Income Distribution and Redistribution: Ireland in Comparative Perspective

TIM CALLAN & BRIAN NOLAN
Economic and Social Research Institute, Dublin

Introduction

Two views of the distribution and redistribution of income in Ireland may be discerned. The first sees Ireland as a particularly unequal society, with state policy doing little to counteract inequalities arising from market and property incomes; a view reflected in the recent synthesis of Breen et al. (1990). The second sees the Irish labour market as suffering from an excessively redistributionist policy which imposes high taxes on work and provides high replacement incomes to those not at work. In this paper we seek to shed some light on these contrasting views.

Our focus is broader in some respects, and narrower in others, than that adopted by proponents of these two different views. It is broader, in that it puts the Irish income distribution and the redistributive process firmly into an international comparative perspective; and that it pays particular attention to the debate on the effects of economic development on income distribution. As in most studies of income distribution, our focus is on the way in which incomes from the market are redistributed through direct and indirect taxes, cash transfers and non-cash benefits. Proponents of each of the views outlined above have also argued, in different ways, that state intervention affects the distribution of market incomes themselves; these wider effects of state intervention are outside the scope of the present paper.


1 Breen et al. argue that 'the benefits of Ireland's economic development have been very unevenly distributed' (1990: x) and that 'Despite the enormously bloated role of the state as an economic intermediary, it has been monumentally unsuccessful either in ensuring sustained economic growth or in moderating inegalitarian tendencies in the class system' (1990: 209).
We begin by briefly reviewing the debate on the relationship between economic development and inequality, noting in particular some of the more recent evidence. We then turn to the empirical evidence on the distribution and redistribution of income. Research in this area has been hampered by the lack of truly comparable cross-country data. A recent paper by O'Higgins, Schmaus and Stephenson (1989) has, however, provided a set of baseline measures of inequality based on the most comparable data now available: the micro-datasets assembled by the Luxembourg Income Study (LIS). We use data from the ESRI Survey of Income Distribution, Poverty and State Services to construct comparable measures of the distribution of cash incomes for Ireland. Since all but one of the countries considered by O'Higgins et al. is at a higher level of economic development than Ireland, we supplement this material with available statistics on other countries at similar or somewhat lower levels of real income. We also use the available LIS-based statistics on redistribution of cash incomes, together with some more detailed material for Ireland and the UK. As far as non-cash benefits are concerned, we concentrate primarily on the Irish and UK situations, for which comparable analyses based on household expenditure surveys are available. The implications of the differences in net income distributions for relative poverty are then explored. Finally, we draw together the main findings.

Economic Development and Income Distribution

Does the process of economic development itself have a major impact on the distribution of income? Or are international differences in income distribution to be explained mainly by factors other than the level of development? These questions have been the subject of considerable controversy. Here we review briefly the main lines of the literature on the relationship between development and income distribution, before assessing the current Irish income distribution in the light of differing theories.

The starting point for any review of this topic must be what has become known as the Kuznets hypothesis (Kuznets, 1955): that inequality increases as countries move from the lowest levels of development, but decreases in the later stages of development. The rationale for this 'inverted-U curve' is that at the lowest levels of development limited economic opportunities lead to low levels of inequality. As the process of development gets under way, economic opportunities are unevenly distributed (for example, between a subsistence and a market sector, and perhaps between regions within countries), leading to an increase in inequality. Later in the
development process economic opportunities become more widely spread (for example, as the subsistence sector shrinks and is absorbed into the market economy). This was the kernel of Kuznets' argument.

The Kuznets hypothesis has been subjected to extensive empirical investigation. Most studies have been based on cross-section comparisons of countries at different levels of development, and have been treated as broadly confirming the main thrust of the hypothesis. Some recent studies have, however, called these results into question. Here we summarise these early and later studies, before drawing out the implications for a study of the Irish income distribution.

Simple cross-sectional comparisons, such as that by Paukert (1973), were found to confirm the Kuznets hypothesis: on average, the Gini coefficient was about 0.42 for the least developed countries, rising to an average of 0.50 for a substantial group of developing countries, and falling to 0.40 or below for the most developed countries in Paukert's sample. Cross-sectional regression analyses which took into account some other influences on inequality (e.g., Ahluwalia, 1974, which focused in particular on the income share of the bottom 40 per cent of the population) were also found to support the hypothesis of an inverted-U relationship between development and inequality. Ahluwalia noted, however, that this should not be regarded as an 'iron law' of development.*

These empirical findings supporting the Kuznets hypothesis have recently been questioned on two main grounds. First, it has been argued that the inverted-U shape relationship estimated in cross-sectional regressions may be the product of an inappropriate functional form. Anand and Kanbur (1986) explored the relationship between inequality and development using a variety of functional forms, each of which would allow either a U-shaped or inverted-U shaped relationship, depending on the estimated parameters. For a subset of Ahluwalia's data for which the income concept provided a U-shaped relationship: inequality first falls and then rises with income.

The second challenge to the established view has come from the work of Fields and Jakobsen (1990). They use a data-set which includes repeated measurements of inequality for some countries, and their method of analysis allows for 'fixed effects' corresponding to each country; that is, there is a common relationship between inequality and development, but

---

* Adelman (1975) also noted that growth with an equitable distribution was possible and had occurred.

3 More formally, non-nested tests reject alternative specifications but cannot reject that giving rise to a U-shaped relationship.
it may be shifted up or down by a constant for each country. They find that the inverted-U shape does not hold if the data is analysed in this way: the relationship may be either U-shaped or monotonically decreasing with per capita income, depending on the measures of income used. When Fields and Jakobsen revert to the standard approach, treating the 'panel' data as a cross-section, it yields the familiar inverted U-shape. Fields and Jakobsen explain these cross-sectional findings as reflecting the fact that Latin American countries have high levels of inequality, but levels of income intermediate between those of Asia and the OECD. Their explanation for the change in shape is, however, less convincing:

A look at the underlying data shows the reason for the change in shape. For five of [six selected countries] . . . inequality fell and then rose. By contrast, in Brazil, we see the more familiar inverted-U shape. We would expect that a family of parallel curves fit to these six countries would also be U-shaped. But there are many other countries in the sample which show rising inequality as they move from low levels of development, some of which also show the inverted-U shape: the data do not provide as clear-cut an answer as the above quotation might suggest.

One thing which does emerge clearly from studies of the Kuznets hypothesis is the diversity of country experience. Countries at similar levels of development may have very different levels of inequality; countries which have similar levels of inequality may have very different levels of income; and countries starting from similar levels of development and with similar growth rates may experience increases or declines in measured inequality. Thus, the relationships estimated can only reflect a dominant experience and not a necessary one. (cf. Adelman and Morris, 1973; Ahluwalia, 1974).

While most of the empirical studies of the Kuznets hypothesis have included countries at high levels of development, their focus has typically been on what countries at low or middle levels of income, by world standards, can expect as the income distribution consequences of economic growth. Rather less attention has been paid to what may be expected at somewhat higher levels of development. How applicable is the basic Kuznets thesis to countries such as Ireland? Broadly speaking, small farming could be identified with the low-income sector in the Kuznets-type model. Given the proportion of population engaged in that sector in recent decades, Ireland might be expected to have experienced declines in

---

4 This result holds for either of the main functional forms (quadratic in levels of per capita income, or quadratic in logs of per capita income) examined by Anand and Kanbur.

5 Some have also re-estimated their results, excluding more developed countries.
inequality from the flow of population from small farming. Alternatively, one could view the broader farming sector as having relatively more unequal incomes, so shrinkage in this sector, even in a way which left a constant differential between farm and non-farm sectors, would also contribute to inequality reduction. In short, the secular decline in agriculture may be associated with declining inequality within the sector and/or between it and the non-farm sector. The empirical studies, with the exceptions noted above, suggest an inverted-U curve: Ireland's income per capita places it well above the turning point on such a relationship. Thus, countries somewhat below Ireland's level of development would be expected to have more inequality, while more advanced economies would be expected to have less inequality. If welfare state intervention is positively related to levels of per capita income, this would also suggest a similar pattern. Level of development is not, however, the only influence on the extent of welfare state intervention, which may therefore be regarded as an index for some independent influences. If Ireland's welfare state is more extensive than would be expected for its level of development, one would expect this to be reflected in income distribution statistics.

Income Distribution

Methodological considerations

Cross-country comparisons of income distribution are bedevilled by problems of comparability. Is the income recipient unit the individual or the household? Is household income adjusted for differences in the size of household, and if so, how? Is income measured before or after deduction of income taxes? Over what period is income measured? Published national studies rarely tally on all of these counts, making international comparisons extremely difficult. It was largely in order to circumvent such difficulties that a group of researchers began the collation of an international data-base, harmonised to the greatest extent possible in terms of variable definitions and coverage, known as the Luxembourg Income Study. In recent years, a number of analyses using these data have appeared, including a baseline study of income distribution by O'Higgins, Schmaus and Stephenson (1989).

O'Higgins et al. identify four major methodological issues for income

\[^6\] See the interchange between Geary (1973), O'Hagan and O'Higgins (1973) and Walsh (1974); and the paper by O'Connell and Rottman in this volume.
distribution studies. The first is the choice of income concept—gross as against net cash income, or as against ‘direct’ or ‘market’ income. Each of the income concepts tells us about different aspects of the income distribution: comparison of market incomes with gross incomes tells us about the impact of cash transfers, while comparison of gross with net incomes tells us about the impact of the tax system. Thus, each of these concepts will be examined.

