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LOW PAY, POVERTY AND SOCIAL SECURITY

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ABSTRACT

Directing support towards those in employment but on low incomes is one of the most serious challenges facing social security policy, whether based on Beveridge or other models. Beveridge saw family allowances - universal cash transfers for children - as the mechanism for eliminating want for those at work. Means-tested transfers to those in work, tax allowances or exemptions, and minimum wages are other widely-used policy options. Here the links between low pay and poverty and the effectiveness of different strategies for helping the "working poor" are examined, using a sample of Irish households. Measuring poverty using relative income poverty lines, only 10-15% of households below such lines are headed by an employee, with up to 20% containing an employee. Using a measure of poverty which combines income and direct indicators of deprivation, households headed by an employee still only account for about 12% of "poor" households. Only a minority of employees below conventional low pay standards, at most about 20%, are in poor households, whether poverty is assessed using income alone or income and deprivation indicators. Of employees heading of poor households, only a minority are low paid but most have child dependants. While most of the first-round gains from a minimum wage do not go to poor households, about 40% of poor employee-headed households do benefit. Tax exemptions for children have quite limited effects, but a substantial increase in universal Child Benefit, partly financed by making it taxable, has a major impact on the working poor.

LOW PAY, POVERTY AND SOCIAL SECURITY

1. INTRODUCTION

One of the most serious challenges facing social security policy, whether based on the Beveridge or other models, is how best to assist those in work but on low incomes relative to their needs -the "working poor". This paper uses data for a large sample of Irish households to analyse the links between low pay, family/household composition, and poverty, and employs a tax/benefit model to assess the effectiveness of different tax and social security strategies to help the working poor. Because self-employment incomes are difficult to measure accurately and the self-employed pose particular problems for policy, we concentrate on those relying on income from employment.

Section 2 describes various strategies which aim to assist those on low earnings relative to their needs, beginning with the approach recommended in the Beveridge Report. Section 3 looks at the extent to which families/households headed by an employee and/or with significant income from employment are in poverty, using conventional relative income poverty lines but also a range of direct indicators of deprivation. In Section 4 the roles of the head's earnings, income of other members, and household composition are disentangled, and the links between low pay and poverty spelt out. Section 5 uses simulations of a tax/benefit model to assess the effectiveness of different social security strategies in assisting the working poor. The approaches considered include means-tested targetted transfers (such as the UK's Family Credit scheme), universal transfers, income tax allowances and exemptions, and earned income tax credits. Section 6 summarises the main findings.

2. STRATEGIES

The Beveridge Report saw its purpose as an attack upon Want, and identified two causes: interruption or loss of earning power, and the failure to relate income during earning to the size of the family. Based on the social surveys carried out in pre-war Britain, it saw interruption or loss of earnings as by far the most important of the two, accounting for from three-quarters to five-sixths of those below subsistence standards, with "practically the whole" of the remaining one-quarter to one-sixth due to failure to relate earnings to family size . Abolition of want , it concluded, requires a double re-distribution of income, through social insurance and by family needs.

The Report devoted almost all its attention to the plan for social security, the integrated scheme of social insurance which was designed to cope with the various contingencies leading to interruption and destruction of earning power. The effectiveness of this plan was predicated however on adjustment of incomes to family needs via children's allowances. These were to be paid in periods of earning as well as interruption of earnings, for two reasons. First, without such allowances a "substantial measure of acute want" would remain among lower paid workers with large families, and second, if paid only during unemployment or other interruptions of work income would then be greater than during work. Thus both the problem of the "working poor" and the disincentive issues which have received so much attention more recently were clearly recognised.

Universal direct cash allowances for children were thus seen as THE mechanism for eliminating want for those at work. The recommended level of paynent per child for those away from work was intended to be sufficient to meet full subsistence needs, taking in-kind transfers into account. For those in work, some element of sharing of these costs between the parents and the community was introduced by not paying the allowance for the first child. Any greater degree of sharing, it was argued, would be undesirable in decreasing the provision for children and narrowing the gap between income in and out of work. The allowances were to be funded out of general taxation rather than social insurance contributions, and were seen as complementing rather than substituting for child tax allowances which, the Report states, involve different considerations. (Since a relatively small proportion of earners were liable for income tax at the time, child tax allowances were presumably not seen as particularly relevant to the working poor).

