income or occupational pensions, rather than employee earnings. Income from self-employment is however known to be difficult to measure in household surveys, and farm income poses particular problems. Further, it may be the case that because farm incomes are more variable from year to year than other income sources, those relying on it tend to smooth consumption and would not therefore be so severely affected by one bad year.[4] It could be the case, then, that focusing on current income gives a misleading picture of the living standards of households relying on income from different sources. A combination of understatement of income from self-employment in surveys and greater smoothing by those receiving it could lead to an overestimate of the importance of households relying on self-employment income among the poor. It is also sometimes argued that those relying on social security transfers are in some respects better off than those at similar income levels but receiving earnings, because the former do not incur travel to work and other work-related expenses and because they may receive more non-cash benefits in the form of free or subsidised goods and services. It could be the case, then that comparisons simply on the basis of current disposable income overstate the relative position of households relying on earnings relative to other households, and underestimate their importance among the poor. Finally, even if this were not the case, current income alone has limitations as an indicator of exclusion due to lack of resources, for reasons discussed at length elsewhere (e.g. Nolan and Whelan 1996) .

For all these reasons, it is worth trying to go beyond income poverty lines in assessing the relative living standards of those relying on earnings. To do so, we employ indicators of deprivation, selected from a wider set of items and activities on which information was obtained in our survey. A full description of the way these have been derived and used is given in Callan, Nolan and Whelan (1993) and Nolan and whelan (1996) and only the briefest summary is possible here. Drawing on Townsend (1979) and Mack and Lansley(1985), information was sought in the

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[4] In fact, the year covered by our 1987 survey was a particularly bad year for income from farming in Ireland.

surveys on whether respondents had/did a range of items or activities, whether they regarded them as necessities, and for those who did not have/do a particular item/activity, whether they had to do without due to lack of money. The items/activities covered everyday consumption items such as having meat/fish regularly, more irregular items such as clothes,shoes, and holidays, durables such as a TV, car and washing machine, and housing-related items such as having an indoor toilet and a bath/shower. Using information of this sort, previous studies have generally selected as deprivation indicators the sub-set possessed by most households or regarded as necessities by most people, and constructed a summary deprivation index. Scores for each item may be based simply on absence, or may take into account whether this is said to be due to lack of money, perhaps also using income to assess whether absence is "enforced". However, constructing a summary index across items in this way implicitly assumes a single underlying dimension of deprivation, whereas exploring the relationship between the indicators may be helpful.

Factor analysis in fact reveals that the items on which we have information cluster into three distinct groups. The first contains items relating to "basic life-style deprivation" - absence of rather basic consumption items such as food, clothing and heating. The second mostly refers to absence of leisure activities such as hobbies or evenings out, holidays, presents. The third group consists of items related to housing and household capital items, such as damp-free dwelling, toilet and bath/shower, washing machine and fridge. This suggests that it is useful to distinguish these three dimensions rather than simply adding items across dimensions in a summary index. While they could be used in various ways, here we concentrate on the first group or dimension, of what we have termed "basic" deprivation indicators. These items are both regarded as necessities and possessed by most people in the samples, in contrast with the second group which are not actually possessed by most households and are not overwhelmingly regarded as necessities. The housing items are possessed by most people and regarded as necessities by almost everyone, but their absence does not appear to be particularly strongly related to current resources, with age, household composition and rural location being important factors. The fact that the factor analysis so clearly distinguishes them from other items itself shows that absence of these housing items is not highly correlated with other aspects of deprivation.

To focus on current basic exclusion due to lack of resources, we concentrate on the basic deprivation items, but also take income into account. Some households lack basic items - and say this is due to lack of money - but are in the middle or upper parts of the income distribution. The factors underlying this pattern have been explored using the 1987 data, within a more general framework for analysis of the relationship between such indicators of life-style/deprivation, income, and wider measures of resources, in Nolan and Whelan (1996). The case is made there that indicators of both resources and way of life can usefully be combined in measuring deprivation/poverty. We therefore look at households which are both below relative income lines **and** experiencing deprivation of one or more of what have been identified as basic deprivation indicators. Only about half the sample households falling below the relative income lines are in fact seen to be experiencing basic deprivation.