The second methodological choice is whether the income of families of different sizes is to be compared directly, without adjustment, or is to be adjusted for size by some ‘equivalence scale’ intended to take differences in needs into account. Many national studies simply publish information on the distribution of family income without adjustment for size, but the distribution of income per equivalent adult is often thought to provide a better measure of the distribution of economic welfare. Both methods were applied in the LIS-based study and will be applied here. The equivalence scale used by O’Higgins et al. was 1 for the first household member, 0.5 for all others, and 6 for households of 10 or more.

Most studies assume complete income sharing within families. But a choice still arises between using the family or the individual as the unit of analysis. O’Higgins et al. refer to this as the choice of ‘weighting of income units’. Does each family count as one unit, or as N units, when there are N persons in the family? Each formulation has its merits. We may be interested in the distribution of equivalent income across families; but we may also be interested in how many people are affected by the differences in equivalent income, in which case an individual unit of analysis is preferable.

In general, income distribution analysis measures the distribution of a particular income concept over units ranked by that same income concept. But O’Higgins et al. note that it is possible to break this link. In particular, they note that it may be of interest to ask questions such as what percentage of total family income goes to the poorest 20 per cent of individuals ranked by total family income. This can be answered by

---

7 Broader income concepts might also take into account non-cash benefits or indirect taxes; but for the moment we concentrate on cash income concepts.

8 For example, a two-adult household can benefit from economies of scale in terms of housing, heating, and cooking, while a child’s needs would typically be less than those of an adult. This could be represented by an equivalence scale such as 1 for the first adult, 0.6 for other adults, and 0.4 for children.

9 Henceforth referred to as equivalent income—what the Institute for Fiscal Studies calls ‘equivalised’ income. It is arrived at by simply dividing total income by the number of ‘adult equivalents’ in the household.

10 In other words, the issue is to whether to attribute a weight of one for each family, or attribute a weight of one to each person.
analysing the distribution of per capita income over individuals ranked by total family income (without adjustment for size differences).

While in principle various combinations of choices regarding equivalence scale (including the possibility of no adjustment for size), unit of analysis, and rank ordering are possible, several of these can be ruled out as inconsistent. O’Higgins et al. concentrate on three combinations: the distribution of unadjusted family income over families ranked by unadjusted family income, the distribution of equivalent income over persons ranked by equivalent income, and the distribution of per capita income over persons ranked by family income.

Data

Details of the LIS data-set may be found in Smeeding and Schmaus (1990). Here we outline briefly some of the features most relevant to the present analysis. The surveys on which the data-set is based typically aimed at covering the population of private households, with the institutional population and the homeless being excluded. Further exclusions were made in Germany, where households headed by a foreigner were excluded; and in Israel, where rural inhabitants (living in settlements of fewer than 2,000 people) were excluded. Definitions of income sharing unit also varied. Some surveys had sufficient flexibility to be able to produce information both for households (defined by common living arrangements) and for families (persons related by blood, marriage or adoption). For Germany and Israel, information could only be analysed on a household basis but only 2.4 per cent of German and 2.2 per cent of Israeli households have multiple families. Sweden and Norway have data on families defined in a slightly narrower fashion: adult children are treated as independent units. The compromise chosen by O’Higgins et al. is to undertake comparisons on a broad family unit basis where possible, since this also ties in with the household definition for Germany and Israel in almost all cases. The narrower Swedish and Norwegian units pose a problem: it should be borne in mind that their income distributions would most likely be more equal in comparisons based on broad family units.

The Irish data for this comparison of income distributions are drawn from the Survey of Income Distribution, Poverty and Usage of State Services, undertaken by the ESRI in 1987. The coverage of the survey was very similar to that of the surveys providing the LIS data-base: private households were included, but institutions and homeless people were excluded. Less than one per cent of Irish households contained more than

---

11 One-person families are sometimes referred to as 'unrelated individuals'.

Table 1. GDP per capita in selected countries adjusted to a common purchasing power standard.

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Index of GDP per capita*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ireland</td>
<td>1985</td>
<td>46.4</td>
</tr>
<tr>
<td>Israel</td>
<td>1979</td>
<td>52.8</td>
</tr>
<tr>
<td>UK</td>
<td>1979</td>
<td>69.8</td>
</tr>
<tr>
<td>Sweden</td>
<td>1979</td>
<td>76.9</td>
</tr>
<tr>
<td>FRG</td>
<td>1981</td>
<td>84.6</td>
</tr>
<tr>
<td>Norway</td>
<td>1979</td>
<td>92.3</td>
</tr>
<tr>
<td>USA</td>
<td>1979</td>
<td>100.0</td>
</tr>
<tr>
<td>Canada</td>
<td>1981</td>
<td>100.4</td>
</tr>
</tbody>
</table>

* Percentage of US GDP per capita in 1979.

one family, in the sense of persons unrelated by blood or marriage, so that Irish households can be considered as closer than their German or Israeli counterparts to the core concept of family unit in the comparisons which follow. A detailed description of the survey is given in Callan et al. (1989). However, it is important to note that in the present paper we use an annual income measure for the first time, in line with the practice in the LIS dataset. This was constructed by using information on participation in the labour market and receipt of social security payments over the 12 months prior to the survey. It is also important to note that our annual income distributions are not directly comparable with those from earlier studies for Ireland, which are based on current income.

Empirical results

Our discussion of the Kuznets hypothesis cautioned against comparing Irish income distribution with that of other countries without taking into account differences in the level of development. Table 1, therefore, presents data on GDP per capita, adjusted to a common purchasing power standard and expressed as a percentage of US GDP per capita in 1979. It

12 For a significant number of cases, however, information was only available on a current basis. For such cases annual income is treated as the annual equivalent of current income. As a result, the estimated annual income distributions reported here may tend to be slightly more unequal than the true annual income distribution. Methods of improving the estimates are under investigation. Recorded income taxes and social insurance contributions were used when available: this constituted the majority of cases. But where such information was not recorded, procedures were developed to allocate the difference between recorded net and gross pay to income taxes and social insurance contributions.
is clear that a substantial gap exists between Ireland and Israel and the more advanced countries included.

Before comparing the distributions of income, we compare in Table 2 the average composition of gross and net income in Ireland with that in the countries covered by O'Higgins et al.

O'Higgins et al. emphasise the importance of the basic distinction between gross income arising from market activities (earnings from employment and self-employment, property income and occupational pensions) and that arising from other sources, predominantly state transfers. Their data show that market income accounts for more than 90 per cent of gross income in the US, Canada and Israel, leaving only a small role for transfers. In Sweden, on the other hand, transfers account for almost 30 per cent of gross income, with market income at just over 70 per cent. The UK, Germany and Norway form an intermediate group, with transfers accounting for between 15 and 20 per cent of gross income. Ireland also falls into this intermediate category, with transfers constituting 17 per cent of average gross income.

However, composition of market income and of state transfers in Ireland shows some interesting differences from the dominant patterns elsewhere. Ireland has the lowest share of wages and salaries in gross

---

**Table 2.** Composition of gross and net income: average value of income source/tax as percentage of average gross income.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages and salaries</td>
<td>75.7</td>
<td>75.8</td>
<td>72.0</td>
<td>63.1</td>
<td>64.5</td>
<td>69.9</td>
<td>66.1</td>
<td>61.9</td>
</tr>
<tr>
<td>Self-employment</td>
<td>5.4</td>
<td>6.7</td>
<td>4.5</td>
<td>16.7</td>
<td>3.7</td>
<td>11.1</td>
<td>16.8</td>
<td>15.2</td>
</tr>
<tr>
<td>Property</td>
<td>7.2</td>
<td>5.8</td>
<td>2.7</td>
<td>1.1</td>
<td>2.7</td>
<td>2.7</td>
<td>4.4</td>
<td>2.8</td>
</tr>
<tr>
<td><em>Factor Income</em></td>
<td>88.3</td>
<td>88.3</td>
<td>79.3</td>
<td>80.9</td>
<td>70.8</td>
<td>83.7</td>
<td>87.3</td>
<td>79.9</td>
</tr>
<tr>
<td>Occupational pension</td>
<td>1.8</td>
<td>2.6</td>
<td>2.5</td>
<td>2.3</td>
<td>0</td>
<td>1.2</td>
<td>3.4</td>
<td>2.9</td>
</tr>
<tr>
<td><em>Market Income</em></td>
<td>90.1</td>
<td>90.8</td>
<td>81.7</td>
<td>83.3</td>
<td>70.8</td>
<td>84.9</td>
<td>90.6</td>
<td>82.8</td>
</tr>
<tr>
<td>Child benefits</td>
<td>0.9</td>
<td>0.0</td>
<td>2.2</td>
<td>1.4</td>
<td>1.3</td>
<td>1.2</td>
<td>2.7</td>
<td>1.8</td>
</tr>
<tr>
<td>Means-tested benefits</td>
<td>1.4</td>
<td>1.3</td>
<td>2.1</td>
<td>0.6</td>
<td>4.4</td>
<td>0.3</td>
<td>0.4</td>
<td>5.7</td>
</tr>
<tr>
<td>Other cash benefits</td>
<td>6.7</td>
<td>6.8</td>
<td>12.9</td>
<td>14.5</td>
<td>23.6</td>
<td>12.7</td>
<td>5.3</td>
<td>9.5</td>
</tr>
<tr>
<td><em>Total cash benefits</em></td>
<td>9.1</td>
<td>8.0</td>
<td>17.2</td>
<td>16.5</td>
<td>29.2</td>
<td>14.1</td>
<td>8.3</td>
<td>17.0</td>
</tr>
<tr>
<td>Private transfers</td>
<td>0.0</td>
<td>0.6</td>
<td>1.0</td>
<td>0.2</td>
<td>0</td>
<td>0.8</td>
<td>1.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Other cash income</td>
<td>0.8</td>
<td>0.6</td>
<td>0.1</td>
<td>0.0</td>
<td>0</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td><em>Gross income</em></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Income tax</td>
<td>15.2</td>
<td>16.5</td>
<td>13.6</td>
<td>14.8</td>
<td>28.5</td>
<td>19.1</td>
<td>23.4</td>
<td>15.6</td>
</tr>
<tr>
<td>Employee payroll tax</td>
<td>0</td>
<td>4.5</td>
<td>3.3</td>
<td>7.7</td>
<td>1.2</td>
<td>6.2</td>
<td>5.3</td>
<td>3.7</td>
</tr>
<tr>
<td><em>Net Cash Income</em></td>
<td>84.8</td>
<td>79.0</td>
<td>83.1</td>
<td>77.5</td>
<td>70.2</td>
<td>74.7</td>
<td>71.3</td>
<td>80.7</td>
</tr>
</tbody>
</table>

income, but one of the highest shares of self-employment income: farm
income is obviously of particular importance in the Irish case.