Children's allowances were in fact the first element of the Beveridge plan to be implemented, in the Family Allowances Act of 1945. The rate of payment, however, was set at only about two-thirds of the recommended amount. Even more significant was the failure to uprate the allowance over time in line with inflation, much less earnings. As a result, by 1966 the rate payable (for the second child) had reached only 8s., the amount recommended by Beveridge in 1942, while prices had more than doubled (Atkinson 1969 p.84). Family allowances were treated as part of taxable income, and co-existed with child tax allowances. In the mid-1970s, Family Allowances were replaced by Child Benefit, payable for all children including the first and non-taxable, with a significant increase in the rate. At the same time, child tax allowances were phased out. The level of Child Benefit, though increased during the early 1980s, was virtually frozen again from 1985 to 1990.

Many other developed countries have family allowances, either with universal coverage along Beveridge lines or based on employment, generally introduced in the 1930s or 1940s. Some, notably France and Belgium, are a good deal more generous than the UK in their payment levels as a percentage of GDP or average earnings. Others, including Ireland, are less generous. Two main difficulties may be identified with this as a strategy for dealing with the working poor (other objectives of family allowances are not the concern of this paper). The first is the tendency for the level of payment to be set at "too low" a level, i.e. one which still leaves significant numbers of families with children below poverty standards (however defined). This can arise either in the rates initially chosen or through the widespread failure to index rates to prices or earnings. (It can also arise due to omission of the first child or first two children in each family from coverage). The extent to which this occurs across countries points to the obvious and powerful pressures on a universal payment of this type, given the very substantial expenditure involved.

The second problem is that the Beveridge assumption that poverty only affects those in work where there are children may not be tenable. Those on low earnings with no or only an adult dependant could be in poverty, and will be unaffected by child allowances - a point which also obviously applies to other strategies aimed at families with children, such as child tax allowances, exemptions or tax credits, and means-tested social welfare transfers to low earners with children. These also suffer from other disadvantages. Child tax allowances, a traditional feature of income tax systems in industrialised countries, affect only those in the tax net, and are of more benefit (in absolute terms) to those paying at higher marginal rates. As in the UK, they have been abolished on this basis in a number of countries in favour of higher family

allowances. Tax credits for children are not of greater value to higher-rate tax-payers, but again only benefit those in the tax net. Child additions to income tax exemption limits have also been employed, in order to remove more of those with children from the tax net. These are important for those affected, but do not help those remaining in the tax net. Means-tested social welfare transfers to low earners with dependent children have been adopted in a number of countries, but face the dual problems of low take-up rates and the poverty trap created for those who do take up their entitlements by withdrawal of benefits as earnings increase.

Apart from these tax and transfer strategies, the other main plank of policy response to the "working poor" focuses on increasing earnings, notably through minimum wage legislation. Many industrialised countries have national minimum wages, while some - including the UK and Ireland - have only rather limited minima applying to particular sectors or occupational groups. While often justified in terms of the objective of helping those on low earnings with families to support, it is not clear that a minimum wage is generally an effective strategy for this purpose. Many of those affected by minimum wage setting would not be in "poor" households, and many of the "working poor" earn above the minimum but dependents bring needs-adjusted incoime below the poverty standard. Introducing or increasing the minimum wage may not then lift most of the "working poor" with children out of poverty - even assuming no adverse impact on employment levels.

We now use data for a representative sample of Irish households to explore the links between low pay and poverty, and the effectiveness of these policies in helping the working poor.