What we are primarily interested in here is whether this affects our assessment of the position of households where the head is an employee or the earnings of other members are important. Table 9 compares the composition of those below the 50% relative income line with the similarly-sized group below 60% and experiencing primary deprivation, in terms of labour force status of the household head. We see that in 1987 the composition of the two groups was indeed rather different. In particular, farm households made up a considerably smaller proportion of those experiencing deprivation and below the 60% line than of those below the lower income line alone. The groups which are now a more substantial proportion of "the poor", though, are mainly households headed by someone who is ill or in home duties. Households headed by an employee increase relatively little in importance, accounting for only about 12% of households meeting the joint income/deprivation criteria. In 1994 the differences between the two groups are less, and households headed by an employee comprise only 7% of those meeting the joint income/deprivation criteria. Broadening the focus beyond the household head again does not greatly increase the importance of earnings for poor households: in 1994, only 15% of household below the 60% income line and experiencing basic deprivation contain an employee, and in 1987 the figure was 18%. Whether current income or income plus deprivation is used, then, the "working poor" receiving or relying on income from employment constitute at most only about 15% of "the poor" in the Irish case.

Table 9: Households in Poverty by Labour Force Status of Head, Ireland 1994

Labour force status	1987		1994	
	below 50% income line	below 60% income line and experiencing basic deprivation	below 50% income line	below 60% income line and experiencing basic deprivation
Employee	8.2	11.7	6.2	7.4
Self-employed	4.8	12.4	6.7	2.2
Farmer	23.7	2.1	8.9	2.8
Unemployed	37.4	36.5	32.6	35.7
Ill/Disabled	11.1	16.6	9.5	10.1
Retired	8.1	5.6	10.5	13.0
Home Duties	6.7	15.0	25.5	28.6
All	100.0	100.0	100.0	100.0

6. Poverty and Low Pay

We now turn from the role of earnings in the incomes of poor/low income households to the relationship between low pay and poverty. Low pay is conventionally measured in terms of the gross earnings of the individual, and related to benchmarks derived from the distribution of earnings. Poverty status, on the other hand, is usually assessed on the basis of the disposable equivalent income of the household, and the relationship between the two is by no means straightforward. Applying the OECD low pay cut-off to the individual earners in the 1994 Irish sample, we found that about 24% of full-time employees are below two-thirds of median gross weekly earnings. If these are taken for the purpose of the exercise to be the "low paid", to what extent do low pay and household poverty overlap?

Table 10 shows that, using the relative income poverty lines, the degree of overlap is quite limited both in 1987 and 1994. In 1987, only 9% of low paid employees were in households below half average income, 19% were in households below the 60% line, and 10% were in households below that line and experiencing basic deprivation. In 1994, the corresponding figures are a good deal lower, at 6%, 13% and 6% respectively. This is primarily because, as we have seen, most of the households below the income lines do not contain an employee, whether low paid or otherwise. From a household perspective, then, in 1994 15% of households below the 60% income line contained an employee, only 6% contain

Table 10: The Overlap between Low Pay and Household Poverty, Ireland

A: % of low paid individuals in poor households:	1987	1994
household below 50% of mean income	8.9	5.5
household below 60% of mean income	19.5	13.3
household below 60% of mean income + experiencing basic deprivation	10.3	6.4
B: % of poor households containing a low paid individual		
household below 50% of mean income	7.0	4.3
household below 60% of mean income	9.3	5.5
household below 60% of mean income + experiencing basic deprivation	8.6	6.3

Note: Full-time employees only, weekly low pay threshold 2/3 of median gross earnings.

a (full-time) low-paid employee. This pattern is not altered by using the family/tax unit rather than the household as recipient unit in measuring poverty.

Most low paid employees are not in "poor" households for two main reasons. The first is that the (take-home pay corresponding to the gross) low pay threshold is substantially higher than the relative poverty lines for a single adult or a couple, so such a household may not be below the lines even if relying entirely on the earnings of the low paid individual. In 1994, for example, the two-thirds of median earnings threshold is IR£165 per week gross, which for a single person corresponds to about £126 net, whereas even the 60% relative income line is only about £80 for a single person. The second is that many households containing a low paid individual are **not** depending on his/her earnings as the main income source. Many of the low-paid are young adults living in the parental home or married women, and the household generally has other earners or is in receipt of social welfare transfers. A limited overlap between low pay and poverty is thus a common finding in UK and US studies. For example, Layard, Piachaud and Stewart (1978) and Bazen (1988) found that between 10-22% of low-paid workers were in families below conventionally-used poverty lines in the UK, while Burkhauser and Finnegan (1989) reported about 8-18% for the USA. The precise extent of the overlap depends on the way in which low pay and poverty are measured (which differs across these studies), but the broad message is consistent with our findings for Ireland.