Perhaps even more striking is that means-tested benefits are of much
greater importance in Ireland than elsewhere, at 5.7 per cent of gross
income, as against levels of no higher than about 2 per cent in almost all
other countries. The only exception is Sweden, but the high figure for
means-tested benefits there reflects the overall importance of transfers.
O'Higgins et al. note that the relative role of means-tested benefits in total
state transfers in Sweden is similar to that in the UK, the US and Canada.
Means-tested transfers in Ireland, on the other hand, account for over one-
third of total cash benefits, as against about one-eighth in Sweden, the UK,
the US, and Canada. Cyclical factors may play a role here. The Irish data
were collected in 1987, after several years of low or negative growth: rising
unemployment, and particularly long-term unemployment, would have led to
a rise in means-tested transfers over that period. Data for the other countries
were collected in 1979 or 1981, at the peak of the business cycle or early in
the downturn: means-tested transfers would certainly have played a much
greater role in the UK by 1987. Even allowing for this time difference, how-
ever, it seems likely that the figures also reflect more fundamental differences
in the structures of social security systems and income composition.

The balance between income taxes and social security contributions
differs considerably across countries. In discussing the role of taxation,
therefore, we concentrate on the size of the total direct tax take. This total
tax take in Ireland (income tax plus employee PRSI contributions) is, at
19.3 per cent, in the middle of the spectrum. Only Canada and the UK
have a lower direct tax take. Here again, though, we must note that
differences in the dates of the surveys may be important: the widespread
international trend towards reductions in income taxes in the 1980s could
be expected to alter at least some of the rankings.

One measure of the 'leverage' which government policy has on the
distribution of income is given by the sum of direct taxes and cash benefits
as a proportion of gross income. O'Higgins et al. found the highest 'impact
potential' on this measure in Sweden, at about 60 per cent, the lowest in
the US at about 30 per cent, while other countries returned figures of
between 35 and 40 per cent. Ireland also falls in this intermediate range,
at 36.3 per cent. Thus, both the Irish 'welfare effort' in terms of cash
transfers and its tax take are similar to those in countries at much higher
levels of development, such as the UK and Germany.13

13 The time difference between the Irish data and that of other countries may play some role
in the precise rankings, but it is clear that Ireland's welfare effort places it in the intermediate
group. The paper by O'Connell and Rottman in this volume finds that the Irish welfare effort is
exceptionally high, and investigates why this is so.
Turning now to income distributions, we show in Table 3 distributions over families. The Gini coefficients suggest that Ireland is the second most unequal country, after Germany. This is not because of a particularly low share going to the bottom quintile: the Irish figures for the shares of both gross and net income going to the bottom quintile are not very different from those of several of the other countries. The source of the inequality lies instead in low shares for the second and third quintiles, together with an exceptionally high share for the top quintile.

But does this apparently high inequality simply reflect differences between household sizes in Ireland and elsewhere? Suppose two countries have precisely the same distribution of incomes over individuals but, in one country, all individuals live in two-person households, while, in the other, some live in one- two- or three-person households. Measures of inequality on a household basis will then show the latter country as more unequal. It is of considerable interest, therefore, to move, as in Table 4, to an individual level of analysis, using income per equivalent adult for each person.

The Irish distributions still rank among the most unequal. The share of net equivalent income going to the bottom quintile of persons in Ireland is the second lowest, although close to that observed in Israel, Germany and Canada. The share of this income going to the top quintile of persons is, however, greater than in all countries except Germany. The Gini coefficient also suggests that Ireland ranks as the second most unequal country. Part of this may have to do with macroeconomic conditions: one might expect the increase in Irish unemployment over the 1980s to have

Table 3. Distribution (%) of gross and net income over families.

<table>
<thead>
<tr>
<th>Quintile</th>
<th>Canada</th>
<th>US</th>
<th>UK</th>
<th>FRG</th>
<th>Sweden</th>
<th>Norway</th>
<th>Israel</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lowest</td>
<td>4.6</td>
<td>3.8</td>
<td>4.9</td>
<td>4.4</td>
<td>6.6</td>
<td>4.9</td>
<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Second</td>
<td>11.0</td>
<td>9.8</td>
<td>10.9</td>
<td>10.2</td>
<td>12.3</td>
<td>11.4</td>
<td>10.5</td>
<td>9.2</td>
</tr>
<tr>
<td>Third</td>
<td>17.7</td>
<td>16.6</td>
<td>18.2</td>
<td>15.9</td>
<td>17.2</td>
<td>18.4</td>
<td>16.5</td>
<td>15.6</td>
</tr>
<tr>
<td>Fourth</td>
<td>25.3</td>
<td>25.3</td>
<td>25.3</td>
<td>22.6</td>
<td>25.0</td>
<td>25.5</td>
<td>24.9</td>
<td>24.2</td>
</tr>
<tr>
<td>Top</td>
<td>41.4</td>
<td>44.5</td>
<td>40.8</td>
<td>46.9</td>
<td>38.9</td>
<td>39.8</td>
<td>43.6</td>
<td>46.6</td>
</tr>
<tr>
<td>Gini coefficient</td>
<td>37.4</td>
<td>41.2</td>
<td>36.5</td>
<td>42.9</td>
<td>32.9</td>
<td>35.6</td>
<td>39.5</td>
<td>42.4</td>
</tr>
</tbody>
</table>

| Net      |        |    |    |     |        |        |        |         |
| Lowest   | 5.3    | 4.5| 5.8| 5.0 | 8.0    | 6.3    | 6.0    | 5.5     |
| Second   | 11.8   | 11.2| 11.5| 11.5| 13.2   | 12.8   | 12.1   | 10.8    |
| Third    | 18.1   | 17.7| 18.2| 15.9| 17.4   | 18.9   | 17.9   | 16.4    |
| Fourth   | 24.6   | 25.6| 25.0| 21.8| 24.5   | 25.3   | 24.5   | 24.0    |
| Top      | 39.7   | 41.0| 39.5| 45.8| 36.9   | 36.7   | 39.5   | 43.4    |
| Gini coefficient | 34.8 | 37.0| 34.3| 40.9| 29.2   | 31.1   | 33.8   | 38.1    |

Sources: As for Table 1.
Table 4. Distribution (%) of equivalent gross and net income over individuals.

<table>
<thead>
<tr>
<th>Quintile</th>
<th>Canada</th>
<th>US</th>
<th>UK</th>
<th>FRG</th>
<th>Sweden</th>
<th>Norway</th>
<th>Israel</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equivalent gross</td>
<td>Lowest</td>
<td>6.7</td>
<td>5.1</td>
<td>7.9</td>
<td>7.2</td>
<td>9.4</td>
<td>8.1</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td>Second</td>
<td>12.6</td>
<td>11.4</td>
<td>13.0</td>
<td>12.1</td>
<td>14.6</td>
<td>13.6</td>
<td>10.3</td>
</tr>
<tr>
<td></td>
<td>Third</td>
<td>17.5</td>
<td>17.1</td>
<td>17.9</td>
<td>16.0</td>
<td>18.5</td>
<td>17.9</td>
<td>15.9</td>
</tr>
<tr>
<td></td>
<td>Fourth</td>
<td>24.0</td>
<td>24.2</td>
<td>23.7</td>
<td>21.3</td>
<td>23.3</td>
<td>23.4</td>
<td>23.7</td>
</tr>
<tr>
<td></td>
<td>Top</td>
<td>39.2</td>
<td>42.1</td>
<td>37.5</td>
<td>43.4</td>
<td>34.3</td>
<td>37.0</td>
<td>44.0</td>
</tr>
<tr>
<td>Gini coefficient</td>
<td>32.7</td>
<td>37.1</td>
<td>29.7</td>
<td>36.3</td>
<td>24.9</td>
<td>28.9</td>
<td>38.2</td>
<td>38.3</td>
</tr>
</tbody>
</table>

| Equivalent net | Lowest | 7.6 | 6.1 | 9.0 | 7.5 | 10.6 | 9.9 | 7.5 | 7.4 |
|                | Second | 13.3 | 12.8 | 13.5 | 12.7 | 16.1 | 14.8 | 11.7 | 12.1 |
|                | Third  | 17.9 | 18.1 | 18.0 | 16.1 | 19.1 | 18.4 | 16.8 | 16.5 |
|                | Fourth | 23.8 | 24.4 | 23.4 | 20.7 | 23.1 | 22.9 | 23.7 | 22.7 |
|                | Top    | 37.4 | 38.6 | 36.1 | 43.0 | 31.1 | 34.1 | 40.3 | 41.7 |
| Gini coefficient | 29.9 | 32.6 | 27.3 | 35.5 | 20.5 | 24.3 | 33.3 | 34.1 |

Sources: As for Table 1.