3 LOW PAY AND POVERTY

The database employed is a sample of 3,294 Irish households obtained from a survey carried out in 1987 by the Economic and Social Research Institute. 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 effective response rate was 64% . 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. Extensive validation of the representativeness and reliability of the sample has been carried out and is described in Callan, Nolan et al.(1989), Callan (19991) and Nolan(1992). On the basis of a range of external information, the (reweighted) sample appears to represent the population well in terms of key variables of interest in the current context, such as age, sex, household composition, average income and earnings, occupational and industrial distribution of employees, and taxable income by range. Comprehensive information on current income from various sources, and detailed information about personal and household characteristics, were obtained.

To examine the working poor and the relationship between earnings 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 EC (O'Higgins and Jenkins 1989, EHHS 1991) and in cross-country comparisons based on the Luxembourg Income Study data (Buhman et al. 1988), (Such relative cut-offs also constitute one element of the official UK series on Households Below Average Income now produced by the DSS (DSS 1990); 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: here we use 40%, 50% and 60% of mean household equivalent income in the sample.

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, Atkinson 1990), and no method of deriving such scales commands general support. We therefore also test for the sensitivity of results by altering the scales used to derive equivalent income. It should be noted that 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 from which the poverty lines are derived. The primary set of scales employed will be (loosely) based on those implicit in the Irish social welfare system's rates of support: where the household head is 1, each extra adult is 0.66 and each child is 0.33. Where alternative scales produce different results this will be noted.

The income concept used is disposable income, that is after deduction of income tax and social security contributions. 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 can be the household or the narrower nuclear family/tax unit of single person or couple together with dependent children. Again, there is little basis on which to say that one is preferable to the other - this may depend on the degree of income sharing within the units and the particular problem to be analysed - and yet the results may differ. Again, we adopt the approach of using both and highlighting where the results do in fact appear to be affected significantly by the choice of unit.

Table 1 shows the percentage of households and persons falling below the relative poverty lines in 1987, using the household as recipient unit and with four different equivalence scales. The choice of scale does affect the precise figure below each line, with for example the percentage of persons below half mean income varying between 20% and 23%. Using the tax unit rather than the household as recipient unit, a slightly higher percentage of persons are below the relative lines but the general pattern is similar. What we are primarily interested in here, though, is the composition of those below the lines and the role of earnings. Table 2 shows the households below the 40%, 50% and 60% relative lines classified by the labour force status of the household head, and using the 1/0.66/0.33 equivalence scale. We see that very few of the households below the 40% line, 10% of those below half mean income, and 14% of those below the 60% line are headed by an employee. Those below the relative lines are dominated by two groups : households headed by an unemployed person or by a farmer, accounting for about 60% of all households below half mean income. If the equivalence scale is altered to 1/0.7/0.5, the importance of households headed by an employee increases

slightly, but such households still only account for 13% of those below half average income and 17% of those below the 60% line. Unsurprisingly, the risk of being in poverty is much lower for households headed by an employee than for other households: only 4% are below half mean income and 11% are below the 60% line.

TABLE 1: Households and Persons Below Relative Income Poverty Lines, Ireland 1987

Poverty line	Percentage of Households			Percentage of Persons		
	Equivalence Scale			Equivalence Scale		
	A	B	C	A	B	C
40%	10.0	8.9	7.5	12.8	10.5	8.2
50%	18.9	18.5	17.5	22.9	21.2	19.8
60%	29.0	30.5	30.0	33.5	32.2	31.4

Equivalence scales A=1/0.7/0.5 for single adult/additional adult/child,
B=1/0.6/0.4
C=1/0.66/0.33.

TABLE 2: Households Below Relative Income Lines By Labour Force Status of Head

Labour Force Status	40% line	50% line	60% line
Employee	6.6	8.9	14.0
Farmer	41.6	23.3	17.9
Other Self-Employed	4.6	4.7	4.4
Unemployed	23.2	39.1	28.3
Ill	7.1	10.1	13.0
Retired	6.2	7.5	8.8
Home Duties	10.8	6.3	13.6
Total	100.0	100.0	100.0

Equivalence Scale: 1/0.66/0.33

While most households below the relative lines are not headed by an employee, they could still contain other members who are employees, so that focusing on the hosehold head could understate the importance of earnings. In fact, about 14% of households below half mean income and 20% of those below the 60% line contain an employee (whether the head or not). This is about 11/2 times the percentage headed by an employee, but even at the highest income poverty line only one-fifth of household below the line are in receipt of employee earnings. Using the family rather than the household as recipient unit 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 or income from self-employment, mostly farming, rather than employee's 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. In fact, the year covered by our survey was a particularly bad year for income from farming in Ireland, and substantial increases were registered in the following two years. 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, relative income poverty lines by their nature are arbitrary, and some of those above even the highest line - 60% of average income - could still be on "inadequate" incomes and experiencing what most people would consider to be deprivation.

