The European Community's poverty measures

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The Commission of the European Communities (EC) has recently published comparative figures on the extent of poverty in different member countries. Since it could in the future form an important element in, among other things, the allocation of EC funds, the way in which poverty is measured by the EC is of obvious importance. Here I look at how the EC is currently approaching the measurement of poverty, and how this compares with the measurement of 'low incomes' in the UK.

The EC poverty estimates

In the Final Report on the Second European Poverty Programme 1985-1989 (Commission of the European Communities 1989), estimates were presented of the extent of poverty in each member country in the mid-1980s. These estimates were the basis for the widely-quoted figure of 50 million people or 15% of the Community's population being in poverty. Estimates for 1980 were also given, the total for that year being 49 million, suggesting a "stabilisation" in the overall level of poverty in the Community over that period. The United Kingdom was shown to have about 18% of its population in poverty in 1985, about the same as Spain, Greece and Ireland, less than Portugal, but much higher than the more prosperous member states, as shown in Table 1. The level of poverty was found to have increased much more rapidly in the UK between 1980 and 1985 than in any of the other countries. By 1985, then, of the 50 million people found to be in poverty in the Community as a whole, 10 million were in the UK.

These estimates were drawn from a detailed study (Poverty in figures) done for the European communities Statistical Office (EUROSTAT 1990). This gives a full description of the data and methods used, as well as much more comprehensive results. The figures in Table 1, which have been highlighted in the Commission's Report and elsewhere, are based on relative poverty lines for each country. These lines are simply constructed as half average household income, or in this case expenditure, for the country in question. Thus, the actual level of poverty line applied varies across countries in line with differences in average income/expenditure.

This approach is consistent with viewing poverty in terms of exclusion from the minimum acceptable way of life of the country in which the person lives. Such a definition of poverty was adopted by the Council of the European

Table 1 EC Poverty estimates for 1980 and 1985: Poverty line taken as 50% of *National* Mean Equivalent Expenditure in Respective Years

Country	Households				Persons			
	1980		1985		1980		1985	
	%	abs (000)	%	abs (000)	%	abs (000)	%	abs (000)
Belgium	6.3	226	5.2	189	7.1	701	5.9	583
Denmark	8.0	166	8.0	166	7.9	407	8.0	409
Germany	10.3	2,592	9.2	2,306	10.5	6,448	9.9	6,074
Greece	20.5	604	17.4	527	21.5	2,073	18.4	1,817
Spain	20.3	2,129	17.8	1,924	20.9	7,829	18.9	7,257
France	18.0	3,503	14.8	2,947	19.1	10,313	15.7	8,681
Ireland	18.5	167	17.4	162	18.4	625	19.5	684
Italy	12.0	2,237	14.7	2,760	14.1	7,941	15.5	8,880
Netherlands	6.9	345	7.9	403	9.6	1,363	11.4	1,661
Portugal	31.4	906	31.7	948	32.4	3,167	32.7	3,310
U K	14.1	2,808	18.9	3,490	14.6	8,226	18.2	10,324

Table 2 EC Poverty estimates for 1980 and 1985: Poverty line taken as 50% of *Community* Mean Equivalent Expenditure in Respective Years

Country	Households				Persons			
	1980		1985		1980		1985	
	%	abs (000)	%	abs (000)	%	abs (000)	%	abs (000)
Belgium	2.4	85	1.6	57	2.7	268	1.8	182
Denmark	3.9	81	2.6	54	3.9	201	2.7	136
Germany	6.9	1,743	6.5	1,626	7.2	4,416	7.1	7,335
Greece	27.6	814	19.6	595	28.9	2,784	20.9	2,062
Spain	29.8	3,127	31.2	3,381	30.8	11,512	32.4	12,453
France	15.8	3,075	11.4	2,269	16.7	8,997	12.1	6,685
Ireland	21.4	192	23.6	219	21.4	729	25.6	898
Italy	12.8	2,386	13.1	2,460	15.0	8,437	13.9	7,912
Netherlands	2.6	128	3.1	158	3.7	517	4.6	664
Portugal	67.5	1,952	68.4	2,045	68.6	6,701	69.5	7,023
U K	14.3	2,855	16.5	3,307	14.9	8,368	15.8	8,944
Community	14.8	16,438	14.4	16,173	16.8	52,930	15.9	51,924