Increased income inequality, so that in a comparison with other countries based on 1980 data Ireland might appear less unequal. Some limitations of our estimates of 12 month income should also be noted: annualised current income is used for a significant proportion of cases. This might tend to overstate inequality, though the difference between annualised current and 12 month income may be small for most of the individuals involved.

In the context of a concern with the relationship between income distribution and levels of development, however, perhaps the most striking feature of Table 4 is that the distribution of equivalent income over persons in Ireland and Israel is very similar. The distributions of unadjusted income were quite different, but in Table 4 the quintile shares of gross income do not differ by more than one percentage point, leading to almost identical Gini coefficients, and the quintile shares of net income are also very close, leading to Gini coefficients which diverge by just one percentage point.

O'Higgins et al. suggest that the Kuznets hypothesis may help to

---

14 But to some extent Irish macroeconomic performance diverged from world trends during the 1980s: the recovery, particularly as regards employment, was more sluggish at least until 1987. Thus, results of a comparison based on 1987 data for all countries might be intermediate between the present ones and those based on a 1980 comparison. An alternative concept of standardisation would be to average over the 'business cycle' influences at national level. Time lags in the transmission of cyclical influences across countries may make this concept different from calendar time standardisation.

15 The exclusion of rural inhabitants from the Israeli survey has already been noted; if they were included, one might expect to find the Israeli distribution slightly more unequal than Ireland's rather than, as in the Table, slightly less unequal.
explain the relatively high inequality in Israel. In terms of income composition, the proximate causes for high inequality in that country are the greater role and more unequal distribution of self-employment income, and the lack of a strong role for cash transfers. This is offset, however, by the strong role for income taxes, which account for almost 30 per cent of gross income. The relative importance of cash transfers and income taxes are reversed in Ireland, but self-employment income plays a similar role and the outcomes in terms of equivalent income per person are also similar.

The similarities between Ireland and Israel, and the differences between them and more advanced countries, suggest that a broader comparison, using more countries at or below the Irish level of development, would be of interest. Unfortunately, the availability of data for such countries is quite restricted, and the comparability of income distribution

<table>
<thead>
<tr>
<th>Country and year</th>
<th>Real GDP per head</th>
<th>Gini coefficient</th>
<th>Quintile shares (where available)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil 1983</td>
<td>3075</td>
<td>0.57</td>
<td>2.4 5.7 10.7 18.6 62.6</td>
</tr>
<tr>
<td>Taiwan 1985</td>
<td>3581</td>
<td>0.27</td>
<td></td>
</tr>
<tr>
<td>Malaysia 1987b</td>
<td>3636</td>
<td>0.48</td>
<td>4.6 9.3 13.9 21.2 51.2</td>
</tr>
<tr>
<td>Singapore 1972/3</td>
<td>3680</td>
<td>0.40</td>
<td></td>
</tr>
<tr>
<td>Hong Kong 1971</td>
<td>3731</td>
<td>0.43</td>
<td></td>
</tr>
<tr>
<td>Mexico 1977</td>
<td>3768</td>
<td>0.50</td>
<td></td>
</tr>
<tr>
<td>Chile 1971</td>
<td>3845</td>
<td>0.46</td>
<td></td>
</tr>
<tr>
<td>Singapore 1978/9</td>
<td>4820</td>
<td>0.37</td>
<td></td>
</tr>
<tr>
<td>Hong Kong 1976</td>
<td>5216</td>
<td>0.43</td>
<td></td>
</tr>
<tr>
<td>Ireland 1987c</td>
<td>5389</td>
<td>0.38</td>
<td>5.5 10.8 16.4 24.0 43.4</td>
</tr>
<tr>
<td>Trinidad and Tobago 1975/6</td>
<td>5775</td>
<td>0.47</td>
<td></td>
</tr>
<tr>
<td>Israel 1979</td>
<td>6124</td>
<td>0.34</td>
<td>6.0 12.1 17.9 24.5 39.5</td>
</tr>
<tr>
<td>Spain 1980/1</td>
<td>6134</td>
<td>n.a.</td>
<td>6.9 12.5 17.3 23.2 40.0</td>
</tr>
<tr>
<td>Singapore 1982/3</td>
<td>6836</td>
<td>0.42</td>
<td>5.1 9.9 14.6 21.4 48.9</td>
</tr>
<tr>
<td>Hong Kong 1981</td>
<td>7751</td>
<td>0.45</td>
<td>5.4 10.8 15.2 21.6 47.0</td>
</tr>
<tr>
<td>UK 1979</td>
<td>8094</td>
<td>0.34</td>
<td>5.8 11.5 18.2 25.0 39.5</td>
</tr>
<tr>
<td>Sweden 1981</td>
<td>8916</td>
<td>0.29</td>
<td>8.0 13.2 17.4 24.5 36.9</td>
</tr>
<tr>
<td>FRG 1981</td>
<td>9820</td>
<td>0.41</td>
<td>5.0 11.5 15.9 21.8 45.8</td>
</tr>
<tr>
<td>Norway 1979</td>
<td>10708</td>
<td>0.31</td>
<td>6.3 12.8 18.9 25.3 36.7</td>
</tr>
<tr>
<td>USA 1979</td>
<td>11602</td>
<td>0.37</td>
<td>4.5 11.2 17.7 25.6 41.0</td>
</tr>
<tr>
<td>Canada 1981</td>
<td>11650</td>
<td>0.35</td>
<td>5.3 11.8 18.1 24.6 39.7</td>
</tr>
</tbody>
</table>

*From Summers and Heston (1988).

b Distribution of unadjusted household income over households, except for Malaysia (per capita income over households); real GDP per capita refers to 1985.

c The latest available Summers and Heston estimate of real GDP for 1985 has been updated by national accounts measure of growth in GDP to 1987.

figures cannot be assured to anything like the degree possible with the LIS data. We have drawn on a number of sources, however, to compile Table 5, which presents data on real GDP per capita (adjusted to a common purchasing power standard) and on income distribution measures.

The table strikingly illustrates the diversity of country experience referred to earlier. For example, Taiwan’s Gini coefficient of 0.27 can be compared with figures of 0.50 or above for its near neighbours in the income league. The earlier detailed comparisons can also be seen as cautioning against over-interpretation of small differences between the distributions in this table: we have seen that the difference between the Irish and Israeli distributions vanishes if the income concept is changed to reflect the distribution of equivalent income over persons. The literature on the Kuznets hypothesis would suggest that over the income range of the countries in Table 5, inequality would decline with increases in GDP per capita. While there is considerable individual variation, it is true that, on average, inequality is greater for countries at or below the Irish level of development than for those above it. The average Gini coefficient for countries below the Irish level is 0.43, or 0.46 excluding Taiwan; for those above, it is 0.37, or 0.35 for those at or above the UK level of GDP per head. On this basis, it would be difficult to argue that the Irish distribution is particularly unequal for its level of development: if anything, it appears slightly more equal than one might expect.

---

**Figure 1.** Income inequality (Gini), income level and rate of cash transfers.
We noted earlier that the extent of welfare state intervention could be seen as an influence on income distribution which is somewhat independent of level of development. It is possible to illustrate this point for Ireland and the countries in the LIS data-set. Figure 1 uses cash transfers as the single most important index of welfare state intervention and real GDP per capita as the index of development. The position of different countries is plotted in this space, and the Gini coefficient for the distribution of net equivalent incomes per person is indicated.

If income inequality declined continuously with GDP per capita and with increases in cash transfers, we might expect smooth 'iso-inequality' contours. Alternatively, these effects might be somewhat discontinuous, in which case a division of the type illustrated into regions of high/low income and high/low rates of cash transfers could be more helpful. In this latter case low income inequality would be expected in the top right hand quadrant, high income inequality in the bottom left-hand quadrant, and moderate income inequality in the other two quadrants. The pattern shown conforms to these expectations in some respects, but Israel and Germany are exceptions, for different reasons.  

Income Redistribution

Redistribution through cash benefits and income taxes

Thus far, analysis of each income concept (net or gross income) has been on the basis of persons or families ranked by that income concept. This is appropriate in making comparisons of the level of inequality at particular stages in the redistribution process. But in order to examine that process itself, an analysis on the basis of a single ranking is also of interest. We need to ask, for example: what is the share of factor income, gross income and net income for the bottom or top 20 per cent of persons ranked by

\[16\] The particularly high (and progressive) direct tax take in Israel can be seen as reducing its inequality more than its rather low rate of cash transfers would suggest: the other country with a particularly high tax take is Sweden, where the combination of high transfers and high taxes leads to the lowest inequality, despite other countries having higher levels of GDP per head. But the most puzzling anomaly is the case of Germany which has a Gini coefficient well above that of other countries with similar levels of development and cash transfers. The analysis of the redistribution process which follows will show that this arises from an exceptionally skewed distribution of factor incomes, rather than from an ineffective redistribution by transfers and taxes; but the underlying causes of this phenomenon lie outside the scope of the present paper.
Table 6. Distribution and redistribution of income: income shares (%) of quintiles of persons ranked by family gross income.