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(1991) and only the briefest summary is possible here. Drawing on Townsend (1979) and Mack and Lansley(1985), information was sought in the survey on whether respondents had/did 24 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 on a range of items/activities, 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 24 items on which we have information cluster into three distinct groups. The first contains eight items relating to "primary life-style deprivation" - absence of rather basic consumption items such as food, clothing and heating. The second, again with eight items, 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 "primary deprivation indicators". These items are both regarded as necessities and possessed by most people in the sample, in contrast with the second group which are not actually possessed by most households and are not overwhelmingly regarded as necessities. The primary deprivation items therefore appear more suitable as indicators of current exclusion from ordinary life, at a rather basic level. The housing items are possessed by most people and regarded as necessities by almost everyone. However, 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 primary items, but also take income into account. Some households lack primary items - and say this is due to lack of money - but are in the middle or upper parts of the income distribution. This can be explored within a more general framework for anaysis of the relationship between such indicators of life-style/deprivation, income, and wider measures of resources, which we pursue elsewhere. For present purposes, suffice it to say that, following Ringen's (1987) line of argument, we believe that indicators of both resources and way of life can be employed 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 primary deprivation indicators.

Table 3 shows the extent to which households in the sample fall below the relative income lines **and** are experiencing primary deprivation. Only about half the households below each line are doing so. 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 earnings of other members are important. Table 4 compares the composition of those below the 50% relative income line with those below 60% and experiencing primary deprivation, in terms of labour force status of the household head. We see that the composition of the two groups is indeed rather different. Farm households make 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 do not increase much in importance, accounting for only about 12% of households meeting the joint income/deprivation criteria. Likewise, broading the focus beyond the household head, only 18% of household below the 60% income line and experiencing

TABLE 3: Households Below Relative Income Lines Experiencing/Not experiencing Primary Deprivation

Relative Income Lines	Households below and Experiencing Primary Deprivation	% of All Below Line
40%	3.3	50.9
50%	10.0	59.3
60%	16.5	56.7

TABLE 4: Households Below Relative Income Lines/Experiencing Primary Deprivation by Labour Force Status of Head

Labour Force Status	Below 50% Income Line	Below 60% Income line and Experiencing Deprivation	Below 60% Income Line and not Experiencing Deprivation
Employee	8.9	11.7	16.3
Farmer	23.3	12.4	25.5
Other Self-employed	4.7	2.1	7.4
Unemployed	39.1	36.5	17.7
Ill	10.1	16.6	7.7
Retired	7.5	5.6	13.0
Home Duties	6.3	15.0	12.3
Total	100.0	100.0	100.0

primary deprivation contain an employee. (Even using a higher income line, 70% of mean equivalent household income, with the deprivation criterion does not alter this pattern)

Whether current income or income plus deprivation is used,then, the "working poor" receiving or relying on income from employment constitute only about 15-20% of "the poor". This puts policy to assist such households in its context within broader anti-poverty policy, but is not intended to devalue its importance. It is also to be emphasised that some approaches to the problems of these households would also benefit others among the poor, notably increased transfers to children. We now explore why some households with an employed head or in receipt of other earnings are nonetheless at relatively low income levels, examining the relationship between low pay, household composition and poverty.