Communities in launching the Second European Poverty Programme. An alternative approach, also explored in the EUROSTAT study, is to apply a single Community-wide standard across all member-states. Table 2 shows that when a poverty line set at half average expenditure for the Community as a whole is used, the estimate for the UK is in fact little changed.

There are dramatic differences though for countries like Portugal, Spain and Greece - which have much higher poverty rates using a common line - and substantial though less pronounced differences for Belgium, The Netherlands and Denmark, which have lower rates using a common line. The ranking of the UK in terms of poverty rate is now well below Portugal, Spain and Greece, below Ireland, about the same as France and Italy, and higher than Belgium, The Netherlands, Denmark or Germany. The adoption of a Community-wide standard would thus produce much wider variation across the states in measured poverty, and thus could have major implications for the UK.

Whether a national or Community-wide standard is adopted, key elements of the method adopted by the EC in measuring poverty merit examination. It is acknowledged in the EC reports that poverty is multi-dimensional and not simply about lack of money, and also that a variety of measurement methods are possible. However, the need for comparative results across countries leads to the focus on data from Household Budget Surveys, and to the use of what might be termed "purely relative" poverty lines. This general approach has been widely employed in studies which are aimed at making poverty comparisons across countries (for example Buhman et al 1989), and it is difficult to argue for an alternative given the data currently available. (Contact the author for a review of the various approaches employed in the literature).

Because income is believed to be particularly poorly measured in these surveys for certain groups in some countries, the EUROSTAT study used household expenditure rather than income as the measure of household welfare. This distinguishes it from common practice in many countries, including the UK as we shall see.

Important decisions were also required about the way in which differences in household size and composition should be taken into account in measuring welfare. The standard approach of calculating equivalent household income based on a set of adult equivalence scales is used. Where a single adult is given a weight of 1 the EUROSTAT study gives each other adult in the household a value of 0.7 and each child a value of 0.5 in calculating the number of "equivalent adults" in the household. Equivalent income is then calculated by dividing the household income by the number of adult equivalents. The EC study employed these scales for each country, and again these differ from the various scales in common use in individual countries, including the UK.

The EC figures to which most' attention has been paid were those using half average (equivalent) expenditure as the poverty line. Within the logic of the approach there is of course no justification for the choice of that particular proportion. It is important then to see how sensitive the results are to the choice of line. The EUROSTAT study also presents results using 40% of average expenditure as poverty line. These show a much smaller proportion of persons falling below the lines in each country, but for the UK there is the same sharp increase between 1980 and 1985 as was found with the 50% line. Finally, the unit of analysis used in measuring poverty in the EC reports may be mentioned. The analysis in the EUROSTAT study is based on the assumption that each member of a particular household has an identical standard of living. While it is common practice in most such research to make this type of assumption - to ignore any differences in welfare between spouses or parents and children, for example - there is an important choice to be made between the household and the narrower family or tax/benefit unit as the recipient unit. The data available appear to have dictated the use of the household in the EC study, but this is also an issue which has particular relevance for the UK, as we discuss. It is helpful that, while the household is the recipient unit, the EC presents results not only on the households below particular lines but also on the number of persons in these households. This represents an advance on some earlier studies which concentrated on results at household level, where important changes in the size of households below poverty lines could be obscured.