What distinguishes the minority of low paid employees who are in poor households is **not** that they have lower earnings than the majority of low-paid employees. Rather, it is the fact that the household is largely dependent on their earnings, and the fact that most of these households contain children This has important implications for the likely immediate impact which even a minimum wage which left employment levels unaffected would have on household poverty, as explored for the UK in Johnson and Stark (1991) and Sutherland (1991) and for Ireland in Callan and Nolan (1992) and Nolan (1993). This in turn focuses attention on the broader range of policies to help families with children, which can have a more immediate impact on poverty both among those depending on earnings and those on social welfare. Such static analsyses clearly only provide part of the story, however. The consequences of long-term low pay interspersed with periods of unemployment are clearly much more serious than those of low pay experienced for a relatively short period, perhaps at an early stage in the working career. This points to the need for dynamic analyses of earnings mobility, which are increasingly becoming possible as suitable panel data become more widely available (see for example Atkinson, Bourguignon and Morrison, 1992, Gittleman and Joyce, 1995, OECD, 1996). In the Irish case, the panel data from the Irish element of the European Community Household Panel now coming on stream opens up the prospect of such dynamic analysis of earnings mobility and the relationship between low pay and poverty.

7. Conclusions

The earnings distribution in Ireland exhibits wider dispersion in 1994 than it did in 1987. This increase in dispersion was pronounced at the top of the distribution, and is seen for hourly earnings among all employees and weekly earnings among all full-time employees, and also for men only. Using the OECD benchmark of two-thirds of median weekly earnings, 24% of full-time employees were low paid in 1994, up from 21% in 1987 and higher than the (roughly) corresponding figures for most of the 15 countries covered in the recent OECD analysis of the extent of low pay.

Only a small minority of these low paid employees were in poor households in 1987 or 1994, and only a small minority of poor households contain a low paid employee. These conclusions holds whether household poverty is measured using relative income poverty lines, or using a combination of income and non-monetary indicators of deprivation. The dynamics of low pay and poverty need to be understood before one can draw firm conclusions about the relationship between low pay and household poverty and its implications.

REFERENCES

Atkinson, A.B. (1985). *How Should We Measure Poverty?,* ESRC Programme on Taxation, Incentives and the Distribution of Income, Discussion Paper No. 82, London School of Economics.

Atkinson, A.B. (1987). "On The Measurement of Poverty", *Econometrica*, Vol. 5, No. 4, pp. 749-764.

Atkinson, A.B., F. Bourguignon and C. Morrison, (1992). *Empirical Studies of Earnings Mobility*, Harwood.

Bazen, S. (1988). *On the Overlap Between Low Pay and Poverty*, ESRC Programme on Taxation, Incentives and the Distribution of Income, Discussion Paper No. 120, London School of Economics.

Buhman, B.,L. Rainwater, G. Schmaus and T. Smeeding (1988). "Equivalence Scales, Well-being, Inequality and Poverty: Sensitivity Estimates Across Ten Countries using the Luxembourg Income Study Database", *Review of Income and Wealth*, Series 33 No. 2, pp. 115-142.

Burkhauser, R. and T. Finegan (1989). "The Minimum Wage and the Poor: The End of the Relationship", *Journal of Policy Analysis and Management*, Vol. 8, No. 1, pp.53-71.

Callan, T. (1991). Male-Female Wage Differentials in Ireland, *Economic and Social Review,* 23, 55-72.

Callan, T. and B. Nolan (1991). "Concepts of Poverty and the Poverty Line", *Journal of Economic Surveys*, Vol. 5, No. 3, pp.243-261.

Callan, T. and A. Wren (1994). *Male-Female Wage Differentials: Analysis and Policy Issues,* General Research Series Paper No. 163, Dublin: The Economic and Social Research Institute.

Callan, T., B. Nolan and C.T. Whelan (1993). *Resources, Deprivation and the Measurement of Poverty*, Journal of Social Policy, 22 (2), 141-72.