<table>
<thead>
<tr>
<th>Quintile</th>
<th>Canada</th>
<th>US</th>
<th>UK</th>
<th>FRG</th>
<th>Sweden</th>
<th>Norway</th>
<th>Israel</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lowest</td>
<td>5.4</td>
<td>4.2</td>
<td>4.0</td>
<td>2.3</td>
<td>6.5</td>
<td>4.4</td>
<td>4.9</td>
<td>2.2</td>
</tr>
<tr>
<td>Second</td>
<td>14.9</td>
<td>12.8</td>
<td>15.0</td>
<td>13.8</td>
<td>18.5</td>
<td>17.0</td>
<td>11.6</td>
<td>8.7</td>
</tr>
<tr>
<td>Third</td>
<td>19.2</td>
<td>19.2</td>
<td>19.9</td>
<td>17.1</td>
<td>18.8</td>
<td>19.6</td>
<td>16.0</td>
<td>16.6</td>
</tr>
<tr>
<td>Fourth</td>
<td>24.5</td>
<td>25.1</td>
<td>24.9</td>
<td>22.0</td>
<td>23.0</td>
<td>24.2</td>
<td>24.3</td>
<td>25.2</td>
</tr>
<tr>
<td>Top</td>
<td>36.0</td>
<td>38.8</td>
<td>36.3</td>
<td>44.7</td>
<td>33.2</td>
<td>34.9</td>
<td>43.2</td>
<td>47.7</td>
</tr>
<tr>
<td>Gross income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lowest</td>
<td>9.5</td>
<td>7.5</td>
<td>10.9</td>
<td>10.7</td>
<td>13.7</td>
<td>12.0</td>
<td>9.3</td>
<td>9.2</td>
</tr>
<tr>
<td>Second</td>
<td>15.6</td>
<td>14.3</td>
<td>15.6</td>
<td>14.7</td>
<td>20.5</td>
<td>17.8</td>
<td>12.5</td>
<td>11.6</td>
</tr>
<tr>
<td>Third</td>
<td>18.7</td>
<td>18.8</td>
<td>18.7</td>
<td>16.2</td>
<td>18.6</td>
<td>18.4</td>
<td>15.8</td>
<td>16.5</td>
</tr>
<tr>
<td>Fourth</td>
<td>23.0</td>
<td>23.6</td>
<td>22.0</td>
<td>20.1</td>
<td>20.1</td>
<td>21.6</td>
<td>22.7</td>
<td>22.9</td>
</tr>
<tr>
<td>Top</td>
<td>33.2</td>
<td>35.9</td>
<td>31.9</td>
<td>38.2</td>
<td>27.1</td>
<td>30.3</td>
<td>39.8</td>
<td>40.2</td>
</tr>
<tr>
<td>Net income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lowest</td>
<td>10.8</td>
<td>9.0</td>
<td>12.4</td>
<td>13.1</td>
<td>16.4</td>
<td>14.7</td>
<td>12.0</td>
<td>11.2</td>
</tr>
<tr>
<td>Second</td>
<td>16.4</td>
<td>15.9</td>
<td>15.9</td>
<td>15.3</td>
<td>21.2</td>
<td>18.6</td>
<td>14.1</td>
<td>13.1</td>
</tr>
<tr>
<td>Third</td>
<td>18.8</td>
<td>19.5</td>
<td>18.6</td>
<td>16.0</td>
<td>18.3</td>
<td>18.6</td>
<td>16.8</td>
<td>16.9</td>
</tr>
<tr>
<td>Fourth</td>
<td>22.6</td>
<td>23.6</td>
<td>22.4</td>
<td>19.3</td>
<td>19.9</td>
<td>21.0</td>
<td>22.1</td>
<td>22.3</td>
</tr>
<tr>
<td>Top</td>
<td>31.4</td>
<td>32.0</td>
<td>30.6</td>
<td>36.2</td>
<td>24.2</td>
<td>27.2</td>
<td>35.0</td>
<td>36.8</td>
</tr>
</tbody>
</table>

gross income?  

This is the perspective adopted by O'Higgins et al.; so in order to compare Ireland's redistributive process with that of the other countries, the same perspective is adopted here, with results as reported in Table 6.

Since the data have been ranked by gross income in all cases, the distributions over other income concepts are 'hybrids': the main interest is in changes in the shares of different income concepts going to the income quintiles ranked by gross income. The change which cash transfers brings about to the share of the bottom quintile is of particular interest. Here we find increases of 7 or 8 percentage points in the UK, Sweden, Norway and Germany; Ireland also falls in this group, with an increase of 7 percentage points. In the US, Canada and Israel, by contrast, the share of the bottom quintile rises by just 3 to 4 percentage points. The proportionate

17 The ranking by gross income also differs from those presented earlier: the present analysis deals with the share of aggregate family income going to successive quintiles of persons ranked by total family income.
18 Other perspectives on the redistribution process would also be of interest. For example, Gini coefficients for re-ranked distributions of market and gross income would help to show the role of cash transfers in different countries; this information is not available from O'Higgins et al., though it could in principle be obtained from direct analysis of the LIS data-sets. Comparisons of this type are presented for Ireland and the UK later in this paper, though not based on LIS data.
19 An initial distribution of market incomes would be preferable for this analysis; but it is clear that the dominant role in changes between factor and gross incomes is played by cash transfers rather than occupational pensions.
increase in the share of the bottom quintile is greatest by far in Germany and Ireland, where the distribution of factor incomes appears most unequal; the lowest proportionate increases are again in Israel, the US and Canada. Cash benefits in Ireland also have a relatively high impact on the share of the second quintile: the increase of almost 3 percentage points in their share is greater in absolute and proportionate terms than elsewhere. The shift from factor to cash incomes also sees a higher percentage point drop in the share of the top decile in Ireland than in the other countries.

The changes caused by direct taxes are more modest in all countries. In Ireland, the share of the bottom quintile rises by a further two percentage points, as against 2.4 to 2.7 percentage points in Germany, Sweden, Norway and Israel, but 1.5 percentage points or less in Canada, the US and the UK. The proportionate rise in Ireland is, however, about as high as in any other country.

Overall, then, it appears that cash transfers and direct taxes have at least as large an impact in Ireland as elsewhere. The fact that net incomes are distributed somewhat more unequally in Ireland than elsewhere reflects a high level of inequality in factor incomes—the dominant component of market incomes in all countries.20

Redistribution through non-cash benefits and indirect taxes

In addition to income tax and social insurance contributions and social welfare cash transfers, the well-being of households at different points in the income distribution is affected by indirect taxes and services provided in free or subsidised form by the state. An evaluation of the impact of such taxes and non-cash benefits is therefore necessary if the full redistributive effects of state policy are to be seen. Unfortunately, attempting such an evaluation poses major methodological problems, and comparative data across countries in this area are rather scarce. Here our limited objective is briefly to describe the way in which indirect taxes and non-cash benefits in Ireland are structured, to set out what is known about their redistributive effects, and to add what can be said to provide a comparative perspective.

In doing so, we draw on the exercises carried out by the CSO on the basis of the 1973 and 1980 Household Budget Surveys (CSO, 1980; 1983), and studies based on these exercises by Nolan (1981), O'Connell (1982a), Murphy (1984) and Rottman and Reidy (1988). (A more up-to-date analysis by the CSO, based on the 1987 Household Budget Survey, is to be published shortly but no results are currently available.) These exercises

20 Only Germany shows a similar level of inequality in factor incomes, as noted earlier.
follow the conventional methodology adopted in studies of fiscal incidence by the UK CSO and other agencies. The limitations of this approach and the care with which results are to be interpreted are discussed at length both in the Irish studies mentioned, and in, for example, Meerman (1978), Bird (1980), O'Higgins (1980) and O'Higgins and Ruggles (1981). Not all taxes and expenditures are included in the analysis, the cost rather than the benefits of services provided by the State are allocated, and, perhaps most crucially, both taxes and benefits themselves influence the distribution of market income. The observed distributions of gross and net incomes reflect that influence. Further, the distribution of factor incomes used in the analysis is constructed by simply adding and subtracting income transfers. This constructed distribution does not, therefore, represent what the distribution of factor incomes would be in the absence of taxes and benefits. The exercises thus aim to show flows of taxes and benefits to and from particular groups of households in a given year, rather than their impact on the distribution in any more fundamental sense.

It is also important to note that using this data-base means that income now largely refers to that received in the last week, rather than the (estimated) annual income employed in our analysis of distribution and redistribution in cash terms. (For the self-employed, though, income over the previous twelve months is generally used in the HBS as the basis for current income.) We deal first with indirect taxes, then with non-cash benefits, and finally with the combined effects of both and the overall redistributive impact of taxes and benefits together.

**Indirect taxes**

Taxes on goods and services are a particularly important source of government revenue in Ireland. Currently they account for about half of all tax revenue for budgetary purposes, or about 42 per cent of all revenue including contributions to the Social Insurance Fund. This is well above the average for the OECD countries, which is 30 per cent of total revenue (including social insurance), or the UK share which is 31 per cent (OECD, 1990: Table 25). Taxes on goods and services account for about 17 per cent of GDP in the Irish case, well above the OECD average and the UK figure, both of which are 12 per cent (OECD, 1990: Table 24). About half the receipts from such taxes in Ireland are raised through Value Added Tax, and most of the remainder is from excise duties, particularly on alcohol, tobacco, motor vehicles and oil. An important feature of the Irish VAT system in a redistributional context is that food and children’s clothing are zero rated.

The analysis of distribution carried out by the CSO using the 1980 Household
Budget Survey allocated VAT, fiscal duties, motor tax and local water charges among households in the sample. Each household's VAT and fiscal duty was estimated by applying the appropriate tax rates to the reported expenditure on different items. This, the conventionally adopted approach, involves the assumption that the incidence of indirect taxes falls entirely on the consumer.

The CSO study showed that, when households were classified by income range, indirect tax paid was generally a higher proportion of income at low than at high incomes. Such a comparison takes no account of the fact that households of different composition are not evenly spread throughout the distribution. The published data also showed, though, that indirect tax as a proportion of income was low at higher incomes for households of each main composition type, classified by market income (CSO, 1983: Tables 4A and 4M). Murphy, presenting a detailed analysis of the CSO results, used equivalent market and disposable income and calculated two frequently used progressivity indices, the Kakwani and Suits measures, for indirect taxes as a whole and for the main constituents. These indicated that total indirect taxes and each main element were regressive (1984: Tables 23 and 24).