The EC poverty measures and official UK statistics

As is well known, there are no official "poverty" statistics in the UK, or rather no estimates to which the government would officially apply that term. From the early 1970s up to the mid-1980s, regular figures were produced by the DHSS on "Low Income Families" in Britain. These showed the number of families receiving Supplementary Benefit (SB), and the number falling below a set of income benchmarks based on SB: SB, SB+20%, etc. Following a review arising inter alia out of the changes in the social security system, this series was discontinued and replaced by one entitled "Households Below Average Income", which is currently produced by the DSS. (The differences between these series are discussed in detail in two papers in Fiscal Studies, Nolan (1989) and Johnson and Webb (1989)).

As the title implies, the current statistical series employs income thresholds related to average household income, rather than to social security rates. This has some advantages over social security rates for the purpose of measuring poverty, since changes over time in the generosity of social security payments relative to other incomes will influence the numbers falling below thresholds based on those rates. (The effectiveness of the social

security system in bringing people up to its own minimum standards is a distinct but important issue which does require data on numbers falling below payment rates - see Nolan (1989) - and the Low Income series has been extended to 1987 in Johnson and Webb (1990)). Both thresholds calculated from average income in the year in question, and ones derived in a base year and held constant in real terms, are used. In addition, the growth in average income for the bottom 10%, 20% etc of the distribution has been given. Thus it has been possible for various commentators and politicians to use the information provided in the series to draw rather different conclusions about trends in poverty during the 1980s, depending for example on whether relative or "constant in real terms" thresholds are used. (The government also highlighted what appeared to be relatively rapid growth in average income for the bottom decile, which turned out to be an error in the series - see Social Services Committee 1990).

Another important difference between the "Low Income Families" series and the "Households Below Average Income" figures is that the latter are based on the household whereas the former used the family/benefit unit. This means that, for example, a pensioner living with his/her adult son and his family was treated as a separate unit under the old series, but is now included in a wider household. Johnson and Webb (1989) show that the number of people found to be below half average income is substantially lower using the household rather than the family as recipient unit - about 5.5 million rather than 4.5 million would have been below that threshold in 1983, for example. Which unit gives a more accurate picture of actual welfare levels depends of course on the degree to which income is actually shared within households, about which not very much is known.

Although not officially called "poverty" estimates, the DSS series has much in common, in terms of its construction, with the general approach adopted in the EC reports to measuring poverty. Like the EC figures, it uses thresholds linked to average household welfare levels, and the household as the recipient unit. The data source employed for Britain is the Family Expenditure Survey in each case. Despite this similarity in general approach, though, there are important differences in the precise way in which the thresholds are calculated and applied, which have a major impact on the results. These differences are detailed, and the two sets of estimates reconciled, in Johnson and Webb (1991).

One of the most important differences is seen to be that the EC study uses household expenditure as the welfare measure, whereas the DSS adopt the much more common (in the British context) approach of using income. Other differences include the equivalence scale employed, and that the EC study covers the UK (including Northern Ireland) while the DSS series refers only to Britain. Johnson and Webb show that the use of expenditure rather than income leads to a substantially higher UK poverty rate in 1985 in the EC

study than in the DSS series, while the equivalence scale employed in the former also leads to a higher poverty rate. These two factors, they find, explain most of the gap between the DSS figure for 1985 of about 5 million people below half average income in Britain, and the EC estimate of 10 million below half average household expenditure in the UK in that year. (They also show, though, that using expenditure rather than income does not invariably have this effect, with a rather different pattern in other years).

Conclusion

The estimates of poverty in member states recently produced by the EC, and seen as showing Britain in a particularly poor light, are based on relative poverty lines explicitly linked to average household welfare levels. They have much in common, in terms of the general approach adopted and the data source used, with the series on "Households Below Average Income" now produced for Britain by the DSS. However, aspects of the precise way in which the EC applied this approach, in particular the use of expenditure rather than income as the measure of household welfare and the equivalence scales employed, lead to a much higher poverty rate for the UK in 1985 in the EC estimates. This illustrates rather dramatically the importance of what could be seen as simply "technical" decisions about the way in which such statistics are produced.

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