Callan, T., B. Nolan and B.J. Whelan, D.F. Hannan with S. Creighton, (1989). *Poverty, Income and Welfare in Ireland*, General Research Series No. 146, Dublin: The Economic and Social Research Institute.

Callan, T., B. Nolan, B.J. Whelan, C.T. Whelan and J. Williams, (1996). *Poverty in the 1990s: Evidence from the 1994 Living in Ireland Survey*, General Research Series No. 146, Dublin: Oaktree Press.

Cantillon, S. and B. Nolan, (1997). "Are Married Women More Deprived than their Husbands?", Journal of Social Policy, forthcoming.

Centre d'Etudes des Revenus et des Couts (1991). *Les Bas Salaires dans les Pays de la Communaute Economique Europeenne*, Paris: CERC.

Coulter, F., F. Cowell and S. Jenkins (1992). "Equivalence Scale Relativities and the Extent of Poverty and Inequality", *Economic Journal*, 102, 1067-82.

Department of Social Security (1996). *Households Below Average Income: A Statistical Analysis 1979-1993/94*, London: Government Statistical Service.

Forster, M. (1994). *Measurement of Low Incomes and Poverty in a Perspective of International Comparisons,* Labour Market and Social Policy Occasional Papers, No. 14, Paris: OECD.

Foster, J. and A.F. Shorrocks (1988). "Poverty Orderings", *Econometrica*, Vol. 56, pp.173-177.

Gittleman, M. and M. Joyce, (1995). "Earnings Mobility in the United States, 1967-91", *Monthly Labour Review*, September, 3-13.

Hagenaars, A., de Vos, K. and Zaidi, M. A. (1994) *Patterns of Poverty in Europe*, paper to Seminar on the Measurement and Analysis of Social Exclusion, Commission of the European Communities/Department of Social Security, Bath: Centre for Research in European Social and Employment Policy.

Harmon, C. and I. Walker (1995) "Estimates of the Economic Return to Schooling for the United Kingdom", *American Economic Review*, 85, 1278-1286.

Hughes, G., and B. Nolan (1996). "Pension Plans and Labor Market Structure: Evidence from Ireland", in E. Reynaud, L. apRoberts, B. Davies, and G. Hughes with the collaboration of T. Ghilarducci and J. Turner, (editors), *International Perspectives on Supplementary Pensions: Actors and Issues.* Westport CT: Quorum Books.

Institute of Social Studies Advisory Service (1990) *Poverty in Figures: Europe in the Early 1980s,* Luxembourg: Eurostat.

Johnson, P. and G. Stark (1991). "The Effects of a Minimum Wage on Family Incomes", *Fiscal Studies*, Vol. 12, no. 3, pp. 88-93.

Layard, R., D. Piachaud and M. Stewart et al. (1978). *The Causes of Poverty*, Background Paper No. 5, Royal Commission on the Distribution of Income and Wealth, London: HMSO.

Mack, J. and S. Lansley (1985). *Poor Britain*, London: Allen and Unwin.

Muffels, R. (1993) "Deprivation standards and style of living indices", in Berghman, J. and Cantillon, B. (1993) *The European Face of Social Security*, Aldershot: Avebury.

Nickell, S. and C. Bean (1996). "Changes in the Distribution of Wages and Unemployment in OECD Countries", American Economic Review, May,

Nolan, B. (1993). *Low Pay in Ireland*, General Research Series Paper No. 159, Dublin: The Economic and Social Research Institute.

Nolan, B. and T. Callan, eds., (1994). *Poverty and Policy in Ireland*, Dublin: Gill and Macmillan.

Nolan, B. and C.T. Whelan (1996). *Resources, Deprivation and Poverty*, Oxford: Clarendon Press.

OECD (1993). *Employment Outlook*, Paris: OECD.

OECD (1996). *Employment Outlook*, Paris: OECD.

O'Higgins, M. and S. Jenkins (1989). "Poverty in the EC: Estimates for 1975, 1980 and 1985", in R. Teekens and B.M.S. van Praag (eds.): *Analysing Poverty in the European Community*, Eurostat News Special Edition 1 - 1990, Luxembourg.

Sutherland, H. (1991). *The Immediate Impact of a Minimum Wage on Family Incomes*, Microsimulation Modelling Unit Research Note 1, STICERD, London School of Economics, London.

Townsend, P. (1979). *Poverty in the United Kingdom*, Harmondsworth: Penguin.