This conforms to the pattern generally found elsewhere. The data available allow few direct comparisons, however, so it is difficult to assess the degree of regressivity in comparative terms. Suits indices for sales and excise taxes in the US (for 1966 and 1970) were similar to the results reported for Ireland in 1973 by Nolan (1981). The variation in indirect taxes as a proportion of income over the UK income distribution, as shown in the UK CSO’s redistributive studies and in O'Higgins and Ruggles (1981), also reveals the same general pattern as in the Irish data.

More generally, the overall redistributive impact of direct and indirect taxes taken together appears to be quite limited in Ireland, which is also the case for a number of other developed countries. Saunders and Klau (1985), in their review of studies of the redistributive effects of taxes and benefits in OECD countries, concluded that for almost all countries covered the tax system had relatively minor effects on the income distribution. This was a result of progressive income tax being largely neutralised by the impact of regressive social security contributions and indirect taxes. For Ireland, this is very much the pattern revealed by Murphy's results (1984: Table 24): compared to either cash or non-cash

---

21 See CSO (1983: Table J, p. xxi, Table 1, pp. 2–3, Table 10, pp. 46–47). This was the case whether market, gross or disposable income was employed.

22 Sweden was identified as an exception to this general pattern, where a markedly progressive income tax means that taxes do affect the distribution.
benefits, taxes as a whole had little impact on the distribution. While the incidence assumptions underlying such exercises may be open to question, it is worth noting Saunders and Klau's conclusion that the broad pattern of the results internationally was not unduly sensitive to changes in these assumptions.

**Non-cash benefits**

The structure and delivery of publicly-provided services in the health, education, housing and transport areas, and their redistributive effects, have been analysed in detail in Rottman and Reidy (1988), again based on the CSO's exercises using the 1973 and 1980 Household Budget Surveys. Only the briefest outline of these structures can be given here. Entitlement to publicly provided health services is determined on the basis of income, with about 38 per cent of the population eligible for the entire range of services free of charge, about 47 per cent entitled mainly to hospital services, and the top 15 per cent entitled to hospital accommodation but liable for consultants' fees. Given this differential pattern of entitlements over the income distribution, and the fact that services will be heavily utilised by groups concentrated in particular parts of the distribution (notably the elderly), the potential for a substantial redistributive impact is clear. In education, all children are entitled to free primary and secondary education, but those not availing of it still benefit through state spending on fee-paying schools. State spending on third-level education also heavily subsidises those receiving it, fees paid being well below the cost of provision. As Rottman and Reidy put it, the redistributive impact of educational spending is primarily a function of class-specific 'take-up' rates of education beyond the legal minimum age, and the cost per student to the state at each level. Expenditure on health and education account for most of public social expenditure, excluding cash transfers, but the much smaller amounts going on subsidies to local authority housing and public transport are also included in the redistributional analyses.

The CSO exercises allocate the 'benefit' of state social spending on the basis of reported or estimated utilisation patterns and the cost of providing the service in question. Thus, households containing a pupil in primary school will be attributed benefit amounting to the cost per student to the

---

23 It is worth noting, though, that whereas for 1973 social security contributions were seen to be regressive (as in Nolan and O'Connell's results), in 1980 Murphy shows that they were mildly progressive.

24 Since 1987, the second and third categories are also liable for charges of £10 per night spent in hospital, and for attendance at outpatient clinics. A full description of the system of entitlements etc., as it applied in 1980, is given in Rottman and Reidy (1988: ch. 3).
state of providing that level of education. This follows the conventional methodology adopted by, for example, the UK CSO; no attempt is made to measure the value to the recipient of the service received. While some studies, mostly in the US (see, for example, Smeeding, 1982), have explored various approaches to evaluating utility in this context, as yet these have not been widely applied. The more common method simply seeks to allocate the value of the resources used in providing the service.

The CSO's results for 1980 show public expenditure on health being relatively evenly spread over the (disposable) income distribution in absolute terms. In proportion to their incomes, then, lower income groups gain considerably more. Education 'benefit', on the other hand, rises as household income rises, but as a proportion of income is highest for those in the middle of the distribution rather than at either tail.\(^{25}\) Clearly, though, the amounts attributed to particular households are crucially dependent on their composition, and looking at households ranked by equivalent rather than unadjusted incomes is of particular interest. Table 7 shows the distribution of health, education, 'other', and total allocated non-cash benefits by equivalent disposable income quintile, derived for 1980 by Rottman and Reidy (1988).

Health expenditure goes disproportionately towards lower income households: 50 per cent of spending goes to the bottom 40 per cent of households ranked by equivalent income. This reflects both the extra entitlements of those towards the bottom and the over-representation of the elderly in the middle and bottom rather than towards the top of the distribution. Education spending in aggregate also goes more to the bottom and middle of the distribution than the top—the top 20 per cent of households receive only 12 per cent of expenditure. However, this aggregate is made up of quite disparate patterns for different levels of education. Primary and secondary education spending go disproportionately to bottom and middle income groups, while third level, and especially university, spending go more to upper income groups (cf. Rottman and Reidy, 1988: Table 4.6). With the much smaller sums allocated for housing, transport and other subsidies also going more towards lower than higher income groups, the total of allocated spending is seen to benefit low-income groups quite substantially relative to their share of disposable income. The bottom 20 per cent of households received 24 per cent of these benefits, whereas the top 20 per cent received only 13 per cent.

\(^{25}\) See CSO (1983), Tables 10 and 11—these conclusions apply whether direct, gross or disposable income is used to classify households.
Table 7. Distribution (%) of non-cash benefits by household equivalent income quintile, Ireland 1980.

<table>
<thead>
<tr>
<th>Quintile</th>
<th>Health</th>
<th>Education</th>
<th>Other[^a]</th>
<th>Total non-cash benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest</td>
<td>25.4</td>
<td>21.6</td>
<td>24.9</td>
<td>23.8</td>
</tr>
<tr>
<td>Second</td>
<td>24.6</td>
<td>23.1</td>
<td>21.9</td>
<td>23.5</td>
</tr>
<tr>
<td>Third</td>
<td>19.8</td>
<td>23.7</td>
<td>18.8</td>
<td>21.3</td>
</tr>
<tr>
<td>Fourth</td>
<td>17.3</td>
<td>19.2</td>
<td>18.0</td>
<td>18.2</td>
</tr>
<tr>
<td>Top</td>
<td>12.9</td>
<td>12.1</td>
<td>16.5</td>
<td>13.2</td>
</tr>
<tr>
<td>All</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

[^a] Housing, transportation and other subsidies.

Source: Rottman and Reidy (1988: Tables 3.7 and 4.6 and Appendix Table 7.2).

The impact of cash transfers, taxes and non-cash benefits on the income distribution

Given the profile of indirect taxes and non-cash benefits, what impact does this have on the level of inequality in the income distribution? The customary approach to assessing this impact is simply to take each household’s disposable income, subtract the indirect taxes and add the non-cash benefits attributed to that household, and thus derive what is usually termed ‘final’ income. This clearly represents a construct quite different in nature to disposable income itself. Whereas disposable income measures the resources available to the household for consumption, non-cash benefits do not represent generalised purchasing power. None the less, final income does provide a benchmark—a starting-point for the assessment of the overall extent of state intervention and its impact on the distribution of income.

Focusing first on unadjusted rather than equivalent income, Table 8 shows the distribution of market, gross, disposable and final income in 1980. Comparing disposable and final income, the overall impact of indirect taxes and non-cash benefits is to produce a more equal distribution—the Lorenz curves do not intersect, the top quintile has a smaller share of final than disposable income and the bottom two quintiles have larger shares. This is reflected in the Gini coefficient, which is 3 per cent lower for final than for disposable income. However, this difference is relatively small when set against the impact of cash transfers and direct tax taken together—seen by comparing market and disposable income distributions. A simple measure of the redistributive effect of taxes and transfers is provided by the percentage reduction in the Gini coefficient, which is termed the Musgrave-Thin index. The overall impact of taxes and benefits...
Table 8. Market, gross, disposable and final household income distribution, Ireland 1980 (% of total income).

<table>
<thead>
<tr>
<th>Quintile</th>
<th>Market</th>
<th>Gross</th>
<th>Disposable</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest</td>
<td>0.5</td>
<td>4.6</td>
<td>5.2</td>
<td>5.8</td>
</tr>
<tr>
<td>Second</td>
<td>8.5</td>
<td>10.6</td>
<td>11.6</td>
<td>11.9</td>
</tr>
<tr>
<td>Third</td>
<td>17.1</td>
<td>16.8</td>
<td>17.2</td>
<td>17.2</td>
</tr>
<tr>
<td>Fourth</td>
<td>25.7</td>
<td>24.2</td>
<td>24.0</td>
<td>24.0</td>
</tr>
<tr>
<td>Top</td>
<td>48.1</td>
<td>43.8</td>
<td>42.0</td>
<td>41.2</td>
</tr>
<tr>
<td>All</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Top decile</td>
<td>29.7</td>
<td>27.0</td>
<td>25.7</td>
<td>25.1</td>
</tr>
<tr>
<td>Gini coefficient</td>
<td>0.468</td>
<td>0.385</td>
<td>0.360</td>
<td>0.348</td>
</tr>
</tbody>
</table>

Source: Murphy (1984: Table 5).

Table 9. Redistributive impact of taxes and transfers, Ireland and UK 1980.