4: POVERTY AND LOW PAY

So far, we have looked at the importance of the "working poor" - confined here to households which rely on or receive employee earnings - among poor/low income households in Ireland. To frame policy to assist such households, though, we need to know why they are in that position, and most importantly whether family size or low pay *per se* is the primary explanation. "Low pay" is conventionally measured in terms of the gross earnings of the individual, and related to benchmarks derived from the distribution of earnings (such as the bottom decile cut-off or two-thirds of the median for full-time adult male earners, for example). 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 conventional low pay thresholds to the individual earners in the Irish sample, we find that about 27% of employees are below the lowest decile cut-off for adult males. 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? Using the relative income poverty lines described above, the degree of overlap is seen to be quite limited. Only 2% of low paid employees are in households below the 40% relative line, 8% are below the 50% line and 19% are below the 60% line. (These results differ little whether a weekly or hourly gross pay threshold is applied in defining the low paid). 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. Only 8% of employees in the sample are in households below the 60% relative line. A majority of these - about 60% - are themselves low paid, but a substantial minority are not. From a household perspective, then, while we saw that 20% of households below the 60% income line contained an employee, only 12% contain a low-paid employee. This pattern is not altered by using the combined income/deprivation criteria described above rather than purely income poverty lines, nor by the use of the family/tax unit rather than the household.

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) 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. 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) report 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 extent to which the household depends on their earnings, and the number of children in the family who must be supported.

Concentrating on "poor" households which contain an employee (whether low-paid or not), the role of low pay and family size is explored in Table 5 using the 60% income poverty line and the weekly earnings threshold to identify poor households and low-paid individuals. We have seen that households with an employee constitute only 20% of those below that poverty line, but this still represents 6% of all households in the sample. Table 5a cross-classifies them by number of children and by whether they contain a low-paid earner. We see that 85% of these households have children, and more than three-quarters have two or more children. Almost half do not contain a low-paid individual, 20% have a low-paid earner who is neither head of household nor spouse, 11% have a low-paid spouse of the head, and only 23% have a low-paid head. For some of these households containing an employee, he/she - often a young person still in the parental household - is not central to the economic status of the household. It may then be preferable to concentrate on the households headed by an employee, constituting 63% of all poor households with an employee, about 4% of all households in the sample. Table 5b shows the same cross-classification for this smaller group, and we see that an even higher percentage contain children - 87% have two or more children. By contrast, only 40% of these households contain a low-paid employee, in most cases the household head, and most of those households also have two or more children. The role played by child dependents is illustrated by the fact that 74% of the employee-headed households below the 60% poverty line would be above it if they did not contain children. Only a small minority of poor households with or headed by an employee are poor because of low pay alone - as will be confirmed in Section 6 by simulating the effects of bringing all employees up to low pay thresholds. However, the need to support children is not the entire story: 10% of poor households headed by an employee have no children, and 24% would still be below the poverty line even if no children were present. Thus while improved child support would assist most of the "working poor", the Beveridge assumption that poverty affects those in work only where there are children is not entirely valid. We turn to the implications for policy in the next section.

TABLE 5: "The Working Poor": Low Pay and Child Dependants

%	No Children	1 Child	2 Children	3 or More Children	All
A/ Households Below 60% Line With an Employee					
Low Paid Head	4.5	0.7	7.7	10.3	23.2
Low Paid Spouse	0.5	2.2	2.0	6.2	10.9
Low Paid - Other	3.8	4.4	3.8	7.8	19.8
No Low Paid	5.8	1.3	6.5	32.5	46.1
All	14.6	8.6	20.0	56.7	100.0
B/ Households Below 60% Line with an Employee Head					
Low Paid Head	7.0	1.1	12.1	16.2	36.5
Low Paid Spouse	-	-	-	1.8	1.8
Low Paid - Other	-	-	0.5	1.1	1.6
No Low Paid	2.7	1.8	6.6	49.1	60.1
All	9.7	2.9	19.3	68.1	100.0

5: POLICY STRATEGIES

Before dealing with tax and social security policy to assist the "working poor", it is worth briefly considering the prospects for a policy focusing on low pay *per se* and aiming to bring low paid employees up to gross pay thresholds, notably by introducing a National Minimum Wage (NMW). (Ireland currently has no NMW, with only certain sectors/occupations covered by legal minima). Abstracting from possible employment effects, it is worth looking at the first-round impact this would have on poor households. A simple formulation is assumed whereby all employees (working at least 18 hours per week) are brought up to £130 per week gross pay. The net addition to take-home pay is then estimated, and Table 6 shows the distribution of the "gainers" and gains by household equivalent disposable income decile. The top half of the distribution contains 61% of the employees affected, and they receive 56% of the total gains. This directly reflects the distribution of low-paid employees, and is on that basis hardly surprising. A similar distributive pattern, with much of the gain from a NMW going to the middle and upper parts of the distribution, is shown in the UK analyses by Johnson and Stark (1991) and Sutherland (1991).

Table 6: Distribution of Gains From Minimum Wage

Equivalent Income Decile	% of Gainers	Average Gain (£ per Week)	% of Total Gains
Bottom	3.3	32.7	4.8
2	8.9	23.0	9.0
3	8.3	26.8	9.9
4	6.8	24.8	7.5
5	11.3	26.3	13.1
6	15.4	20.2	13.7
7	14.3	20.3	12.8
8	14.8	22.3	14.5
9	11.3	19.5	9.7
Top	5.6	20.4	5.0

However, while the benefits from the "simulated" NMW in the exercise appear poorly-targetted, it could still be having a significant effect on those below the poverty line - it could be an effective if not an efficient strategy for assisting the working poor. In fact, the results show that 27% of households below the 60% income line and containing an employee, and 24% of those below the line and headed by an employee, would be lifted above that line by the additional income associated with the NMW. A further substantial proportion are helped, though not by enough to bring them above the poverty line. In all, then, about 50% of all poor households with an employee, and almost 40% of those headed by an employee, benefit from the first-round effects of a NMW. The contribution which an effective strategy to combat low pay could make is not to be ignored, then, but it would not in itself suffice as a strategy to assist the "working poor".

We now turn, therefore, to the role which tax and transfer policy could play in alleviating the plight of the "working poor". Three main elements of tax and transfer policy aimed at assisting the "working poor" were identified in section 2: universal child-related transfers (such as child benefit in the UK and Ireland), family allowances conditional on employment (such as Family Credit in the UK and Family Income Supplement in Ireland), and tax-based income support to families with children.[1] In this section, we begin by outlining the policies in force in Ireland in 1987, and which form part of the underlying picture of poverty among the employed population at that date; we also set out a brief picture of developments since

[1] The implications of a more radical strategy along the lines of a "guaranteed basic income" are highly dependant on the level and structure of the guaranteed income, and the financing methods chosen; these issues are outside the scope of the present paper.

that date. We then consider the effectiveness and efficiency of devoting additional resources to each of these alternative forms of income support, in terms of their impact on overall poverty and in particular poverty among the working population. None of these policies addresses the issue of poverty among low-paid employees without children. A national minimum wage policy is sometimes seen as a means of addressing this issue. We conclude, therefore, by returning to the national minimum wage and comparing it to the tax/transfer strategies in terms of effectiveness and efficiency.

In 1987, child benefit in Ireland was at the rate of just under £3.50 per week for the first five children, and £5 per week for the sixth and subsequent children. Family Income Supplement had a similar structure to the UK FIS: the amount of FIS was determined as one-third of the gap between actual gross income and a set amount, depending on family size. There were also maximum levels of payment for each family size. To be eligible for FIS, an individual had to be working for at least 24 hours per week. There were no general child tax allowances or exemptions in the income tax code.

Child benefit, unlike most social welfare payments, has not been indexed in line with inflation. But the higher rate of payment now applies to the fourth and subsequent children, so significant increases have been targetted towards large families. It now stands at £3.65 per week for the first 3 children, and £5.28 for other children. There have been more substantial changes in the other policy instruments. FIS has been made more generous in several respects. The set amounts have been over-indexed, and the proportion of the gap between the actual gross income and the set amount which is paid in benefit has risen from 33 per cent to 60 per cent.[2] Furthermore, the ceiling on payments has been removed. Despite these changes, take-up of FIS has remained low. Child additions to the tax exemption limits have also been introduced, but without any corresponding child tax allowances.