<table>
<thead>
<tr>
<th>Percentage reduction in Gini coefficient, redistribution from</th>
<th>Ireland</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market → gross income</td>
<td>17.7</td>
<td>21.8</td>
</tr>
<tr>
<td>Gross → disposable income</td>
<td>6.5</td>
<td>7.8</td>
</tr>
<tr>
<td>Disposable → final income</td>
<td>3.3</td>
<td>2.7</td>
</tr>
<tr>
<td>Market → final income</td>
<td>25.6</td>
<td>29.6</td>
</tr>
</tbody>
</table>

Source: Calculated from Murphy (1984: Table 5) and Economic Trends, January, 1982.

in 1980 was to reduce the Gini from 0.468 to 0.348, a fall of 26 per cent. But about 70 per cent of this reduction was attributable to the effect of cash transfers, 20 per cent to direct taxes, and only 10 per cent to indirect taxes and non-cash benefits combined.26

This conforms to the general pattern found in similar studies in other developed countries, in particular the UK. A direct comparison can be made with the results of the corresponding exercise carried out by the UK CSO, also for 1980, as shown in Table 9.27 A slightly higher overall 'redistributive effect' is seen in the UK, as measured by the fall in the Gini coefficient of 30 per cent from market to final income, compared with the Irish figure of 26 per cent. Once again, in the UK case 74 per cent of this reduction was attributable to cash transfers, 20 per cent to direct taxes, and only 6 per cent to indirect taxes and non-cash transfers combined. Saunders and Klau (1985), having reviewed available studies for OECD

26 The Theil inequality measure, also calculated by Murphy, shows a very similar pattern to the Gini coefficient.

27 Rottman and Reidy (1988: ch. 7) present a similar analysis, with slightly different levels for Gini coefficients, based on discrete rather than decile data. Here we use the latter, presented by Murphy (1984), to maintain consistency with those for equivalent income below.
countries, concluded that public expenditure programmes, particularly
cash transfers, have been almost totally responsible for the changes in
income distribution which governments have brought about. Ireland
appears to fit comfortably within this general pattern.

These results refer to the income distribution among households,
without adjustment for differences in household size and composition. It
is also of interest to look at the overall impact of taxes and benefits on the
equivalent income distribution. Table 10 shows the distribution of market
and final equivalent income in Ireland in 1980. Final income is once again
a good deal more equally distributed than market income, the differences
being concentrated in the larger share of the lowest quintile and the smaller
share of the top decile. Compared with unadjusted income, the redistribu-
tive impact of taxes and benefits is considerably greater when assessed on
an equivalent income basis. The Gini coefficient is reduced from 0.46 to
0.27, giving a Musgrave-Thin index of 41 per cent, compared with 26 per
cent for unadjusted incomes. This comes about because there is little
difference between unadjusted and equivalent market income distribu-
tions, but equivalent final income is a good deal more equally distributed
than unadjusted final income.

While fewer studies are available for other countries on an equivalent
income basis, a comparison can be made with the UK. The UK CSO
carried out an exercise with 1985 data, comparing the redistributive effects
of taxes and benefits using equivalent as opposed to unadjusted income. This
showed an overall reduction in the Gini coefficient of about 47 per

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest</td>
<td>1.7</td>
<td>7.7</td>
<td>0.7</td>
<td>8.8</td>
</tr>
<tr>
<td>Second</td>
<td>10.5</td>
<td>13.5</td>
<td>9.3</td>
<td>14.3</td>
</tr>
<tr>
<td>Third</td>
<td>16.9</td>
<td>17.2</td>
<td>17.0</td>
<td>17.5</td>
</tr>
<tr>
<td>Fourth</td>
<td>24.5</td>
<td>22.1</td>
<td>25.3</td>
<td>22.3</td>
</tr>
<tr>
<td>Top</td>
<td>46.5</td>
<td>39.5</td>
<td>47.6</td>
<td>37.0</td>
</tr>
<tr>
<td>All</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Top decile</td>
<td>29.4</td>
<td>25.0</td>
<td>29.8</td>
<td>22.7</td>
</tr>
<tr>
<td>Gini coeff.</td>
<td>0.434</td>
<td>0.306</td>
<td>0.459</td>
<td>0.272</td>
</tr>
</tbody>
</table>

Source: Murphy (1984: Tables 9 and 17).

28 The equivalence scales employed by Murphy, from whom these results are taken, differ
from those used earlier in this paper—see Murphy (1984: 72).
cent (from market to final income) for equivalent income, compared with 33 per cent for unadjusted income. The overall redistributive impact is again slightly higher than in Ireland. However, it should be noted that both the inequality in market income and the overall redistributive impact in the UK appear to have risen between 1980 and 1985. Thus comparison based on equivalent income for the same year would probably reveal even less difference between the two countries in overall redistributive impact.30

Rottman and Reidy (1988), in addition to looking at redistribution in terms of the income distribution in the 1973 and 1980 Household Budget Surveys, also examined the redistributive impact of taxes and transfers on households in terms of a social class categorisation. While the pattern revealed is a complex one, large proprietors and, even more so, large and medium scale farmers were seen to be more favourably treated in terms of overall redistributive impact than the professional and managerial classes. Small and marginal farmers were also more favourably treated than unskilled workers. While these class differentials affect the degree of vertical redistribution taking place across income groups, their significance from an income distribution perspective may be greatest in terms of horizontal equity—‘equal treatment of equals’. The relationship between class-based analysis and the income distribution perspective clearly deserves greater attention than it has received in the literature. But a major problem with the class-based analysis is that it does not allow us to say whether the pattern for Ireland is more or less extreme than elsewhere. Cross-country comparisons face great difficulty in arriving at a class categorisation which is consistently articulated and applied. This is perhaps the principal reason why most studies aiming at a cross-country perspective on redistribution, like the present one, rely on income rather than class categories.

Trends over time in redistributive effects

Finally, what can be said about trends over time in the redistributive effects of taxes and benefits in Ireland? Currently, relevant analyses are only available for 1973 and 1980. Rottman and Reidy (1988) analysed trends over this period in depth, and on the basis of the distribution of unadjusted income showed a significant increase in overall redistributive impact. This

30 The equivalence scales used in the Irish and British studies differ, and the coverage of the UK exercise is slightly broader, complicating the comparison. The UK exercise found the results to be insensitive to the precise scales adopted however. The UK CSO has now changed to equivalent income as the basis for its redistributive exercises (see Economic Trends, May 1990).
they attributed primarily to increases in levels of direct taxes and cash transfers. While inequality in market incomes rose, this was counteracted by an expanded redistributive effort, so that inequality in final income was actually lower in 1980 than 1973. The distributions of market and final equivalent income for 1973, presented by Murphy and shown in Table 10 along with the 1980 figures, reveal a similar picture. While the Gini coefficient for equivalent market income was lower in 1973 than 1980, the reduction brought about by taxes and benefits was only 29 per cent in 1973 compared with 41 per cent in 1980, leaving the Gini for final income higher in the earlier year. When the corresponding CSO exercise based on the 1987 HBS becomes available it will be possible to update these findings through the 1980s. Given the very substantial increases in levels of unemployment, public expenditure and taxation, it may be speculated that both the inequality in market incomes and the overall redistributive impact of taxes and benefits will show a continuing rise in Ireland, as they have in the UK.

The main features of the redistribution of income through taxes and benefits in Ireland may now be summarised. Taken together, taxes and benefits have a major impact on the distribution, leading to greater equality. As in other OECD countries, most of this is attributable to cash transfers—the tax system has relatively little effect, regressive indirect taxes offsetting progressive income tax, while non-cash transfers are mildly progressive. The overall ‘redistributive effect’, as reflected in the decline in the Gini coefficient brought about by taxes and benefits, was slightly less than in the UK in 1980. Given the differences between the two countries in level of development, the overall impact of taxes and benefits in Ireland may thus be regarded as relatively substantial. The ‘redistributive effect’ increased over the 1970s in Ireland, as direct tax and cash transfers in particular became more important, and this is likely to have continued through the 1980s.

Relative Poverty

Relative poverty in EC countries

In placing the distribution and redistribution of income in Ireland in a comparative perspective, it is also of interest to look very briefly at the extent of poverty and the effectiveness of social security transfers in alleviating it. To do so, we focus on poverty measured using relative poverty lines, and compare results for Ireland with those for other EC countries. The conceptual and methodological issues raised by such an
Table 11. Percentage of persons below half average equivalent income, EC countries, 1980 and 1985.\(^a\)

<table>
<thead>
<tr>
<th>Country</th>
<th>1980</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>[7.6]</td>
<td>7.2</td>
</tr>
<tr>
<td>Denmark</td>
<td>[13.0]</td>
<td>[14.7]</td>
</tr>
<tr>
<td>France</td>
<td>17.7</td>
<td>[17.5]</td>
</tr>
<tr>
<td>FRG</td>
<td>6.7</td>
<td>[8.5]</td>
</tr>
<tr>
<td>Greece</td>
<td>24.2</td>
<td>[24.0]</td>
</tr>
<tr>
<td>Ireland</td>
<td>19.2</td>
<td>22.9</td>
</tr>
<tr>
<td>Italy</td>
<td>9.4</td>
<td>11.7</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>[7.9]</td>
<td>7.9</td>
</tr>
<tr>
<td>Netherlands</td>
<td>7.0</td>
<td>7.4</td>
</tr>
<tr>
<td>Portugal</td>
<td>27.8</td>
<td>[28.0]</td>
</tr>
<tr>
<td>Spain</td>
<td>20.5</td>
<td>[20.0]</td>
</tr>
<tr>
<td>UK</td>
<td>9.2</td>
<td>12.0</td>
</tr>
</tbody>
</table>

Note: \(^a\) Figures in square brackets have been estimated—see source, Annex 1; dates refer to nearest available year.

Sources: O'Higgins and Jenkins (1989: Table 1), except for Ireland, for which see Callan et al. (1989: Table 5.4).

The first set of comparisons which can be made with data available across EC countries is based on results presented in O'Higgins and Jenkins (1989). Poverty lines are derived as 50 per cent of average equivalent household income in the country in question, using a common set of equivalence scales. Table 11 shows the percentage of persons in each country in households falling below these 50 per cent relative poverty lines for 1980 and 1985 or the nearest available year. The Irish figures are based on the ESRI's survey carried out in 1987 and the 1980 Household Budget Survey.\(^31\) Without placing too much emphasis on the precise figures shown, the position of Ireland compared with the other countries may be noted. There is a higher proportion of the population below the 50 per cent relative poverty line in Ireland than in any of the other EC countries, except Portugal and Greece, in each of the years. Spain has a similar percentage below the line; France shows a lower, and other countries, a considerably lower figure.

A similar comparison on a somewhat different basis may also be made. EUROSTAT has produced figures showing the percentage falling below 50 per cent relative poverty lines in each EC country, based on household

\(^{31}\) The Irish figure for 1980 presented here differs from that in O'Higgins and Jenkins (1989), being derived from direct analysis of the HBS micro-data rather than by interpolation. The 1987 figure is also slightly revised.
Table 12. Percentage of persons below 50 per cent of average equivalent expenditure, EC countries, 1980 and 1985.

<table>
<thead>
<tr>
<th>Country</th>
<th>1980</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>7.1</td>
<td>5.9</td>
</tr>
<tr>
<td>Denmark</td>
<td>7.9</td>
<td>8.0</td>
</tr>
<tr>
<td>France</td>
<td>19.1</td>
<td>15.7</td>
</tr>
<tr>
<td>FRG</td>
<td>10.5</td>
<td>9.9</td>
</tr>
<tr>
<td>Greece</td>
<td>21.5</td>
<td>18.4</td>
</tr>
<tr>
<td>Ireland</td>
<td>18.4</td>
<td>19.5</td>
</tr>
<tr>
<td>Italy</td>
<td>14.1</td>
<td>15.5</td>
</tr>
<tr>
<td>Netherlands</td>
<td>9.6</td>
<td>11.4</td>
</tr>
<tr>
<td>Portugal</td>
<td>32.4</td>
<td>32.7</td>
</tr>
<tr>
<td>Spain</td>
<td>20.9</td>
<td>18.9</td>
</tr>
<tr>
<td>UK</td>
<td>14.6</td>
<td>18.2</td>
</tr>
</tbody>
</table>

*a Relates to 1987.

equivalent expenditure rather than income. These figures are based on the Household Budget Surveys carried out in the various countries, again for 1980 and 1985 (or nearest available year). Table 12 shows the percentage of persons falling below this line in each country. The Irish figures (which are for 1987) are not very different from those on an income basis, and are now about the same as those for Spain and Greece, and much lower than for Portugal. Italy, Portugal and the UK have higher percentages below the expenditure-based lines than in Table 11, but the relative position of Ireland is not much affected.

Clearly, the extent of relative poverty in the various EC countries is related to the level of development attained, with the less developed countries—Ireland, Spain, Greece and Portugal—having higher poverty figures, even on a purely relative basis. However, the relationship—like that between income inequality and level of development discussed earlier—is not a simple or rigid one, and no attempt will be made here to tease out the complex influences at work.

Relative poverty in Ireland and Britain

It may be of interest in the present context to examine in more detail the comparison between Ireland and the UK. To make a precise comparison with the official British Department of Social Security data on ‘Households Below Average Income’, we have applied the methodology used in this

32 The comparison between the income and expenditure-based results is complicated by the fact that for some countries—including Ireland for 1987—different data sources were used.
Table 13. Percentage of persons below relative income cut-offs, Great Britain and Ireland, 1987

<table>
<thead>
<tr>
<th>Cut-off % of mean equivalent income(^a)</th>
<th>Great Britain</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>14.3</td>
<td>17.4</td>
</tr>
<tr>
<td>60</td>
<td>25.5</td>
<td>28.5</td>
</tr>
<tr>
<td>70</td>
<td>36.2</td>
<td>39.6</td>
</tr>
<tr>
<td>80</td>
<td>45.9</td>
<td>48.9</td>
</tr>
<tr>
<td>90</td>
<td>54.8</td>
<td>57.1</td>
</tr>
<tr>
<td>100</td>
<td>63.4</td>
<td>63.8</td>
</tr>
</tbody>
</table>

\(^a\) Income is before housing costs.

Sources: DSS (1990), Table C 1; Nolan and Callan (forthcoming: Table 3).

new series—including the equivalence scales—to data from the ESRI 1987 sample. This involves calculating average equivalent income, deriving income cut-offs as 50 per cent, 60 per cent, 70 per cent and up to 100 per cent of that average, and looking at the percentage of persons falling below each. (The results for the 50 per cent cut-off differ from those given in Table 11 because, although the general approach is the same, there are differences in its detailed application.)\(^{33}\)

The DSS produce figures for Great Britain—Northern Ireland is not included—based on the Family Expenditure Survey, recently updated to 1987, and Table 13 compares these to the corresponding Irish results for the same year. The table shows that, consistently at all cut-offs up to average income, a higher proportion of persons fall below the relative thresholds in Ireland. It is worth noting, though, that the differences between the two countries are much less striking than in the comparison presented in Nolan and Callan (forthcoming), which employed British data for 1985. This is because there was a dramatic increase in the percentage of British persons falling below most of the thresholds between 1985 and 1987—the percentage below the 50 per cent line rising from 9.2 per cent to 14.3 per cent.

Differences in the composition of those at low incomes in the two countries are also of interest. An analysis of the risk and incidence of poverty in the two countries reveals a number of important differences. The risk of being below the 50 per cent or 60 per cent line is significantly higher for the elderly in Britain, whereas the non-elderly generally face a

\(^{33}\) In particular, the equivalence scales employed in the two exercises differ, and the DSS average equivalent income across persons, whereas O'Higgins and Jenkins compute the average across households.
higher risk in Ireland. As a result of both their higher risk and higher weight in the population, families with children constitute a much higher proportion of those below the cut-offs in Ireland than in Britain. About 69 per cent of those below half average income in Ireland are families consisting of a couple with dependent children, compared with 45 per cent in Britain.

Conclusions

Is the Irish income distribution particularly unequal? And is state redistributive policy particularly ineffective in Ireland? Here we summarise the main findings as regards these basic questions underlying our investigations.

The Irish income distribution does appear unequal when compared with countries at higher levels of development. However, comparison with countries at similar or lower levels of development suggests that the Irish income distribution is not particularly unequal. Relative poverty rates—on either an income or an expenditure basis—were likewise found to be greater in Ireland than in the more developed EC countries, though not dissimilar from those in Spain and Greece, and below those of Portugal.

The Irish welfare effort is rather higher than might be expected on the basis of level of income per head. As elsewhere, most of the redistributive effect is attributable to cash transfers, with direct taxes playing a less important redistributive role; the progressive effect of non-cash benefits is in large part offset by regressive indirect taxes. Detailed comparisons with the UK, and more limited comparisons with other countries, suggest that this intervention is no less effective than in other countries. Thus, the greater degree of inequality in Irish incomes after government intervention can be traced back to greater inequality in market incomes.

What factors account for the differences between these findings and the view of the redistributive process put forward by Breen et al. (1990)? First, many of their arguments concerning the ineffectiveness of state intervention refer to class rather than income categories. One clear message from this paper is that the relationship between class categories and income deciles is a complex one, deserving of greater attention than it has received up to now. Second, Breen et al. have in mind a broader assessment of the state's role, including not only policies usually encompassed by redistribution studies, but also the provision of economic subsidies to industry and agriculture and the state's role as employer, which influence the distribution of what is termed 'market' income. There is, however, a third factor which the present analysis suggests should not be underestimated. It is that
conclusions regarding the distribution and redistribution of income in Ireland can be heavily influenced by the international perspective in which they are located. Conclusions based on comparisons with the UK, or with other countries at higher levels of development than Ireland, may need to be substantially modified when a wider perspective, including countries at similar or lower levels of development, is adopted.

Acknowledgements. We would like to thank participants at the Nuffield conference, in particular the discussants, Michael O’Higgins and Mairéad Reidy, and the editors of this volume, for helpful comments and suggestions.
Bibliography


Census of Population, *General Reports for Ireland, 1891; 1901; 1911*, London: HMSO.

Census of Ireland (1901), (1902), *Part II General Report*, Dublin: HMSO.


BIBLIOGRAPHY


BIBLIOGRAPHY


442 BIBLIOGRAPHY


ICTU (1984): *Confronting the Jobs Crisis*, Dublin: ICTU.


IDA (1980): *Survey of Recruitment Patterns and Age Structure of Workforce in New Industry Grant Aided Companies*, Dublin: IDA.


Inter-Departmental Committee on the Problems of Small Western Farms (1962); *Report*, Dublin: Stationery Office.


Comment on Steinmetz and Wright'. American Journal of Sociology, 96: 727–735.


Murphy, J. A. (1975): Ireland in the Twentieth Century, Dublin: Gill and Macmillan.


BIBLIOGRAPHY

Roche, W. K. (forthcoming): ‘Organisational Dynamics and the Business Cycle:
Aspects of the Growth and Performance of British Trade Unions in the Republic of Ireland’, *British Journal of Industrial Relations*.