In our analysis, we consider changes in each of the three main areas identified earlier, some of which reflect changes in actual policy. We consider first of all an increase in child benefit of about 10 per cent. We then consider a much more substantial increase in child benefit, which is partly financed by making it taxable[3], and results in the same net cost to the exchequer. Turning to the Family Income Supplement scheme, we first identify how effective and efficient it would be at reducing poverty among the relevant population if it could be paid automatically in the wage packet, thereby ensuring 100 per cent take-up of the benefit. We then consider the effectiveness and efficiency of increasing FIS along the lines which have been pursued since 1987. On the income tax side, we examine the effects of an addition to the income tax exemption limits of £500 per child dependant[4]. (For an analysis

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[2] This figure can also be viewed as the "benefit withdrawal rate" on additional gross income; so a direct corollary of this aspect of the increased generosity is a worsening in the poverty trap for recipients of FIS.

[3] Since the Irish income tax system is based on "income splitting", the marginal tax rate applicable to child benefit depends on the earnings of both partners.

[4] This analysis has been carried out at the level of the tax unit - a single person or married couple, together with dependant children if any.

of child allowances for all taxpayers, rather than additions to exemption limits, based on British data see Parker and Sutherland (1991)).

The results are presented in terms of their "effectiveness" and "efficiency" in reducing the aggregate poverty gaps for the total population and for tax units containing an employee. Formally, these concepts can be defined as:

$$Effectiveness = 100 \times \frac{Baseline\,Poverty\,Gap - Reform\,Poverty\,Gap}{Baseline\,Poverty\,Gap}$$

$$Efficiency = 100 \times \frac{Baseline\,Poverty\,Gap - Reform\,Poverty\,Gap}{Exchequer\,Cost}$$

They represent an adaptation of Beckerman's (1979) concepts to a consideration of changes at the margin. The levels of effectiveness and efficiency obviously depend on the level of the poverty line, but in the current context, it is the efficiency and effectiveness relative to other policies which is of greatest interest. The rankings of effectiveness and efficiency are quite robust with respect to the level of the poverty line, so results are presented here (Table 7) for the 60 per cent relative poverty line.

Table 7: Poverty Reduction Effectiveness and Efficiency of Alternative Policies at 60 Per Cent Relative Poverty Line

	Net Exchequer cost £m. p.a.	Effectiveness in reducing poverty gap for:		Efficiency in reducing poverty gap for:	
		overall population	"working poor"	overall population	"working poor"
Child Benefit increase (10%)	25	1.5	4.0	29.7	3.8
Child Benefit increase (54%) and made taxable	27	5.9	4.5	111.6	7.8
Child additions to income tax exemption limits	25	0.9	13.2	25.2	17.2
FIS 100% take-up	6	0.9	17.3	74.1	74.1
FIS 100% take-up and more generous	61	1.8	35.4	14.8	14.8

A 10 per cent increase in child benefit has a limited effect on overall poverty, and a very limited effect on poverty among tax units containing an employee. Only 4 per cent of the £25m expended in this way would go to "poor employees". A more substantial increase in

child benefit (of about 54 per cent), financed mainly by making the benefit taxable, would have a more significant impact on overall poverty. It would also be highly efficient in terms of poverty reduction, because gains would be heavily concentrated in the bottom half of the income distribution, and losses in the top half. In fact, the net reduction in the poverty gap would exceed the net exchequer cost of the change, leading to an "efficiency" figure of over 100 per cent. The level of the increase in child benefit would have been just sufficient to compensate standard rate taxpayers[5] for the inclusion of child benefit in the income tax base: their post-tax child benefit would be identical with its baseline level. As a result, the impact on "poor employees" would still be quite limited. A small number of low paid employees, with incomes just above the income tax exemption limit, would lose from the change. This is because "marginal relief" provisions limited tax liabilities to 60 per cent of the excess of earnings over the exemption limit. As a result, such tax units faced a marginal tax rate of 60 per cent, which would also apply to child benefit if it were made taxable.

The main thrust of actual policy developments has been rather different. Child additions to the tax exemption limits were introduced and then increased.[6] The table shows that this strategy is more efficient than others in terms of poverty reduction. But it has the effect of pushing the poverty trap for the working poor into a more densely populated part of the income distribution. It is neither as effective nor as efficient as the increased, taxable child benefit in terms of overall poverty reduction. A package which combined some elements of these two policies might be preferable to either one in isolation, in terms of overall impact on poverty and the effect on the "working poor". The impact of greater increases in child benefit, in combination with its being made taxable, would also be of interest.

Low take-up has been a continuing problem with FIS-type schemes in several countries. The take-up rate in Ireland seems to be particularly low. Callan, Nolan et al. (1989) estimated that less that between 13 and 22 per cent of those eligible actually received a payment, and that less than 40 per cent of the potential benefit was taken up. The present analysis shows that if the take-up rate could be increased to 100 per cent, the 1987 structure of FIS would have been highly efficient in terms of poverty reduction, with almost three-quarters of the £6m involved going to the reduction of the poverty gap, and quite effective in reducing poverty among the "working poor". It would not make a major contribution towards the overall reduction of poverty because, as has been shown earlier, the "working poor" form quite a small proportion of the total poor population.

A more generous FIS scheme, with higher set amounts, a higher proportion of the difference between set amounts and gross income payable, and no maximum payment was also analysed, again on the assumption of 100 per cent take-up. The distributional implications of this change require careful consideration. Only £1 in every £6 of the expenditure of £60m would go to the reduction of the poverty gap. A similar amount would be going to the same families as a "spillover", raising their incomes above the 60 per cent relative poverty line. Most of the remainder would go to families who were initially not far above the 60 per cent

[5] The standard rate of tax was 35 per cent in 1987, though it has since been reduced to 27 per cent.

[6] Since 1991, the levels have been £300 for the first two children, and £500 for subsequent children.

line.

A similar analysis can be applied to the National Minimum Wage proposal, in terms of its impact on household poverty. This shows that the total increase in net incomes (after tax and social insurance deductions) would be about £190m. Of this, 6.7 per cent would go to the reduction of the poverty gap. This would result in a reduction in the overall poverty gap of 2.8 per cent, and a reduction in the poverty gap for households containing an employee of 16.5 per cent. Thus, a national minimum wage, while quite effective for the working poor relative to the other approaches, is relatively inefficient as a means of reducing poverty. Alternative strategies for the reduction of poverty among workers with and without children would seem to be required.

6: CONCLUSIONS

Beveridge saw interruption or loss of earning power as the most important cause of Want, with failure to relate income when earning to family size as the second though less important element. This paper has shown first that "interruption" of earnings through unemployment is certainly the dominant cause of poverty in Ireland at present, but that up to about one-fifth of "poor" households do contain an employee, with up to about 15% headed by an employee. This conclusion follows from the application of relative income poverty lines, and remains true when life-stye/deprivation indicators are also used in measuring poverty status.

While most employees below conventional low pay thresholds are not in poor households - measured in terms of income or income plus direct indicators of deprivation - a majority of the employees in poor households are low paid. Most of the "working poor" - poor households headed by/containing an employee - contain children, though the Beveridge assumption that poverty affects those in work only where there are children is not entirely valid. While the first-round effects of a National Minimum Wage would assist up to half the "working poor", most of the gains would go to non-poor households. Tax/benefit strategies were simulated using a tax-benefit model. A substantial increase in universal Child Benefit, financed by making it taxable, would be highly efficient in targetting the poor and have a substantial impact on the overall poverty gap for all poor families, but would have a quite limited effect on the "working poor" (because their gains would mostly be taxed away). Child additions to income tax exemption limits, while relatively effective in reducing the poverty gap for the working poor, push the poverty trap into a more densely population part of the income distribution. If take-up of means-tested Family Income Supplement support for working families with children could be improved, it would be highly efficient and also quite effective in helping the "working poor" - begging the question of course as to how this might be achieved.

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